EB-2015-0029

ONTARIO ENERGY BOARD

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

AND IN THE MATTER OF an Application by Union Gas Limited pursuant to Section 36(1) of the *Ontario Energy Board Act*, *1998*, for an Order or Orders approving the 2015 to 2020 Demand Side Management Plan.

APPLICATION

1. Union Gas Limited ("Union") is a business corporation, incorporated under the laws of Ontario, with its head office in the Municipality of Chatham-Kent.

2. Union conducts an integrated natural gas utility business that combines the operations of selling, distributing, transmitting and storing gas within the meaning of the Ontario Energy Board Act, 1998 (the "Act").

3. On December 22, 2014, the Ontario Energy Board (the "OEB" or the "Board") issued the Demand Side Management ("DSM") Framework and Guidelines for Natural Gas Utilities. The Board noted the natural gas utilities were expected to develop their DSM plans in accordance with the DSM Framework and Guidelines, and to submit those plans to the Board for approval.

4. Accordingly, Union hereby applies to the Board pursuant to Section 36 of the Ontario Energy Board Act for an Order or Orders effective January 1, 2015 approving Union's DSM Plan for the years 2015-2020.

5. Union further applies to the Board for the following:

(a) Approval of DSM budgets and associated calculation methodology for the years 2015 - 2020;

(b) Approval of the Program scorecard targets and associated target adjustment methodology for the years 2015- 2020;

(c) Approval of the DSM Incentive amounts and associated calculation methodology for the years 2015-2020;

(d) Approval of the Resource Acquisition Programs budget and incentive mechanism related thereto;

(e) Approval of the Market Transformation Program, budget and incentive mechanism related thereto;

(f) Approval of the Low-income Program, budget and incentive mechanism related thereto;

(g) Approval of the Large Volume Rate T2/Rate 100 Program and budget;

(h) Approval of the Performance-Based Scorecard;

(i) Approval of the Stakeholder Terms of Reference;

(j) Approval of the Evaluation Plans;

(k) Approval to continue the Board approved Lost Revenue Adjustment Mechanism variance account, DSM variance account and DSM incentive deferral account; and,

(l) Approval to build 100% of the target DSM Incentive into rates beginning in 2016.

6. Union also applies to the Board for an interim order if a Board Decision cannot be released by November 15, 2015 for the 2015 to 2020 DSM Plan. Union requires a Decision on the Plan from the Board prior to 2016 to prevent market disruption and establish the required contracting commitments to ensure program continuity in the market.

Ontario Energy Board

EB-2014-0134

Draft Report of the Board

Demand Side Management Framework for Natural Gas Distributors

September 15, 2014

Overall, many stakeholders were of the view that annual DSM spending was likely to increase in order to achieve a greater level of natural gas savings, although there were some stakeholders who cautioned that increased spending must be supported by evidence that clearly displayed the incremental benefits the additional expenditures will produce.

4.2 Board Conclusions

The Board's objectives with respect to natural gas include the requirement to protect the interests of consumers with respect to prices, reliability and quality of gas service. The Board also has an objective to promote energy conservation and energy efficiency, but doing so having regard to the consumer's economic circumstances. In approving any budget amount, it is necessary for the Board to consider the rate impacts, or overall cost impacts, to customers, as all DSM costs are recovered through distribution rates. As noted earlier, since all customers share the total cost of DSM activities undertaken by the gas utilities, the Board must be mindful of the cost impacts to the non-participating customers. Many customers in all rate classes will likely not participate in a DSM program over the course of the new DSM framework. This is due to a number of reasons, including the inherent limits of DSM programs, primarily driven by the lack of opportunities a customer has to upgrade space or water heating systems. Although non-participating customers will enjoy some of the non-energy benefits that result from the program, including environmental benefits, the Board is centrally concerned with two factors that must be balanced: ensuring the gas utilities have sufficient funding available to pursue all cost-effective natural gas savings in their franchise areas and that the costs to undertake such efforts are reasonable for those customers who will not participate in a program.

Therefore, the Board has determined that for DSM activities between 2015 and 2020, the gas utilities' annual DSM budgets should be guided by the simple principle that DSM costs (inclusive of both DSM budget amounts and shareholder incentive amounts[15]) for a typical residential customer of each gas utility should be no greater than approximately $2.00/month. The current bill impact for a typical residential customer is just under $1.00/month. The budget guidance for the new multi-year DSM plans is in the order of double the cost impacts to residential customers from the 2012 to 2014 DSM period. Based on a $2.00/month cost impact to a typical residential customer and considering the general historic program mix and the relative size of each utility, the Board has estimated total annual DSM amounts of $85M for Enbridge and $70M for

[15] Shareholder Incentives are further discussed in Section 5 below.

Table 4

2015 DSM Plan Budget

Program Budget		
Resource Acquisition		
Residential Incentives/Promotion	$	2,567
Residential Administration	$	576
Residential Evaluation	$	20
Total Residential Program	$	3,163
Commercial/Industrial Incentives/Promotion	$	8,118
Commercial/Industrial Administration	$	2,682
Commercial/Industrial Evaluation	$	60
Total Commercial/Industrial Program	$	10,859
Total Resource Acquisition Programs	$	14,022
Large Volume T1/T2/R100		
Large Volume T1/T2/R100 Incentives/Promotion	$	3,587
Large Volume T1/T2/R100 Administration	$	907
Large Volume T1/T2/R100 Evaluation	$	40
Total Large Volume T1/T2/R100 Program	$	4,534
Low-Income		
Low-Income Incentives/Promotion	$	5,827
Low-Income Administration	$	972
Low-Income Evaluation	$	40
Low-Income Program	$	6,839
Market Transformation		
Optimum Home Incentives/Promotion	$	1,185
Optimum Home Administration	$	194
Optimum Home Program	$	1,379
Programs Sub-total	$	26,773
Portfolio Budget		
Research	$	766
Evaluation	$	969
Administration	$	1,582
DSM Budget Subtotal Pre-Inflation	$	30,091
Cumulative Inflation @1.68%	$	2,497
DSM Budget Subtotal	**$**	**32,588**
Incremental Budget Requirements		
Achievable Potential Study	$	200
Future Infrastructure Planning Study	$	200
DSM Tracking and Reporting System Upgrades	$	1,000
Total DSM Budget Post-Inflation	**$**	**33,988**

Table 2

2016-2020 DSM Plan Budget

	Year				
	2016 ($000)	2017 ($000)	2018 ($000)	2019 ($000)	2020 ($000)
Program Budget					
Resource Acquisition					
Residential Development and Start-up	$ 1,850	$ -	$ -	$ -	$ -
Residential Incentives/Promotion	$ 8,745	$ 13,569	$ 15,916	$ 15,916	$ 15,916
Residential Evaluation	$ 559	$ 709	$ 859	$ 859	$ 859
Residential Administration	$ 991	$ 1,071	$ 1,071	$ 1,071	$ 1,071
Total Residential Program	$ 12,145	$ 15,349	$ 17,845	$ 17,845	$ 17,845
Commercial/Industrial Incentives/Promotion	$ 14,562	$ 14,571	$ 15,293	$ 14,957	$ 14,957
Commercial/Industrial Evaluation	$ 189	$ 189	$ 189	$ 189	$ 189
Commercial/Industrial Administration	$ 3,929	$ 4,076	$ 4,076	$ 4,076	$ 4,076
Total Commercial/Industrial Program	$ 18,680	$ 18,836	$ 19,558	$ 19,222	$ 19,222
Total Resource Acquisition Programs	$ 30,825	$ 34,185	$ 37,404	$ 37,067	$ 37,067
Performance-Based					
Performance-Based Incentives/Promotion	$ 297	$ 592	$ 837	$ 582	$ 802
Performance-Based Evaluation	$ 35	$ 35	$ 35	$ 35	$ 35
Performance-Based Administration	$ 216	$ 216	$ 216	$ 216	$ 216
Total Performance-Based Program	$ 548	$ 843	$ 1,088	$ 833	$ 1,053
Low-Income					
Low-Income Incentives/Promotion	$ 9,705	$ 10,647	$ 11,863	$ 12,419	$ 13,261
Low-Income Evaluation	$ 219	$ 212	$ 225	$ 244	$ 262
Low-Income Administration	$ 1,425	$ 1,425	$ 1,425	$ 1,425	$ 1,425
Total Low-Income Program	$ 11,349	$ 12,284	$ 13,514	$ 14,088	$ 14,948
Large Volume					
Large Volume Incentives/Promotion	$ 400	$ 349	$ 373	$ 397	$ 421
Large Volume Evaluation	$ -	$ -	$ -	$ -	$ -
Large Volume Administration	$ 409	$ 409	$ 409	$ 409	$ 409
Total Large Volume Program	$ 809	$ 758	$ 783	$ 807	$ 831
Market Transformation					
Optimum Home Incentives/Promotion	$ 841	$ -	$ -	$ -	$ -
Optimum Home Evaluation	$ -	$ -	$ -	$ -	$ -
Optimum Home Administration	$ 201	$ -	$ -	$ -	$ -
Optimum Home Program	$ 1,042	$ -	$ -	$ -	$ -
Programs Sub-total	**$ 44,573**	**$ 48,070**	**$ 52,787**	**$ 52,795**	**$ 53,899**
Portfolio Budget					
Research	$ 1,500	$ 1,000	$ 1,000	$ 1,000	$ 1,000
Evaluation	$ 1,300	$ 1,300	$ 1,300	$ 1,300	$ 1,300
Administration	$ 2,935	$ 2,842	$ 2,842	$ 2,842	$ 2,842
Pilots	$ 1,000	$ 1,000	$ 500	$ 500	$ 500
DSM Tracking and Reporting System Upgrades	$ 5,000	$ -	$ -	$ -	$ -
Portfolio Sub-total	$ 11,735	$ 6,142	$ 5,642	$ 5,642	$ 5,642
Total DSM Budget Pre-Inflation	**$ 56,308**	**$ 54,212**	**$ 58,429**	**$ 58,437**	**$ 59,541**
Cumulative Inflation @1.68%	$ 946	$ 1,837	$ 2,995	$ 4,027	$ 5,172
Total DSM Budget Post-Inflation	**$ 57,254**	**$ 56,049**	**$ 61,424**	**$ 62,464**	**$ 64,714**

The program budgets and their individual components (development and start-up, incentives/promotion, evaluation and administration) are consistent with the definitions provided in the Guidelines, Section 9.1.2. The Portfolio budget captures DSM activities that are not

4.0 Response to Guiding Principles

In Section 2.0 of the Guidelines the Board requested that the gas utilities, "…include a section in their multi-year DSM Plan applications which discusses how they have incorporated the Board's guiding principles throughout the multi-year plan." Union has addressed the Board's guiding principles throughout the multi-year Plan as follows:

1. *Invest in DSM where the cost is equal to or lower than capital investments and/or the purchase of natural gas*

   Union will perform a study commencing in 2015 to determine the potential effects DSM can have on deferring, postponing or reducing future capital investments. Union's preliminary proposed approach is outlined at Exhibit A, Tab 1, Appendix D.

2. *Achieve all cost-effective DSM that results in a reasonable rate impact*

   In Section 4.2 of the Framework the Board states that it is, "…of the view that a bill impact of $2.00/month for a typical Residential customer…provides a reasonable guideline for the gas utilities to prepare their DSM plans." The Board further states in Section 4.2 that, "The gas utilities should ensure that overall cost increases to all other rate classes are generally proportional with the guidance outlined relative to Residential customers…".

   When developing Union's DSM Offerings and accompanying budget requirements, Union balanced the need to comply with the reasonable rate impact to all rate classes outlined by the Board (as stated above) and the need to achieve all cost-effective savings available within program areas funded by these rate classes. The result is a balanced budget that complies with the guidance on the Residential rate class impact, and is well

within the rate impact guidance for all other rate classes, while still achieving an overall cost-effective portfolio. Union proposes a budget that will reach $59.5 million in 2020 (excluding inflation). Rate impacts based on the proposed 2016-2020 DSM Plan are included at Exhibit A, Tab 3, Appendix E. For Residential customers in Rate M1 the average monthly bill impact is $1.92 per month in 2020, for Residential customers in Rate 01 the average monthly bill impact is $2.20 per month in 2020. In accordance with the Framework, by 2020 the average Residential customer in Union's franchise will pay approximately $2.00 per month in DSM costs.

3. *Where appropriate, coordinate and integrate DSM and electricity CDM efforts to achieve efficiencies*

Union has successfully worked with electric utilities to partner on conservation initiatives since 2008. Union recognizes that this is a priority for both the Board and the Ministry of Energy and has made significant efforts towards meeting this goal through participation on the Conservation First Advisory Working Group that was established to develop the new CDM Framework in 2014. Union has also had ongoing discussions with a number of electric utilities and the Independent Electricity System Operator (the "IESO") to identify additional opportunities to work together. In addition, Union is a member of the Conservation First Implementation Committee and will join the CDM Working Groups with the goal of integrating program design in the future where appropriate. Union will continue to work on addressing the barriers in the market that are impeding stronger collaboration of natural gas DSM programs and electric CDM programs. Union's approach to collaboration and integration is outlined at Exhibit A, Tab 1, Appendix C.

ONTARIO ENERGY BOARD

FILE NO.:	**EB-2015-0029** **EB-2015-0049**	**Union Gas Limited** **Enbridge Gas Distribution Inc.**

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BEFORE:	**Christine Long**	**Presiding Member**
	Allison Duff	**Member**
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for us as well.

Union's approach in developing the plan was to take a balanced approach overall, recognizing the importance of meeting the needs of our customers to promote the culture of conservation, but also to fulfil the Board's request to enable and incorporate ten guiding principles and six key priority areas, as outlined in the framework.

We've also endeavoured to respond to input received from stakeholders, and in doing that, it is all while adhering to, in our plan, the budget guidance provided by the Board at the maximum level, as well as the guidance that, for a typical residential customer, the impact should be no more than $2 a month on average.

I would like to note that there are a couple of areas in our plan where we see material variations from the framework in what we have proposed. Those areas include the treatment of T1 customers, who we have proposed to include on our resource acquisition scorecard. We have also not proposed a fee for service program for our large volume T2 rate 100 customers.

In addition, in determining Union's scorecard achievement and results, we feel very strongly that revised input assumptions and adjustment factors should be applied on a prospective basis, and we've outlined that at Exhibit A, tab 3, page 17.

In addition, in establishing the upper band for our targets, we've established it at 125 percent. We outline that at Exhibit A, tab 3, page 17 and provide further

detail at Exhibit B, tab T2, Union.Staff.4.

As noted in our plan, Union has built our scorecard targets to achieve the budget guidance with the mind of achieving our 100 percent targets of that guidance.

With that that in mind, the framework allows us to do a 15 percent overspend and to be able to achieve 150 percent or a 50 percent increase with a 15 percent overspend was just not proportional for us and seen as reasonable stretch.

In addressing our customers' needs, we've considered barriers to participation, which we've outlined at Exhibit A, tab 1, page 15, and a couple of examples that we include are the importance of education and ensuring that we have new offerings.

In addition, we've looked at increased incentive levels which are critical to overcoming some of the cost barriers that are -- cost barriers in increasing energy -- or investing in energy efficiency.

As far as the process that we used for developing our targets and budgets, we look to set our annual and long term targets based on a detailed analysis that was performed. We performed it on a bottom-up approach, and it was based on our experience, program potential, and what we saw as the market opportunities in different areas.

This included building on the existing programs we have that have been successful, as well as identifying and proposing new program offerings in the residential, low-income, commercial-industrial and for large volume

customers.

Our approach was informed by the Board's framework and guidelines, which included the budget and rate impact guidance as I've noted, as well as the guiding principles and key priorities.

We then assessed the offerings we would propose, the expected savings we thought we could achieve with the budget required, and this was done through an iterative process to determine the plan that we now have before you.

The result is a balanced cost effective plan that does meet the budget guidance provided.

In considering other scenarios, we did complete a sensitivity analysis that is outlined at Exhibit A, tab 3, appendix G, and we've outlined three alternative budget scenarios.

One, the first one is really the base budget that we would see, which is slightly lower than what we have proposed, the base we would see required to implement the guiding principles and the priorities of the Board.

The next scenario considered, if we spent the budget as we proposed in 2020, as well as the overspend and then 5 million in additional spending, what would that achieve. And then we went on to do the same with the maximum budget guidance, the overspend and $10 million, just to demonstrate where we saw directionally some of the considerations with respect to sensitivity in the budget.

As has happened in the past, I expect over the course of the framework there will be additional changes that will

impact our approach to the plan. So, with that in mind, to address what we would see as program and market changes, Union has proposed that in its 2017 to 2020 resource acquisition, low-income and performance-based scorecards, that we use a formulaic target-setting methodology.

This ensures that while Union strives to achieve expense exemplary results, the following year's targets are adjusted to reflect that performance.

In addition, we have also identified that there are two pieces of work that are currently underway with our technical evaluation committee. Those are the completion of the technical reference manual for many of our input assumptions, as well as a net to gross study to be completed on our custom projects.

We have identified that given the significance of those pieces of work, it will be important that we adjust the 2016 targets as we've proposed to account for those pieces of work, and then the formulaic approach would take us forward from there.

In addition, as I've said that the framework has continued to evolve, I expect it will continue to evolve. With that in mind, I expect that we will see key pieces of information that will inform us further as we go through this framework, including key policy decisions around the structure of a cap and trade system in Ontario, as well as key studies that we have identified in our plan, including DSM and infrastructure planning and the achievable potential study.

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As has happened in the past, I expect over the course of the framework there will be additional changes that will

Target Development

Union's approach to setting the annual and long-term targets was based on a detailed analysis that was performed using a bottom up approach based on Union's experience, program potential and market opportunity. It was then informed by the Board's Framework and Guidelines which included budget and rate impact guidance along with the guiding principles and key priorities. With these key drivers in mind, Union's internal teams performed detailed analysis, taking a phased approach to balance the various objectives.

In Phase One of the analysis, Union took a bottom-up approach to assess the market opportunity available within existing program offerings. This included:

- Reviewing Union's historical results and projected trends in many facets, including; participation levels, types of customers participating, measure penetration and trends in segments;
- Assessing remaining market size using internal and third party data;
- Performing jurisdictional scans to determine whether key elements of the program offering, such as incentive levels, were in-line with comparable jurisdictions;
- Considering market insight from Union's account managers who hold key relationships with Union's customers and who have firsthand experience of the opportunities and barriers in the market; and,
- Reviewing market research to better understand the opportunities and barriers in the market.

In Phase Two of the analysis, Union sought new program ideas through an extensive review, including:

- Performing jurisdictional scans on leading jurisdictions to identify new program opportunities;
- Holding internal sessions with various groups to generate new ideas;
- Engaging external stakeholders, including; intervenors, Enbridge, the IESO, customers and the Ministry of Energy to gain a better understanding of market opportunities and barriers, policy objectives and customer priorities (Exhibit A, Tab 3, Appendix B provides documentation regarding Union's stakeholder engagement);
- Re-assessing new measure opportunities with the updated Total Resource Cost ("TRC") values within the all cost-effective Framework;
- Considering customer insight from Union's account managers who hold key relationships in the field; and,
- Considering the key priorities and guiding principles outlined by the Board.

In Phase Three of the analysis, Union struck a balance between all of the findings above with the following decision making criteria in mind:

- Addressing the key priorities and guiding principles outlined by the Board through new program offerings;
- Adhering to the rate impact guidelines set by the Board;
- Maximizing opportunities within existing program offerings; and,
- Having broad access for customers while taking a holistic approach to program design.

Union's most recent Achievable Potential Study, conducted in 2008 with an economic update in 2011, while considered, did not play a significant role in the most recent target development. Union believes that while Achievable Potential studies provide an assessment of technical and economic potential, and can serve as a reference for achievable potential, it represents a point in time estimate based on a set of inputs.

Union's most recent Achievable Potential Study does not reflect Union's program experience, or any new information outside of the scope of the economic update, since 2008, including the overriding policy objectives in the new Framework and Guidelines. Considering this, Union used a bottom-up approach to target development for the Plan.

Union is committed to completing an achievable potential study by June 2016, as outlined by the Board in Section 1.3. of the Framework, and the results of the study will be used within the mid-term review process to test the directional long-term target, established based on the goals approved in the annual scorecards, to confirm whether any changes are required.

Union believes that the appropriate balance has been struck in the target development around the key priorities and guiding principles the Board has outlined. While the primary focus of Union's annual and long-term targets continues to be the achievement of cumulative lifetime natural gas savings, this objective is appropriately balanced with the need to provide broad based offerings to enter new areas of the market, such as the Behavioural and Strategic Energy Management offerings.

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paragraph, I guess starting at about the middle of that paragraph or the second-last sentence, it says:

> "Further, the annual savings targets should be challenging, yet reasonable, and based on the following: An undated analysis of the level of natural gas energy efficiency potential available in Ontario, market opportunities, past DSM program experience, new innovations, and industry capacity to deliver expanded DSM programs."

Do you see that?

MS. LYNCH: Yes.

MR. MILLAR: I assume you were guided by that in how you set your targets; is that fair?

MS. LYNCH: That's fair, although I will note as we indicate in our evidence, our latest achievable potential study was done in 2008. We completed the bottom-up approach --

MR. MILLAR: Yes.

MS. LYNCH: -- in assessing what we thought was the potential within this plan.

MR. MILLAR: Okay, that's fair enough. Thank you.

If you could flip to page 12, the Board speaks on this point again, in fact, I think almost directly to what you were just mentioning, Ms. Lynch. The paragraph at the top of the page, I don't know, about two sentences in, about the middle of that paragraph, it says:

> "The Board expect that the gas utilities will

rely on their most recent achievable potential studies, experience to date, and projected market opportunities and constraints to inform the development of their annual and long-term natural gas savings targets."

And I take it that you did follow this guidance as well in establishing your targets?

MS. LYNCH: Yes, I would say that's correct. I would note that while we had our previous achievable potential, we did know at the time of the directive provided and the subsequent framework that an achievable potential study was going to be completed by June of 2016, so therefore expected that that would be a key element that we could consider on a go-forward basis.

MR. MILLAR: Yes, okay, thank you for that. So, as I understand it, what you do is you consider all these types of things, and you do what we've been calling a bottom-up analysis and that will get you to a target; is that right?

MS. LYNCH: Yes, that's correct.

MR. MILLAR: Okay, now let's look -- still on page 12, this is where the Board discusses the, I guess, the achievement bands, you might call them.

What the Board says is -- this is at the last full paragraph:

"Three levels of achievement should be provided for in the scorecards for each metric, one at 75, one at 100, and one at 150.”

Do you see that?

MS. LYNCH: Yes.

MR. MILLAR: And I want to be clear. When we talked about that bottom-up analysis, that builds to what the Board calls here the target number, is that right, the 100 percent?

MS. LYNCH: Yes, that's right.

MR. MILLAR: Okay. Now these achievement bands have a significant impact on your incentive, is that right?

Let me just complete the question then. If you hit 100 percent of your target, I think you get 40 percent of the maximum allowable incentive. If you're under 75, I think you get zero. And if you make it to at least 150 as described in the framework, then you can get your entire allowable incentive; is that right?

MS. LYNCH: Yes, across all scorecards.

MR. MILLAR: That's right. I know you have to add it all together, but generally that's the idea?

MS. LYNCH: Yes.

MR. MILLAR: Now what you're proposing, actually, is something a little bit different. Union is proposing that they would be eligible for the maximum allowable incentive at 125 percent of the target, as opposed to the 150 percent as set out in the framework; is that right?

MS. LYNCH: Yes.

MR. MILLAR: And a number of parties have asked you questions about this, including Staff, and I want to take you to your response to Staff Interrogatory No. 4.

I'm having some difficulty. It may be the way that

the answer is worded or is presented. But I'm having some difficulty meshing what we've just discussed with what I see set out -- what I think I see set out in Board Staff interrogatory 4.

We asked you some questions about why this would be appropriate, and if you turn to page 2 of that interrogatory response, just above the table, just above figure 1, you state just above that:

> "As outlined in figure 1, if Union had used a 75 percent, 100 percent, 150 percent scorecard design, it would have resulted in lower 75 percent and 100 percent target levels in order to ensure the upper band level was attainable within the available budget."

Do you see that?

MS. LYNCH: Yes, I do.

MR. MILLAR: And then the source of my confusion -- I think Mr. DeRose was asking about this in the technical conference as well, and I still wasn't quite following it.

When you looked at what you presented in figure 1, it seems to assume that the starting point of the analysis is not the 100 percent, not the target, if I could call it that, but it looks like you start at the upper band target and reverse-engineer both the 100 percent and the 75 percent from there.

Whether you start as a 150 or 125, it seems to me your starting point is not the target, but it's the upper band.

You can help me with that?

MS. LYNCH: Yes. Figure 1 is meant to illustrate the difference. So when I'm speaking to our -- how we built the target, we've built it assuming the budget amount in a year, and what it would take to achieve the 100 percent target as we've laid it out.

Now, if you assume that we've spent our budget to get to the 100 percent and then, as the framework outlines, we then have the ability to spend 15 percent more to overachieve our target, going from 100 to 150 with a 15 percent available budget, in our view, just -- it isn't a proportional stretch.

MR. MILLAR: So it's not a realistic possibility; is that a fair way to put it?

MS. LYNCH: Correct, based on how we've built the budget and target within our plan.

MR. MILLAR: And I think I understand that. I don't want to put words in the company's mouth, but you think that 150 is not a realistic target to get to, and that 125 better represents would be within the realm of possibility. Is that a fair assessment, a fair overview?

MS. LYNCH: It is fair in the sense of the budget available to do that. And I would note that this is similar to the bands that we've had in our previous framework, where we had 75, 100, 125 with the 15 percent overspend available to achieve between 100 and 125 percent.

MR. MILLAR: I understand what you're saying there. The parties may disagree with that analysis, but I understand what your position is.

What I don't understand is how, in both figure 1 and then table 1 on the next page, but we can -- actually can we turn to table 1 on the next page? It shows the same sort of thing, and I think it's meant to be another illustration of how the target, the lower band and the upper band, would move based on whether you were using the 125 percent upper band, or the 150 percent upper band; is that fair?

MS. LYNCH: It's fair, because we're assuming that we have the budget plus 15 percent.

MR. MILLAR: Right, and again what puzzles me is the upper band number stays fixed, and then it is the target number, and then I guess the lower band that's switched, where as I would have thought you build to the target, which is 100 percent, and then you calculate the upper band and lower band from there.

Whether the upper band is 125 or 150, I would have thought you still would have used the target to calculate that. So what am I missing here?

MS. LYNCH: Again, it is meant to be illustrative to say, based on the budget and the target that we have. So in doing this illustration, we maintained the upper band as we have -- would -- have proposed in this, based on the 125, and then said if you were to say this is the budget that we have available, how would we need to allocate that differently in what we need to achieve the target number band. That's where you get to the differences in the budget.

MR. MILLAR: The top table -- I guess the table on table 1, that's taken straight out of the application, right? That's your resource acquisition targets? Those are the actual numbers from the application?

MS. LYNCH: That's correct.

MR. MILLAR: And the one below is just an illustration you've done using 150?

MS. LYNCH: Yes, using it as what our 150 would be within the plan we -- what the upper band would be within the plan we propose.

MR. MILLAR: If you've answered this, I apologize. Math is not my strong point, but I would have thought that to figure out what the 150 percent upper band would be, you would take the 110 million m-cubes that are your target and multiply that by 1.5.

But you've actually done it the other way. You've started with the upper band and, I guess, you've reverse engineered the target. Have I got that right?

MS. LYNCH: Yes, because we've done it with the assumption of the budget that's available.

MR. MILLAR: I think I do understand what's happened, how you've done it. So thank you for that.

What I do want to confirm though is, when we first looked at this, we thought we had been mistaken all along and you had done your bottom-up analysis to build to the upper target.

But can you confirm for me that is not correct? You do the bottom-up analysis to get to the 100 percent figure;

is that right?

MR. DIBAJI: That is correct.

MR. MILLAR: And if I took something else from both figure 1 and table 1, I was mistaken based on the explanation you have just provided?

MR. DIBAJI: Correct.

MR. MILLAR: Okay, why don't we move on. I have some questions about input assumptions and changes to input assumptions.

I don't know if I'll actually take you to anything you wrote here, but I guess our starting point for these questions was GEC interrogatory 31. It might be helpful just to have that handy.

Okay. Let me back up a little bit just to frame the issue a little bit with some very basic stuff.

Under your proposal there will be an annual EM&V process, evaluation, measurement, and audit process?

MS. LYNCH: Yes, that's correct.

MR. MILLAR: And one of the outcomes from that process can be changes to input assumptions; let's just take measure lives for an example. That's a possibility from the EM&V review?

MS. LYNCH: Certainly through our evaluation work, yes.

MR. MILLAR: Okay. And I just have some questions about how and when those changes to input assumptions will be applied under your proposal, and for me the easiest way to go about this is to give you an example, and let's walk

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BEFORE:	**Christine Long**	**Presiding Member**
	Allison Duff	**Member**
	Susan Frank	**Member**

negotiated out. I was representing another organization that negotiated a settlement with both the electric utilities and gas utilities there. They proposed and the regulators approved giving certain multipliers for savings that came from emerging -- certain selected emerging technologies like -- in the case on the electric side these were heat-pump water heaters, high-performance cold-climate heat pumps, things that have -- that are kind of emerging, don't have -- have hardly any significant traction in the market, would require a little bit of creativity to advance. If you're not a risk-taker as a utility, you wouldn't go there, but if you got a 50 percent or a 75 or a 100 percent bonus per unit of savings you got from those technologies, maybe you'd pay a little bit more attention to them, so the utilities thought that was a good idea too, and that was another twist on how you can develop a performance incentive mechanism that gave a little bit of encouragement to try something new that might have longer-term pay-off.

MS. DUFF: Thank you, you just actually anticipated another question. I want to talk now about using other jurisdictions as benchmarks. We have had many comparisons, whether it's Navigant, you, looking at Ontario versus Minnesota, Rhode Island, Vermont. I don't know if they consider Ontario part of their peer group.

MR. NEME: Not yet.

MS. DUFF: But -- pardon me?

MR. NEME: Not yet.

MS. DUFF: But you spoke a lot about some of the caveats of doing direct comparisons with Ontario and others of these states. The percentage of sales by customer type, the regulation policy, government policy, DSM budgets, shareholder incentive structures.

With all of those differences, what is the -- what should this Board be taking in terms of the reliance we place on these comparisons? I can maybe add to that, in that in one way you could just be looking at it from best practices, idea generation, or the other extreme would be, you know, we're going to plot exactly how much you're spending and how much Ontario is spending and use that as a guide for making our decisions.

MR. NEME: Well, I think you need to separate a couple sets of differences that you just articulated. One set of differences are policy differences, which the -- over which the regulators and to some degree the utilities and all the rest of us have some input on and control over. The other set of differences are kind of, for want of a better term, endemic to the jurisdiction or to the utility. The mix of customers they have is not something that you can modify. I mean, it is what it is, and if it is different from one place to another you have to take that into account.

When I looked at the jurisdictions that I picked for comparators, I tried to keep those endemic differences in mind. I only looked at cold-climate jurisdictions which have, you know, a lot of their gas consumption driven by space heating, just as Ontario does.

And I did look at the customer makeup, and as I noted -- the days are all becoming a blur now, but sometime before today -- the key differences -- or the one of the key differences there I think is what portion of your sales are going to residential customers versus business customers, because the cost of getting savings from residential customers is considerably higher, typically, and that -- I noted that in all four of the jurisdictions that -- other comparative jurisdictions that I looked at, they were all roughly in the same ballpark in terms of the percentage of sales going to residential, and Enbridge's was kind of smack in the middle of that range, so that seemed like a really good comparison from that perspective.

Union, on the other hand, sells a lot smaller percentage of its gas to residential, and I simply -- in that sense, the comparison group I chose is a conservative one.

Those seemed to me to be -- and they all use net savings. I think that's another kind of key issue. There are some jurisdictions that use gross savings, and you obviously wouldn't want to compare a gross savings estimate to a net savings estimate across jurisdictions.

So those seem to me to be the big ones, and I think we -- I resolved all of those in the jurisdictions that I picked.

The other differences that you mentioned around budget and other things, those are things over which you have control, so the question at that point is if these

comparison jurisdictions suggest you can get savings of X, that would suggest that Ontario could too, provided you put the right framework and policies in place to allow that to happen.

MR. CHERNICK: And again, that's a suggestion, and if the utilities come back and say, :Well, we don't think we can do this much in this sector, but there are other states that have been doing that." There are, say, U.S. states that have been done that, then you -- it's reasonable to ask: Well, what's different? And in fact, there may be something different about the mix of space heating versus water heating or something else that makes one group -- the customers easier to reach or less expensive to reach in one jurisdiction compared to compared to another, but it is a very useful initial test of the reasonableness or the aggressiveness of an efficiency program.

MR. NEME: And I should add one other that just occurred to me -- one other attribute that I think it's important to get one's head around to draw conclusions about comparability, and that would be, you know, how long have you been doing this? Because if it's a jurisdiction that's getting 1 or 2 percent savings but they only just started two years ago, and they did nothing before then, then maybe they're going out and, you know, getting the easy stuff that Enbridge and Union have gotten before, but all of these jurisdictions like Enbridge and Union have been doing substantial gas DSM for quite some time.

MS. DUFF: Thank you. I have one final question. It

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	Allison Duff	**Member**
	Susan Frank	**Member**

MS. DUFF: Thank you, that's helpful, and I realize it is just picking one as an example, but it is one that we're familiar with.

MS. OLIVER-GLASFORD: Yes.

MS. DUFF: Moving on to a different area -- oh, sorry.

MS. LONG: Do you need to take a break, or do you want to continue? I had promised a break at the one-hour mark, so -- I think we'll probably be another half hour, so I wanted to give you the option of taking a 15-minute break and coming back for half an hour, or we can continue through. It's up to you.

MS. LYNCH: We're okay.

MS. LONG: You're okay? All right. Then let's continue.

MS. DUFF: I want to also talk about now the 150 percent target, and your understanding of that. One interpretation could be the 150 percent target is a stretch goal, given the budget that you've established. Another interpretation can be what can help us toward that 150 is moving budget around a reallocation to help us get there.

How have you interpreted the 150? Is there a bit of both? That it's driven by budget? Or could it also be a stretch based on the efficiency of your delivery, your targeting, penetration, savings per program?

MS. LYNCH: So, as Union built the plan, we built it bottom-up and we built it under the expectation that we needed -- of what we could achieve with our 100 percent. So, the budget guidance that was provided.

And then we said what would be -- what is a stretch that would be reasonably achievable with the 15 percent overspend? So that's how we looked at it, and that's what led us to our proposal of the 125 percent.

MS. DUFF: And I've asked this of the joint panel, just to contrast Enbridge's, you know, interpretation of this.

MS. OLIVER-GLASFORD: Enbridge sought to be responsive to the framework, and so we put in the 150 percent target recognizing that is most definitely a stretch target. In fact, I looked back because I had a discussion with Mr. Shepherd about whether we had achieved our full DSMI or SSM, ever in the past, and we have ever, not even once, hit our maximum allowable shareholder incentive. And so this stretch is certainly a stretch.

MS. LYNCH: If you wouldn't mind, I would just add to that that, again, similarly, we looked at it as an aggressive, and in our last 2012 to 2014, we similarly had 75, 100, 125 in our structure. And we weren't able to achieve the maximum incentive in that, so it was an aggressive stretch.

MS. DUFF: Thank you. I have a question about the DVAs, just the structure of them and the true-up that occurs.

So as I understand, to the extent that you spend more or less in the programs versus what's been approved or in budget, that the DVA is a mechanism to true-up.

But the actual rate mechanism is a variable charge,

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VOLUME: **1**

DATE: **August 19, 2015**

BEFORE:	**Christine Long**	**Presiding Member**
	Allison Duff	**Member**
	Susan Frank	**Member**

MS. LYNCH: Yes. Figure 1 is meant to illustrate the difference. So when I'm speaking to our -- how we built the target, we've built it assuming the budget amount in a year, and what it would take to achieve the 100 percent target as we've laid it out.

Now, if you assume that we've spent our budget to get to the 100 percent and then, as the framework outlines, we then have the ability to spend 15 percent more to overachieve our target, going from 100 to 150 with a 15 percent available budget, in our view, just -- it isn't a proportional stretch.

MR. MILLAR: So it's not a realistic possibility; is that a fair way to put it?

MS. LYNCH: Correct, based on how we've built the budget and target within our plan.

MR. MILLAR: And I think I understand that. I don't want to put words in the company's mouth, but you think that 150 is not a realistic target to get to, and that 125 better represents would be within the realm of possibility. Is that a fair assessment, a fair overview?

MS. LYNCH: It is fair in the sense of the budget available to do that. And I would note that this is similar to the bands that we've had in our previous framework, where we had 75, 100, 125 with the 15 percent overspend available to achieve between 100 and 125 percent.

MR. MILLAR: I understand what you're saying there. The parties may disagree with that analysis, but I understand what your position is.

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FILE NO.:	**EB-2015-0029**	**Union Gas Limited**
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VOLUME: **3**

DATE: **August 21, 2015**

BEFORE:	**Christine Long**	**Presiding Member**
	Allison Duff	**Member**
	Susan Frank	**Member**

MR. SMITH: Good afternoon panel. I'm going to ask questions in two areas. The first area arises from a question you had -- or a series of questions you had, rather, from Member Frank about the 30 percent flexibility mechanism.

The question is simply: How long has the 30 percent flexibility mechanism been in place?

MS. LYNCH: Gee, I've been doing this a long time. Certainly it's been in place -- it was in place in the last framework and, I believe, similarly through the generic proceeding, in that we had flexibility in how we could move funding around, which would have been --starting in 2007 was that plan period.

MR. SMITH: Thank you. The second area I want to ask about relates to some of the questions that Mr. Shepherd was asking you earlier today with respect to over-spend; do you remember that?

MS. LYNCH: Yes.

MR. SMITH: So here the first question: If an upper band target is not reasonable, in Union's view, do you expect that Union's senior management will allocate resources to meeting that target?

MS. LYNCH: No. Without a maximum shareholder incentive that is considered to be achievable, it will not have senior management attention.

MR. SMITH: Okay. Then will Union be able to achieve the maximum with the upper band at 150 percent with an overspend of 15 percent?

MS. LYNCH: No.

MR. SMITH: Those are my questions. Thank you.

MS. LONG: Thank you, Mr. Smith.

And thank you, panel, for your evidence. I know it's been a very long week, but we appreciate your evidence. You are excused.

I don't think there are any other issues that we need to deal with. The schedule has been set for Monday. Mr. O'Leary, I don't know that we will get to your panel on Monday, but I would like them to be on standby, just in case.

MR. O'LEARY: We will, Madam Chair.

MS. LONG: That being said, we are adjourned until Monday. Have a good weekend, everybody.

--- Whereupon the hearing adjourned at 4:57 p.m.

Scorecard Metric Descriptions

Cumulative Natural Gas Savings (m^3)

The Cumulative Natural Gas Savings Metric measures the total natural gas saved for all Resource Acquisition programs (Residential and Commercial/Industrial) delivered for the term of their measure life, net of adjustment factors (such as free ridership, spillover and persistence). For 2015, the Cumulative Natural Gas Savings target will be determined by multiplying the 2014 post-audit scorecard cost-effectiveness (cumulative m^3 per promotion and incentive dollar spent) by $10.684 million (the 2015 Resource Acquisition promotion and incentive budget prior to the application of inflation). The result is further multiplied by 1.02, ensuring a 2% increase in targets from the previous year, which produces the final 2015 Cumulative Natural Gas Savings target. The Lower Band will be 75% of the target and the Upper Band will be 125% of the target. By using a formulaic approach, the targets will be adjusted based on the prior year's performance.[6]

Deep Savings – Residential (Homes)

The Deep Savings – Residential (Homes) Metric measures participants in the Home Reno Rebate Offering that achieve a minimum gas savings of 11,000 cumulative m^3 (based on HOT2000 software used in EnerGuide mode), and implement a minimum of two major measures in their

[6] For illustrative purposes, if Union's 2014 post audit achievement is 875,000,000 m^3 while spending $10.9 million (promotion and incentive spend) to achieve those results, the cost-effectiveness would be 80.3 m^3 per dollar spent. To calculate the 2015 Target, the 2014 post audit cost effectiveness (80.3 m^3/$) will be multiplied by the 2015 Resource Acquisition promotion and incentive budget ($10.684 million) and 1.02 to equal a target of 875,083,703 m^3. The Lower Band will be 656,312,777 m^3 (75% of 875,083,703 m^3) and the Upper Band will be 1,093,854,629 m^3 (125% of 875,083,703 m^3).

home as outlined in Exhibit A, Tab 3, Appendix A, Section 1.0. Furthermore, the aggregate of all the homes counted towards the Deep Savings – Residential (Homes) Metric must achieve, on average, at least a 25% reduction in their annual gas usage for space and water heating (as determined by HOT2000 software used in EnerGuide mode).

For 2015, the Deep Savings – Residential (Homes) target will be based on 2014 achievement multiplied by 1.25. The Lower Band will be 75% of the Target and the Upper Band will be 125% of the Target.[7]

Deep Savings – Commercial/Industrial (%)

The Deep Savings – Commercial/Industrial Metric measures the savings achieved from all Commercial/Industrial custom projects as a percentage of the participants' baseline consumption. This will be calculated by comparing the forecasted weather normalized annual gas savings for all Commercial/Industrial custom projects against the actual weather normalized consumption of the participants in those projects for the immediately preceding year. For any Commercial/Industrial custom project, should a prescriptive measure be installed, the savings relating to that measure will be included for the purpose of calculating the normalized annual gas savings. For 2015, the Deep Savings – Commercial/Industrial target will be based on the higher of: a) 2014 actual plus 1% or b) 5.5%. The Lower Band will be based on the higher of: a) 2014

[7] For illustrative purposes, if Union's 2014 Deep Savings – Residential (Homes) achievement is 1,000 homes, then the 2015 Target will be 1,250 homes (1,000 homes times 1.25). The Lower Band will be 938 homes (75% of 1,250 homes) and the Upper Band will be 1,563 (125% of 1,250 homes).

actual or b) 4.5% and the Upper Band will be based on the higher of: a) 2014 actual plus 2% or b) 6.5%.[8]

3.2. Large Volume Scorecard

The Large Volume Scorecard consists of two metrics, a Cumulative Natural Gas Savings Metric for Rate T2/Rate 100 customers and a Cumulative Natural Gas Savings Metric for Rate T1 customers. These two metrics are in recognition of the 2012-2014 DSM Guidelines main principle of maximizing cost-effective natural gas savings. The scorecard metrics for Rate T2/Rate 100 customer and Rate T1 customers are split to recognize that Rate T2/Rate 100 customers operate under the Direct Access budget mechanism which allows them direct access to their dedicated customer incentive budget in rates whereas Rate T1 customer will have access to an aggregated pool of customer incentive funding. The 2015 Large Volume Scorecard, which is a rollover of the formulaic adjustment of the 2014 Large Volume Scorecard approved in Union's Large Volume 2013-2014 DSM Proceeding (EB-2012-0337), is provided in Table 8.

[8] For illustrative purposes, if the total annual natural gas savings from Union's 2014 Commercial/Industrial custom projects was 400,000,000 m^3 and the total 2013 consumption for the Commercial/Industrial project participants was 5,318,598,501 m^3 , then the 2014 achievement would be 7.52%. Therefore the 2015 Target will be 8.52% (7.52% plus 1%) which is higher than 5.5%. The Lower Band will be 7.52% and the Upper Band will be 9.52%.

Table 8

2015 Large Volume Scorecard

2015 Large Volume Rate T1/Rate T2/Rate100 Scorecard				
Metrics	Metric Target Scorecard			Weight
	Lower Band	Target	Upper Band	
Rate T2/Rate 100 Cumulative Natural Gas Savings (m^3)	75% of Target	Three-year rolling average (2012-2014) post-audit Rate T2/Rate 100 cost effectiveness (m^3 per customer incentive dollar spent) times $2.383M	125% of Target	40%
Rate T1 Cumulative Natural Gas Savings (m^3)	75% of Target	Three-year rolling average (2012-2014) post-audit T1 cost effectiveness (m^3 per customer incentive dollar spent) times $1.104M	125% of Target	60%

Both of the Cumulative Natural Gas Savings Metrics measure the total natural gas saved for all projects delivered to Rate T1, Rate T2, and Rate 100 customers for the term of their measure life, net of adjustment factors (including, but not limited to free ridership, spillover and persistence).

For 2015, both of the Cumulative Natural Gas Savings Targets will be determined by multiplying the average 2012-2014 post-audit scorecard cost effectiveness (cumulative m^3 per incentive dollar spent) by the current year's customer incentive budget, prior to the application of inflation ($2.383 million for Rate T2/Rate 100 and $1.104 million for Rate T1). The Lower Band will be 75% of the Target and the Upper Band will be 125% of the Target. The formulaic approach for the Large Volume Scorecard approved in EB-2012-0337 uses a three year rolling average to recognize that the cost effectiveness may change considerably for the Large Volume

Program from year to year. The Large Volume cost effectiveness is calculated using the customer incentive as promotion costs are not tracked at a rate class level.

3.3. Low Income Scorecard

Union's Low Income Scorecard contains two metrics: Cumulative Natural Gas Savings from Single Family and Cumulative Natural Gas Savings from Multi-Family Offerings. These two metrics reflect the principle in the 2012-2014 DSM Guidelines of maximizing cost-effective natural gas savings. The Cumulative Natural Gas Savings from Single Family Metric measures the total natural gas saved from the Home Weatherization Offering delivered by Union for the term of their measure life, net of adjustment factors (such as free ridership, spillover and persistence). The Cumulative Natural Gas Savings from Multi-Family Metric measures the total natural gas saved from the Affordable Housing Conservation Offering delivered by Union for the term of their measure life, net of adjustment factors (such as free ridership spillover and persistence).

The 2015 Low Income Scorecard, which is a rollover of the 2014 Low Income Scorecard as illustrated in the EB-2011-0327 Settlement, is provided in Table 9.

(125%), which is consistent with Union's 2012-2014 Plan.[4] For the proposed scorecards Union has established the Lower Band and Upper Band achievement levels as a symmetric multiplier of the Target, unless stated otherwise.

The multiplier for the Lower Band will be 0.75 of the Target (Lower Band = Target x 0.75). As per the Guidelines, Section 5.0, Union will not earn a DSM incentive for a weighted scorecard achievement of less than the Lower Band target. The multiplier for the Upper Band is consistent with Union's 2012-2014 Scorecard approach of 1.25 (Upper Band = Target x 1.25). The Upper Band multiplier has been established with the consideration that Union has to achieve a 25% increase above the target with additional funding of only 15% above the Board-approved DSM budget as outlined in Section 11.2 of the Guidelines. This approach is consistent with Union's Board-approved 2012-2014 DSM Plan (EB-2011-0327) Settlement. Union is motivated to achieve results beyond the Target (100%) as the Board has established a DSM incentive structure which introduces a pivot point at the scorecard's 100% target level.[5] Further information on the DSM incentive mechanism can be found at Exhibit A, Tab 3, Section 4.

3.1. Resource Acquisition Scorecard

The Resource Acquisition scorecard will measure the performance of Union's Residential and Commercial/Industrial programs. The scorecard's performance will be measured on two metrics: Cumulative Natural Gas Savings (m^3), and Home Reno Rebate ("HRR") Participants (Homes). Union is proposing these metrics as they reflect the Board's guiding principles and

[4] In the DSM Guidelines for Natural Gas Utilities (EB-2008-0346), the Board's Guidelines contained an Upper Band of 150% and the Board ultimately approved an Upper Band of 125% in Union's 2012-2014 DSM Plan.
[5] Union will earn a DSM incentive for a scorecard weighted achievement between 75% and 125% of the target.

key priorities. The Cumulative Natural Gas Savings Metric ensures Union's DSM programs have been designed to pursue long-term energy savings to meet the Board's goal of "assisting consumers in managing their energy bills through the reduction of natural gas consumption"[6]. The HRR Participant Metric reflects multiple objectives, such as the Board's key priority of taking a holistic approach to identifying savings throughout a customer's home, preventing lost opportunities and pursuing long-term energy savings through a focus on thermal envelope improvements. The proposed scorecard strikes the appropriate balance of Union's efforts to meet the guiding principles and key priorities as set out in the Framework and Guidelines. As noted in the Framework, Union has placed a higher weighting on the Cumulative Natural Gas Savings Metric recognizing that it will produce the greatest long-term benefit to customers and the overall natural gas system. Table 4 summarizes Union's proposed 2016-2020 Scorecards along with a description of the proposed metrics.

[6] EB-2014-0134, Report of the Board, Demand Side Management Framework for Natural Gas Distributors (2015-2020), p. 5.

Table 4

2016-2020 Resource Acquisition Scorecard[7,8]

2016 Resource Acquisition Scorecard				
Metrics	**Metric Target Scorecard**			**Weight**
	Lower Band	**Target**	**Upper Band**	
Cumulative Natural Gas Savings (m^3)	832,223,742	1,109,631,656	1,387,039,570	75%
Home Reno Rebate Participants (Homes)	2,250	3,000	3,750	25%

2017 Resource Acquisition Scorecard				
Metrics	**Metric Target Scorecard**			**Weight**
	Lower Band	**Target**	**Upper Band**	
Cumulative Natural Gas Savings (m^3)	75% of Target	2016 Post-Audit Scorecard Yield times 2017 Resource Acquisition pre-inflation promotion and incentive budget times 1.02	125% of Target	75%
Home Reno Rebate Participants (Homes)	75% of Target	2016 Post-Audit Scorecard Yield times 2017 HRR pre-inflation promotion and incentive budget	125% of Target	25%

2018 Resource Acquisition Scorecard				
Metrics	**Metric Target Scorecard**			**Weight**
	Lower Band	**Target**	**Upper Band**	
Cumulative Natural Gas Savings (m^3)	75% of Target	2017 Post-Audit Scorecard Yield times 2018 Resource Acquisition pre-inflation promotion and incentive budget times 1.02	125% of Target	75%
Home Reno Rebate Participants (Homes)	75% of Target	2017 Post-Audit Scorecard Yield times 2018 HRR pre-inflation promotion and incentive budget	125% of Target	25%

[7] The Post-Audit Scorecard Yield for the Cumulative Natural Gas Savings (m^3) metric equates to the m3 per promotion and customer incentive dollar spent for the year in question.

[8] The Post-Audit Scorecard Yield for the Home Reno Rebate Participants (Homes) metric equates to the homes per promotion and customer incentive dollar spent for the year in question.

2019 Resource Acquisition Scorecard				
Metrics	**Metric Target Scorecard**			**Weight**
	Lower Band	**Target**	**Upper Band**	
Cumulative Natural Gas Savings (m^3)	75% of Target	2018 Post-Audit Scorecard Yield times 2019 Resource Acquisition pre-inflation promotion and incentive budget times 1.02	125% of Target	75%
Home Reno Rebate Participants (Homes)	75% of Target	2018 Post-Audit Scorecard Yield times 2019 HRR pre-inflation promotion and incentive budget	125% of Target	25%

2020 Resource Acquisition Scorecard				
Metrics	**Metric Target Scorecard**			**Weight**
	Lower Band	**Target**	**Upper Band**	
Cumulative Natural Gas Savings (m^3)	75% of Target	2019 Post-Audit Scorecard Yield times 2020 Resource Acquisition pre-inflation promotion and incentive budget times 1.02	125% of Target	75%
Home Reno Rebate Participants (Homes)	75% of Target	2019 Post-Audit Scorecard Yield times 2020 HRR pre-inflation promotion and incentive budget	125% of Target	25%

Union's 2016 Resource Acquisition Scorecard targets have been established based on a bottom up analysis. For further information on the target, refer to Exhibit A, Tab 3, Appendix A, Sections 1.0 and 1.1 where the program offering targets and rationale are outlined in detail. As discussed earlier, the 2016 Lower and Upper Band targets have been established based on 75% of Target and 125% of Target respectively. Consistent with the approach outlined in the input assumptions subsection above, Union will update the 2016 Resource Acquisition Scorecard Targets upon completion of the TRM and NTG reviews.

Union proposes the 2017-2020 metric targets be based on a formulaic target setting mechanism. This approach is consistent with the Board-approved 2012-2014 Scorecards included in the EB-2011-0327 Settlement. This formulaic approach ensures that while Union strives to achieve exemplary results in any given year, the following year's targets are adjusted to reflect its performance. Union recognizes that establishing five year targets based on current market fundamentals, historical data, internal sales and account management teams, relevant research and current input assumptions may have inherent assumptions that may change in the future. Therefore the formulaic approach provides flexibility for the targets to reflect the best available information and most recent experience at the time the targets are set. The scorecard metric descriptions and illustrative examples of the formulaic approach are outlined below.

Scorecard Metric Descriptions

Cumulative Natural Gas Savings (m^3)

The Cumulative Natural Gas Savings (m^3) metric measures the total natural gas saved for all Resource Acquisition programs[9] delivered by Union for the term of their measure life, net of adjustment factors (such as free ridership, spillover and persistence). The Resource Acquisition offerings that contribute to the Scorecard can be found under the Residential and Commercial/Industrial Program Sections at Exhibit A, Tab 3, Appendix A, Sections 1.0 and 1.1.

For 2017-2020, the Cumulative Natural Gas Savings Target will be determined by multiplying the previous year's Resource Acquisition Scorecard post-audit yield (m^3 saved per promotion

[9] Rate T2/Rate 100 rate classes are excluded.

and incentive dollar spent) by the current year's pre-inflation promotion and incentive budget.[10] The result is further multiplied by 1.02, which produces the final Cumulative Natural Gas Savings Target for the year in question. Union proposes to maintain the 2% increase in its targets (approved by the Board in EB-2011-0327), which in turn requires Union to deliver its Resource Acquisition programs more cost-effectively. The Lower Band will be 75% of the target and the Upper Band will be 125% of the target[11]. By using a formulaic approach, the targets will be adjusted based on the prior year's performance.

In instances where a new offering is being introduced during the 2017-2020 term, the offering's target-outlook (as outlined in Exhibit A, Tab 3, Appendix A) would be added to the calculated target amount based on the formulaic approach. If the Residential Behavioural Offering were to be introduced for 2017, then the Behavioural Target outlook of 4,051,007 m^3, as outlined at Exhibit A, Tab 3, Appendix A, Section 1.0, would be added to the target as established by the formula for a final 2017 target[12]. The formulaic approach will continue in the following years which will take into account the previous year's yield including any incremental offerings that were introduced. As demonstrated in the illustrative example found in footnote 8, the formulaic

[10] The promotion and incentive budget for scorecard target calculations do not include any incremental budget from the cost-efficiency incentive.

[11] For illustrative purposes, if Union's 2016 post-audit achievement is 1,109,631,656 m^3 while spending $30.8 million dollars (promotion and incentive spend) to achieve those results, the yield would be 36.0 m^3 per dollar spent. To calculate the 2017 target, the 2016 post audit yield (36.0 m^3/$) will be multiplied by the 2017 Resource Acquisition promotion and incentive budget ($34.2 million) and 1.02 to equal a target of 1,255,189,380 m^3. The Lower Band will be 941,392,035 m^3 (75% of 1,255,189,380 m^3) and the Upper Band will be 1,568,986,725 m^3 (125% of 1,255,189,380 m^3).

[12] For example, if the scorecard target formula determined the 2017 target to be 1,255,189,380 m^3, then the final 2017 target will be 1,255,189,380 m^3 plus 4,051,007m^3 (Residential Behavioural offering target) equalling a target value of 1,259,240,387 m^3.

approach to target setting provides flexibility and is responsive to market conditions and Union's performance, while ensuring aggressive targets are set based on current assumptions.

Home Reno Rebate Participant (Homes)

Homes that count as a participant towards the Home Reno Rebate ("HRR") Participant (Homes) metric must meet the following two requirements:

1. A homeowner must complete at least two eligible renovations as outlined at Exhibit A, Tab 3, Appendix A, Section 1.0, Table 1.
2. The aggregate of all of the homes counted towards the metric must achieve, on average, at least a 15% reduction in annual natural gas use as determined through comparing a pre and post energy assessment.[13]

For 2017-2020, the HRR participant target will be determined by multiplying the previous year's post-audit yield (homes per promotion and incentive dollar spent) by the current year's promotion and incentive budget[14], producing the final HRR participant target for the year in question. The Lower Band will be 75% of the Target and the Upper Band will be 125% of the Target[15]. By using a formulaic approach, the targets will be adjusted based on the prior year's performance.

[13] For detailed information on the Home Reno Rebate offering please refer to Exhibit A, Tab 3, Appendix A, Section 1.0.

[14] The promotion and incentive budget for scorecard calculations do not include any incremental budget from the cost-efficiency incentive.

[15] For illustrative purposes, if Union's 2016 post audit achievement is 3,000 homes while spending $7.2 million dollars (promotion and incentive spend) to achieve those results, the yield would be 0.0004 homes per dollar spent. To calculate the 2017 target, the 2016 post-audit yield (0.0004 homes/$) will be multiplied by the 2017 HRR

3.2. Low Income Scorecard

The Low Income Scorecard measures the performance of Union's Low Income Program offerings. The Scorecard's performance will be measured on three metrics: Single Family Cumulative Natural Gas Savings (m^3), Social and Assisted Multi-Family Cumulative Natural Gas savings (m^3), and Market Rate[16] Multi-Family Cumulative Natural Gas Savings (m^3). These metrics have been included in Union's Low Income Scorecard as they reflect the Board's guiding principles and key priorities. The Cumulative Natural Gas Savings Metrics for Single Family and Multi-Family Offerings are focused on the pursuit of long-term energy savings and are consistent with Union's EB-2011-0327 Settlement. The Market Rate Multi-Family Metric was introduced based on feedback received by stakeholders during Union's 2016-2020 consultations, as outlined at Exhibit A, Tab 3, Appendix B. Stakeholders expressed their interest in increasing the DSM offering focus on the multi-family private sector by introducing a Scorecard Metric to monitor Union's performance. Table 5 summarizes Union's proposed 2016-2020 Low Income Scorecards along with a description of the proposed metrics.

promotion and incentive budget ($9.9 million) to equal a target of 4,098 homes. The Lower Band will be 3,073 homes (75% times 4,098 homes) and the Upper Band will be 5,122 homes (125% times 4,098 homes).

[16] Market rate refers to the Low-Income private multi-family sector as outlined at Exhibit A, Tab 3, Appendix A.

Table 5

2016-2020 Low Income Scorecards[17,18,19]

2016 Low Income Scorecard				
Metrics	**Metric Target Scorecard**			**Weight**
	Lower Band	**Target**	**Upper Band**	
Single Family Cumulative Natural Gas Savings (m^3)	25,763,419	34,351,225	42,939,031	60%
Social and Assisted Multi Family Cumulative Natural Gas Savings (m^3)	11,021,832	14,695,776	18,369,720	35%
Market Rate Multi Family Cumulative Natural Gas Savings (m^3)	1,834,422	2,445,896	3,057,370	5%

2017 Low Income Scorecard				
Metrics	**Metric Target Scorecard**			**Weight**
	Lower Band	**Target**	**Upper Band**	
Single Family Cumulative Natural Gas Savings (m^3)	75% of Target	2016 Post-Audit Scorecard Yield times the 2017 Single Family pre-inflation promotion and incentive budget	125% of Target	60%
Social and Assisted Multi Family Cumulative Natural Gas Savings (m^3)	75% of Target	2016 Post-Audit Scorecard Yieldtimes the 2017 Social and Assisted Multi-Family pre-inflation promotion and incentive budget	125% of Target	35%
Market Rate Multi Family Cumulative Natural Gas Savings (m^3)	75% of Target	2016 Post-Audit Scorecard Yield times the 2017 Market Rate Multi-Family pre-inflation promotion and incentive budget	125% of Target	5%

[17] The Post-Audit Scorecard Yield for the Single Family Cumulative Natural Gas Savings (m^3) metric equates to the m3 per promotion and customer incentive dollar spent for the year in question.
[18] The Post-Audit Scorecard Yield for the Social and Assisted Multi-Family Cumulative Natural Gas Savings (m^3) metric equates to the m^3 per promotion and customer incentive dollar spent for the year in question.
[19] The Post-Audit Scorecard Yield for the Market Rate Multi-Family Family Cumulative Natural Gas Savings (m^3) metric equates to the m^3 per promotion and customer incentive dollar spent for the year in question.

2018 Low Income Scorecard				
Metrics	**Metric Target Scorecard**			**Weight**
	Lower Band	**Target**	**Upper Band**	
Single Family Cumulative Natural Gas Savings (m^3)	75% of Target	2017 Post-Audit Scorecard Yield times the 2018 Single Family pre-inflation promotion and incentive budget	125% of Target	60%
Social and Assisted Multi-Family Cumulative Natural Gas Savings (m^3)	75% of Target	2017 Post-Audit Scorecard Yield times the 2018 Social and Assisted Multi-Family pre-inflation promotion and incentive budget	125% of Target	35%
Market Rate Multi Family Cumulative Natural Gas Savings (m^3)	75% of Target	2017 Post-Audit Scorecard Yield times the 2018 Market Rate Multi-Family pre-inflation promotion and incentive budget	125% of Target	5%

1

2019 Low Income Scorecard				
Metrics	**Metric Target Scorecard**			**Weight**
	Lower Band	**Target**	**Upper Band**	
Single Family Cumulative Natural Gas Savings (m^3)	75% of Target	2018 Post-Audit Scorecard Yield times the 2019 Single Family pre-inflation promotion and incentive budget	125% of Target	60%
Social and Assisted Multi Family Cumulative Natural Gas Savings (m^3)	75% of Target	2018 Post-Audit Scorecard Yield times the 2019 Social and Assisted Multi-Family pre-inflation promotion and incentive budget	125% of Target	35%
Market Rate Multi Family Cumulative Natural Gas Savings (m^3)	75% of Target	2018 Post-Audit Scorecard Yield times the 2019 Market Rate Multi-Family pre-inflation promotion and incentive budget	125% of Target	5%

2

2020 Low Income Scorecard				
Metrics	**Metric Target Scorecard**			**Weight**
	Lower Band	**Target**	**Upper Band**	
Single Family Cumulative Natural Gas Savings (m^3)	75% of Target	2019 Post-Audit Scorecard Yield times the 2020 Single Family pre-inflation promotion and incentive budget	125% of Target	60%
Multi Family Cumulative Natural Gas Savings (m^3)	75% of Target	2019 Post-Audit Scorecard Yield times the 2020 Social and Assisted Multi-Family pre-inflation promotion and incentive budget	125% of Target	35%
Percent of Multi-Family savings from the Market Rate Sector (%)	75% of Target	2019 Post-Audit Scorecard Yield times the 2020 Market Rate Multi-Family pre-inflation promotion and incentive budget	125% of Target	5%

Union's 2016 Low Income Scorecard Targets were established based on a bottom up analysis. For further information on the target rationale, refer to Exhibit A, Tab 3, Appendix A, Section 1.4. The 2016 Lower and Upper Band targets have been established based on 75% of target and 125% of target, respectively. Consistent with the approach outlined in the input assumptions subsection above, Union will update the 2016 Low Income Scorecard Targets upon completion of the TRM and NTG reviews. Similar to the Resource Acquisition Scorecard, Union proposes a formulaic target setting mechanism for the 2017-2020 scorecards. The formulaic approach ensures that while Union strives to achieve exemplary results the following year's targets are adjusted accordingly to reflect past performance and current budget levels. The scorecard metric descriptions and illustrative examples for the formulaic approach are provided below.

Scorecard Metric Descriptions

Single Family Cumulative Natural Gas Savings (m^3)

The Single Family Cumulative Natural Gas Savings (m^3) Metric measures the total natural gas saved for all single family offerings delivered by Union for the term of their measure life, net of adjustment factors (such as free ridership, spillover and persistence). Exhibit A, Tab 3, Appendix A, Section 1.4 outlines the Single Family Offerings that contribute to the Scorecard Metric.

For 2017-2020, the Single Family Cumulative Natural Gas Savings Target will be determined by multiplying the previous year's Single Family Cumulative Natural Gas Savings Metric post-audit yield (m^3 saved per promotion and incentive dollar spent) by the current year's pre-inflation

promotion and incentive budget[20] which produces the final target for the year in question. The Lower Band will be 75% of the Target and the Upper Band will be 125% of the Target[21]. By using a formulaic approach, the targets will be adjusted based on the prior year's performance.

Social and Assisted Multi-Family Cumulative Natural Gas Savings (m^3)

The Social and Assisted Multi-Family Cumulative Natural Gas Savings (m^3) Metric measures the total natural gas saved for all Multi-Family Offerings delivered to the social and assisted sector by Union for the term of their measure life, net of adjustment factors (such as free ridership, spillover and persistence). Exhibit A, Tab 3 Appendix A, Section 1.4 outlines the suite of Multi-Family Offerings that contribute to the Scorecard Metric. The Multi-Family target setting approach will follow the same direction as outlined in the Single Family Cumulative Natural Gas Savings Metric discussed above.

Market Rate Multi-Family Cumulative Natural Gas Savings (m^3)

The Market Rate Multi-Family Cumulative Natural Gas Savings (m^3) metric measures the total natural gas saved for all Multi-Family Offerings delivered to the Market Rate sector by Union for the term of their measure life, net of adjustment factors (such as free ridership, spillover and persistence). Exhibit A, Tab 3, Appendix A, Section 1.4 outlines the suite of Multi-Family

[20] The promotion and incentive budget for scorecard target calculations do not include any incremental budget from the cost-efficiency incentive.

[21] For illustrative purposes, if Union's 2016 post-audit achievement is 34,351,225 m^3 while spending $7.0 million dollars (promotion and incentive spend) to achieve those results, the yield would be 4.9 m^3 per dollar spent. To calculate the 2017 Target, the 2016 post audit yield (4.9 m^3/$) will be multiplied by the 2017 Low Income promotion and incentive budget ($7.3 million) to equal a Target of 35,533,215 m^3. The Lower Band will be 26,649,911 m^3 (75% of 35,533,215 m^3) and the Upper Band will be 44,416,518 m^3 (125% of 35,533,215 m^3).

offerings that contribute to the scorecard metric. The Market Rate Multi-Family target setting approach will follow the same direction as outlined in the single family cumulative natural gas savings metric discussed above

3.3. Market Transformation Scorecard

Union's Market Transformation Scorecard will measure the performance of Union's Optimum Home program. Union proposes a continuation of the Optimum Home program for 2016 as outlined at Exhibit A, Tab 3, Appendix A, Section 1.5. Based on feedback received by stakeholders at Union's consultative session on January 14, 2015, Union will continue to focus on supporting enrolled builders to increase the market penetration of homes that are built to a 20% higher energy efficient standard than OBC 2012 ("Optimum Home standard"). Table 6 illustrates Union's 2016 Market Transformation Scorecard.

Table 6

2016 Market Transformation Scorecard

2016 Market Transformation Scorecard				
Metrics	**Metric Target Scorecard**			**Weight**
	Lower Band	**Target**	**Upper Band**	
Homes Built (>20% above OBC 2012) by Participating Builders	2015 Actual +15%	2015 Actual +20%	2015 Actual + 25%	100%

The Market Transformation Metric measures the percentage of homes built to Optimum Home standards in relation to the total number of homes built in a program year by actual participating builders who remain enrolled in the program.

Ontario Energy Board

Commission de l'Énergie de l'Ontario

Ontario

EB-2006-0021

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

AND IN THE MATTER OF a generic proceeding initiated by the Ontario Energy Board to address a number of current and common issues related to demand side management activities for natural gas utilities.

BEFORE: Pamela Nowina
Presiding Member and Vice Chair

Paul Vlahos
Member

Ken Quesnelle
Member

DECISION WITH REASONS

August 25, 2006

The Board is satisfied that the Financial Package proposal reaches an appropriate balance between increasing DSM budgets and approving budgets which can be spent in a cost effective manner. Both Pollution Probe and GEC argued in favour of much higher budgets; however, the Board is not convinced that the utilities could currently spend these amounts cost-effectively.

Should there be plan targets and if so, should they be volumetric or based on TRC values? (Issue 1.4)

The Financial Package agreement makes the following proposal:

> "Parties to this partial settlement further agree that there will be an annual TRC target. The parties agree to phase in a formula over the next three years which will set this target, as described below, by averaging the Utility's actual audited TRC results over the previous three years and applying to this figure an escalation factor equal to 1.5 times the amount by which the utility's budget is increased. The parties agree to phase in the aforementioned formula over the next three years beginning with an agreed upon target for each utility in 2007 which, for Union will be $188 million and for EGD $150 million.
>
> Furthermore, the parties agree that, in the event the avoided costs used by the utility are, at a later date, updated, the actual audited results from previous years used to calculate the target will be adjusted to reflect these updated avoided costs.
>
> Finally, and for greater certainty (and as an example), set out below is the formula by which the target will be set for Union, with 2010 provided for illustrative purposes only:
>
> • 2007 - $188 million.
>
> • 2008 - The simple average of $188 million and the actual 2007 audited TRC value as approved by the Board increased by 1.5 times the budget escalation factor (ie. 15%).

• 2009 - The simple average of $188 million and the actual 2007 and 2008 audited TRC values as approved by the Board increased by 1.5 times the budget escalation factor (ie. 15%).

• 2010 - The simple average of the previous three years actual audited TRC values as approved by the Board increased by 1.5 times the budget escalation factor (ie. 15%).

For EGD, the formula by which the target will be set is as follows, with 2010 provided for illustrative purposes only:

• 2007 - $150 million

• 2008 - The simple average of $150 million and the actual 2007 audited TRC value as approved by the Board increased by 1.5 times the budget escalation factor (ie. 7.5%).

• 2009 - The simple average of $150 million and the actual 2007 and 2008 audited TRC values as approved by the Board increased by 1.5 times the budget escalation factor (ie. 7.5%).

•2010 - The simple average of the previous three years actual audited TRC values as approved by the Board increased by 1.5 times the budget escalation factor (ie.7.5%).

The “actual audited TRC values” shall be the total TRC produced for the year in question as determined by the audit in the following year. In setting the target for 2009 and subsequent years, the actual audited TRC value for the immediately preceding year, but not for the prior two years used in the average, will be adjusted to reflect any changes in input assumptions determined in the audit to apply to that year for LRAM purposes. By way of example, if a free rider rate is increased in the 2009 audit carried out in the first half of 2010, under the partial settlement that change would normally apply to SSM for the years 2010 and thereafter, but to LRAM for 2009 as well. In calculating the target for 2010, the three year average will use the TRC values otherwise determined for 2007 and 2008, but for 2009 will use the audited TRC values, adjusted for that change in free rider rate identified in the audit.”

The Board is satisfied that the Financial Package proposal sets reasonable TRC targets for the utilities. The Board notes that the formula used to derive the targets in years two and three of the plan is self adjusting to account for actual performance in the previous year. The Board finds this formula to be preferable to setting the targets for all three years in advance.

The Board notes that the target for Union in year one of the plan will actually be lower than its Board approved target for 2006. The Board heard evidence from Union that the TRC target for 2006 had been set at a level that it will not attain. Union indicated that according to its current projections for 2006, the company will likely achieve TRC savings in the range of $170 million (on a target of $216 million). The Board accepts Union's evidence in this regard, and finds that a target of $188 million in year one of the three-year plan is reasonable.

On what basis should the DSM program spending be targeted amongst customer classes? (Issue 1.7)

The Financial Package agreement makes the following proposal:

> "Parties acknowledge that EGD's and Union's rate classes and customer needs are not identical, and hence it is not appropriate to restrict spending based on a rigid formulaic approach by rate class. The Utilities acknowledge and accept the principle that their portfolio of DSM programs should provide customers in all rate classes and sectors with equitable access to DSM program(s) to the extent reasonable, and that this principle must be balanced and consistent with the principle of optimizing cost-effective DSM opportunities. To the extent that a proposed multi-year plan proposes DSM sector (ie. residential, commercial, or industrial) level spending that is significantly different than the historical percentage levels of spending in those sectors, the utility will provide its explanation for this in its proposed multi-year plan. Parties may challenge any such

EB-2011-0327

UNION GAS LIMITED

SETTLEMENT AGREEMENT

January 31, 2012

"Stakeholder Engagement Agreement") with stakeholders covering the period 2012 through 2014. For Union, the Stakeholder Engagement Agreement was filed with the Board for its consideration and approval on November 10, 2011, and is incorporated into this Agreement at Appendix B.

6/ RESOURCE ACQUISITION PROGRAM

(Partial Settlement)

Evidence Reference: A/p.19; A/p.24; A/Ap.A/p.15-17; A/Ap.A/p.36; B1.1; B1.7; B1.8; B4.9; B6.5; B6.13; B9.1; B9.3; B10.1; B11.10; B11.11; B11.18

The Participating Parties, except Pollution Probe, agree to a program budget of $14.022 million for 2012 – 2014 related to Union's Resource Acquisition programming. The budget of $14.022 million includes program-specific evaluation, administration and overhead costs, but excludes inflation, general evaluation and research costs, and allocated overheads.

Parties acknowledge that if the Board finds that the increase in the DSM incentive related to the additional Low-income budget should not be approved and, as a result, Union reduces its Low-income budget to align with the lower incentive, the allocation of overheads will change.

Subject to the Board's findings on Section 3 of this Agreement, the maximum incentive for the Resource Acquisition Scorecard in 2012 is 53.5% ($14.022 million/$26.233 million) of the maximum incentive of $10.450 million. This equates to a maximum incentive of $5.588 million for the Resource Acquisition scorecard.

Subject to the Board's findings on Section 3 of this Agreement, the maximum incentive for the Resource Acquisition Scorecard in 2013 and 2014 is 52.4% ($14.022 million /$26.773 million) of the maximum incentive of $10.450 million. This equates to a maximum incentive of $5.473 million for the Resource Acquisition scorecard.

Parties, except Pollution Probe, agree to the following Resource Acquisition scorecards for each of years 2012, 2013 and 2014.

The scorecard targets contained in this agreement supersede Union's DSM Plan Exhibit A, Table 4.

2012 Resource Acquisition Scorecard				
Metrics	**Metric Target Levels**			**Weight**
	Lower Band	**Target**	**Upper Band**	
Cumulative Natural Gas Savings (m3)	619,500,000	826,000,000	1,032,500,000	90%
Deep Savings - Residential (homes)	120	160	200	5%
Deep Savings - Commercial/Industrial (% of baseline consumption)	4.00%	5.00%	6.00%	5%

2013 Resource Acquisition Scorecard				
Metrics	**Metric Target Levels**			**Weight**
	Lower Band	**Target**	**Upper Band**	
Cumulative Natural Gas Savings (m3)	75% of Target	2012 Post-Audit Scorecard Cost Effectivness (m3 per Promotion and Incentive Dollar Spent) times $10.684M times 1.02	125% of Target	90%
Deep Savings - Residential (homes)[(1)]	2013 Target minus 50 homes	2012 Actual times 1.25	2013 Target plus 50 homes	5%
Deep Savings - Commercial/Industrial (% of baseline consumption)	The higher of: i) 2012 Actual ii) 4.5%	The higher of: i) 2012 Actual + 1% ii) 5.5%	The higher of: i) 2012 Actual + 2% ii) 6.5%	5%

(1) In the event the calculated 2013 Target (2012 Actual times 1.25) is lower than the 2012 Target (160 homes), the 2013 Metric Target Levels will become the 2012 targets (Lower Band: 120, Target:160, Upper Band: 200)

2014 Resource Acquisition Scorecard				
Metrics	**Metric Target Levels**			**Weight**
	Lower Band	**Target**	**Upper Band**	
Cumulative Natural Gas Savings (m3)	75% of Target	2013 Post-Audit Scorecard Cost Effectivness (m3 per Promotion and Incentive Dollar Spent) times $10.684M times 1.02	125% of Target	90%
Deep Savings - Residential (homes)[(1)]	2014 Target minus 50 homes	2013 Actual times 1.25	2014 Target plus 50 homes	5%
Deep Savings - Commercial/Industrial (% of baseline consumption)	The higher of: i) 2013 Actual ii) 4.5%	The higher of: i) 2013 Actual + 1% ii) 5.5%	The higher of: i) 2013 Actual + 2% ii) 6.5%	5%

[(1)] In the event the calculated 2014 Target (2013 Actual times 1.25) is lower than the 2012 Target (160 homes), the 2014 Metric Target Levels will become the 2012 targets (Lower Band: 120, Target:160, Upper Band: 200)

For 2013 and 2014, the cumulative natural gas savings target will be determined by multiplying the previous year's Resource Acquisition Scorecard post-audit cost effectiveness (m^3 per promotion and incentive dollar spent) by $10.684 million (the current year's Resource Acquisition promotion and incentive budget prior to inflation). The result of the calculation will be further multiplied by 1.02 to arrive at the final cumulative natural gas savings targets for the year in question. For example, if in 2012 Union achieves 875,000,000 m^3s (post-audit) on the cumulative natural gas savings metric and spent $10.9 million in promotion and incentive costs within Resource Acquisition programs, the cost effectiveness would be 80.3 m^3 per promotion and incentive dollar spent (875 million m^3 divided by $10.9 million). The 2012 cost effectiveness (80.3 m^3/$) would then be multiplied by the 2013 Resource Acquisition promotion and incentive budget of $10.684 million (2013 Residential promotion and incentive budget plus 2013 Commercial/Industrial promotion and incentive budget, as per Table 1), results in a 2013 pre-adjusted cumulative natural gas savings of 857,925,200 m^3. The 2013 pre-adjusted cumulative natural gas savings of $857,925,200 m3 is further increased by 2% for a final 2013 cumulative

natural gas savings target of 875,083,703 m^3. The Lower Band would be 656,312,778 m^3 (75% of 875,083,703 m^3) and the Upper Band would be 1,093,854,629 m^3 (125% of 875,083,703 m^3).

For 2013 and 2014, the Deep Savings – Residential Target will be determined by taking the previous year's Deep Savings – Residential result and multiplying it by 1.25. If by using this methodology the 2013 and/or 2014 Target is lower than the 2012 Target, then the Target, Lower Band, and Upper Band, will revert to the 2012 Target, Lower Band, and Upper Band. For example:

a) If in 2012 Union achieves 180 homes on the Deep Savings – Residential Metric, the 2013 Target would be 225 homes (180 homes multiplied by 1.25). The Lower Band would be 175 homes (225 homes minus 50 homes) and the Upper Band would be 275 homes (225 homes plus 50 homes).
b) If in 2012 Union achieves 120 homes on the Deep Savings – Residential Metric, the calculated 2013 Target would be below the 2012 Target (120 homes multiplied by 1.25 is 150 homes; 10 homes fewer than the 2012 Target of 160 homes). In this example, the 2013 Target, Lower Band, and Upper Band, would revert to the 2012 levels of 160 homes at the Target, 120 homes at the Lower Band, and 200 homes at the Upper Band.

For 2013 and 2014, the Deep Savings – Commercial/Industrial Target will be determined by taking the previous year's Deep Savings – Commercial/Industrial result and adding 1%. If by using this methodology the Target is less than 5.5%, then the Target will be 5.5%. The Lower Band will be the previous year's Deep Savings – Commercial/Industrial result. If the previous year's result is less than 4.5%, then the Lower Band will be 4.5%. The Upper Band will be

determined by taking the previous year's Deep Savings – Commercial/Industrial result and adding 2%. If by using this methodology the Upper Band is less than 6.5%, then the Upper Band will be 6.5%. For example:

a) If in 2012 Union achieves 5.2% on the Deep Savings – Commercial/Industrial Metric, the 2013 Target would be 6.2% (5.2% plus 1%). The Lower Band would be 5.2% and the Upper Band would be 7.2% (5.2% plus 2%).

b) If in 2012 Union achieves 4.3% on the Deep Savings – Commercial/Industrial Metric, the calculated 2013 Target would be below 5.5% (4.3% plus 1% is 5.3%). In this example, the 2013 Target would be 5.5%, the Lower Band would be 4.5% (since the 2012 result is only 4.3%), and the Upper Band would be 6.5% (since the 2012 result plus 2% would only be 6.3%).

With respect to Union's Resource Acquisition plan, parties, except Pollution Probe, further agree that:

1. Union will move the Integrated Energy Management Systems ("IEMS") initiative from the Market Transformation scorecard to the Resource Acquisition scorecard. The budget associated with IEMS is $0.600 million. There are no cubic meters savings associated with the IEMS budget. The Participating Parties further agree that, at Union's sole discretion, Union may use the IEMS budget for other programs or activities. In the event that Union uses IEMS funds for other programs, the cumulative cubic meter scorecard figures for Resource Acquisition in 2012, including(lower band, target, and upper band, shall increase

ONTARIO ENERGY BOARD

FILE NO.:	**EB-2015-0029** **EB-2015-0049**	**Union Gas Limited** **Enbridge Gas Distribution Inc.**

VOLUME:	**12**	
DATE:	**September 3, 2015**	
BEFORE:	**Christine Long**	**Presiding Member**
	Allison Duff	**Member**
	Susan Frank	**Member**

MR. SMITH: Thank you.

So Panel, I'm Alex Smith, counsel for Union Gas. I have a few questions on my first topic, which is the application of input assumptions for the purpose of determining incentive earnings.

And in connection with that I'd ask you to turn to page 5 of the compendium. And the page numbers are in the top right corner. Do you have that?

MR. WOOLF: Yes.

MR. SMITH: Thank you, so this is a decision of this Board in the DSM generic proceeding from 2006. And I'd now just ask you to turn to page 8 of the compendium, which is several pages into the decision. And I'm just going to read from the top of page 8. It says:

> "The Board is satisfied that the financial package proposal sets reasonable TRC targets for the utilities. The Board notes that the formula used to derive the targets in years 2 and 3 of the plan is self-adjusting to account for actual performance in the previous year. The Board finds this formula to be preferable for setting the targets for all three years in advance."

And my question is whether -- were you aware of this decision when you drafted your report?

MR. WOOLF: No.

MR. SMITH: Thank you.

I have a few questions on targeted adjustment mechanism. That's my second topic. And in that connection

I'd ask you to turn to page 30 of my compendium.

MR. WOOLF: Yes.

MR. SMITH: Thank you. So this is also from the 2006 generic proceeding that we just looked at. You will see at the bottom of the page that it references a formula in what they call issue 1.4. That's a reference to a different section of the report, and I apologize for making you turn around a little bit, but if you could now just turn to page 6, and we're going to look at 1.4 -- issue 1.4.

Here's the formula, which is what the Board approved for use during the 2007 to 2011 period. I'm not going to ask you to parse it. I'm just going to ask whether you were aware that Union used a formulaic approach for setting scorecard targets during the 2007 to 2011 period in accordance with this.

MR. WOOLF: During that period, no, I wasn't aware of what they were doing.

MR. SMITH: Okay, thanks.

I'd now ask you to turn to page 9 of the compendium. What this is is the settlement agreement for the 2012-2014 DSM plan.

Have you reviewed this settlement agreement or the excerpts included here?

MR. WOOLF: I have not.

MR. SMITH: Okay. That's fine. Are you aware that it was agreed to by the parties and approved by the Board?

MR. WOOLF: I am aware of that, yes.

MR. SMITH: Thank you. Are you aware that as a result

of this Board-approved settlement Union used a formulaic approach for setting scorecard targets under the 2012-2014 DSM plan?

MR. WOOLF: Yes, consistent with what they're proposing in this docket.

MR. SMITH: Thanks. And then if we just go a few pages over to page 16, and everybody will recognize this. It's from the framework, and it's the part of the framework that addresses DSM activities in 2015, and it says, and I quote:

> "The gas utilities should roll forward their 2014 DSM plans, including all programs and parameters (i.e. budget, targets, incentive structure) in 2015."

Do you see that?

MR. WOOLF: Yes.

MR. SMITH: And so it appears from what I've taken you through that Union has been applying a Board-approved formulaic approach for a decade; isn't that right?

MR. WOOLF: If the years are correct, I guess that's ten years, yes.

MR. SMITH: Thanks very much.

I'd like to move on to my third topic now, and that is the reasonableness of Union's targets, and I'm going to ask you to turn to page 35 of the compendium.

You will recognize this. This is an undertaking response prepared by you; correct?

MR. WOOLF: Yes, it is.

UNION GAS LIMITED

Answer to Interrogatory from
Board Staff

Reference: Exhibit A, Tab 3, pp. 20-24
Exhibit A, Tab 3, pp. 26-30
Exhibit A, Tab 3, Appendix A, pp.15, 43, 89

Preamble: For the 2016 Resource Acquisition and Low-Income scorecards, Union set the cumulative natural gas savings targets using a bottom-up analysis. However, over the 2017 to 2020 period, the targets on both scorecards are adjusted each year, using a formulaic target setting approach, based on the previous year's (i.e. 2016) achieved savings expressed on a $\$/m^3$ basis multiplied by the subject year's (i.e. 2017) promotion and incentive budget (plus a 2% target increase applied in the case of the Resource Acquisition scorecards).

Union also provided program-specific rationale for cumulative natural gas savings targets, where applicable, in Exhibit A / Tab 3 / Appendix A.

a) Please provide Union's position on setting the cumulative natural gas savings targets for the 2017-2020 period, for both of the noted scorecards, using a bottom-up analysis (similar to how Union set the 2016 targets).

b) Please file proposed cumulative natural gas savings targets for the 2017-2020 period, for both of the noted scorecards, using a bottom-up analysis (similar to how Union set the 2016 targets).

c) For the Resource Acquisition scorecard, please confirm that these cumulative natural gas savings targets would be calculated by adding the total in Table 6 (Exhibit A / Tab 3 / Appendix A / p.15) and Table 13 (Exhibit A / Tab 3 / Appendix A / p. 43) for each year. For the Low-Income scorecard, please confirm that the cumulative natural gas savings targets calculated, on a bottom-up basis, would reflect the total provided in Table 31 (Exhibit A / Tab 3 / Appendix A / p. 89) for each year.

d) Please explain why Union provided program-specific rationale for cumulative natural gas savings targets, for the 2016-2020 period, when Union is not proposing to use these targets in the Resource Acquisition and Low-Income scorecards over the 2017-2020 period.

e) Please explain why it is reasonable to establish 2017-2020 savings using a formulaic target setting mechanism, similar to that used for the 2013-2014 Resource Acquisition scorecards, given the DSM Framework's guiding principle to achieve all cost-effective DSM that results in a reasonable rate impact.

f) Please explain how Union's proposed target setting approach will result in sufficiently aggressive targets that ensure the prudent use of ratepayer funds.

g) Please explain why Union is not proposing to apply the same 2% increase to the cumulative natural gas savings targets, used in the 2017-2020 formulaic target setting approach for its Resource Acquisition scorecard, to its Low-Income scorecard.

Response:

a) Setting fixed targets for 2017-2020 based on current input assumptions and market expectations would not take into account changes that may occur over the course of the framework. The formulaic targets as set out in Union's Resource Acquisition and Low Income scorecards allow for the targets to remain flexible and adjust based on best available information. As stated at Exhibit A, Tab 3, p. 22, Union's approach to formulaic scorecards is consistent with the Board-approved 2012-2014 Scorecards (EB-2011-0327 Settlement).

b) Table 1 and Table 2 below represent the 100% scorecard targets using the same methodology to derive the 2016 scorecard targets for the Resource Acquisition and Low Income scorecards.

Table 1

Resource Acquisition Scorecard Targets for 2017-2020				
Metric	2017	2018	2019	2020
Cumulative Natural Gas Savings (m^3)	1,148,519,100	1,185,792,799	1,186,045,987	1,186,045,987

Table 2

Low Income Scorecard Targets for 2017-2020				
Metric	2017	2018	2019	2020
Single Family Cumulative Natural Gas Savings (m^3)	34,402,185	37,562,991	40,033,822	41,238,796
Social and Assisted Multi Family Cumulative Natural Gas Savings (m^3)	14,414,187	13,733,226	13,722,425	13,718,000
Market Rate Multi Family Cumulative Natural Gas Savings (m^3)	4,581,202	4,611,338	6,306,214	6,306,214

c) Confirmed.

d) Although Union is proposing a formulaic approach to its Resource Acquisition and Low Income scorecards, the Guidelines required Union to file its forecasted annual targets and long-term natural gas targets (p. 42). In order to comply with the filing requirements Union provided forecasted cumulative natural gas savings for each of its programs for 2016-2020.

e) As described at Exhibit A, Tab 1, p. 6,Union designed its DSM programs to balance the need to achieve all cost-effective savings while complying with the rate impact requirements ($2.00/month for a typical Residential customer) outlined by the Framework. Details on Union's programs and offerings and how they address the Framework and Guidelines key priorities, such as the achievement of all cost-effective DSM, can be found at Exhibit A, Tab 3, Appendix A. It is the design of Union's DSM portfolio of programs and offerings that balance the achievement of all cost-effective savings and reasonable rate impacts; the formulaic approach to target setting has no bearing on the achievement of all cost-effective savings.

f) Union believes the 2016 targets have been aggressively set based on the Board's key priorities and guiding principles. The formulaic approach for the subsequent years ensures that the targets remain aggressive by responding to market conditions. This approach is responsive to changes in the market place and to the extent Union is more cost-effective in achieving savings, it would be reflected through a higher target the following year.

g) Union believes the target formula for the Low Income Scorecards outlined in Exhibit A, Tab 3, p. 26 represents a challenging target setting methodology.

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	Allison Duff	**Member**
	Susan Frank	**Member**

metrics are based on cost effectiveness or I would say yield, that the cubic metres of gas saved per dollar spent, so there are circumstances where we may have not achieved the target, but we were also underspent, so our target wouldn't necessarily go down the following year, no.

MR. MILLAR: Okay. But in my -- let's take an example. You did spend your budget and it is an m-cubed target, something like that, you didn't hit the target, your target for the next year would be adjusted downwards.

MR. DIBAJI: Correct.

MR. MILLAR: Okay. And conversely, it works both ways. If you hit the ball out of the park on a particular program, your target would increase in the next year.

MR. DIBAJI: That is correct.

MR. MILLAR: Okay. Thank you.

And correct me if I'm wrong, I always start with the Board's framework when I consider how the programs should look, at least at the outset, and as I read through the guidelines, I didn't -- or, pardon me, the framework, not the guidelines -- I didn't see specific direction on this point. Is that fair, or did I miss something?

MR. DIBAJI: That is fair.

MR. MILLAR: Okay. So this is something that Union has proposed, I guess, I don't want to say outside the framework. It's something that the framework is silent on.

MR. DIBAJI: Yes, this is something that we've proposed, but we've been following through with since the generic, even within the generic between 2007 to 2011, we

are under a formulaic target setting mechanism with the TRC target. Then that followed through with the 2012-2014 framework, where we also proposed a formulaic approach, and we propose to continue with that.

MR. MILLAR: Okay. So you propose to maintain the status quo? Was that fair?

MR. DIBAJI: Right.

MR. MILLAR: And for that previous proceeding, the 2012 to 2014, that was arrived at by way of a settlement; is that correct?

MR. DIBAJI: That is correct.

MR. MILLAR: Okay. So there is a Board decision on that to the extent that it approves the settlement proposal, but there is a not a -- we won't find a passage in a Board decision discussing this issue; is that fair?

MR. DIBAJI: With the exception of our large-volume plan that was before the Board in 2013, where they also made a decision on a formulaic approach for that scorecard.

MR. MILLAR: Okay. But absent that example there is not a --

MR. DIBAJI: Correct.

MR. MILLAR: The Board may have turned its mind to it in the sense that they accepted the settlement proposal, but it is not something that was litigated before the Board, if I could put it that way; is that fair?

MR. DIBAJI: That is fair.

MR. MILLAR: Okay. Thank you.

Okay. I want to look at some of the potential

Input Assumptions

In determining Union's scorecard achievement, Union strongly believes that revised input assumptions and adjustment factors, such as free ridership, spillover and persistence, should be applied on a prospective basis upon the completion of evaluation findings. Targets are established based on the information known by all parties at the time they are determined. Furthermore, applying retroactive input assumptions is not consistent with the policy of the majority of U.S. jurisdictions – 81% apply input assumption changes on a go-forward basis only.[3] As noted at Exhibit A, Tab 3, Section 9.2, Union will be finalizing the Technical Resource Manual ("TRM") and will be completing a net–to-gross study ("NTG") in 2015. Any input assumptions adjustments that occur as a result of the TRM and the NTG study will be applied to Union's 2016 targets on a go-forward basis only and they will scale up or down accordingly.

Scorecard Target Achievement Level

Consistent with the Framework, Union is proposing scorecards with various metrics to monitor Union's performance. The scorecards and metrics have been designed to ensure the Board's guiding principles and key priorities are addressed through the delivery of Union's DSM programs. At Section 3.2 of the Framework, the Board states that "three levels of achievement should be provided on the scorecard(s) for each metric: one at each 75%, 100% (target) and 150%". Union has proposed the scorecard metric levels to be 75%, 100% (target), and 125%. Union will refer to the target levels as the Lower Band (75%), Target (100%), and Upper Band

[3] American Council for an Energy-Efficient Economy, A National Survey of State Policies and Practices for the Evaluation of Ratepayer-Funded Energy Efficiency Programs, February 2012, Page 28.

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is that right?

MR. DIBAJI: That is correct.

MR. MILLAR: And if I took something else from both figure 1 and table 1, I was mistaken based on the explanation you have just provided?

MR. DIBAJI: Correct.

MR. MILLAR: Okay, why don't we move on. I have some questions about input assumptions and changes to input assumptions.

I don't know if I'll actually take you to anything you wrote here, but I guess our starting point for these questions was GEC interrogatory 31. It might be helpful just to have that handy.

Okay. Let me back up a little bit just to frame the issue a little bit with some very basic stuff.

Under your proposal there will be an annual EM&V process, evaluation, measurement, and audit process?

MS. LYNCH: Yes, that's correct.

MR. MILLAR: And one of the outcomes from that process can be changes to input assumptions; let's just take measure lives for an example. That's a possibility from the EM&V review?

MS. LYNCH: Certainly through our evaluation work, yes.

MR. MILLAR: Okay. And I just have some questions about how and when those changes to input assumptions will be applied under your proposal, and for me the easiest way to go about this is to give you an example, and let's walk

through it and you can tell me how it would work.

Okay. Let's use the year 2016 as an example, so 2016 comes, you do your programs in 2016. At the end of 2016 you would have your EM&V process for that year's programs; is that right? You would do your evaluation?

MS. LYNCH: Sorry, could you repeat the question?

MR. MILLAR: Yes, I'm sorry, it is 2016, you do whatever programs are in your plan, 2016 ends, then you would do your EM&V process for those 2016 programs; is that right? You do it at the end of the year, or after the year is over.

MS. LYNCH: For the audit process. I mean, certainly there is verification work that we start during the year.

MR. MILLAR: Understood.

MS. LYNCH: And continues on, verification, and the audit process would then take place in 2017.

MR. MILLAR: Okay. So the audit process takes place at the end. Some of the other work would be ongoing before that, the verification --

MS. LYNCH: Yes.

MR. MILLAR: Okay, so let's imagine that through the audit process there's a determination that one of the input assumptions you used was incorrect. Again, let's say it was a measure life, it was either too long, too short, what-have-you, that there is a conclusion that you were using the wrong number in 2016, okay? So in my example, I just want to understand when you would look to apply the updates to the input assumptions, so let's start with the

LRAM, the lost revenue adjustment mechanism.

If your audit that's conducted in 2017 but is done for 2016 determines that you had an input assumption was wrong, would you apply those results to the 2016 LRAM or would you not?

MR. DIBAJI: We would.

MR. MILLAR: You would, okay, and how about for the incentive for 2016?

MR. DIBAJI: In our proposal we are proposing not to apply to the incentive and to carry that forward to set the following year's targets.

MR. MILLAR: So you would use it starting in 2017.

MR. DIBAJI: Correct.

MR. MILLAR: Okay. And is that your current practice?

MR. DIBAJI: Under the 2012-2014 framework, no, that is not our current practice, but that was the practice that we followed under the generic framework.

MR. MILLAR: What is your current practice? Is it to apply the updates for the incentive to 2016, in my example?

MR. DIBAJI: Correct.

MR. MILLAR: Okay. That's very helpful. I actually don't -- I'm not necessarily challenging you on that here, I just wanted to make sure we understood the company's position. So thank you for that. Well, why don't I challenge you while we're here. Just kidding.

Why don't you tell me why you've changed your mind on that? Why was it appropriate in the previous framework, but you've decided a change is appropriate?

MR. DIBAJI: Yeah, so we've never really changed our mind on this process. As I said, it is a process that we followed under the generic framework that we followed. That was the proposal we had in the 2012-2014 framework when we provided our comments on that framework that also consistent with the comments we had with regards to the 2015-2020 framework, so we maintained the same mindset with regards to the application of changes due to evaluation.

The reason why we are proposing this again, in our review of leading jurisdictions, as we mentioned in our plan, 81 percent of leading jurisdictions in the U.S.A. follow this policy, including the number-one-ranked energy-efficient state, Massachusetts, who recently changed their policy to go to a forward-looking update to their input assumptions, and we feel that's appropriate for us to do so also.

MR. MILLAR: Well, what's the rationale for applying the change in an input assumption to the LRAM but not to the incentive? What's the distinction there?

MS. LYNCH: The important distinction for LRAM is that it's -- it is -- it's a lost revenue adjustment mechanism, so using the best available information accounts for what lost revenue you would have expected as a result of your program.

However, when you're looking at it from an incentive perspective, it is the equivalent of changing the goal posts, so we could go through a program year based on assumptions and targets that have all been agreed to

upfront, and a piece of information can come to us six months post that program year being completed, after -- so when our audit is being done, and we are told retroactively that our earnings would have changed as a result of something we could not have reasonably known at the time when we delivered the program.

MR. MILLAR: Well, is it fair to say there's two parties who could bear the risk for that sort of thing? One would be the utility and one would be the ratepayers, and as I see it, you are proposing that ratepayers bear the risk for that.

MS. LYNCH: I wouldn't say that in the sense that when we have a plan that's done upfront and we are doing what is expected with good intentions, I think we want to promote that we do have the best available information at any time and that applying that on a go-forward basis is a reasonable approach --

MR. MILLAR: But you are not actually proposing to use the best available information; right? You are proposing to ignore the best information in the year that it happened and apply it in the next year.

MS. LYNCH: Well, I would say that the information that was used to set our target is the same information that's used to assess our achievement, so we are just looking for consistency in that.

MR. MILLAR: Okay, I have your answer. Thank you very much.

Let's move to residential behavioural programs, if we

6. Union should consider including a scorecard for the Large Volume program to ensure that the costs for that program are appropriately spent.

6.3. Performance Incentive Target Adjustments

6.3.1 Enbridge's Proposed Target Adjustment Factor

Enbridge proposes to adopt a target adjustment factor (TAF) that would adjust its savings targets as input assumptions change over time in response to evaluations and audit processes. Enbridge explains that the purpose of the TAF is to ensure that targets, and subsequent shareholder incentives, are fair and predictable for both ratepayers and shareholders. Enbridge proposes to apply the TAF to each cumulative cubic meter (CCM) metric to determine its actual savings targets, based on the variance in CCM that can be attributed to changes in input assumptions (Enbridge Gas Distribution 2015b, Exh. B, Tab 1, Sch. 4, pp. 40-41).

Specifically the TAF is calculated as follows:

$$TAF = \left(\frac{\text{CCM Based on Input Assumptions and Adjustment Factors at Time of Audit} - \text{CCM Based on Input Assumptions and Adjustment Factors at Time of Filing}}{\text{CCM Based on Input Assumptions and Adjustment Factors at Time of Filing}} \right)$$

6.3.2 Union's Proposed Formulaic Target Setting Mechanism

Union proposes that the 2017 through 2020 metric targets be based on a formulaic target setting mechanism that adjusts a year's targets based on the previous year's performance. Union explains that this approach provides flexibility for the targets to reflect the best available information and most recent experience at the time the targets are set. More specifically, Union will determine the cumulative natural gas savings targets for each year by multiplying that year's budget by the prior year's post-audit cost of saved energy or cost per participant (depending on the scorecard metric). For some scorecards, Union proposes a percentage increase in targets each year to further incent the utility to deliver programs cost-effectively (Union Gas Limited, 2015a, Exh. A, Tab 3, pp. 22-23).

Union offers the following illustrative example to demonstrate how this mechanism will work:

> For illustrative purposes, if Union's 2016 post-audit achievement [by the Resource Acquisition program] is 1,109,631,656 m^3 while spending $30.8 million dollars (promotion and incentive spend) to achieve those results, the yield would be 36.0 m^3 per dollar spent. To calculate the 2017 target, the 2016 post audit yield (36.0 m^3/$) will be multiplied by the 2017 Resource Acquisition promotion and incentive budget ($34.2 million) and 1.02 to equal a target of 1,255,189,380 m^3. The Lower Band will be 941,392,035 m^3 (75% of 1,255,189,380 m^3) and the Upper Band will be 1,568,986,725 m^3 (125% of 1,255,189,380 m^3). (Union Gas Limited, 2015a, Exh. A, Tab 3, p. 23).

This method will apply to all scorecards, except the Market Transformation scorecard which will be phased out in 2016, and will be adjusted according to whether the metric's units are in terms of savings or in terms of participants.

Note that Union applied this same methodology to establish their Resource Acquisition targets in their 2012-2014 program (EB-2011-0327).

6.3.3 Appropriateness of Shareholder Incentive Adjustment Mechanisms

The utilities propose different mechanisms to adjust their annual shareholder incentives to avoid the risk associated with updates to input assumptions. As discussed in more detail in Section 9.2 below, it is a best practice to limit the impact that evaluation studies can have on the shareholder incentive a utility achieves. However, it is also important to maintain precedent where policy decisions have already been determined.

In Massachusetts, the program administrators revise their performance incentive rates (i.e., the incentive dollar earned for each dollar benefit or net benefit achieved) only for updates to avoided costs. Avoided costs are seen as beyond the utilities' control, and therefore they should not be penalized for applying such updated information. However, the program administrators do not update the incentive rates to account for program implementation or other evaluation impacts that effect savings during the course of a three-year plan. The mechanism used in Massachusetts does not change the overall pool of performance incentives available to the program administrators.

Beyond this treatment in Massachusetts, we are unaware of other jurisdictions where shareholder incentives are adjusted by this type of mechanism. As discussed in more detail in Chapter 8.1, some jurisdictions will adjust the amount of shareholder incentives awarded at the completion of a year to account for adjustments to input assumptions. However, it is much less common to adjust the shareholder incentive targets against which a utility's actual performance will be compared.

The Board should reject both Enbridge's and Union's proposed adjustment mechanisms because the overall five-year savings goal targets that the utilities are required to achieve should not be adjusted during the course of the plan. Such an approach encourages the utilities to reach their initial goals more creatively should evaluation impacts decrease claimed savings for current measures. If evaluation study results reduce the amount of savings the utilities can claim from certain measures, then the utilities will need to investigate new measures, increase marketing for other measures, or implement other strategies that results in greater savings. Therefore, it is important the initial goals (and therefore shareholder incentive targets) established during this planning process are appropriately aggressive to ensure the utilities remain motivated to achieve savings throughout the plan term.

Note that Union's proposed approach is particularly problematic because it accounts not only for input assumption updates, but also changes in implementation. It also proposes annual target updates. Accounting for implementation changes and updating the performance incentive annually removes the benefits of applying a multi-year plan. Through a multi-year plan, a utility has the flexibility to achieve

the overall multi-year goal at a pace that is suitable for its service territory, customers, and energy markets, which may not be the same pace every year.

6.3.4 Recommendations

1. The Board should reject both Enbridge's and Union's proposed shareholder incentive target adjustment mechanisms because the overall five-year savings goal targets that the utilities are required to achieve should not be adjusted during the course of the plan.

2. The Board should thoroughly investigate whether the initial goals (and therefore shareholder incentive targets) established during this planning process are challenging to achieve to ensure the utilities remain motivated to reach greater savings throughout the plan term.

6.4. Pay-for-Performance

The Framework encourages a pay-for-performance type of a structure for pilot programs (Ontario Energy Board, 2014a, p. 24). Such a mechanism combines a utility's cost recovery and shareholder incentive amounts into one standard rate for all cubic meters of natural gas saved ($/m^3). Both Enbridge and Union indicate that they are investigating a pay-for-performance mechanism as part of their plans (Enbridge Gas Distribution 2015b, Exh. B, Tab 1, Sch. 2, p. 9; Union Gas Limited, 2015a, Exh. A, Tab 3, p. 65).

Union expects that it will examine the associated strengths, risks, impacts, and limitations of a pay-for-performance mechanism. It will do an in-depth quantitative analysis of Union's programs to determine which programs are conducive to such a mechanism. If Union deems a pay-for-performance mechanism appropriate, it will propose it to the Board for approval during the mid-term review. (Union Gas Limited, 2015a, Exh. A, Tab 3, p. 65).

Our research indicates that there have been very few pay-for-performance mechanisms implemented in other jurisdictions. Such an approach could result in programs that "cream skim," meaning they focus on implementing measures that have the lowest costs with the highest savings potential. This could happen if the rate is set such that the utility receives a flat amount for cost recovery and performance incentives. The utility will likely aim to keep costs as low as possible, so that they can keep the remaining revenue from the established rate as a performance incentive.

We suggest that the Board review Union's analysis on this issue during the mid-term review to assess whether a pay-for-performance mechanism is appropriate for use in Ontario. We caution that the proposed shareholder incentive mechanisms may be a better use of ratepayer funding to incent the utilities to deliver successful programs.

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costs of -- by way of example, if it is a custom project and you go in and you do a boiler, it is the incremental cost of the boiler to that participant?

MS. OLIVER-GLASFORD: Yes, the difference between what would be considered the base case and the energy efficient option.

MR. DeROSE: Okay. And so the line item of total cost of DSM participants, none of those costs have been recovered through any type of rates, or recovered in any way by Enbridge?

MS. OLIVER-GLASFORD: That is correct.

MR. DeROSE: So in terms of the pure -- what ratepayers have paid directly to Enbridge is 353 million?

MS. OLIVER-GLASFORD: Yes, that would be the amount that would be in rates.

MR. DeROSE: Okay. Thank you very much for that.

And then if I can take you -- probably the best place to deal with this is Staff 8.

MS. OLIVER-GLASFORD: Okay, we're ready.

MR. DeROSE: And again, I know that you talked this morning about the TAF mechanism, and I think you explained clearly what would happen if there's a new input assumption.

Does the TAF also address situations where one of your programs -- and not because of input assumptions, but just because of unforeseen circumstances with your program -- whether you either materially exceed the scorecard performance metrics or materially under-perform, does the

TAF address that situation?

MR. OTT: No. The TAF has not been designed to address that situation.

MR. DeROSE: Okay. And so if you set your scorecard metrics today, and three years from now you are either materially under-performing or materially over-performing for reasons that are separate and apart -- these are not input assumption information, this is just you didn't foresee something to happen -- is the target adjusted at all? Or is there a mechanism to adjust the performance metric, the targets?

[Witness panel confers]

MR. OTT: Thank you for your patience, Mr. DeRose. So from our perspective, certainly the TAF has not been proposed as a mechanism to address any such discrepancy.

From our view, the Board has given us direction that it is appropriate for a mid-term review to take place at the halfway point in our DSM multi-year plan. And should targets or budgets at that time -- well, they will be reconsidered as part of that review. And if they're not appropriate, then presumably they would be adjusted accordingly.

MR. DeROSE: Okay. Other than the mid-year review -- and I guess really, just so you understand where I'm getting at here, I am just trying to understand the importance of getting the targets right.

So if, for instance, if you're -- we will use the example that you have used at page 7 of 7. If the original

current year target is 1000, and in year 1 you achieve 100, there's nothing that you can do about that until the mid-year review?

[Witness panel confers]

MR. OTT: That is correct.

MR. DeROSE: And conversely, if -- and really I guess what I'm getting at is if we or the Board collectively set the targets wrong, I am trying to understand what the consequences would be.

If the target is too low and the original target is 1,000 and you start achieving, let's say, 5,000 because it is easier than anyone thought, again other than the mid-year review, there is nothing that any party could do about that?

MR. LISTER: I would say that's accurate, Mr. DeRose. Ii is, I suppose, a condition of any multi-year plan, and the Board has specifically asked for a multi-year plan.

Presumably the mid-term review is intended to be a pulse check on things like budgets and targets. But it's not our intention -- other than through the TAF and effects on input assumptions -- to adjust any of the targets or budgets, at least before the mid-term review.

MR. DeROSE: Other than the TAF?

MR. LISTER: Other than the TAF.

MR. DeROSE: Okay. Those are all of my questions, thank you very much.

MR. MILLAR: Thank you, Mr. DeRose. Ms. Fraser, did you want to go next?

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	Susan Frank	**Member**

the weight, then it's not clear that the company ought to be earning anything close to the maximum incentive. I mean, that's a policy -- that's a policy call.

MR. O'LEARY: Fair enough. Fair enough.

MR. NEME: And as I noted yesterday, just to kind of underscore that this is not a -- that this is a balancing issue and a judgment call, you know, I suggested in my evidence, you know, 150 per cent is the potential cap. It needn't be at 150. One could set it at 200, for example. I think I mentioned that to Mr. Shepherd. It's a question of where's the right balance. I think allowing it to get up to 500, 700, 1,000 is problematic.

MR. O'LEARY: Let's move on to another area, and that is the age-old question about adjusting assumptions for best available information, and this, you will recall, goes back some time, and that's why you're smiling.

So, first of all, let me make sure that everybody understands the concern of the utilities. You know, assume that the utilities have, in good faith, prepared their plans for 2016, and they have done so on the basis of the best available information that currently exists. So that means the input assumptions that the Board has approved. And in future, I'm assuming, Mr. Neme, with you on the evaluation audit committee, you'll make sure that everybody is aware of the best available information that is currently available. Is that fair to say, to the extent you can?

MR. NEME: Well, I will try to do my part.

MR. O'LEARY: Yes, fair enough. So the utilities have prepared their plans for 2016. They've operated -- delivered their plans in 2016, and they believe they've reached the 100 per cent target based upon the information that they relied upon for the purposes of developing the targets.

Lo and behold, there's a boiler baseline study that comes out, perhaps, in early 2017, or there's another study which affects free rider rates in a material way. And as we know, for the purposes of the LRAM, this best available information is going to be used to be used to determine the actual results; correct?

MR. NEME: Yes, it should be.

MR. O'LEARY: Yes. And no dispute there. The question is whether or not you should use this new information and apply it to the utilities in a retroactive fashion, in the sense that you are now taking best available information which could reduce their results relative to their targets using the old information and whether or not that actually becomes a disincentive to the utilities because they're effectively being judged on the basis of information that's developed beyond their control. And do you think that's appropriate?

MR. NEME: Well, let me start by saying this: This is one of those issues -- and there has been quite a few of them -- where I don't think there's a case to be made that all of the pros are on one side of the ledger and all the cons on the other side of the ledger. There are pros and

cons of both approaches, advantages and disadvantages of both.

My personal opinion is that for some of those assumptions, with respect to determination of whether the company has met its performance targets or not, it is appropriate to lock them in.

That -- and this is really principally for prescriptive measures, where you've got a savings assumption, for example, for a hot-water heater or an Energy Star fryer that gets installed in a restaurant or whatever it is, particularly for measures that get promoted in through mass-market channels and installed by medium, small, or business customers and residential customers. I believe it's -- the company has no control over what the savings of those measures are. They have no control over what the best assumption is about the life of those savings. And because -- because of that, I believe when you're deciding whether the company did an exemplary job, which is the purpose of a shareholder incentive mechanism, I believe it's appropriate for that purpose alone to let the company calculate the savings relative to its target, based on the information that it had at hand when it was developing and implementing its plans.

Now, I don't think that that applies to custom projects, because custom projects are -- the savings estimates are entirely in the company's hands -- or in the company's control, I should say. The company is pursuing those projects on a case-by-case basis and controls what is

8.0 Avoided Costs

Avoided costs represent the benefits in TRC calculations (i.e. the benefits of not having to provide an extra unit of supply of natural gas, electricity, water, heating fuel oil and/or propane) and are thus integral to Program screening.

Since 2007, Union and Enbridge have used the same methodology in calculating avoided gas costs. In late 2014, Union contracted ICF International to review Union's use of this methodology. The ICF International report, "Evaluation of Union Gas Avoided Costs", can be found at Exhibit A, Tab 2, Appendix C. The purpose of this review was to ensure that the methodology remains an accurate reflection of Union's franchise area and gas supply management policies and practices.

The review concluded that Union's use of this methodology is reasonable and appropriate. ICF's report provides four refinements to the methodology:

1. Account for avoided fuel losses across Union's system
2. Account for avoided storage costs
3. Incorporate a long term gas commodity price forecast when forecasting avoided cost estimates beyond the initial modeling period
4. Account for avoided, deferred or delayed infrastructure (T&D) costs

Union supports the findings of the report and has incorporated these refinements into a revised avoided gas cost methodology.[11]

For 2015, Union used its revised methodology for the calculation of avoided gas costs. The commodity portion of Union's avoided gas costs will be updated annually. Union will also discount the total avoided costs resulting over the life of each DSM measure by using its Weighted Average Cost of Capital ("WACC").

Exhibit A, Tab 2, Appendix B includes the 2015 avoided costs for natural gas, electricity and water that Union used for TRC screening in this Plan. Avoided costs used for cost-effectiveness screening in each program year will be filed annually in the Annual Report for the program year.

9.0 Evaluation and Audit Approach

In Section 7.2 of the Framework, the Board concludes that, "….it is in the best position to coordinate the evaluation process throughout the DSM framework period (i.e., 2015 to 2020)". Union supports the Board's coordination of the evaluation and audit process. Union expects this change will improve the process by providing for regulatory efficiency and ensuring timelines are met while giving the Board and stakeholders confidence in the accuracy of results.

[11] Union has estimated avoided T&D costs at 2% of its other avoided gas costs. Union will refine this estimate through its DSM and Infrastructure Planning Study.

The Framework and Guidelines have introduced a secondary cost-effectiveness test: the Program Administrator Cost ("PAC") test. The PAC test will measure Union's avoided costs and the associated costs to administer its DSM programs. The PAC test will be used as a secondary cost-effectiveness reference tool to help better determine which programs deliver the most cost-effective results and, therefore, should be prioritized. Union will identify any programs that pass the TRC-Plus test but fail the PAC test and provide rationale to support the appropriateness of the Program. The program cost-effectiveness results can be found at Exhibit A, Tab 3, Appendix A.

8.0 Avoided Costs

Avoided costs represent the benefits in TRC-Plus and PAC calculations (i.e., the benefits of not having to provide an extra unit of supply of natural gas, electricity, water, heating fuel oil and/or propane)[26] and are thus integral to Program screening. In the case of the TRC-Plus test, a 15% non-energy benefit adder is applied to total avoided costs but will not be considered a component of avoided costs.

For 2016-2020, Union will follow a consistent methodology for calculating the avoided costs as outlined at Exhibit A, Tab 2, Section 8. Starting in 2016, Union will discount the total avoided costs resulting over the life of each DSM measure by using a real discount rate of 4% as recommended by the Board, in Section 10.1 of the Guidelines.

[26] Only avoided natural gas costs are considered as benefits in the PAC calculation.

Exhibit A, Tab 3, Appendix F includes a preliminary 2016 avoided costs table for natural gas, electricity and water, that Union used for TRC-Plus and PAC screening in this Plan. The actual avoided costs used for cost-effectiveness screening in each program year will be filed annually in the Annual Report for the program year.

9.0 Evaluation

9.1. Evaluation Governance and Audit Approach

For 2016-2020, Union has proposed to follow the Evaluation Governance and Audit Approach as outlined at Exhibit A, Tab 2, Section 9.

9.2. Input Assumptions

The Technical Reference Manual ("TRM"), which is currently in development, will be a complete listing of measures and assumptions for use by Union and Enbridge and is expected to be completed in Q2 of 2015. Until such time as the TRM is completed in its entirety, and filed with the Board, the Input Assumptions Spreadsheet will continue to be filed annually with the Board and document the measure assumptions.

The Input Assumptions Spreadsheet in Tab 3, Appendix D, contains the new and updated measure assumptions as per the most recent joint utility filing, EB-2014-0354, filed with the Board on March 27, 2015.

The deviations from EB-2014-0354 used in Union's 2016-2020 Plan include:

Filed: 2015-08-28
EB-2015-0029
Exhibit J3.18
Page 176

UNION GAS LIMITED

Undertaking of Mr. Tetreault
To Ms. Frank

To address member Frank's queries.

Response:

Union has reviewed the transcript beginning at page 174 in relation to Member Frank's queries. Specifically, Member Frank asked Union to consider impacts of conservation on non-participants and to quantify that impact in relation to the $2.00/month per residential customer as contemplated in the Guidelines.

Union is not able to quantify the impact of conservation to non-participants. Union's current approved delivery rates, used in the calculation of the bill impacts found at Exhibit A, Tab 3, Appendix E include any avoided distribution, transmission and storage costs resulting from historical DSM activity. These avoided cost savings are offset to some degree, however, by annual adjustments associated with the Lost Revenue Adjustment Mechanism ("LRAM").

Union notes that the majority of savings that accrue from DSM are related to gas supply commodity-related costs, which accrue to participants rather than non-participants.

To estimate the quantum of benefits non-participants receive as a result of DSM, Union must finish its DSM and Infrastructure Planning Study which it will complete in time to inform the midterm review.

per GJ. While the impact on avoided costs of this component is negligible, the costs are conceptually relevant, easily estimated, and should be included in the avoided cost calculations.

ICF recommends that the DSM program impact estimates used in the SENDOUT model be increased by the estimate of the in-system fuel use and loss when determining the change in supply costs used to determine avoided costs.

5.3 Other Potential Changes to Avoided Cost Calculations

In our review of the avoided cost methodologies in other jurisdictions, ICF identified several categories where other utilities considered in their estimates of avoided costs, but are beyond the scope of the existing OEB mandate on avoided costs. These factors are included in other utilities' avoided costs for a variety of reasons, not all of which apply to Union Gas. ICF is not recommending the inclusion of these factors in the Union Gas avoided cost.

5.3.1 Commodity Price Reduction (DRIPE)

In New England, natural gas utility avoided costs often include a significant cost component associated with a decrease in the regional price of natural gas resulting from the decline in demand attributed to the DSM programs. This component of avoided cost is particularly relevant in markets that are capacity constrained and subject to large increases in gas prices during high demand periods. In these regions, the reduction in demand associated with DSM programs can be a significant percentage of the regional market, and can lead to avoidance or delay of major new infrastructure projects, leading to significant savings. In New England, estimates of 2014 natural gas DRIPE benefits for avoided costs range from $0.039/MMBtu in Connecticut to $0.003/MMBtu in Vermont (Synapse Energy Economics Inc., 2013).

However, the magnitude of the commodity price reduction in New England is due to the relatively small size of the market and the degree of the infrastructure restraints into the market. Due to the general integration of the Dawn Market with the broader North American markets, the reduction in demand associated with DSM programs in the Union Gas service territory is not expected to have a significant impact on regional natural gas prices.

5.3.2 Non-Energy Benefits

Conservation measures can have additional benefits beyond energy savings, potentially including improved comfort, health, convenience, aesthetics (National Action Plan for Energy Efficiency, 2008), and carbon emission reductions. The appropriateness of inclusion of non-energy benefits in the avoided costs typically would be based on policy decisions at the provincial level.

Ontario Energy Board

EB-2014-0134

Report of the Board

Demand Side Management Framework for Natural Gas Distributors (2015-2020)

December 22, 2014

It is important that the gas utilities' multi-year DSM plans focus on activities that will achieve a greater amount of long-term natural gas savings, better help participating customers manage their overall usage and ultimately their bills, and consider the guiding principles from Section xx and key priorities outlined above. The Board has provided a specific discussion of program types in the DSM Guidelines in Section 6.0. The gas utilities are expected to collaborate and integrate natural gas DSM program offerings across all sectors with Province-Wide Distributor and/or Local Distributor CDM programs throughout the course of the DSM framework period. As part of the multi-year DSM plans filed by the gas utilities, the Board expects that the gas utilities will include a discussion of the areas where programs have been coordinated and/or integrated with Province-Wide Distributor and/or Local Distributor, program aspects that have the potential to be integrated in the future and any barriers that have restricted the program from being coordinated and integrated with an electricity CDM program.

Additionally, the gas utilities DSM portfolios should include programs that are specifically designed to address customer groups with significant barriers to entry (e.g., small business customers). DSM portfolios should also include programs targeted to customers who are already very invested in energy efficiency and where more complex or customer-specific options are necessary.

The Board is of the view that rate funded DSM programs for large volume customers should not be mandated as these customers are sophisticated and typically competitively motivated to ensure their systems are efficient. The small number of customers in these classes further heightens the issues of one customer subsidizing business improvements of another. If a gas utility, in consultation with its large volume customers, determines that there is substantial interest in the gas utility providing expertise and a value-added service to help improve the energy efficiency levels of these customers' facilities, the gas utilities are able to propose a fee-for-service program which the Board will approve on its merits. The primary focus of any program proposed for large volume customers should be offering technical expertise, including conducting facility audits, advice for operational improvements, or engineering studies as opposed to capital incentives. Specifically, the gas utilities can propose a fee-for-service DSM programs to the customers in those classes identified as large volume rate classes in the table below. As can be seen in the table below, there is a very limited number of customers in these rate classes.

- Consultations with Large Volume customers showed that the nature of Union's technical contacts' interactions with the customer's energy team members and other staff does not lend itself to a fee-for-service approach.

Instead, based on direct customer input, Union has determined that it is appropriate for Union to offer a multi-year ratepayer-funded Rate T2/Rate 100 program. The scope of the proposed program would be significantly narrower than in the past, focusing on those items customers have identified as most important. The program cost would also be significantly reduced. A program of this nature will support large volume customers by ensuring a continued focus on energy efficiency by providing training and resources that will sustain the efforts to date. In view of the demonstrated high participation rates in the prior years' ratepayer-funded programs, the results of customer consultations in February and March 2015, and contributing to the achievement of Goal (ii) in Section 1.4 of the Framework to "Promote energy conservation and energy efficiency to create a culture of conservation", Union believes this is a natural and appropriate evolution of the DSM programs for this market. Union proposes the following:

- Continuing specialized technical support and equipment audits by qualified Union Professional Engineers on an as-requested basis.
- Coordinating and delivering training on energy near plant locations or online to minimize customer staff time away from the plant.
- Eliminating customer incentive payments for studies, capital or operations & maintenance equipment investments (as outlined in Framework).
- Eliminating costs associated with energy saving targets and performance measurement.

- Eliminating Rate T2/Rate 100 energy savings targets and Union's performance incentive.

12.3. Pay-for-Performance

Union will begin to investigate a pay-for-performance mechanism, combining both the cost recovery and shareholder incentive into one standard rate. Union's approach to assessing pay-for-performance will include a jurisdictional scan to determine if it has been prevalent in other jurisdictions in North America and to identify industry best practices. Union will review the approach used in the CDM Framework and will continue to leverage electric LDCs' experience as their pay-for-performance approach develops. In addition, Union will examine the associated strengths, risks, impacts and limitations of this approach to guide the potential development of the structure. An in-depth quantitative analysis of Union's current programs will be conducted to determine which programs are conducive to a pay-for-performance approach and the appropriate rate ($/m³) will be determined. This includes detailed financial modeling to determine the costs and results of a pay-for-performance structure for various scenarios based on past historical results and projected results. If deemed appropriate, Union will put forth a proposal for the Board to consider at the mid-term review.

13.0 Rate Impacts

Guiding Principle 2 of the Framework states: *"Achieve all cost-effective DSM that result in a reasonable rate impact."* The purpose of this evidence is to describe the rate impacts for all rate classes participating in Union's DSM programs.

ONTARIO ENERGY BOARD

FILE NO.:	**EB-2015-0029**	**Union Gas Limited**
	EB-2015-0049	**Enbridge Gas Distribution Inc.**

VOLUME: **4**

DATE: **August 24, 2015**

BEFORE:	**Christine Long**	**Presiding Member**
	Allison Duff	**Member**
	Susan Frank	**Member**

similar results, if the program were to be continued.

I believe that means that the continuation of the program in 2016 with a $4 million budget would produce net TRC of approximately $156 million, which is an average of the 2013 and 2014 results.

Is that a fair understanding of your interrogatory response?

MR. GOULDEN: Yes, it is.

MR. ELSON: Thank you. And if Environmental Defence were to ask the Energy Board to continue the large volume direct access program in 2016 with a budget of $4 million, would Union object to this?

[Witness panel confers]

MR. GOULDEN: Yes, we would object, because it is not our proposal.

MR. ELSON: If you were to be asked to continue the program, how much lead time would you need?

MS. LYNCH: We would need to have an understanding of the budget expectations, whether it's incremental or from within our existing programs, and also need to look if there were any target changes that would be required, based on any other expectations as far as custom programs.

MR. ELSON: Now, there may need to be some impact on incentives and targets and the like. But my question more relates to being able to ramp-up a program or continue a program, and how much lead time you would need to have before knowing that it's going to continue in 2016.

So let's assume that there is an incremental budget of

$4 million -- so keeping the budget the same as it was in 2015 -- when would you need to know that the Board would like you to continue that program in order to be able to do so?

[Witness panel confers]

MR. GOULDEN: Not to be flip, Mr. Elson, but the sooner the better. There is lots of details around what would the direct access program look like, what would be the guidelines be, how applicable are the targets based on what we achieved in 2015 to 2016.

So we'd have to work all of that out.

MR. ELSON: Thank you. So as I understand, it's doable at the moment, but the sooner the better.

MR. GOULDEN: Yes.

MR. ELSON: Thank you.

MS. DUFF: Mr. Elson, could I just ask a question?

MR. ELSON: Of course.

MS. DUFF: In this answer, B.T3.Union.ED.4, is there a free ridership assumed in here? I wasn't too sure, so I wanted to ask.

MR. GOULDEN: The free ridership rate for our custom program is established on a portfolio basis. So again, to my response, that would also be contingent upon assuming the same free ridership rate that we have in our current portfolio.

So that is baked into the targets, as well as the results. Did I answer your question?

MS. DUFF: Which is what percentage -- I wasn't sure

Ontario Energy Board | **Commission de l'énergie de l'Ontario**

EB-2012-0337

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

AND IN THE MATTER OF an application by Union Limited pursuant to Section 36(1) of the *Ontario Energy Board Act*, 1998, for an Order or Orders approving the 2013-2014 Large Volume Demand Side Management Plan.

BEFORE: Paula Conboy
Presiding Member

Marika Hare
Member

DECISION AND ORDER
March 19, 2013

Union Gas Limited ("Union") filed an application with the Ontario Energy Board (the "Board") dated August 31, 2012, seeking approval for its 2013-2014 Large Volume Demand Side Management ("DSM") Plan. The proposed budget is $4.664M plus inflation in both 2013 and 2014. With the inflation factored in, Union estimates the 2013 budget to be $4.769M and the 2014 budget to be $4.876M delivered to customers utilizing rates 100, T1 and T2.

The application was filed pursuant to the Board's DSM Guidelines for Natural Gas Distributors ("DSM Guidelines") that were issued on June 30, 2011, as well as in accordance with the Union Settlement Agreement, January 31, 2012 (EB-2011-0327) which was accepted by the Board on February 21, 2012.

Union stated that it had consulted with stakeholders when developing the Plan and incorporated, where in Union's view appropriate, the feedback provided. However, it noted that it did not achieve consensus on the Plan.

principle that “all customers in the class pay the same rates”. Union was concerned that a departure from this principle would invite many similar requests for special exemptions, both within large volume rate classes and in other rate classes.

Board Findings

The Board does not accept APPrO’s proposal to allow large volume customers to be able to opt-out of DSM programs. Industrial DSM programs, both those funded though rates and by individual customers, have shown to be efficient and to have societal benefits with respect to reducing greenhouse gas emissions and encouraging wiser energy usage.

Comparisons were made to Enbridge Gas Distribution Inc.’s (“Enbridge”) rates for generators, who do not have and therefore do not pay for DSM programs. However, in the Enbridge example, entire rate classes are exempt, not certain customers within a rate class.

The Board agrees that an opt-out proposal would expose those customers that do not opt-out to be burdened with more costs than originally anticipated. The Board heard that large volume users are most concerned about rate predictability and stability when it comes to DSM and was urged to be guided by this concern.

The Board’s DSM Guidelines do not make it mandatory for natural gas distributors to have DSM programs for industrial classes, but once the distributor decides to provide for such programs, the entire class is responsible for paying for those programs.

While there was discussion about the rigour around Navigant’s Jurisdictional Review, the Board does not need to opine on this because it agrees with the principle that allowing certain customers in a rate class to opt-out of the costs allocated to that class is contrary to the fundamental class ratemaking methodology that all customers in the class pay the same rates. This, and the unintended consequences of increasing costs for customers that do not opt-out, are sufficient reasons for the Board to deny the opt-out proposal.

2. Self-Direct Program

Union is proposing a new customer incentive budget process for Rate T2 and Rate 100 customers (“Self-Direct” access budget mechanism) whereby customers will each have direct access to the full customer incentive budget they pay in rates (as opposed to the

1.0.10.1 Context for Targets

Context for Home Reno Rebate Targets

- Eligibility requirements are as follows for a home to qualify towards the "Residential Deep Savings" metric:
  - Homeowner must complete at least two eligible energy efficiency upgrades (eligible measures are listed in Table 1).
  - The aggregate of all of the homes counted must achieve, on average, at least a 15% reduction in annual natural gas use, comparing the results of the D Assessment to the results of the E Assessment. D and E Assessment savings will be based on Natural Resource Canada's energy rating software, and will not include free ridership or spillover.[3]
- The lifetime m^3 targets for Home Reno Rebate were built using the current assumptions within the Hot2000 modeling tools. As noted at Exhibit A, Tab 3, Appendix A, Section 1.0.10.2, there are anticipated changes to the modeling tools. The lifetime m^3 targets for Home Reno Rebate will be adjusted up or down accordingly upon the release of a new industry standard modeling tool.

- *Home Reno Rebate Participants 2016-2017*
  - Initially, participation growth will be limited by Service Organization capacity, particularly in the east and north regions where Home Reno Rebate was not offered in the past.
  - During the ramp-up period Union intends to carefully screen, test and train Service Organizations and continue to work with contractors to ensure a suitable network of supporting channel partners and trades is in place across the franchise area. This will be critical in maintaining appropriate service standards, (such as wait times for having an energy assessment completed), preserving a positive customer experience, and protecting the reputation of the offering amongst customers and channel partners alike.

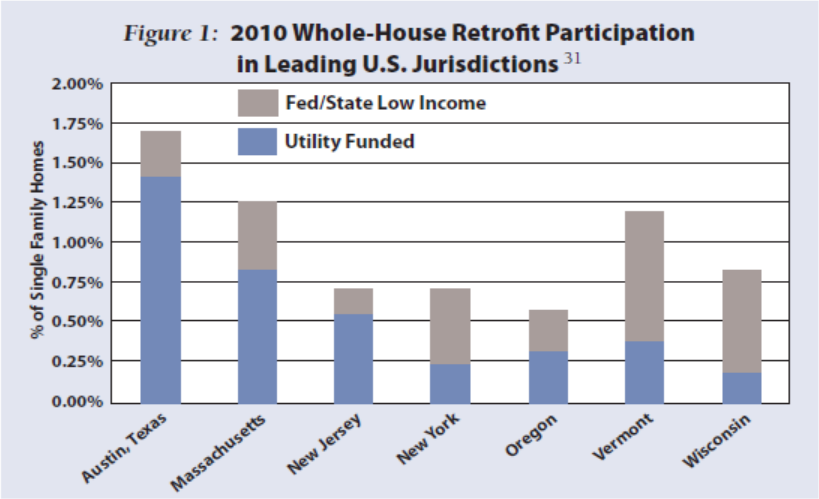
- *Home Reno Rebate Participants 2018-2020*
  - Home Reno Rebate is a relatively new offering that has not yet been expanded across the entire Union franchise area. Establishing a baseline for annual participation is therefore challenging, and Union has directionally been informed in establishing the deep homes target by participation rates seen from comparable offerings in other jurisdictions.
  - With approximately 1.3 million residential customers, the projected annual participation rate for Home Reno Rebate in the 2018-2020 plan years is 0.4%. This is a relatively aggressive target relative to the most comparable participation

[3] Details of the home savings modeling is provided in the Residential Home Reno Rebate EM&V Plan, Exhibit A, Tab 3, Appendix C.

participation rate for Home Reno Rebate in the 2018-2020 plan years is 0.4%. This is a relatively aggressive target relative to the most comparable participation rates experienced in leading jurisdictions.

- Whole house retrofit participation rates are displayed in Figure 1 below. The authors of this Figure made great effort to obtain data only for homes that received at least two major measures, which aligns with the requirement of the Home Reno Rebate offering. However, the utility funded data is not directly comparable to Home Reno Rebate as it appears to include utility-funded low-income as well as standard-income residential retrofits and represents both electric and natural gas retrofits, which may skew participation rates.

Figure 1
Whole-House Retrofit Participation in Leading US Jurisdictions[4]



- The results of Figure 1 indicate a directional relationship between the level of customer rebate and residential participation rates (e.g. the rebates as a percentage of project costs are approximately 10% in New York, 33% in Vermont and Wisconsin, 50% in New Jersey and 75% in Massachusetts). Given the relatively high cost of whole-home retrofit upgrades, such as building envelope and water/space heating measures, it is intuitive that a relatively high rebate level may be required to achieve broad uptake of whole-home retrofit program offerings.
- Similar to Massachusetts, the *ecoENERGY Retrofit – Homes* program that was offered by the federal government, and matched with grants from the provincial *Ontario Home Energy Savings Program (HESP)*, were able to achieve a high participation rate in Ontario through the use of high incentives. Federal

[4] Regulatory Assistance Project. *Residential Efficiency Retrofits: A Roadmap for the Future*. (2011) p. 15.

UNION GAS LIMITED

Answer to Interrogatory from
Green Energy Coalition ("GEC")

Reference: Exhibit A, Tab 3, Appendix A, pp. 17-18

Union states that "Federal ecoEnergy grants combined with provincial HESP rebates were more than double that of the Home Reno Rebate:

a) Please substantiate this statement.

b) What is Union's understanding regarding the average Federal ecoEnergy grant in Ontario during each of the last 5 years of the program's operation? Please provide separately for each year. Also, please document the source of this understanding, providing copies of referenced documents.

c) What is Union's understanding regarding the average Provincial HESP rebate during each of the last 5 years of the federal ecoEnergy program? Please provide separately for each year. Also, please document the source of this understanding, providing copies of referenced documents.

Response:

a) Union referred to tables listing the combined grants from the Governments of Ontario and Canada when comparing the rebate levels available. Union reviewed both the original rebates provided until 2009 (please see Attachment 1) and increased rebates that were available 2009-2011 (please see Attachment 2).

Union has provided a table below which summarizes Union's rebates in relation to the most recent comparable combined ecoEnergy and Home Energy Savings Program ("HESP") rebates. Union has included comments in the table where there were differences in the measure criteria. This assessment does not factor in the Home Renovation Tax Credit ("HRTC") that was available for the 2009 tax year. The HRTC allowed homeowners to receive a further 15 per cent back from the cost of a home renovation, up to a maximum of $1,350.

Table 1: Home Reno Rebate and Combined eco-Energy and HESP measure Rebate Levels

Measure	Rebate		Description
	Home Reno Rebate	Combined eco-Energy and HESP Rebate[1]	
Basement Insulation	$1,000	$2,500	For adding at least R23 to 100% of basement
	$500	$1,250	For adding at least R12 to 100% of basement
	$800	$2,000	For adding at least R23 to 100% of crawl space wall
	$400	$1,000	For adding at least R10 to 100% of crawl space wall
	$450	$500	For adding at least R24 to 100% of floor above crawl space
Exterior Wall Insulation	$1,500	$3,750	Add at least R9 for 100% of building to achieve a minimum of R12
	$1,000	$2,250	Add at least R3.8 for 100% of building to achieve a minimum of R12
Attic Insulation	$500	$1,500	For increasing attic insulation from R12 or less to at least R50
	$250	$750	For increasing attic insulation from R13 to R25 to at least R50
	$500	$1,500	For increasing cathedral/flat roof insulation by at least R14
Air Sealing	$150	$240	Achieve 10% or more above base target
	$100	$380	Achieve base target
Furnace	$500	$1,250	*HRR:* For 95% AFUE or higher condensing natural gas furnace *ecoENERGY/HESP:* For 92.0% AFUE or higher ENERGY STAR condensing natural gas with DC variable-speed motor
Boiler	$500	$1,500	For 90% AFUE or higher ENERGY STAR condensing gas boiler
Water Heater	$200	$630 (instantaneous) $750 (condensing)	*HRR:* For ENERGY STAR natural gas water heater with EF of 0.82 or higher *ecoENERGY/HESP:* For ENERGY STAR natural gas water heater with EF of 0.80 or higher
Window/Door/ Skylight	$40	$80	For each window, door or skylight replaced with ENERGY STAR-qualified model.

[1] Grant levels shown here were in effect 2009-2011. For the majority of measures, the combined ecoEnergy and HESP rebates were 25% lower prior to 2009, but were still double or more than double the rebates of Home Reno Rebate in most cases.

b) The average ecoEnergy grant in Ontario is assumed to be the same as the average HESP grant, as shown in the response to part c) below. HESP grants were an exact match of ecoEnergy grants and participants were identical since all ecoEnergy grant applications in Ontario were automatically forwarded to the HESP program.

c) Union's understanding of the average HESP rebate is shown in Table 2 below. The fiscal year for the program was April 1 to March 31, not including funding toward the completion of an energy assessment. Union does not have data separately for each year or for the entire length of the program. A copy of the source document is provided at Attachment 3. This program had no restrictions around savings achieved and the minimum number of measures installed. During the April 1, 2007 - March 31, 2010 period, 24% of participants installed a single measure. The most common retrofit was a furnace replacement done as a single-measure project. Most ecoEnergy grants increased by 25% at the start of the 2009 fiscal year, and HESP grants were correspondingly increased to match that of ecoEnergy.

Table 2: HESP – Average Grant Per Retrofit

Fiscal Year	Retrofits* (#)	Retrofit Grants ($)	Average Grant Per Retrofit
2009/2010	107,000	150,000,000	$1,402
2008/2009	42,000	45,000,000	$1,071
2007/2008	9,000	9,800,000	$1,089

* Retrofits represent the number of households that participated and completed a home retrofit.

ONTARIO ENERGY BOARD

FILE NO.:	**EB-2015-0029** **EB-2015-0049**	**Union Gas Limited** **Enbridge Gas Distribution Inc.**

VOLUME:	**12**	
DATE:	**September 3, 2015**	
BEFORE:	**Christine Long**	**Presiding Member**
	Allison Duff	**Member**
	Susan Frank	**Member**

the reason that we support that is, for this one program, to try to achieve both depth and breadth, and that by removing that two-measure constraint, the program could serve more customers and help offset more rate impacts and achieve one of the key goals of increasing participants.

MR. SHEPHERD: But then it's not a deep savings program anymore.

MR. WOOLF: Well, it might do both. And, you know, all utilities and all jurisdictions face this issue of depth versus breadth. It's an important one, and it's a tricky one, and just because it's called a deep savings program doesn't mean you can't encourage breadth as well. That's all.

MR. TAKAHASHI: And I will also add that, you know, depending how you look at this, our recommendation, one can say, actually, our approach is also holistic, because the holistic, if you just look at one-year installation, it may not be holistic, but then not everyone can implement every measures because there are some funding constraints. And if you look at five-year span, you know, it could be cost, you know, holistic; right? One customer may end up installing three measures over the course of five years. And there might be some reasons in the first year the customer cannot install other measures because it just happened the customer, their furnace failed, they have to replace it, but then their insulation, you know, they're not ready yet, or windows, so some customer needs some time to do it, to be comprehensive, so depending on how you look

ONTARIO ENERGY BOARD

FILE NO.:	**EB-2015-0029**	**Union Gas Limited**
	EB-2015-0049	**Enbridge Gas Distribution Inc.**

VOLUME: **10**

DATE: **September 1, 2015**

BEFORE:	**Christine Long**	**Presiding Member**
	Allison Duff	**Member**
	Susan Frank	**Member**

goes the lower your free-rider rate becomes, that also improves cost-effectiveness as well, so the -- I don't think it has any -- if anything, it has positive effects on cost-effectiveness.

The question of whether -- I guess I struggle with your question about whether the -- whether it's appropriate to increase incentives so that you can better compete with the money that the electrics are spending. I don't think that's the right way of looking at that it.

I think the more appropriate way to look at it is, given the marketplace the way it is, including the involvement of the electric LDCs, what kind of traction am I getting in the market? What kind of market share am I getting in a prescriptive rebate program for a particular product? Can I get -- if it's low, can I significantly increase my participation? What would be required to do that? If increasing incentives is one of the things that would be necessary to make that happen, then I think it's a reasonable thing to consider.

MR. SHEPHERD: Let me give you a specific example. Let's suppose that an electricity distributor offers 5,000 to a homeowner to insulate their house, and gas utility says, Well, we only have 2,500. Should the gas utility be saying, Okay, no, we'll offer you 5,000 too so that you will take it from our program rather than from the electric program? Or should the gas utility say, You know what? Take the money from the electric. We'll spend our money somewhere else.

- Target manufacturers who do not have a distributor network and/or distributors of eligible equipment.
- Determine opportunities where this incentive model is most effective in the supply chain in Union's franchise to increase sales and distribution of energy efficient technologies.
- Assess customers with low adoption that would benefit from influence at the supply chain level, and technologies that are most suited to this type of incentive model.
- Ensure there is ability for the utility to demonstrate influence over the results.

Market Delivery

- For the past several years Union has focused on a segmented market approach consistent with marketing best practices. Through this plan, Union will continue to deliver offerings using a segmented market approach. Within each segment, Union identifies and targets the key influencers and segment leaders.

- In addition, where applicable, measures will be targeted using a National Account strategy to reach decision makers who are part of a centralized management decision making process for implementing energy improvements.

- Offers will be delivered both directly to the customer, supported through Union's Account Management team, and indirectly, through delivery channels that consist of service providers including HVAC contractors, design build contractors, engineers, distributors, manufacturers, and building owners and managers. In addition Union will explore enhancements to self-service capabilities for customers and trade allies.

- Offers will be marketed through targeted strategies, both direct-to-customer and mass market, including print and digital media-based tactics. Union will also explore implementing event-based marketing strategies, such as tradeshows targeting specific customer segments, and other strategies such as an online web portal to provide a resource for mass market customers.

Barriers Addressed

Primary barriers preventing higher uptake in the market include the following:

- Upfront cost of capital and lengthy payback periods
  - Union offers incentives that help to offset initial project costs and reduce project payback time.

- Customer knowledge of payback period

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FILE NO.:	**EB-2015-0029**	**Union Gas Limited**
	EB-2015-0049	**Enbridge Gas Distribution Inc.**

VOLUME: **1**

DATE: **August 19, 2015**

BEFORE:	**Christine Long**	**Presiding Member**
	Allison Duff	**Member**
	Susan Frank	**Member**

your complete answer on all this. We want to make sure we get it right.

But one of the things that you try to minimize in the design of your custom offerings would be free riders; right?

MR. GOULDEN: Yes, that's correct.

MR. MILLAR: Sorry, I think your mic was off.

MR. GOULDEN: Yes, that's correct.

MR. MILLAR: Would you agree with me that, based on what we just said, all else being equal, a program with a short payback period is more likely to attract free riders than a program with a longer payback period?

MR. GOULDEN: No, I wouldn't agree in the custom market.

MR. MILLAR: Why is that?

MR. GOULDEN: Why would I not agree?

MR. MILLAR: Yes.

MR. GOULDEN: Because the two are not directly linked. Perhaps I could turn you to our response to topic 5, Staff number 16.

MR. MILLAR: Sure.

MR. GOULDEN: What we indicated in our response there, Mr. Millar, is it is one of many factors that affect a customer's decision to go forward with a project, but there is lots of other factors. And maybe let me just give you a really quick sort of example.

With regards to customers' decisions, especially industrial and commercial customers' decisions to go

forward with DSM-type projects, the other considerations they have are around budget constraints, around productivity goals and standards, around timing constraints, and around ultimately operational prioritization. Lots of our customers, especially our industrial customers, they quite frankly need our help to identify energy inefficiency because their job is making widgets, so consequently all of those other factors are just as important as payback when it comes to why they might or not -- why they might go forward or not go forward with a specific energy-saving project --

MR. MILLAR: Well --

MR. GOULDEN: -- it is not as simple as, yes, there is a better payback, therefore I'm going to go ahead. They may not have the money; they may not have the time. They may not -- with regards to their pending plant shutdown, they may not have the opportunity to actually put that on the list of things to do in the five days that they're shut down.

MR. MILLAR: Well --

MR. GOULDEN: That's bigger than just payback.

MR. MILLAR: I don't dispute that, and to be clear, I wasn't suggesting that payback period is the only factor. I was suggesting that it is a factor; would you at least agree with that?

MR. GOULDEN: Yes.

MR. MILLAR: Okay. Why don't I just take you to -- you will be familiar that Synapse discussed this issue in

ONTARIO ENERGY BOARD

FILE NO.:	**EB-2015-0029**	**Union Gas Limited**
	EB-2015-0049	**Enbridge Gas Distribution Inc.**

VOLUME: **3**

DATE: **August 21, 2015**

BEFORE:	**Christine Long**	**Presiding Member**
	Allison Duff	**Member**
	Susan Frank	**Member**

They couldn't do that on their own? They needed your $40,000, or they wouldn't do it?

MR. GOULDEN: I think the part that maybe I haven't explained very well, Mr. Shepherd, is they also need our assistance to identify opportunities.

Customers are typically -- many customers are not in the business of seeking energy efficiency. They're in the business of producing widgets, or running their facility.

So in fact, they wouldn't spend the money, because they haven't identified the project.

They are also budget- and capital-constrained like many of us are. So they don't necessarily have the funds that are available, even though it looks like a really darn good project.

MR. SHEPHERD: I don't understand. If what they're getting is your technical expertise, why would you write them cheques?

MR. GOULDEN: That's part of the package of services we provide to those customers.

MR. SHEPHERD: Would they not --

MR. GOULDEN: Likewise, the cheques that we write them allow them to potentially influence their own senior management to go forward with these projects, because even though from your perspective they'd look like a very low payback project, that doesn't necessarily mean that'll hit the priority with regards to the operational considerations in any particular plant or facility, so it won't happen without our involvement.

ONTARIO ENERGY BOARD

FILE NO.:	**EB-2015-0029**	**Union Gas Limited**
	EB-2015-0049	**Enbridge Gas Distribution Inc.**

VOLUME: **9**

DATE: **August 31, 2015**

BEFORE:	**Christine Long**	**Presiding Member**
	Allison Duff	**Member**
	Susan Frank	**Member**

that's an important qualifier -- all other things being equal, the free rider rate for projects that have short paybacks is likely to be higher than the free rider rate for projects that have long paybacks, or longer pay backs, all other things being equal.

That said, it's equally true, from my perspective, that it would be unreasonable to draw the conclusion that all short payback projects are free riders.

I generally agree with the arguments that Union's witnesses made in this regard. There are a variety of reasons why efficiency projects, even short payback efficiency projects and even those being implemented by large sophisticated customers, are not always free riders.

MR. POCH: That said, you are proposing a minimum one and a half year to two-year payback screen for the large volume program.

Can you comment on that juxtaposition?

MR. NEME: Sure. I think this it's important to note first that that proposal was solely for the very largest customers, and solely with respect to on operational efficiency improvements, not to capital projects.

Now, I offered that proposal as something for the Board to consider in the event that the concerns about rate impacts -- not rate impacts, the concerns about free riders are sufficient that it felt that something needed to be done.

That kind of requirement would almost certainly result in a lower free rider rate for the set of projects from

Commercial:

- Union is proposing a Direct Install Pilot for small business customers that will investigate how to take a holistic approach to these hard to reach customers. Given the barriers these customers face in entering DSM Programs, such as capital outlay, Union is researching how to properly address this customer group through the appropriate program design and delivery to ensure all opportunities are addressed when entering the business, thus decreasing any potential lost opportunities. Further detail on this offering is provided at Exhibit A, Tab 3, Appendix A, Section 1.1.

Industrial:

- Union is proposing a Strategic Energy Management offering designed to increase the adoption of an energy management system to establish a baseline for existing operations and to track performance over time for continuous improvement. Incentives are available to support the implementation of a system and for performance improvements throughout the five year term. Taking a comprehensive approach in energy management through monitoring and tracking will assist customers in identifying and prioritizing further improvements and minimizing lost opportunities. Further detail on this offering is provided at Exhibit A, Tab 3, Appendix A, Section 1.2.

7. Ensure low-income programs are accessible across the province

Union currently has the ability to deliver the Home Weatherization and Affordable Housing Conservation offerings province wide. For Home Weatherization, Union aims to

get a minimum of ten applications within a small rural area before deploying a delivery agent. Over the course of the Plan, Union will continue to develop its market channels to more proactively promote and respond to customers residing in remote locations. Union is also broadening its reach to low income customers through the launch of an Aboriginal Conservation offering as described at Exhibit A, Tab 3, Appendix A, Section 1.4.

8. *Programs should be designed to pursue long-term energy savings*

Union's proposed DSM offerings are designed to focus on the pursuit of long-term energy savings with measures that have long measure lives and would be very challenging to remove or replace. More than 98% of the measures proposed in Union's offerings have a measure life of 10 years or more. In addition, lifetime cubic metres of natural gas savings represent the largest portion of the scorecards proposed in Exhibit A, Tab 3, Section 3.

9. *Shareholder incentives will be commensurate with performance and efficient use of funds*

Union has allocated the shareholder incentive across scorecards based on the percentage of the total proposed budget spend and allocated the largest proportion to metrics that achieve significant lifetime natural gas savings as outlined by the Board in Section 5 of the Framework. The targets and accompanying budgets within the 2015-2020 Plan will produce substantial savings for customers and will be required to be delivered using funding in an efficient manner. Union's scorecard proposals are outlined at Exhibit A, Tab 2, Section 3 for 2015 and Exhibit A, Tab 3, Section 3 for 2016-2020.

Low Income

1.4 Low Income Program

Union's proposed 2016-2020 Low Income Program will build on the successes from the current DSM framework. Proposed enhancements, including new offerings and customer segments, reflect both the new Framework and Guidelines as well as the feedback received through ongoing consultation with low income intervenors, stakeholders and customers.

Union has proposed the following enhancements to its Low Income Program:

- Single family offering enhancements – Union proposes:
  - *Continued expansion of the Home Weatherization offering to new, and smaller, geographic areas across Union's franchise.* This will ensure that this offering is accessible to low income customers across the province; however, this will result in increased costs, as promoting and delivering this offering within non-urban centres will become increasingly more expensive.

  - *Introduction of an Aboriginal offering*. Union will utilize a unique market approach to promote and deliver the Home Weatherization and Furnace End-of-Life Upgrade offerings within Aboriginal reserves. This will include leveraging Union's existing Band Council relationships, employing local band members and implementing community events and marketing. To date, on-reserve customers have not participated in Union's low income offerings; therefore, this approach will be critical to ensuring that customers within these areas trust, buy-into, take up and benefit from Union's DSM program.

  - *Introduction of a Furnace End-of-Life Upgrade offering*. This will provide Social and Assisted Housing Providers and private market customers with an incentive to upgrade to a 95% or greater efficiency rating (AFUE) furnace when their existing furnace reaches end-of-life and is being replaced. This offering will be available to all low income single family customers, regardless of whether or not they are a Home Weatherization participant. This offering helps ensure that Union is addressing all deep saving opportunities and is also minimizing lost opportunities.

- Multi-family offering – Union proposes:
  - *Extension of the current offering to market rate buildings that are occupied by low income tenants:* A portion of low-income customers reside in market rate multi-family buildings; therefore, expanding the multi-family offering to this new customer segment helps to ensure that low income customers across Union`s franchise area benefit from the DSM offerings. Union worked closely with low income interveners

to define eligibility criteria, determine appropriate incentive levels and to build an initial market delivery approach.

1.4.1 Customer class(es) targeted

- Residential, C/I General Service

1.4.2 Rate Classes Targeted

- Rate M1, Rate M2, Rate 01, Rate 10

1.4.3 Goals

Program goals for the Low Income Program are to:

- Reduce the energy burden of Union's low income customer base
- Provide offerings to Union's low income customer base that adhere to the guiding principles and key priorities outlined in Section 2.0 of the Guidelines
- Continue to develop the breadth and the depth of the low income offerings throughout the term of the multi-year plan
- Minimize the barriers that low income customers face in participating in energy conservation programs

1.4.4 Program Strategy

Program strategies to achieve Union's goals for the Low Income Program include:

- Addressing all measures and natural gas savings opportunities in dwellings while meeting the program cost-effectiveness requirements
- Growing the offering's infrastructure across Union's franchise area
- Providing customers with the education required to continue conservation in their home after measure installation has been performed
- Addressing universality by expanding the Program to new low income markets (i.e. Low Income Market Rate Multi Family, Aboriginal communities etc.)
- Fostering relationships with key influencers in the low income community (i.e. Municipal Service Manager Offices, social service agencies, associations)

1.4.5 Program Offerings

The offerings delivered in the Low Income Program are outlined below.

Home Weatherization ("HW") Offering

Description

The Home Weatherization offering provides:

- A free home energy audit ("Initial Audit") to qualified homeowners and tenants to determine the building envelope upgrade requirements. During the Initial Audit, an

APPENDIX B: ON-BILL FINANCING

Union has considered the flexibility given by the Board in Section 6.2 of the Framework for the "development of new and innovative programs, including flexibility to allow for on bill financing options". On-bill financing was discussed as a potential new program idea in a consultation session with stakeholders in December 2013 as referenced at Exhibit A, Tab 3, Appendix B and the majority of participants did not support moving ahead with this new offering.

One of the guiding principles for the DSM Framework is that programs should be designed to remove barriers in the marketplace to increase program take-up[1]. Customer research provides important insights on the barriers to participation. Notably, customers do not cite access to financing as an obstacle to undertaking energy efficiency improvements.

High upfront costs of undertaking energy efficiency improvements are a commonly cited barrier to participating in DSM programs. While some may argue that an on-bill financing program helps to overcome upfront costs, it would only do so if the customer is willing to take on additional debt. Union's research suggests that there is a wide array of financing options available to those customers wishing to pursue financing for energy efficiency improvements, including some borrowing vehicles which specifically target energy efficiency improvements[2]. In spite of the current availability of financing, the majority who have or expect to undertake

[1] EB-2014-0134 Report of the Board, December 22, 2014, page 8.
[2] On-Bill Financing for DSM Programs: Research Insights and Findings.

energy efficiency improvements in the next two years have or expect to do so from cash or savings[3]. Union believes that making an additional borrowing vehicle available through an on-bill financing program, with additional customer costs required to establish that vehicle, will not alter the customer's willingness to take on debt for energy efficiency improvements.

In Union's view, overcoming the upfront cost of energy efficiency improvements is critically linked to two factors:

1. ***Customer incentives***

   Union has heard that rebates and incentives are the most valued program feature by residential single family and commercial/industrial mass market customers. In contrast, access to financing options is perceived as the least valuable program feature by the majority of these customers.

2. ***Customer understanding of the potential to save on their utility bills***

   Lack of clarity on savings also emerges as a barrier. Union believes that program features that build customer understanding of the benefits of the investment, such as the energy assessment component of the Home Reno Rebate Offering outlined at Exhibit A, Tab 3, Appendix A, Section 1.0 will be far more effective in encouraging customers to implement efficiency upgrades than an on-bill financing offering.

[3] On-Bill Financing for DSM Programs: Research Insights and Findings.

In order to ensure customers have an understanding of the financing options available to them during the 2015-2020 Plan, Union intends to focus on enabling financing options through the following:

- Providing information to customers on financing options for energy efficiency upgrades, for example within a promotion on a bill insert
- Initiating dialogue with key financial institutions about how their financing offerings might be promoted from Union's programs
- Developing an online page on Union's website that provides customers with financing information and options

UNION GAS LIMITED

Answer to Interrogatory from
Board Staff

Reference: Exhibit A, Tab 1, Appendix B, p.1
EB-2014-0134, Report of the Board, Section 6.2

Preamble: At section 6.2 of the DSM Framework, the OEB stated that utilities should strive towards the "development of new and innovative programs, including flexibility to allow for on-bill financing options." Union noted that it discussed on-bill financing as a potential new program idea with stakeholders and the majority of stakeholders that attended a December 2013 consultation session did not support on-bill financing.

a) Please indicate whether Union completed a jurisdictional review for on-bill financing programs. If yes, please provide the review.

b) Please file the document titled, "On-Bill Financing for DSM Programs: Research Insights and Findings."

c) Please indicate whether zero interest financing was considered as an option for on-bill financing programs. Please provide Union's views on a zero interest on-bill DSM financing program.

d) Please discuss Union's position on implementing a limited pilot program to test the effectiveness of on-bill financing.

e) Please discuss Union's position on collaborating with Enbridge on the pilot program.

Response:

a) Yes. Union performed a jurisdictional review in 2013. Please see Attachment 1 for the results.

b) Please see Attachment 2.

c) Zero interest financing was outlined within the Accenture report provided at Attachment 3. Union did not consider zero interest financing because Union's research provided in Attachment 2 indicated a preference from customers for rebates and incentives.

d) As outlined at Exhibit A, Tab 1, Appendix B, "Union believes that making an additional borrowing vehicle available through an on-bill financing program, with additional costs required to establish that vehicle, will not alter the customer's willingness to take on debt for energy efficiency improvements". Union does not believe that a pilot program is a good use of ratepayer DSM funding for a program that consumers have indicated would not address the key barrier to energy efficiency upgrades. A pilot program would require the same amount of effort and expense as an on-bill financing program to integrate on-bill financing options into Union's customer billing system.

   Union believes it is more effective to focus on enabling financing options through the examples listed at Exhibit A, Tab 1, Appendix B, p. 3.

e) No, for the reasons set out in part d) above.

On-Bill Financing for DSM Programs:

Research Insights and Findings

Prepared by: Market Research & Analysis

April 2014

On-Bill Financing for DSM Programs: Research Insights and Findings

Background

Residential Home Renovation, with a focus on deep measures, is expected to be a significant focus area in the next DSM framework. Some have suggested that the availability of financing is a significant market barrier to energy efficiency home retrofits. Several interveners have suggested that utility financing, with discounted interest rates that utilities can access, along with extended amortization periods, would favourably position customers to upgrade their home if the upgrades result in a reduction in the total bill including repayment charges.

Other North American jurisdictions have adopted on-bill financing programs to support energy efficiency programs, in response to legislative or regulatory mandates. Many of the on-bill financing programs include a provision whereby the loan attaches to the dwelling or property (instead of the customer).

A key implication of introducing on-bill financing for DSM renovations would be that the utilities may be intruding on what is currently characterized as a competitive financing market.

Research Objectives

The overall goal of the research is to assist in evaluating a decision to move forward with an on-bill financing offering to support the marketing of Union's DSM programs, specifically those focused on higher cost deep measures such as those included under the Home Reno Rebate offering. The specific research objectives are to explore:

1. The extent to which the availability of financing is a barrier to customer participation in Union's DSM programs.
2. Customer appeal for an on-bill finance offering.
3. Availability and access to competitive financing offerings in the Ontario market.
4. Trends in household indebtedness.
5. The extent to which an on-bill financing offering provides an opportunity to drive additional participation in Union's DSM program offerings.

Research Approach

In order to address the research objectives, Market Research & Analysis:

1. Conducted a review of on-bill financing offerings in other North American jurisdictions, leveraging information available through E-source and Chartwell.

2. Participated in discussions with Manitoba Hydro and Fortis BC.

3. Reviewed existing primary research conducted with utility customers to provide insight on desirability and benefits of an on-bill financing program from a customer perspective. This included qualitative research as well as quantitative research.

4. Conducted a review of existing competitive financing offerings available to utility customers through banks, financial institutions and other market players. This included offerings specifically targeting spending on energy efficiency improvements as well as options generally available in the marketplace.

5. Conducted a review of the financial situation of Ontario households, including outstanding indebtedness and borrowing capacity and;

6. Conducted quantitative research (following assessment of items 1-5 outcomes) with Union Gas customers[1] residing in dwellings eligible for the Home Reno Rebate Program specifically to gauge the extent to which financing is a barrier to DSM adoption and the ability of an on-bill Union Gas financing option to increase participation in the program.

Key Findings:

1. The extent to which the availability of financing is a barrier to customer participation in Union's DSM programs.

A number of primary research studies have been conducted with utility customers that cover barriers to undertaking energy efficiency and on attitudes toward On-bill financing programs to support energy efficiency initiatives[2]. Utility customers rarely cite the inability to obtain financing as a barrier to undertaking Energy Efficiency improvements.

Among those that have not made energy efficiency improvements, the key factors (top of mind) to not undertaking relate to cost (broadly stated), the belief that their home is already energy efficient and the fact that they have other priorities. Another important barrier that emerges in both qualitative and quantitative research is uncertainty or lack of concrete information on the savings. This is consistent with key barriers discussed in numerous discussion papers related to on-bill financing.

The assessment from studies conducted by others is consistent with findings from Union's DSM segmentation study (2009), which found that customer's don't feel changes will make a difference in their utility bill. This study also found that proof that their bill would decrease would be a motivator to undertaking initiatives.

[1] *Customer opinion gauged through the annual UG penetration study which randomly samples 1200 single family customers. The 2013 study was fielded in November 2013. Key questions related to On-Bill Financing were also included in the CI Mass Market Customer Satisfaction Study conducted in November-December 2013.*

[2] *See Appendix 1 for a list of Primary Research studies reviewed.*

Access to financing is not cited by customers as a barrier to adopting DSM measures

In the most recent customer research[3] (Nov 2013), lack of financing was not cited as a reason for not undertaking energy efficiency improvements. Union's customers echoed the key rationales cited in research previously conducted, with over half (51%) believing that there home is already efficient. The second major factor is that customers don't have the money or it costs too much.

For those that have done or intend to undertake energy efficiency improvements in the future, cash or savings is the most common and preferred source of funds. In the quantitative research with Toronto homeowners, less than 20% have or intend to use credit (with the most common cited form of credit being line of credit). For Union's single family customers, cash or savings is the means of payment for those who have undertaken (66%) or intend to undertake (61%) in the next two years. As in the Toronto research, line of credit is the most common form of borrowing when not using cash to fund the improvements. Use of a line of credit is the second (9% for those that have and 13% for those expecting to undertake) mentioned means of payment. For those that have undertaken improvements over half spent over $5,000 on improvements.

Funding trends for past energy efficiency improvements as well as intentions suggest that the majority of customers are not inclined to fund energy efficiency improvements by borrowing. In qualitative research discussing the appeal of on-bill financing, there was some reticence expressed regarding taking on more debt in the current economic environment. Thus it seems that regardless of how an on-bill option is positioned vis a vis savings that can be achieved, it is seen as another vehicle for taking on debt, which has little appeal for the majority of households.

2. Customer Appeal for an on-bill financing offering

The November 2013 research conducted with Union's single family and CI Mass Market customers asked respondents to rate the value of different energy efficient program features. The results show that the most valued program feature is ***rebates and incentives*** with 43% of residential and 59% of CI customers indicating this feature is extremely valuable. This is consistent with the often cited "upfront cost" barrier, since this feature directly reduces the costs of energy efficiency improvements. By contrast, only 14% of residential and 23% of CI customers indicated that ***Access to financing options*** was extremely valuable. Interestingly, a higher percentage (Residential 49%, CI 33%) indicate that such a feature would be "not at all valuable". It is noteworthy that many proponents of on-bill financing position financing programs as a means of overcoming the upfront cost barrier. However, Union's research, based on customer valuation of program features, reveals that the goal of driving adoption would be best achieved by enhancing the level of rebates/incentives.

[3] See Appendix 6 for detailed results from Union 's 2013 Residential Single Family Penetration Study

Enhancing rebates/incentives for energy efficiency improvements is a more effective means of driving adoption

Existing research has discussed different interest rate levels in gauging the appeal of on-bill programs to customers. In BC, although there was preference to use an established line of credit, an interest rate lower than the bank was appealing. In Ontario, the research defined the interest rate vaguely as low-cost, but in qualitative research customers considered low-cost to mean either zero or prime.

Subsequent quantitative research by the City of Toronto tested the appeal of the program under an assumption of "very low interest". Amongst the 42% likely to apply for the loan, the most often cited reason they would apply was the low interest rate. On this basis, the appeal is likely overstated relative to offerings at higher interest levels. This is borne out by the research with Union's customers where 67% indicate that access to a rate of 5.5% would have ***no impact*** on their likelihood to undertake energy efficiency upgrades. Only 13% stated that it would make them "much more likely" to undertake.

In Alberta, the research was conducted on the basis of a 5% loan rate for possible municipal programs. In this government context, there was great concern that this was a "profit making scheme" and that the government was getting into the banking business.

It is reasonable to assume that incremental DSM take-up for an on-bill finance program will depend on the interest rate and how customers see the offering in relation to other available financing options

Attachment of the loan to the property emerged as a concern in all qualitative research (BC, Alberta and Ontario). The key worry is the potential for the loan to discourage potential purchasers in the event of a sale of the property.

The extent of the resistance to this program element was tested in the Toronto quantitative study. Over half of respondents opposed attachment of the loan to the property (with over one third strongly opposing the proposal) and likelihood to apply for the loan was significantly lower when attached to the property.

The Toronto quantitative study also measured likelihood of purchasing an energy efficient home depending on the existence of an outstanding energy efficiency loan. Likelihood of purchasing an

energy efficient home was cut by more than half under the existence of an energy efficiency loan attached to the property.

> *Attachment of the loan to the property is not a broadly appealing element of an on-bill financing program and may introduce a barrier to participating for some*

Negativity toward loans attached to the property was somewhat less for Union's single family customers, with respondents being evenly divided on preference for a loan attached to the property vs. the homeowner. Interestingly, close to one third indicated "neither". The preferences are highly dependent on age, with younger customers below 35 indicating a clear preference for attachment to property.

3. Availability and access to Competitive Financing Offerings in the Ontario Market

There are a variety of general financing vehicles available to the residential market including mortgage refinancing, home equity line of credit, second mortgages, personal line of credit and personal loan. Those loan programs linked to the properties generally offer the most favourable interest rates and terms. For example, home equity loans are typically based on the prime rate + a percentage in the range of 1-2% (the October 2013 prime rate is 3%)

In addition to general financing options, some financial institutions have developed loan products specifically targeting the market for energy efficiency upgrades[4]. Specific products include:

- RBC Energy Saver Loan with 1% off interest rate (where base interest rate is based on creditworthiness) or a $100 rebate on a home energy audit

- Bank of Montreal EcoSmart Mortgage (purchase of homes with energy efficient features).

> *Creditworthy households have access to a variety of financing mechanisms with the most favourable rates linked directly to home equity. Any utility on-bill financing above 5% would not be competitive with financial institution offerings*

Over the 2011-2013 period, home equity in Canada ranged from 66% to 70%[5], and historically no more than 1% have negative equity in their home. By contrast, the equity position of U.S. homeowners was 60% in 2005 prior to the collapse of the housing market and currently sits below 50%. These statistics

[4] *See Appendix 2 for a detailed review of General Financing Options and a review of financing available for Energy Efficiency Upgrades*
[5] *See Appendix 3 "Home ownership, Equity and Mortgage in Canada*

reveal that Canadians in general have a greater ability to borrow against housing values relative to their U.S. counterparts. Interestingly, most of the on-bill financing programs for energy efficiency first emerged in the U.S. within the last 10 years period.

On a Canada wide basis, 83% of homeowners have 25% or more equity in their homes. This includes 41% of homeowners who are mortgage free and 59% who have a mortgage. Across both groups 24% owe money on a *Home Equity Line of Credit*. The most commonly cited reasons for taking equity out of a home are for debt consolidation or repayment, investments and renovation or home repair. If the data for Union's franchise is comparable to the Canada wide data, it suggests that more than 80% of Single Family Union Gas homeowners or around 600,000 of targeted homeowners in the Home Reno Rebate program[6] have access to the most favourable borrowing terms, either by taking a mortgage or making use of a Home Equity Line of Credit.

A sizeable portion of Canadians have access to the most competitive borrowing vehicles and the capacity to borrow against home values

[6] *As at August 2013, there were 1,125,500 Single Family customers. The Home Reno Rebate target is 68% of Single Family, based on a criteria that they are detached homes built before 1995*

ONTARIO ENERGY BOARD

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VOLUME: **3**

DATE: **August 21, 2015**

BEFORE:	**Christine Long**	**Presiding Member**
	Allison Duff	**Member**
	Susan Frank	**Member**

The first deals with on-bill financing.

Ms. Lynch, you had a discussion with Mr. Elson about on-bill financing and, as I understood your evidence, it was that this was not an initiative that was the number one priority for your customers. They preferred instead to receive incentives.

And you also spoke a bit about the administrative costs and the credit risk, and how that all worked into your decision not to offer on-bill financing; I realize it wasn't the reason that you decided against it.

But I just wondered, did you consider the option -- and would your answer change with respect to credit risk and administrative burden if there was a DSM program where you didn't have third-party or Union wasn't at risk, but there was a set amount, a back-stop let's say, where you could offer on-bill financing up to a certain amount. Did you consider that?

MS. LYNCH: We did talk about a number of options, but our overriding view was that having an on-bill financing will not change the barriers for customers to participate. So we felt that that would be better spent on incentives.

MS. LONG: Okay. My other question, I think, it relates to a discussion that you had earlier, Ms. Brooks, with Ms. Duff, Member Duff, about the behavioural program platform.

I guess I'm wondering -- I understand how that meets the objective about reaching a large customer base, which is one of the things that the framework talks about.

ONTARIO ENERGY BOARD

FILE NO.:	**EB-2015-0029** **EB-2015-0049**	**Union Gas Limited** **Enbridge Gas Distribution Inc.**

VOLUME:	**11**	
DATE:	**September 2, 2015**	
BEFORE:	**Christine Long**	**Presiding Member**
	Allison Duff	**Member**
	Susan Frank	**Member**

percent of the budget to work with. The other 3 percent is not expected to drive savings because its purpose is to plant some of the seeds to test some of the new ideas that might then bear fruit and, hopefully, in significant ways when the utility comes back for their next filing. Sometimes it bears fruit quickly enough that the utilities can actually, in the course of a three-year period, even start in the second or third year to get some savings out of it.

Sometimes they -- these pilot projects are successful enough that they move them out of the pilot phase and into the full implementation phase, but mostly it's about trying to build the pipeline of ideas and new approaches for the next generation of programs for the, you know, future filings.

MS. FRANK: Okay. So on that, there aren't targets in terms of performance or incentive associated with it. Just you've got 3 percent of your budget. Go be innovative.

MR. NEME: Correct. It's like an incubator budget.

MS. FRANK: If we went there to look at their decisions, would there be a definition of what they consider to be innovative? And I'm going to the kind of question that Mr. Shepherd had where he said, "I've seen that done in other jurisdictions, so that's not innovative." Would there be a definition like that? You have to be the first one out?

MR. NEME: No. I -- I read, with some amusement, some of Mr. Shepherd's cross on this topic, and I don't believe

that you have to be the first one to do anything to be called innovative. You know, you want to be at the front of the curve, and you don't want to be doing something that's been tried for 15 years in 40 different places, to use the -- you know, to go to the other extreme, but I would, for example, characterize -- well, not quite. I think, you know, a few years ago the upstream program incentive models outside of residential lighting hadn't really been tested and that, you know, a few years ago, that would have been an example. It had been tested in one market and folks were starting to now try to test it in other in markets. So I think it's now been tested enough in different places in other markets that, you know, it may not be quite, you know, in the innovative category.

But generally -- and I also smiled a little bit when you asked for a definition because we are in the middle of kind of a heated debate in Illinois right now about exactly what the definition ought to be or developing a policy manual around DSM, and that's a -- for whatever reason, that's a topic that has been somewhat contested among the parties. So I'm not sure there's -- and certainly I think the approach Michigan takes is very different than the Illinois approach. I think they're a little bit more lenient in terms of what gets -- what's allowed to get put in there.

So I don't know that there's a standard definition. I think you can develop one that makes the most sense for Ontario. My -- you know, my personal take would be to

allow the -- if this is something you were going to be considering here in Ontario, would be to allow the utility some discretion about what gets put into that bucket, and it's, you know, kind of -- if it doesn't really fit, you'll know it when you see it.

MS. FRANK: Okay. My last question is: At one point when you were speaking with Mr. Shepherd, you said that the framework should encourage risk-taking. That's kind of a quote. I don't have the page. But I just wondered what did that mean and what would a framework look like that encouraged risk-taking, and can you point us somewhere to find what that looks like?

MR. NEME: That's a great question. Well, you know, one way that one could do that would be to set up some performance metrics that are targeted to certain markets that may not have had a lot of -- you know, where we've not had a lot of experience to this point, and certainly -- actually, probably the single most important thing that you could do to encourage risk-taking would be to set the ambition for the amount of savings if they're going to get a lot higher, because when the ambition is modest it is easy to get there by just doing all the tried and true stuff and, you know, to skim the cream, if you will.

So the single-most important thing I think you can do would be to force them to look under more rocks, to push the envelope a little bit more by setting a more ambitious target.

MS. FRANK: Thank you for those thoughts.

Table 2

2016-2020 DSM Plan Budget

	Year				
	2016 ($000)	2017 ($000)	2018 ($000)	2019 ($000)	2020 ($000)
Program Budget					
Resource Acquisition					
Residential Development and Start-up	$ 1,850	$ -	$ -	$ -	$ -
Residential Incentives/Promotion	$ 8,745	$ 13,569	$ 15,916	$ 15,916	$ 15,916
Residential Evaluation	$ 559	$ 709	$ 859	$ 859	$ 859
Residential Administration	$ 991	$ 1,071	$ 1,071	$ 1,071	$ 1,071
Total Residential Program	$ 12,145	$ 15,349	$ 17,845	$ 17,845	$ 17,845
Commercial/Industrial Incentives/Promotion	$ 14,562	$ 14,571	$ 15,293	$ 14,957	$ 14,957
Commercial/Industrial Evaluation	$ 189	$ 189	$ 189	$ 189	$ 189
Commercial/Industrial Administration	$ 3,929	$ 4,076	$ 4,076	$ 4,076	$ 4,076
Total Commercial/Industrial Program	$ 18,680	$ 18,836	$ 19,558	$ 19,222	$ 19,222
Total Resource Acquisition Programs	$ 30,825	$ 34,185	$ 37,404	$ 37,067	$ 37,067
Performance-Based					
Performance-Based Incentives/Promotion	$ 297	$ 592	$ 837	$ 582	$ 802
Performance-Based Evaluation	$ 35	$ 35	$ 35	$ 35	$ 35
Performance-Based Administration	$ 216	$ 216	$ 216	$ 216	$ 216
Total Performance-Based Program	$ 548	$ 843	$ 1,088	$ 833	$ 1,053
Low-Income					
Low-Income Incentives/Promotion	$ 9,705	$ 10,647	$ 11,863	$ 12,419	$ 13,261
Low-Income Evaluation	$ 219	$ 212	$ 225	$ 244	$ 262
Low-Income Administration	$ 1,425	$ 1,425	$ 1,425	$ 1,425	$ 1,425
Total Low-Income Program	$ 11,349	$ 12,284	$ 13,514	$ 14,088	$ 14,948
Large Volume					
Large Volume Incentives/Promotion	$ 400	$ 349	$ 373	$ 397	$ 421
Large Volume Evaluation	$ -	$ -	$ -	$ -	$ -
Large Volume Administration	$ 409	$ 409	$ 409	$ 409	$ 409
Total Large Volume Program	$ 809	$ 758	$ 783	$ 807	$ 831
Market Transformation					
Optimum Home Incentives/Promotion	$ 841	$ -	$ -	$ -	$ -
Optimum Home Evaluation	$ -	$ -	$ -	$ -	$ -
Optimum Home Administration	$ 201	$ -	$ -	$ -	$ -
Optimum Home Program	$ 1,042	$ -	$ -	$ -	$ -
Programs Sub-total	**$ 44,573**	**$ 48,070**	**$ 52,787**	**$ 52,795**	**$ 53,899**
Portfolio Budget					
Research	$ 1,500	$ 1,000	$ 1,000	$ 1,000	$ 1,000
Evaluation	$ 1,300	$ 1,300	$ 1,300	$ 1,300	$ 1,300
Administration	$ 2,935	$ 2,842	$ 2,842	$ 2,842	$ 2,842
Pilots	$ 1,000	$ 1,000	$ 500	$ 500	$ 500
DSM Tracking and Reporting System Upgrades	$ 5,000	$ -	$ -	$ -	$ -
Portfolio Sub-total	$ 11,735	$ 6,142	$ 5,642	$ 5,642	$ 5,642
Total DSM Budget Pre-Inflation	**$ 56,308**	**$ 54,212**	**$ 58,429**	**$ 58,437**	**$ 59,541**
Cumulative Inflation @1.68%	$ 946	$ 1,837	$ 2,995	$ 4,027	$ 5,172
Total DSM Budget Post-Inflation	**$ 57,254**	**$ 56,049**	**$ 61,424**	**$ 62,464**	**$ 64,714**

The program budgets and their individual components (development and start-up, incentives/promotion, evaluation and administration) are consistent with the definitions provided in the Guidelines, Section 9.1.2. The Portfolio budget captures DSM activities that are not

reporting guidelines of the Board (found at Section 2.1.12 of the Natural Gas Reporting & Record Keeping Requirements Rule for Gas Utilities).

The AC will be responsible for following a structured process that provides sufficient opportunity for input and the transparency required to instill confidence in the accuracy of audited results. The AC will endeavour to reach consensus on all recommendations and where consensus is not reached, the Board representative as Chair will lead the resolution process.

Union's overall evaluation budget for 2015 will be $1.13 million, which includes impact evaluation as well as the cost of funding the EAF, the AC, two DSM Consultative meetings, and the Auditor.

10.0 Research

Union has long recognized that Research activities are a necessary component of new Programs and offerings. Over the term of the Plan, Union will continue to investigate emerging energy efficiency technologies and new opportunities that provide an increased understanding of the market Union serves. Through these studies, the utility is able to offer customers a full suite of cost-effective programs in ever changing markets.

Union will continue to conduct research activities in coordination and collaboration with Enbridge over the term of the Plan resulting in more cost effective projects, reducing duplication of research efforts, and greater value to customers.

Research ideas are generated for the Residential, Low-Income, Commercial and Industrial sectors from internal employees, Enbridge, research exchanges with other utilities outside of Ontario, industry associations and experts, customers, conferences, and trade shows etc. Research projects thoroughly investigate critical input assumptions to natural gas, electricity and water savings, costs and equipment useful life, among a variety of typical usage data for a variety of market segments. Market information, such as market barriers, market shares, and how supply chains operate, is also examined to assist Union in designing programs that are well informed and take a strategic approach to the market. Information garnered through research informs Union's program design process to overcome identified market barriers and target the appropriate customers in a manner that is economically effective. Existing programs are impacted by changes in market conditions. Market saturation, competitive alternatives, technology advances, the economy and other external forces drive the importance of research in order to adapt to shifting market conditions and continue to improve upon the diverse portfolio of programs for customers.

Research additionally enables the utility to convert common custom DSM projects into prescriptive offerings. In such cases, research can determine common average input assumptions

based on typical equipment use and characteristics, as well as market data. This provides information on the ability to reach a broad base of customers, which in turn drives further participation. Increased participation is achieved through a more straightforward application process which typically results in a more streamlined process for customers and a more efficient evaluation process. A resulting benefit of research moving custom options towards more prescriptive program offerings is that it allows Union's custom project resources to focus on projects which are truly unique in nature.

Through its research efforts, Union will continue to investigate leading front line program options for all customer segments. Over the duration of the Plan technologies under investigation will change to include new compelling energy efficient options and solutions for customers.

In 2015, Union will focus on research to identify technology opportunities, including space heating, water heating, controls etc., that will improve overall program design for commercial, residential and low income sectors. For example, Union is currently exploring the viability of commercial market expansion of Demand Control Ventilation systems ("DCV"). The overall research budget for 2015 is $0.766 million.

11.0 Stakeholder Engagement

Union developed its 2015 DSM Plan in accordance with the Board's direction as outlined in the Framework. On January 14, 2015 Union held a full day DSM Consultative meeting on its 2015

new DSM offerings are introduced, Union will require incremental budget to facilitate EM&V requirements while continuing to evaluate the existing suite of offerings. Union proposes to isolate the evaluation budget (program specific and general portfolio) to only evaluation related activities, ensuring the budget is not utilized for any other DSM activity. Further information on Union's evaluation plans can be found at Exhibit A, Tab 3, Appendix C.

While Union's proposed DSM programming is comprehensive, a pilot program budget has been identified to allow Union to explore innovative DSM programs and market approaches. The budget will fund pilot projects identified by Union and/or industry partners, such as Enbridge, electric local distribution companies ("LDCs") and the Independent Electricity System Operator ("IESO"). While developing the 2016-2020 DSM Plan Union has identified a key pilot program that will be pursued over the course of the Framework: Direct Install Pilot for Small Business customers, which is outlined at Exhibit A, Tab 3, Appendix A, Section 1.1. Furthermore, Union is participating in a pilot, led by the Toronto and Region Conservation Authority ("TRCA") and the IESO, investigating the Performance-Based Conservation methodology for driving deeper savings in the commercial and institutional sectors.

As discussed at Exhibit A, Tab 2, Section 12.2, Union will undertake activities to upgrade its DSM Tracking and Reporting System to ensure the requirements of the new framework are met. The required activities in 2016 are budgeted at $5 million.

2.0 Introduction

Union has prepared its DSM Plan (the "Plan") for the six year period of 2015 – 2020 in accordance with the Framework and Guidelines. The following summarizes the key elements of Exhibit A:

- Incorporates the Board's guiding principles and key priorities;
- Was informed by stakeholder consultation;
- Includes a roll-over of the 2014 Plan parameters to 2015 per the Board's direction;
- Budget spending rises from $34 million in 2015 to $59.5 million by 2020 (excluding inflation), including approximately $6 million for a new tracking and reporting system;
- Volumetric savings over the term of the plan are 8 billion lifetime cubic meters of natural gas[1];
- Achieves $1 billion in net total resource cost ("TRC") benefits[2];
- Union's shareholder incentive cap will be $11 million in 2015 and $10.45 million annually commencing in 2016;
- Union's shareholder incentive at 100% target will be included in rates beginning in 2016;
- Contains new program offerings for all customers beyond 2015 including; Residential, Low Income, Commercial, Industrial and Large Volume; and,
- Includes a commitment to coordinating with electricity Conservation Demand Management ("CDM") per the Board's direction.

[1] Savings assume Union achieves the cumulative 2015 m^3 target as estimated based on the pre-audit and pre-verification Resource Acquisition, Low Income and Large Volume Scorecards as outlined in Union's 2014 Draft Demand Side Management Annual Report.
[2] 2015 TRC results are based on the pre-audit, pre-verification results as outlined in Union's 2014 Draft Demand Side Management Annual Report.

10. Ensure DSM is considered in gas utility infrastructure planning at the regional and local levels

Union will examine how DSM could be considered in gas utility infrastructure planning. This will be identified as part of the study Union will commence in 2015 to determine the potential effects DSM can have on deferring, postponing or reducing future capital investments. Union's preliminary approach is outlined at Exhibit A, Tab 1, Appendix D.

5.0 Response to Key Priorities

In Section 6.2 of the Framework, the Board outlines the expectation that the multi-year plans, "…enable the delivery of results in the areas which have been identified as key priorities in the Long Term Energy Plan, Conservation Directive and by the Board".

Union's 2015-2020 Plan will enable the delivery of results in areas identified as key priorities as follows:

a) Implement DSM programs that can help reduce and/or defer future infrastructure investments

As outlined in guiding principle number one and number ten above, Union will perform a study commencing in 2015 to determine the potential effects DSM can have on deferring, postponing or reducing future capital investments.

b) Develop new and innovative programs, including flexibility to allow for on-bill financing options

Union has proposed many new and innovative programs in its Plan, including:

- A Behavioural Offering for Residential customers (Exhibit A, Tab 3, Appendix A, Section 1.0);
- An Aboriginal Conservation Offering (Exhibit A, Tab 3, Appendix A, Section 1.4);
- Furnace End-of-Life Upgrade Offering for Low Income customers (Exhibit A, Tab 3, Appendix A, Section 1.4);
- Direct Install Pilot for Small Business customers (Exhibit A, Tab 3, Appendix A, Section 1.1);
- Strategic Energy Management for Industrial customers (Exhibit A, Tab 3, Appendix A, Section 1.2); and,
- Best practices training and technical expertise for Large Volume customers (Exhibit A, Tab 3, Appendix A, Section 1.3).

Although Union is not proposing to offer on-bill financing based on customer feedback as outlined at Exhibit A, Tab 1, Appendix B, Union will investigate how to facilitate financing options for customers through partnership and education efforts.

c) *Increase collaboration and integration of natural gas DSM programs and electricity CDM programs*

Union has been actively engaged with the IESO and electric LDCs to continue to progress on collaboration and integration of DSM and CDM Programs. Union's approach to collaboration and integration is outlined at Exhibit A, Tab 1, Appendix C.

12.1.2. DSM and Infrastructure Planning

Union will perform a study commencing in 2015 to determine the potential effects DSM can have on deferring, postponing or reducing future capital investments. Union's preliminary proposed approach is outlined at Exhibit A, Tab 1, Appendix D.

12.2. DSM Tracking and Reporting System Upgrades

The information technology architecture behind Union's current DSM system was designed in 2000 and 2005 respectively to support the needs of DSM reporting at that time. Several upgrades to Union's DSM systems were made over the last ten years to accommodate the revised DSM reporting and processing requirements of the previous two DSM Frameworks.

The 2015-2020 DSM Framework includes new data reporting and processing requirements that can no longer be met by the architecture of the existing DSM systems. Union has conducted a preliminary review of both the current state of the DSM systems and the future requirements to meet the needs of the new DSM framework. The review process included identification and prioritization of DSM data requirements during the six year framework.

Future needs include the following functionality:

- Packaged Customer Relationship Management ("CRM") tool to manage DSM related contacts, customer activities, leads and opportunities;

- Core DSM tracking system to replace the existing systems. The primary functionality is to support all of the key DSM processes, including the ability to interface with Union's billing systems and financial software; and,
- Analytics and reporting to support the new DSM framework requirements.

This project will replace the aging applications with current technology to meet the new DSM reporting requirements, maintain data integrity, utilize resources more efficiently and provide flexibility for future needs.

The preliminary review has provided a high-level estimate of $6 million to perform the necessary system changes. This is reflected in the DSM budget submission as $1 million in 2015 and $5 million in 2016. Any variance between the budget and actual cost will be captured in the DSMVA and subject to a full prudence review on disposition.

In addition, initial discussions with Enbridge are underway to determine if there are potential synergies in the replacement of the utilities' existing systems.

12.3. Collaboration

Union is committed to meeting the Board's objective of increasing DSM and CDM collaboration opportunities through the coordination and integration of program offerings. Union will

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FILE NO.:	**EB-2015-0029**	**Union Gas Limited**
	EB-2015-0049	**Enbridge Gas Distribution Inc.**

VOLUME: **13**

DATE: **September 4, 2015**

BEFORE:	**Christine Long**	**Presiding Member**
	Allison Duff	**Member**
	Susan Frank	**Member**

and the experts both had some thoughts that they gathered from benchmarking. So I wondered if, in your opinion, would there be any benefit from a joint study looking for best practices in other jurisdictions?

[Witness panel confers]

MS. LYNCH: I do think that is an area that we -- we have done a fair amount of work, and I think we do look to continue that sort of work together, to look for best practices. We've had studies that we have done in the past. We do leverage resources that are in the marketplace, like eSource, where they are very focused on providing information to us on best practices and understanding what's happening in other jurisdictions. So we have found that we have been getting a lot of value out of that, those resources and the work that we've been doing on an ongoing basis.

MS. FRANK: Ms. Oliver-Glasford?

MS. OLIVER-GLASFORD: I would agree with that entirely. I think there's been a lot of work done on reviewing different jurisdictions, even most recently within the technical evaluation committee, a jurisdictional review of free rider studies.

So I think we've done a lot of looking around. I think the value will be really looking inwards and continuing to spend our focus on understanding and continuing to cultivate the information and data we need on our own markets, beyond what we already have.

MS. FRANK: Okay. One last area of potential joint

activity, and this is in the program and evaluation, the actual -- the information requirements.

There has obviously been a change as to accountabilities, and my question is: Given the change in accountabilities and potentially new information requirements being proposed, is there a possibility that a joint monitoring and reporting system -- which, I do understand, you likely need to have an interface to your own systems -- but rather than two separate initiatives, could there be one new system with an interface to your current? Is there any potential there?

[Witness panel confers]

MS. OLIVER-GLASFORD: We had some chance to chat about this one, so thank you for the heads-up that you gave us the other day on this particular question. And I think, really, what we understood when we read Synapse's report and what we do see and can understand is the need for consistency in reporting. So perhaps looking at creating some similar headlines or templates, if you will, for our annual report, the things that we're reporting on, and how it looks. We think that there is some value there and we can certainly seek do that, where it is appropriate.

I think in terms of a -- one central reporting or system, I think that's more difficult. As we have kind of spoken about with respect to OPower, we have our own separate enterprise systems. And so the IT systems will need to work within those already established IT systems.

I think also where we're looking at, the electrics,

for example, they have a management entity actually managing and overseeing and developing that, which is the IESO, and in terms of the gas utilities, we have been very efficient at how we are administering and delivering our programs, so I think if we were to have some sort of centralized system that would require additional layering of administration, which we -- I believe we've shown that we can do effectively and efficiently within the utilities' walls.

MS. FRANK: And Ms. Lynch, when you answer, you might also -- I notice there is, what is it, 10 million, maybe a bit more, when I combine the two systems, so when you're answering, if it was 1, would it be less than 10 million? That is really what -- this is all about efficiency.

MS. LYNCH: And we have talked about that too, and, I mean, certainly we've been having -- our teams have had discussions, we've talked about what our requirements are. We've talked about the process that we're following to look to get the systems in place. Our understanding is a lot of it will be the integration with our existing systems and the need for potential customization in that, so I think there is benefit to us to continue to work together to make sure our reporting is the same and see what -- and when we're determining what options are out there in the market, but we didn't see that there would be considerable efficiencies in the overall amount, based on one system.

MS. FRANK: Fine, those are my questions. Thank you for that. And I would encourage you to continue to think

about areas to cooperate. That certainly is the direction that are in the guidelines, so I hear you do quite a bit of it, but I would certainly encourage you to continue.

MS. DUFF: Good morning. I have six areas. The first one I wanted to talk about was staffing, your internal versus external staffing for DSM programs.

What is the mix today that you have that supports this application? I don't know if you have exact numbers, but is the size of full-time Union and Enbridge employees dedicated to DSM versus contractors? Please.

MS. OLIVER-GLASFORD: In terms of staffing, I don't have the exact number off the top of my head. I think we're roughly at about 80 or so full-time equivalents. Really, in terms of staffing, it depends on the market that we're serving. In the residential and low-income markets typically, but not the case for all offers, we are using a lot of third-party delivery agents, contractors, if you will, so I don't know how many of them are feet on the street, but that would really be where we have more ability to use the third-party delivery agents and channels, such as those.

In terms of commercial-industrial, that is a lot more specialized, in terms of skill set and the type of people that we hire and develop. So we have less contracting available to us in those markets. We still do work very heavily through channel partners and through channels that are appropriate to get to the customers and work with the customers, but most of our -- you know, the people that

		• 2016-2020 Scorecards with proposed metrics and formulas • Proposed allocation of shareholder incentive across scorecards • Allocation of budget across rate classes

Materials for all sessions noted above including, meeting attendees, meeting invitations, agendas and presentations can be found in Exhibit A, Tab 3, Appendix B.

12.0 Framework Considerations

12.1. Treatment of Rate T1 Customers

In 2016, Union is proposing to continue offering Rate T1 customers Commercial/Industrial programs and include them in the Resource Acquisition Scorecard. These programs are described in detail in Exhibit A, Tab 3, Appendix A, Section 1.1. Rate T1 is currently included on the Large Volume Scorecard due to the timing of splitting Rate T1 into a mid-size Rate T1 class and a large Rate T2 class. The programs offered to Rate T1 customers are different than the programs offered to Rate T2 and Rate 100 customers and continue to be consistent with the Commercial/Industrial Custom Offering on the Resource Acquisition Scorecard from 2012-2015. Union is proposing to exclude Rate T1 from the definition of Large Volume rate classes given the significant differences between Rate T1 and Rate T2 in terms of daily contracted demand and annual consumption. Rate T1 customers are similar in composition to customers in Union's Rate M4 and Rate M7 rate classes. Further, the Rate T1 rate class is similar to Enbridge's Rate 100 rate class, which is also not included in the definition of Large Volume rate class within the

Board's Framework. Accordingly, the Rate T1 rate class should be treated consistently with Rate M4 and Rate M7 and Enbridge's Rate 100.

This section of evidence is organized as follows:

1. The 2013 Board-approved Rate T1 redesign
2. Timing of DSM Proceedings relative to Rate T1 redesign
3. Comparison of the Rate T1, Rate T2, Rate M4 and Rate M7 rate classes
4. Comparison of Rate T1/Rate T2 to Enbridge's Rate 100/Rate 125

1. <u>2013 Board-approved Rate T1 Redesign</u>

In EB-2011-0210 (Union's 2013 cost of service proceeding), Union proposed to split the existing Rate T1 rate class into a new Rate T1 mid-market rate class and a new Rate T2 large-market rate class. Union proposed to split Rate T1 to better align cost incurrence and cost recovery by recognizing the differences in distribution demand and distribution customer-related costs between small Rate T1 and large Rate T1 customers. The proposed split also addressed the significant diversity in daily contracted demand and firm annual consumption that existed between small and large customers within the Rate T1 rate class.

In its EB-2011-0210 Decision, dated October 25, 2012, the Board approved the split of Rate T1 into a new Rate T1 rate class and a new Rate T2 rate class, effective January 1, 2013. As a result of the Board's Decision, Union was able to address the significant diversity in daily contracted

demand and firm annual consumption that existed within the previous Rate T1 rate class through the introduction of Rate T2.

The 2013 Board-approved average firm daily contracted demand in Rate T1 is approximately 56,000 m^3/day, while the 2013 Board-approved average firm daily contracted demand in Rate T2 is approximately 890,000 m^3/day (or 16 times greater). Similarly, the average firm annual consumption in Rate T1 is approximately 13,000,000 m^3/year, while the average firm annual consumption in Rate T2 is approximately 200,000,000 m^3/year (or 15 times greater). Please also see Table 10 below.

Table 10

Summary of Rate T1 – 2013 Board-approved Firm Contracted Demand and Firm Annual Consumption with and without Rate T1 Redesign

Line No.	Particulars		2013 Rate T1 without Redesign	Rate T1 Redesign	
				Rate T1	Rate T2
			(a)	(b)	(c)
1	Firm Contracted Demand (m^3/day)	MIN	9,300	9,300	165,000
2		MAX	2,755,000	140,000	2,755,000
3		AVG	343,191	55,812	889,212
4		MED	67,800	48,750	669,000
5	Annual Firm Volume (m^3)	MIN	4,640,210	4,640,210	22,590,890
6		MAX	836,320,120	42,600,000	836,320,120
7		AVG	78,383,593	12,795,770	199,721,065
8		MED	13,628,490	10,726,120	146,616,000

Note: Table 1 above is Table 15 in EB-2011-0210, Exhibit H1, Tab 1, Page 40, updated: 2012-07-13.

Given the significant differences between Rate T1 and Rate T2, classifying both rate classes as Large Volume is not appropriate. As described in more detail below, the composition of the Rate T1 rate class is similar to Union's Rate M4 and Rate M7 rate classes.

2. Timing of DSM Proceedings relative to Rate T1 redesign

Union's 2012-2014 DSM Plan (EB-2011-0327) was filed on September 23, 2011, prior to the filing of Union's EB-2011-0210 evidence in which it proposed to split Rate T1. In its 2012-2014 DSM Plan Union introduced a separate Large Volume balanced scorecard to provide additional transparency for the targets and rate impacts for customers in Rate T1 and Rate 100. As part of the EB-2011-0327 Settlement Agreement, Union agreed to file a new Large Industrial Rate T1 / Rate 100 DSM plan for 2013 and 2014.

Union filed its 2013-2014 Large Volume DSM Plan (EB-2012-0337) on August 31, 2012. The plan was premised on the old Rate T1 rate class, as the Board had not approved Union's Rate T1/Rate T2 proposal at that time. Rate T1 continued to be included in the Large Volume balanced scorecard, however, it was proposed it be treated differently than Rate T2 and Rate 100 in the 2013-2014 Large Volume DSM Plan. Union proposed that Rate T1 customers maintain access to an aggregate pool of customer incentives throughout the year, while Rate T2 and Rate 100 would change to a Direct Access budget mechanism. The Board approved Union's proposals in its March 19, 2013 Decision.

3. Comparison of the Rate T1, Rate T2, Rate M4 and Rate M7 rate classes

The composition of the new Rate T1 rate class is more similar to Union's Rate M4 and Rate M7 rate classes than to Rate T2.

2013 Board-Approved Contracted Demand and Annual Consumption

As described above, the 2013 Board-approved average firm daily contracted demand in Rate T1 is approximately 56,000 m^3/day, while the average firm daily contracted demand in Rate T2 is approximately 890,000 m^3/day (or 16 times greater).

The 2013 Board-approved average firm daily contracted demand in Rate M4 is approximately 11,000 m^3/day, which is comparable to the Rate T1 average firm daily contracted demand of 56,000 m^3/day. The average Rate T1 firm daily contracted demand is only five times greater than the average firm daily contracted demand in Rate M4, while in contrast, the Rate T2 average firm daily contracted demand is 16 times greater than Rate T1 and 80 times greater than Rate M4.

Further, the 2013 Board-approved average firm annual consumption in Rate T1 is approximately 13,000,000 m^3/year, while the average firm annual consumption in Rate T2 is approximately 200,000,000 m^3/year (or 15 times greater).

The 2013 Board-approved average firm annual consumption in Rate M4 is approximately 2,650,000 m^3/year, which is similar to the Rate T1 average of 13,000,000 m^3/year. The average

Rate T1 firm annual consumption is only five times greater than the average firm annual consumption in Rate M4, while in contrast, the Rate T2 average firm annual consumption is 15 times greater than Rate T1 and 75 times greater than Rate M4. Please see Table 11 below.

Table 11

Summary of 2013 Board-approved - Firm Contracted Demand and Firm Annual Consumption
Rate T1, Rate T2, Rate M4 and Rate M7

Line No.	Particulars		Rate T1	Rate M4	Rate M7	Rate T2
			(a)	(b)	(c)	(d)
1	Firm Contracted Demand (m^3/day)	MIN	9,300	4,800	60,000	165,000
2		MAX	140,000	50,000	820,000	2,755,000
3		AVG	55,812	11,317	127,371	889,212
4		MED	48,750	7,500	85,000	669,000
5	Annual Firm Volume (m^3)	MIN	4,640,210	700,800	2,475,880	22,590,890
6		MAX	42,600,000	14,400,000	52,235,000	836,320,120
7		AVG	12,795,770	2,652,236	15,392,376	199,721,065
8		MED	10,726,120	1,950,010	10,844,140	146,616,000

Notes: Rate T1 and Rate T2 reflect the Board-approved rate redesigns implemented in 2013 and based on the 2013 approved forecast.
Rate M4 and Rate M7 reflect the Board-approved rate redesigns implemented in 2014 and based on the 2013 approved forecast.

Rate Class Eligibility

As described above, the Board-approved rate class eligibility for Rate M4, Rate M5 and Rate M7 changed effective January 2014. Rate T1 customers can meet the rate class eligibility for either

Rate M4 or Rate M7 depending on their level of firm daily contracted demand. Accordingly, Rate T1 customers have the ability to remain in the semi-bundled Rate T1 service or select the bundled Rate M4 or Rate M7 services. Rate T1 customers cannot meet the rate class eligibility requirements for Rate T2. Please see Table 12 below for a summary of the rate eligibility criteria for Rate T1, Rate M4, Rate M7 and Rate T2.

Table 12

Rate Class Eligibility

Line No.	Particulars		Rate T1	Rate M4	Rate M7	Rate T2
			(a)	(b)	(c)	(d)
1	Firm Contracted Demand (m^3/day)	MIN	n/a	2,400	60,000	140,870
2		MAX	140,870	60,000	n/a	n/a

Finally, in Section 6.2 of the DSM Framework, the Board describes Rate T1, noting that:

> *"Customers in this rate class include manufacturing plants, chemical plants, large processors/greenhouses and small specialty steel plants".*

The Rate M4 and Rate M7 rate classes include similar types of customers as the Rate T1 rate class. Specifically, Rate M4 and Rate M7 include manufacturers, chemical plants and large processors/greenhouses. Many customers qualify for the volumetric requirement of the Rate T1 rate of 2,500,000 m^3/year, but choose to remain in Rate M4 or Rate M7.

The rationale for remaining as a bundled customer in Rate M4 or Rate M7 is varied. Some customers prefer the ease and convenience of the bundled balancing service over the semi-unbundled Rate T1 service. The savings of associated with T1 service are not significant (as a total cost of their annual natural gas costs) and would be partially offset by the costs of having a third party energy manager administer the storage balance on a daily basis. Other customers choose to remain bundled to keep their energy contract as simple as possible as the energy contract is not within their area of expertise. There are several customers that have multiple locations, some of which would qualify for the T1 rate while others would not. In these instances, it is easier for them to manage the energy portfolio if all customers are part of the same rate, or at least manage to the same balancing parameters.

In summary, similar types of customers of comparable size are included in Rate M4, Rate M7 and Rate T1. In effect, Rate T1 service is interchangeable with Rate M4 or Rate M7 service depending on the customer's preference for a fully bundled service or a semi-bundled service.

4. Comparison of Rate T1/Rate T2 to Enbridge's Rate 100/Rate 125

In addition to the similarities between Union's Rate T1, Rate M4 and Rate M7 described above, the rate class eligibility for Rate T1 is also similar to Enbridge's Rate 100 eligibility. Enbridge's Rate 100 is not defined as a Large Volume rate class in the Board's DSM Framework.

Specifically, the Rate T1 rate class has a maximum firm daily contracted demand of up to 140,870 m^3/day. This rate class eligibility is similar to Enbridge's Rate 100, which requires a

maximum daily volume of not less than 10,000 m^3 and not more than 150,000 m^3. In Union's view, given the similarities between Rate T1 and Enbridge's Rate 100, it is not appropriate for Rate T1 customers to be defined as a Large Volume rate class while similar customers in Enbridge's Rate 100 are not.

By comparison, Union's Rate T2 rate class has a minimum firm daily contracted demand of 140,870 m^3/day and no maximum firm daily contracted demand. The Rate T2 rate class eligibility is similar to Enbridge's Rate 125 rate class, which requires a minimum firm daily contracted demand of 600,000 m3/day and also has no maximum firm daily contracted demand. Both Rate T2 and Enbridge's Rate 125 are defined as Large Volume in the DSM Framework.

Please see Table 13 below for a comparison of Rate T1/Rate T2 and Enbridge's Rate 100/Rate 125 firm daily contracted demand requirements.

Table 13

Comparability of Union and Enbridge Firm Rate Eligibility

Line No.	Particulars	Union Rate T1 (1)	Enbridge Rate 100 (2)	Union Rate T2 (1)	Enbridge Rate 125 (2)
		(a)	(b)	(c)	(d)
1	Minimum CD	n/a	10,000	140,870	600,000
2	Maximum CD	140,870	150,000	n/a	n/a

Notes:
(1) Union's Rate T1 and Rate T2 parameters per EB-2011-0210.
(2) Enbridge's Rate 100 and Rate 125 parameters per EB-2014-0276 Rates Handbook.

In summary, based on the significant differences between Rate T1 and Rate T2, the similarities of Rate T1 with bundled contract rates M4 and Rate M7 and the comparison of large volume rate classes between Union and Enbridge, Union is proposing to include Rate T1 in the Commercial/Industrial DSM programs within the Resource Acquisition Scorecard.

12.2. Fee-for-Service

Union accepts the need articulated in the Framework to reduce the scale of ratepayer impact and potential cross-subsidization between ratepayers. However, Union has concluded that it should not offer a program based on fee-for-service consulting services on energy management for the following reasons:

- It would not be appropriate to develop fee-for-service offerings with Board-approved regulated rates when these services are already offered competitively in the market.
- Making reliable determinations of the actual natural gas savings from projects Union participates in would be required for Union to track savings for the purpose of determining a performance incentive. It would not be justifiable for a customer to devote staff resources to this activity without receiving a customer incentive.
- Reporting and receiving a performance incentive based on customer savings achieved as a result of fee-for-service consulting would constitute a potential conflict of interest for Union.

UNION GAS LIMITED

Answer to Interrogatory from
Canadian Manufacturers & Exporters ("CME")

Reference: Exhibit A, Tab 1, p. 19 of 23

Union has proposed that in 2016, Rate T1 customers will be offered commercial/industrial programs within the resource acquisition scorecard rather than the large volume program (for which they are currently eligible). CME would like to better understand the impact which this proposed change would have on Rate T1 customers. In this regard, please provide the following information:

a) How many Rate T1 customers have participated in the large volume program since the split of Rate T1 and T2 became effective on January 1, 2013?

b) CME understands that Rate T1 customers have been offered programs which are consistent with commercial/industrial custom offerings on the resource acquisition scorecard. How many Rate T1 customers have participated in such offerings since the split of Rate T1 and T2 became effective on January 1, 2013? Also, please set out the type of programs which Rate T1 customers have received since January 1, 2013 and explain how they are inconsistent with the large volume program.

c) If CME is correct and T1 customers have received programs consistent with commercial/industrial custom offerings on the resource acquisition scorecard, how have those costs been allocated to the various rate classes. Specifically, has Rate T1 been allocated costs arising from both the resource acquisition scorecard and the large volume program?

d) Please explain why Rate T1 customers cannot be offered DSM programs under both the large volume program and the commercial industrial program.

Response:

a) In total, 28 unique Rate T1 customers have participated in Union's custom program since January 1, 2013.

b) Please see response to part a) above for historical Rate T1 customer participation.

Since January 1, 2013, the custom program available to Rate T1 customers has been identical to that available to all other of Union's Commercial/Industrial Customers. The Rate T1 custom program differs from that of the Direct Access Large Volume program available to Rate T2 and Rate 100 customers in both project incentives and program structures. The

Direct Access Large Volume program has self-directed incentive budgets and an annual energy efficiency plan requirement for each participating Rate T2 or Rate 100 customer.

c) Effective January 1, 2016, Rate T1 has not been allocated any costs associated with the Large Volume program for 2016-2020. The costs associated with the Large Volume program proposed in Exhibit A, Tab 3 have been allocated to Rate T2 and Rate 100 only.

d) Rate T1 customers are not eligible for both Large Volume and Commercial Industrial programs. Union is proposing to offer Rate T1 customers the Commercial Industrial programs only, consistent with other similar customers in Rates M4, M5 and M7.

ONTARIO ENERGY BOARD

FILE NO.:	**EB-2015-0029**	**Union Gas Limited**
	EB-2015-0049	**Enbridge Gas Distribution Inc.**

VOLUME: **4**

DATE: **August 24, 2015**

BEFORE:	**Christine Long**	**Presiding Member**
	Allison Duff	**Member**
	Susan Frank	**Member**

bundled rate classes.

MR. MONDROW: Okay, so what is the reason that you want to put T1 back into DSM? Is there something that you can help me with to understand why you think the Board was mistaken in its guidance to you, why those customers need more full-fledged DSM programs and T2 and rate T100 customers don't?

MR. TETREAULT: I don't know if I have a different position, Mr. Mondrow, than what we've just been discussing. As I mentioned, it is a bit of an anomaly that they are considered large volume, given when that definition was initially established there was only a rate T1 class. We did not yet have an approval of a rate T1 split into rate T1 and T2. So from my standpoint we've looked at what really constitutes large volume, and in Union's view, that's rate T2 and rate 100 customers, and in the case of T1 they are very similar to customers in other bundled contract rate classes, namely M4, M5, M7, and we've proposed to continue to offer them the same DSM programs as those other customers in those other rate classes that I mentioned.

T1 customers, for example, would have the ability, depending on their own needs, to switch back and forth between T1 or M4 or M7. They are very interchangeable from a rate-class eligibility perspective. It tends to come down to how active the customer wants to be in terms of managing storage and other things, but rate T1 is essentially what I would call from a rate-making view the

semi-bundled version of M4, M7, so we've tried to treat similar rate classes similarly.

MR. MONDROW: Is part of the problem that you have in T1, M4, M5, M7, the industrial customers that IGUA represents, and other types of customers that aren't like those customers that maybe want your energy-efficiency programs or value them more; is that part of the problem?

MR. TETREAULT: Certainly not a problem from my view, Mr. Mondrow.

MR. MONDROW: Okay. If you turn to page 18 of the compendium, please? Sorry, I keep calling it the compendium; it is Exhibit K4.1.

So I just excerpted the title page from appendix A of your pre-filed and then if you flip over to page 19 of the compendium, here I excerpted -- and I think you will see again today the evidence on the large volume programs, both historical and a little bit in the background section, and then prospectively.

So just on the background section -- and Mr. Elson was talking to you about this a little while ago -- this direct access program. It's been described here, and I think you've described it earlier today that under that program, the amount paid in rates by each customer was available for that customer to get back, provided they demonstrated qualifying efficiency spending; is that accurate?

MR. GOULDEN: Yes. They would, on an annual basis, complete an energy efficiency plan and they would identify how they would see fit to spend the funds they are paying

will pay approximately $23 per year or $1.92 per month in DSM costs in 2020, regardless of their participation in Union's DSM programs.

For the average Rate 01 residential customer in Union North participating in Union's DSM programs, Union estimates annual volume savings of 65 m^3 in 2020. Based on the variable portion of a Rate 01 residential customer's bill, the annual volume savings of 65 m3 result in a bill reduction of approximately $23 per year or $1.91 per month. This bill reduction represents one year of natural gas savings and does not reflect customer incentives received or other utility savings (e.g. electricity, water). As described above, the average Rate 01 residential customer will pay approximately $26 per year or $2.20 per month in DSM costs in 2020, regardless of their participation in Union's DSM programs.

Please see Exhibit A, Tab 3, Appendix E, Schedule 4 for the annual and monthly bill reductions associated with the estimated annual volume savings by rate class in comparison to the DSM costs included in rates.

2. Rate M4, Rate M5 and Rate M7 Proposal

As noted above, 2020 DSM costs will represent 8.6% of a typical Rate M7 bill based on current approved rates. Similarly, 2020 DSM costs will represent approximately 4.2% of the current approved Rate M4 bill and 2.4% of the current approved Rate M5 bill. 2020 DSM costs in Rate M7 in proportion to the current approved bill are approximately two times greater than Rate M4 and three times greater than Rate M5. The discrepancy between the proportion of DSM costs in

Rate M7 as compared to Rate M4 and Rate M5 is the result of rate class eligibility changes approved by the Board in EB-2011-0210, effective January 1, 2014.

Background

In EB-2011-0210, Union proposed to lower the rate class eligibility criteria for the mid-market bundled contract rate classes (Rate M4 and Rate M5) and the large volume bundled contract rate class (Rate M7), effective January 1, 2014. In particular, Union proposed to lower the Rate M7 eligibility to a daily contract demand of 60,000 m^3 from 140,870 m^3. This minimum daily contracted demand for Rate M7 aligned with the proposed maximum daily contracted demand for Rate M4 and Rate M5. In its EB-2011-0210 Decision, the Board approved Union's proposed rate class eligibility changes. As a result of this change, 22 Rate M4 and Rate M5 customers in Union's 2013 Board-approved forecast were required to move to Rate M7 effective January 1, 2014.

During its 2014 to 2018 Incentive Regulation Mechanism ("IRM"), Union's rates are set based on the 2013 Board-approved volume forecast, subject to specific volume adjustments related to changes in normalized average consumption ("NAC") and DSM savings ("LRAM") only.

Union's ratemaking process during IRM does not recognize the annual volumes (i.e. billing units) associated with the transition of 22 customers from Rate M4 and Rate M5 to Rate M7, while Union's proposed 2016 to 2020 DSM budget reflects the current number of customers in all three rate classes. The 2013 Board-approved volumes associated with the 22 customers that

transitioned to Rate M7 are approximately 300,000 10^3m^3, or two times greater than the 2013 Board-approved Rate M7 volumes of 147,000 10^3m^3. As a result, in the absence of Union's proposal, the proportion of DSM costs in a Rate M7 customer's bill would be substantially higher than in Rate M4 or Rate M5.

Union's Proposal

To address the discrepancy between the proportion of DSM costs in Rate M7 compared to Rate M4 and M5, Union proposes to pool the proposed DSM costs for these three rate classes and reallocate the costs in proportion to 2015 approved billing units. Union is proposing this approach for ratemaking purposes from 2016 to 2018.

Table 14

Re-Allocation of Proposed DSM Budget for Rate M4, M5, and M7

		Rate Class Specific DSM Unit Rate			Common DSM Unit Rate			
Line No.	Particulars	2020 Proposed DSM Budget ($000s)	2020 Proposed DSM Rates (cents/m³)	Percent Of Bill (%)	2020 Proposed DSM Budget ($000s)	2020 Proposed DSM Rates (cents/m³)	Percent Of Bill (%)	Change in DSM Budget ($000s)
		(a)	(b)	(c)	(d)	(e)	(f)	(g) = (d - a)
1	Rate M4	3,637	0.9532	4.2%	3,200	0.8385	3.7%	(438)
2	Rate M5	2,609	0.5099	2.4%	4,291	0.8385	4.0%	1,682
3	Rate M7	2,415	1.7292	8.6%	1,171	0.8385	4.2%	(1,244)
4	Total	8,661			8,661			

As shown in Table 14 above, combining and reallocating the proposed 2020 DSM costs for Rate M4, Rate M5 and Rate M7 results in similar proportions of DSM costs in all three rate classes. Specifically, Union's proposal reduces the DSM costs allocated to Rate M7 from $2.415 million to $1.171 million (or $1.2 million) and decreases the proportion of DSM costs in the current approved bill from 8.6% to 4.2%.

For Rate M4, Union's proposal decreases the allocated DSM costs from $3.637 million to $3.200 million (or $0.4 million) and decreases the proportion of DSM costs in the current approved bill from 4.2% to 3.7%.

For Rate M5, Union's proposal increases the allocated DSM costs from $2.609 million to $4.291 million (or $1.7 million) and increases the proportion of DSM costs in the current approved bill from 2.4% to 4.0%.

Please see Exhibit A, Tab 3, Appendix E, Schedule 3 for the 2020 bill impacts for all in-franchise rate classes, including Union's Rate M7 proposal.

Union is also proposing to revise the DSMVA deferral account disposition treatment for Rate M4, Rate M5 and Rate M7 for 2016 to 2018. To align with Union's ratemaking proposal described above, Union proposes to track the variance between the DSM budget included in rates and actual DSM spending in Rate M4, Rate M5 and Rate M7 in the DSMVA on a pooled basis.

At its next cost of service proceeding, when Union's volume forecast reflects the current approved rate class eligibility for the Rate M4, Rate M5 and Rate M7 rate classes, Union will include the DSM budget in rates consistent with the proposed 2016 to 2020 DSM budget. This approach will ensure that the DSM costs included in rates and the DSM plan are aligned and eliminate the requirement to pool the DSM costs for these rate classes, as proposed for 2016 to 2018.

ONTARIO ENERGY BOARD

FILE NO.:	**EB-2015-0029**	**Union Gas Limited**
	EB-2015-0049	**Enbridge Gas Distribution Inc.**

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DATE: **August 20, 2015**

BEFORE:	**Christine Long**	**Presiding Member**
	Allison Duff	**Member**
	Susan Frank	**Member**

have not done that specific research.

MR. ELSON: Thank you. I have no further questions.

MS. LONG: Thank you, Mr. Elson.

Mr. DeRose, you're next.

CROSS-EXAMINATION BY MR. DEROSE:

MR. DeROSE: Thank you, Madam Chair.

Good morning, panel, my name is Vince DeRose. I'm here on behalf of CME, and I will not be talking about on-bill financing.

There are a few areas that I would like to speak about today, the first being the migration of M4, M5, M7 customers and your proposal for pooling.

Just stopping there, am I right, you are the correct panel to address that issue with?

MR. TETREAULT: Yes, we are.

MR. DeROSE: So we'll talk about that first, then I'm going to follow up on some questions that Mr. Millar asked yesterday with respect to annual target-setting, as well as input assumptions, and I also have some high-level questions about Synapse, so just as a roadmap, that's where I'm going.

But let's start with the M4, M5, M7 proposal. First of all, just for the benefit of the Panel members, could you at a very high level just describe what your proposal is for M4, M5, M7?

MR. TETREAULT: For those three rate classes we are proposing to pool the DSM costs to recognize that the majority of customers in M7 in Union's DSM programs are

from a rate-making standpoint, from a billing-determinate standpoint, those customers reside largely in rate M4 and rate M5.

The reason for that is the fact that in January of 2014 there was a rate-class eligibility change approved by the Board that shifted approximately 20 customers from rate M4 and M5 to M7.

At the same time, our rate-making process over the course of Union's IRM term keeps those billing units or reflects those billing units in the rate M4, M5 rate classes. So there is a disconnect between the DSM programs, in terms of where the customers currently are, and where they are for rate-making, and Union's proposal is meant to recognize that disconnect and deal with that through the pooling concept.

MR. DeROSE: If the Board does not approve the pooling concept, would -- I guess it's not theoretical -- would customers from one rate class be receiving DSM programs that another rate class is paying for?

MR. TETREAULT: Yes, I think that's a potential, Mr. DeRose.

What I mean by that is, from a rate-making standpoint, there are only a handful of customers in M7, whereas in the DSM programs, it reflects the current number of customers which is substantially more.

The way I would describe it is that in the absence of our proposal, we would be over-recovering DSM program costs from rate M7 customers, as an example -- and, at the same

time, potentially under-recovering them from the rate M4 and M5 rate classes.

MR. DeROSE: Could you -- and again, I'm sorry. From a rate design perspective, I sometimes take a simple high-level approach.

But my understanding of the principle behind rate allocation for DSM is that the rate classes that receive the DSM programs should pay for those programs.

Is there a reason why you cannot track the DSM being delivered, for instance, to M4 as opposed to M5, as opposed to M7, and then allocate the appropriate classes to each of those rate classes so that M7 customers are paying for DSM given to M7 customers M5 pays for M5, and M4 pays for M4?

MR. TETREAULT: I think, Mr. DeRose, if I can answer it this way, we do have the DSM VA which, as you know, trues up what we spend in each rate class to the amount that's included in rates.

But the issue that we're trying to solve through the pooling concept, I think, still remains from a rate-making standpoint, which is that from a rate-making view, we only have a handful of customers in rate M7 during our IR, whereas the DSM programs reflect many more customers that are M7.

Hopefully, this is helpful to your question. But the idea of the pooling concept is to recognize exactly that, by essentially shifting some of the DSM program costs from a rate-making standpoint back to M4 and M5, which is where those customers are from a rate-making standpoint.

So it is an attempt through pooling to line up in rate-making where those customers are.

MR. DeROSE: Would the DSM VA still true up for each rate class, or would they true up for the pool?

MR. TETREAULT: Our proposal with the DSM VA is to be consistent with rate-making, so it would be the pooled concept for 2016 through 2018.

MR. DeROSE: And regardless of what you're doing for rate-making purposes, would you be able to -- well, let me rephrase it; not would you be able to, but do you intend to track what the program delivery is between M4, M5, and M7?

MR. DIBAJI: Yes, we do.

MR. DeROSE: And do you intend to also -- so you would be able to, for instance at the mid-term review, advise the Board the, I assume, of the programs that have been delivered to each of those three rate classes, regardless whether it is pooled or not?

MR. DIBAJI: That is correct.

MR. DeROSE: And the costs for each those three rate classes, regardless of whether it's pooled or not?

MR. DIBAJI: That is correct.

MR. DeROSE: And the savings achieved for each of those rate classes, regardless of whether it's pooled or not?

MR. DIBAJI: That is correct.

MR. DeROSE: Thank you, those are my questions on the pooling.

Before I go to the annual target setting and incentive

ONTARIO ENERGY BOARD

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BEFORE:	**Christine Long**	**Presiding Member**
	Allison Duff	**Member**
	Susan Frank	**Member**

technologies we're using, what sectors we're focusing on.

So I would see them as separate, and I think that it is better for us to continue to look at it in that respect, unless we find that the value of the DSM work we're doing now is called into question. Right? I think that's really what I would use as a distinction.

I think also the carbon pricing would be much the same. If we have a carbon price that comes into place, that could be incorporated into how we look at bill impacts, as has been discussed in this hearing, or it could be a separate program which has, again, a different focus. It would bring together a lot of different things that might not be in scope for DSM as we have it here.

So I don't have any definitive answers but if, for example, if we look at where GHG is being derived, we know that transportation is a large sector.

One could say that, for example, natural gas vehicles could play a part in that.

Now, clearly that would not fall into scope in our DSM portfolio, so you might have -- I'm just using that example to indicate that you might have a program that looks different that and has a separate objective.

MS. FRANK: Okay. Thank you for that. It actually leads me well into my next topic area about the midterm review, because I was thinking we're in a bit of a dynamic environment and you actually had to develop this plan in an environment where there was uncertainty. And I actually had written down the new carbon requirements as one of the

aspects of that uncertainty.

And it was, I think, a very good idea that there be a midterm review. I think that that will be helpful, and so I'm looking for some of your thoughts about the midterm review. And my first question would be: What information do you think would be appropriate to bring to the midterm review? What would be helpful to be looked at, at that point in time?

MS. LYNCH: So we have given this some thought. And I do think, you know, as we look at the plan as we have here, I think -- and the approvals that we're seeking in this, I think we will need to look at everything as a material change from the time that the plan is approved to where we're looking at the midterm review, like the carbon policy, like the infrastructure planning and the achievable potential.

So I think those are key elements that we'll want to consider at that time, because I think those are likely to be the most significant impacts on what the plans should look like going forward.

MS. FRANK: So -- and Ms. Lynch, are you suggesting that you would likely bring a, I'll call it, a revised plan for some period of time -- you're going to help me with what that "some" looks like -- because of these changes that have happened in the interim? So are you going to give us new plans? Are there going to be new targets? What? What information?

MS. LYNCH: I do think that we will need to look at

the studies that we have, the pieces of information that are available, compare that to what we're proposing here and what our plan looks like, and say "Do we need an incremental budget? Is there an additional program that we think would be extremely effective?" And in that case I would see us bringing additional pieces at that time to -- for the Board to consider, based on the new information that's become available.

MS. FRANK: Ms. Oliver-Glasford?

MS. OLIVER-GLASFORD: Sorry, I was just clearing my throat. I would agree with what Ms. Lynch has offered, and I would say these plans, though, have been developed with an eye to being sustainable over the six years, should the Board feel that that would be the appropriate course of action. We've built in proper mechanisms, proper ability to be flexible within the framework, within our plan, so I don't disagree that there could be a material change when you talk about a carbon price, if that -- when that comes into place, but that could be amply dealt with in how we address our avoided costs, so that could, again, be brought into that equation, and then that $2 cap again would play out a little differently because you would have clear offsetting amounts.

MS. FRANK: Okay, so carrying on with other thoughts on the midterm update, a few items. One would be timing as to when the material should come in. We're talking -- it's a bit vague in terms of when the material would come in and when a decision would be rendered, so I'm looking for a