EB-2015-0029
EB-2015-0049

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

AND IN THE MATTER OF an Application by Enbridge Gas Distribution Inc. pursuant to Section 36(1) of the *Ontario Energy Board Act, 1998,* S.O. 1998, for an order or orders approving its Demand Side Management Plan for 2015-2020.

ASSOCIATION OF POWER PRODUCERS OF ONTARIO (APPrO) COMPENDIUM OF MATERIALS FOR UNION GAS CROSS-EXAMINATIONS

24 August 2015

Lisa (Elisabeth) DeMarco
Tel: 647-991-1190
Email: lisa@zadllp.com
Facsimile: 1-888-734-9459

Joanna Kyriazis
Tel: 1-888-389-5798
Email: joanna@zadllp.com
Facsimile: 1-888-734-9459

Zizzo Allan DeMarco LLP
5 Hazelton Ave, Suit 200
Toronto, ON M5R 2E1

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Ontario Energy Board

EB-2014-0134

Report of the Board

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

December 22, 2014

Two stakeholders, both representatives of large volume customers, who did not feel that programs for large volume customers should be mandatory, recommended that the Board consider providing an opportunity for large volume customers to "opt-out" from, or not be required to help fund, a gas utility DSM program for large volume customers. They noted that the principle that ratepayer funded DSM should not be mandatory for large volume customers protects large volume customers as a class, but does not address a customer-specific issue where it was argued that many of these customers are self-motivated and have made significant energy efficiency investments on their own. These stakeholders noted that large volume customers do not need or desire a mandatory ratepayer funded DSM program and that in the event a customer believes that utility or third party expertise is helpful, that be provided outside of a rate funded DSM program.

6.2 Board Conclusions

As discussed in Section 4.2 – Budgets, the Board expects the gas utilities' multi-year DSM plans will enable the delivery of results in the areas which have been identified as key priorities in the LTEP, Conservation Directive and by the Board.

Key priorities identified in the LTEP and Conservation Directive:

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

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

c) increase collaboration and integration of natural gas DSM programs and electricity CDM programs; and

d) expand the delivery of low-income offerings across the province.

The Board identified priorities:

e) implement DSM programs that are evidence-based and rely on detailed customer data; and,

f) ensure that programs take a holistic-approach and identify and target all energy saving opportunities throughout a customer's home or business.

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.

Table 1 – Large Volume Rate Classes

Enbridge Gas Distribution Inc.				
Rate Class	No. of Customers	2013 Annual Volumes (m^3)[22]	Percent of Total Annual Volumes[21]	Description of Rate Class
Rate 125	5	n/a	n/a	For applicants who use the EGD network to transport a specified maximum daily volume of natural gas that is not less than 600,000 m^3.

Union Gas Limited				
Rate Class	No. of Customers[23]	2013 Annual Volumes (m^3)[24]	Percent of Total Annual Volumes	Description of Rate Class
Rate T1	38	452,838,193	3%	Rate T1 is a contract rate for customers in Union's southern operations area who actively manage their own storage services, have an aggregated Firm Daily Contracted Demand up to 140,870 m3 and who consume a minimum of 2.5 million m^3 of natural gas each year. Customers in this rate class include manufacturing plants, chemical plants, large food processors/greenhouses and small specialty steel plants.
Rate T2	22	4,241,475,463	30%	Rate T2 is a contract rate for customers in Union's southern operations area who actively manage their own storage services and require a minimum aggregated Firm Daily Contract Demand of at least 140,870 m^3. Customers in this class include large power (cogeneration), large steel, large petrochemical plants and a large feedstock plant.
Rate 100	14	1,926,579,498	14%	For large commercial and industrial customers who have signed a Northern Distribution contract for firm natural gas delivery with Union Gas. These customers are typically large manufacturers requiring a very large volume of natural gas for industrial processes – such as steel, pulp and paper and mining. These customers, located in our northern and eastern operation areas, require a minimum consumption of 100,000 m3 of natural gas or more each day. These customers must maintain a 70% load factor over the course of a year.

The fee-for-service program would be different than the current large volume program approved by the Board. Rate funding recoverable from all customers in the large

[22] Rate 125 is made up of power generators who are billed on contract demand as opposed to actual throughput.
[23] As per EB-2014-0145, Exhibit A, Tab 2, Appendix A, Schedule 10
[24] As per EB-2014-0145, Exhibit A, Tab 2, Appendix A, Schedule 6

ONTARIO ENERGY BOARD

FILE NO.:	**EB-2012-0337**	
VOLUME:	**2**	
DATE:	**February 1, 2013**	
BEFORE:	**Paula Conboy**	**Presiding Member**
	Marika Hare	**Member**

anything.

MS. CONBOY: Thank you. Okay, so we will -- we will rise until 3 o'clock. Thank you very much.

--- Luncheon recess taken at 1:05 p.m.

--- On resuming at 3:08 p.m.

MS. CONBOY: Thank you. Please be seated.

Thank you. Mr. Smith, we will hear your argument in-chief.

FINAL ARGUMENT BY MR. SMITH:

MR. SMITH: Thank you.

Allow me to first give the Board -- well, actually, before I even do that, you should have a compendium that we have prepared, and in our haste to prepare this compendium, we organized it by tabs, but we don't have tabs. We have numbers in the top right-hand corner. It's sub-optimal, but I think we'll be fine.

MS. CONBOY: okay.

MR. MILLAR: Madam Chair, I would propose we mark that Exhibit K2.3, which is the Union Gas argument in-chief compendium.

EXHIBIT NO. K2.3: UNION GAS ARGUMENT IN-CHIEF COMPENDIUM.

MS. CONBOY: Thank you.

MR. SMITH: So here is a road map to my submissions. I will first address the Board's two questions from before lunch, and then proceed to an overview of the rest of Union's argument, and then go into that.

So with respect to question 1: How should the fact that we are now in February impact the August 1st deadline? From Union's perspective, the answer to this first question is that Union doesn't believe that the August 1st deadline should be moved as a result of the fact that it is February the 1st.

Funds can be protected by earmarking them for an approved project by August 1st and spending them by the end of the year.

There is one date that would have to move, though, and that's the date that the deadline for submitting the energy plan arrives, and that used to be April 1st, and if you went in this direction, in our submission, it should be June 1st.

On the second question: How would a two-year approach bear on the August 1st deadline for spending or earmarking funds? The answer to this question is that if the Board decides to go with Mr. Neme's two-year proposal, then the August 1st deadline should move to December 31st, 2013.

This deadline would give T2 and R100 customers adequate time to access or earmark their designated incentive amounts, but at the same time it would also give other rate class members time to use those undesignated incentive amounts in the aggregate pool at the end of 2013, if they're essentially abandoned.

So now moving on to the overview of the main argument, first, I will briefly summarize Union's position and what Union is proposing in this application. My submission on this point will be that Union's application should be approved as filed.

Second, I will address APPrO's proposal to introduce the so-called opt-out into Union's high-volume DSM plan. My primary submission on this point is that, depending on how it would be structured, an opt-out would either (a) be unfair to other rate class members, or (b) would be unfair to other rate class members and would also compromise the viability of the program and constitute an undesirable precedent-making departure from fundamental rate-making principles.

As an aside, I will also argue that the Navigant study should be given little weight.

Third, I will address GEC's proposal to change Union's large volume DSM program from a one-year program to a two-year program. My primary submission on this point is that doing so would (a) ensure added complexity and risk, (b) encourage or at the very least facilitate procrastination on the part of busy customers who have higher priorities than pursuing conservation initiatives, and (c) would create a potential for larger deferral amounts. And we'll have more to say about why that is highly undesirable.

All of this would be in the name of a speculative hope that customers will be encouraged to pursue larger projects and, in our view -- in our submission, rather, there is no solid evidence before the Board that that is in fact going to happen.

Fourth, I will address Environmental Defence's proposal to increase the large volume DSM budget. My submission on this point is that such an approach is one-sided and will result in a customer backlash against Union's large volume DSM program.

Finally, I will argue that the primary irritant that led to this matter proceeding all the way to a hearing was the 2011 deferral issue and that, in our submission, the Board should not attempt to address that issue by unwinding decades of precedent on fundamental principles of rate-making.

So on to my first issue, Union's position. Union freely acknowledges that power generation customers possess expertise to undertaken energy efficiency programs on their own that result in natural gas savings. In Union's submission, this fact should not be seen as a matter of controversy in this proceeding.

The Board has acknowledged this fact in the DSM guidelines and stated that DSM proposals for such customers, if proposed, should be considered on their merits.

I would just like to take you to that very briefly. That's the first tab of our compendium, and it is side-barred, 8.2:

> "The Board is of the view that large industrial customers possess the expertise to undertake energy efficiency programs on their own. As a result, ratepayer funded DSM programs for large industrial customers are no longer mandatory. If any are proposed, they will be considered on

UNION GAS LIMITED

Answer to Interrogatory from
The Association of Power Producers of Ontario ("APPrO")

Reference: i) EB-2014-2014-0134, DSM Framework, dated December 22, 2014, Section 6.2 p. 27, the Board indicated:

> *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 fee-for-service DSM programs to the customers in those classes identified as large volume rate classes in the table below.*

ii) Exhibit A, Tab 3, Appendix A, Section1.3

Preamble: In reference ii) Union continues to propose a mandatory ratepayer funded DSM program that requires all large volume customers to pay for access to Union's technical resources. APPrO would like to better understand Union's decision making process to propose such a program, particularly for a public utility that has monopoly access to such data.

a) At page 64 of reference ii), Union indicates that based on direct customer impact, Union has determined that it is appropriate for Union to offer a multi-year ratepayer funded Rate T2/Rate 100 program. Union does include supportive feedback from stakeholders, however Union does not appear to reference information received from stakeholders opposing mandatory ratepayer funded programs.

   i. Please confirm that Union has a system to centrally capture such feedback.

   ii. Please provide a chart outlining all feedback (verbal and written) from stakeholders opposed to, and/or opposing, mandatory ratepayer funded programs.

b) Union provides information from the consultations with 16 customers, from which it seems to be basing its decision to offer the program noted in reference ii):

i. Please indicate if Union believes that these 16 customers' views were representative of all customers in this large volume customer category. What percentage of these customers did not engage in Union's DSM programs in the last 3 years?

ii. Please provide the number of gas fired electricity generators in each of Union South and Union North.

iii. Did any gas fired electricity generation customers, or their associations, provide feedback opposing a mandatory ratepayer funded program? Please explain and provide details.

c) Union indicates that the DSM program costs will be approximately $800,000 annually (see Table 25 in reference ii). This amount is made up an administration amount and an incentive/promotion amount.

i. Please indicate how Union chose this budget level for the incentive/promotion amount of approximately $400,000 annually?

ii. Is budget amount of approximately $400,000 illustrated in Table 25 fixed each year or is this amount eligible for variance account treatment?

iii. Is any or all of the 15% overspending amount eligible to be spent in, or by the customers in, the large volume T2/Rate 100 rate classes? If yes, is it at least theoretically possible that the entire amount could be spent in, or by the customers in, these two rate classes?

iv. How will Union ensure that there will not be scope creep in the nature of the proposed services that will result in Union exceeding regularly the $800,000 amount?

Response:

a)

i. Confirmed. Union manually captures customer feedback.

ii. In responding to this interrogatory, Union discovered it had not filed the most recent version of Exhibit A, Tab 3, Appendix A, Attachment A. Please see Attachment 1 for a revised version.

b)

i. Yes. Union believes that these customers are representative of the large volume market as they encompass power producers, steel, chemical and refinery customers. Please see the response to part a) ii. above. All but one of these 20 customers were engaged in the DSM program in the last three years (5% did not participate).

ii. There are five gas fired electricity generator customers in Union North with 11 plants and 6 customers in Union South with seven plants.

iii. Yes. On March 11, 2015, Union met with APPrO and some of the APPrO members. They indicated to Union that the APPrO membership does not need Union's DSM program to conduct energy efficiency activities.

c)

i. This budget level is based on providing 18 regional training sessions and an additional 25 on-site sessions to provide education for staff of Large Volume customers.
It is important to note that there is no allocation within this "Incentive/Promotion" budget for incentive payments to customers. The title is part of a standard language for the filing and does not contain an allocation for project incentives.

ii. The incentive/promotion costs outlined at Exhibit A, Tab 3, Appendix A, p 71, table 25 is the budgeted amount required for the program each year. Spending above or below this amount will be tracked through the variance account.

iii. If Union's proposed Large Volume program is approved then Rate T2 and Rate 100 customers would not be eligible for the 15% overspend. However, the 15% overspend amount can be spent on the Low Income programs which will be recovered by all rate classes.

iv. Union is not proposing the Large Volume DSM program will have access to DSMVA overspend and therefore will be capped at the budgeted amount.

Compilation of T2/R100 Customer Feedback
On Proposed Program Changes for 2016-2020

The following comments were received in February and March 2015 from customers who had been presented the PowerPoint slides included as Appendix C, entitled: "T2/R100 Large Volume Custom Program: Next Generation Demand Side Management Plan Concepts"

Customer	Comment *(note the numbers in brackets refer to Consultation Slide #)*
A	• Strongly wants to reduce or eliminate their exposure to deferral costs (4) • The proposal supports DSM program principles from a sustainability standpoint (3) • Incentives are appreciated but the underlying reality is reduced and avoided costs of fuel (2) • The proposal makes sense, and they would like to retain access to an experienced Professional Engineer with a good breadth of energy saving approaches (4) • The concept provided seems to be a good program especially at 1/3rd the cost in rates with a reduction in deferral exposure (4) (5) • Incentives for steam maintenance activities are directly earmarked for future steam maintenance activities thus helping reduce the risk of spending cuts to those activities from year to year (2)
B	• Stated the desire to reduce or eliminate exposure to deferral costs (4) • Although incentives are appreciated, reduced cost of fuel remains the primary driver (2) • The program concepts regarding training (regional seminars and lunch & learns) and access to an experienced energy expert were strongly supported (4) • The concept of a ratepayer-funded technical support program seemed reasonable based on the rate impact (5)
C	• Avoided costs of fuel has been a stronger driver for energy efficiency projects than incentives (2) • The proposed program concepts regarding training and access to an experienced energy expert were strongly supported (4)
D	• Reduction of fuel usage is a bigger driver for energy efficiency than incentives have been (2) • Strong support was expressed for the proposed program elements i.e. training (regional seminars and lunch & learns) and access to an experienced "energy expert"(4)
E	• Incentives drive good energy efficiency behavior, illustrate internal results for their energy efficiency efforts and allows

Customer	Comment *(note the numbers in brackets refer to Consultation Slide #)*
	recognition of individual efforts (2) • Strong support was expressed for the program concepts regarding training and access to an experienced energy expert (4) • Keeping a ratepayer-funded program seemed reasonable given the reduced rate impact (5) • Likely would use steam training (4) • "There is nothing like getting some incentives" – it drives behavior towards energy conservation especially while gas is cheap (2) • There is value in the existing program as well as the proposed (3) • Appreciate the partnership with Union Gas on energy conservation (4) • Incentives give real reward rather than something imaginary (2)
F	• "We will be sorry to see the end of the incentives" (2) • The current program assists them in their energy program, and they expressed concern about the cancellation of the incentives (2) • The two main offerings Union is proposing for the new program (Technical support and Training) are important and they need them, however they do not support a ratepayer funded program based on customer demand as the benefits do not justify the cost (4) • Incentives they have been receiving are utilized directly by the Energy Group to help justify difficult energy projects such as metering and furnace studies (2) • The current program has not had much of a net cost to them (2)
G	• Do not mind that incentives are to be eliminated (2) • Supportive of the concepts (Technical Support and Training) presented and likes the reduced Program cost (4) (5) • Strongly opposed to retroactive deferral account clearing and was pleased to hear that will be greatly reduced under the new program (4) • Staff have had value from support from the Technical Account Manager (4)
H	• Disappointed that incentives are to be terminated; they helped to get smaller projects and studies approved (2) • Have appreciated Union's DSM training courses to date, and would definitely make use of training offered under the proposed program if it can be offered locally (4) • The services offered by the Union Technical Account Manager are appreciated (4)

Customer	Comment *(note the numbers in brackets refer to Consultation Slide #)*
I	• Cost reductions are on the right track (5) • It is consistent that both customer incentive and Union incentive should be eliminated (3) • Less concern if there is a small bill impact (5)
J	• Cost reductions are on the right track (5) • Training content is interesting (4)
K	• Cost reductions are on the right track – we appreciate the 'skinnying down' of the program cost (5) • There is always some opportunity for additional energy savings (4) • As an energy conversion company we have our own expertise (4) • The education component has been valuable in the past (4) • Doubtful whether Union Gas staff could provide sufficiently specialized technical expertise for their plant processes and if required will be secured in the competitive marketplace(3) • Oppose embedded DSM program costs in rates
L	• Cost reductions are on the right track (5) • Doubtful whether Union Gas staff could provide sufficiently specialized technical expertise for their plant processes and if required will be secured in the competitive marketplace(3) • Oppose embedded DSM program costs in rates
M	• Cost reductions are on the right track (5) • The services offered by the Union Technical Account Manager are appreciated (4) • The magnitude of savings achieved in the projects supported by Union's DSM incentives was surprisingly large.
N	• Cost reductions are on the right track (5) • The services offered by the Union Technical Account Manager are appreciated (4)
O	• Cost reductions are on the right track (5) • The services offered by the Union Technical Account Manager are appreciated (4)
P	• Interested in the training (4) • Doubtful whether Union Gas staff could provide sufficiently specialized technical expertise for their plant processes(3)

Customer	Comment *(note the numbers in brackets refer to Consultation Slide #)*
Q	• Significant program cost reductions while still trying to keep the focus on energy efficiency from slipping (5) • Union needs to maintain a presence in Energy Efficiency with customer at all levels or folks will tend to slide backwards without someone advocating for efficiency (4) • Unsure as to whether they'd get value from technical expertise until more details are given. • Have appreciated Union's DSM training courses to date, and would definitely make use of training offered under the proposed program (4)
R	• Doubtful whether Union Gas staff could provide sufficiently specialized technical expertise for their plant processes(3) • Oppose embedded DSM program costs in rates
S	• Proposed program is more favourable than current in that rates will be less. (5) • Doubtful whether Union Gas staff could provide sufficiently specialized technical expertise for their plant processes (3) • Prefer removing DSM program costs from rates
T	• Doubtful whether Union Gas staff could provide sufficiently specialized technical expertise for their plant processes as they have in house specialists (3) • Oppose embedded DSM program costs in rates

to offer a multi-year ratepayer-funded Rate T2/Rate 100 program that 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. The program cost to ratepayers would be reduced to $800,000/year.

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. The proposed program would include 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
- Eliminating Union's performance incentive and Rate T2/Rate 100 energy saving targets
- Eliminating costs associated with energy saving targets and performance measurement
- Providing increased program cost certainty to customers by greatly reducing the magnitude of deferred costs to customers.

1.3.1 Customer Class(es) Targeted

Large Volume Customers

1.3.2 Rate Classes Targeted

- Rate T2 - Storage and Transportation Rates for Contract Carriage Customers (Union South).
- Rate 100 - Large Volume High Load Factor Firm Service (Union North).

1.3.3 Program Goals

- Provide all Large Volume customers with the tools, expertise and support to incorporate energy-efficiency into their everyday operations and practices through continuous improvement.
- Promote the identification of energy saving measures through proper analysis techniques.

- Support the development of a growing knowledge base of customer staff on natural gas efficiency-related topics by offering customized technical training programs locally or online, building on Union's demonstrated competency and success in this area

1.3.4 Program Strategy

To achieve these program goals, the program strategy for Large Volume Rate T2 and Rate 100 program consists of the following:

Union will provide dedicated technical expertise to assist customers in obtaining value from the identification, adoption and implementation of energy efficient actions throughout their sites, facilities and operations. Union will engage customers to increase awareness surrounding the positive benefits achieved through active energy management. The need for job-related technical training will be particularly high in the next few years due to demographic shifts in the workforce. Customers will be offered easy-to-access and low cost training initiatives designed to increase awareness, knowledge and skills related to improving the efficient use of natural gas in their plants' equipment and processes.

1.3.5 Program Offering

The Large Volume Rate T2 and Rate 100 offering is outlined below.

Description

<u>Technical Support</u>

The support of Union Professional Engineers with experience in industrial energy efficiency and natural gas utilization will be available to all Rate T2/Rate 100 customers, offering the following services:

- Support the activities of a plant Energy Team, or technical staff, such as arranging for visiting speakers, visits to other (non-competitor) plants and employee recognition for energy saving initiatives.
- Provide single-topic training presentations to the Energy Team and other customer staff at meetings on site (e.g. 'Lunch and Learn' sessions)
- Provide customers with copies of texts, such as the ISO 50001 Manual and the Fives North American Combustion Handbook, to enable them to achieve best practice standards in energy management.
- Energy efficiency calculation tools developed for the Energy Solutions Center will be made available as required.
- Under the customers' guidance, carry out research on available and emerging

technologies which, if applied, could result in improved energy efficiency and other benefits such as reduced emissions or maintenance requirements.

- Provide benchmarking information on the expected performance of natural gas equipment and processes where this will assist in determining the potential for improvements.
- Undertake energy use analysis of specific process equipment in collaboration with customer staff. Union staff can provide and utilize or loan measurement instrumentation and/or temporary flow metering and data-logging equipment. This kind of initial assessment has been shown to be an important precursor to customers undertaking a more in-depth study of the equipment using a consultant. Where applicable, Union staff will make use of industry-recognized software tools available from Natural Resources Canada and the U.S. Department of Energy :
    - RETScreen Energy Management Software
    - Steam System Tool Suite: Steam System Assessment Tool
    - 3EPlus Insulation Assessment Tool
    - Combined Heat & Power Application Tool
    - Process Heating Assessment and Survey Tool

Customer Training

- In consultation with Large Volume Customers in a given locality, Union will organize specialized 1- or 2-day training courses that meet the training needs of the customers on topics related to the efficient use of natural gas. These courses may be system related (e.g. steam system optimization) or on a specific technical topic (e.g. process temperature measurement and control). A list of suggested topics is provided in Attachment B, but others may be added on the basis of customer needs.
- Train all eligible staff in a range of relevant topics over the duration of the Program (2016-2020). Union will work diligently with Large Volume Customers to plan a range of training offerings that will meet their stated needs each year. A logistical challenge which Union will manage is sourcing the qualified training organizations, obtaining competitive bids and arranging course locations which are close enough to a plant or a group of plants that there will be no significant travel or accommodation required for customers' staff to attend. This will reduce the amount of time the staff will need to be away from the plant for training and therefore help to minimize the disruption of shift plans etc. In some cases courses may be offered online. Training plans for each year the Program runs will be developed through consultations with customers in January and February and training sessions will begin in April and run through November.

- To encourage the uptake of this training, customer departments sending staff for training will be required to pay only a nominal fee of $100 per attendee for each course to ensure attendance by those who register. The balance of the course costs will be covered by the Program costs, within rates.
- The overall participation rate (number of customers sending staff to courses) and the number of attendees per customer are expected to rise over the 5 years this Program will be offered. Especially in the early years, significant promotion will be undertaken to ensure that customers are aware of the Program and how it can meet their energy efficiency training needs.
- Initial estimates of the Program cost of delivering staff training local to plants indicate that it will increase from $0.29 million in 2016 to $0.38 million in 2020 (excluding inflation).

Target Market

Large Volume Industrial and Power Generation firm service contract customers

Market Delivery

- This energy efficiency program is delivered directly to customers in these rate classes by dedicated Technical Account Managers, who are Professional Engineers with a background in industrial energy efficiency and natural gas applications. In addition to providing technical support to customers' energy teams, they will act as the program contact person for the customer to communicate their training needs to Union in January and February of each year so that the Training Plans can reflect their input.
- Union will plan and deliver high quality industrial and power generation system energy efficiency training in locations that will meet customer needs. Union will qualify vendors, consultants and training organizations and select organizations on the basis of competitive bids wherever possible.
- Union will track the number and role titles of attendees from all Rate T2/Rate 100 customers in order to evaluate the overall reach of the program and compare progress year-on-year.
- Union will monitor attendee satisfaction with the content and delivery of each course offered, and will make adjustments based on customer feedback over the duration of the program to address weaknesses identified and build on strengths.
- The development of professional working relationships between Union staff and the staff of vendors, consultants and training organizations offering training will be a priority to ensure that the highest quality customized training will continue to be available to customers.

Barriers Addressed

- Rate T2 and Rate 100 customers in these rate classes utilize very large amounts of natural gas in their operations, representing 42% of Union's total volume throughput in 2014. Energy purchases are, in most cases, a significant fraction of their overall production costs. Due to the focus on core production competencies such as quality, reliability and safety, energy use continues to be viewed as a 'cost of doing business' allocated between business units at a given site, making it challenging to maintain a disciplined, focused approach to energy efficiency.
  - Union's technical support helps to address this barrier by providing resources to Energy Team members in identifying and quantifying potential actions that could result in saving of natural gas, and helping to recognize both customer staff who bring forward the ideas and those who act upon the ideas.

- In this customer group there is a wide range of equipment using large quantities of natural gas; examples include but are not limited to turbine or engine drives, steam raising, product smelting, reheating or heat treating, product drying or curing and space heating. The efficient operation and maintenance of equipment requires experienced and well trained operators, technicians and trades people. With demographic shifts currently occurring at these plants, there is a growing need for training of new staff or staff who move departments so that they understand the equipment they are working with. Given tight staffing situations at many plants, a barrier to undertaking the necessary training is making staff available for courses that may be held in other parts of North America, including the associated overnight stays and travel time and costs.
  - The customer training offering in this program is designed to address this barrier by making high quality training courses available in the vicinity of customer plants, and handling reservations and course logistics to make staff attendance convenient, with the least possible staff time away from the plant.

1.3.6 Program Duration

- The offerings to the Rate T2 and Rate 100 customers will be delivered throughout the 2016– 2020 DSM Plan.
- A program review will take place in 2018 as the Framework proposes

1.3.7 Program Budget

The budget presented in Table 25 below does not include inflation

Table 25
Large Volume Program Budget

Program Cost ($000)	2016	2017	2018	2019	2020
Incentives/Promotion*	$400	$349	$373	$397	$421
Evaluation	$0	$0	$0	$0	$0
Administrative Costs	$409	$409	$409	$409	$409
Total	**$809**	**$758**	**$783**	**$807**	**$831**

* Includes Training Program Delivery Costs and Educational material costs

1.3.8 Projected Program Participation

As requested by the Board in the Framework, below is a summary of forecasted participants in Union's Large Volume program per offering. A participant represents a customer within the Rate T2/Rate 100 rate class. Customers can participate in both offerings.

Table 26
Large Volume Program Participation

	2016	2017	2018	2019	2020
Large Volume Participation	29	30	32	33	34

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

Ontario

ONTARIO ENERGY BOARD

FILE NO.: **EB-2012-0337**

VOLUME: **2**

DATE: **February 1, 2013**

BEFORE: **Paula Conboy** **Presiding Member**

Marika Hare **Member**

EB-2012-0337

THE 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 2012 to 2014 Demand Side Management Plan.

Hearing held at 2300 Yonge Street,
25th Floor, Toronto, Ontario,
on Friday, February 1st, 2013,
commencing at 9:39 a.m.

VOLUME 2

BEFORE:

PAULA CONBOY Presiding Member

MARIKA HARE Member

feel we can do it in a very cost-effective manner, more cost-effective than through the program.

MR. FRANK: Mr. Zarumba was mentioning earlier some reasons why sequencing of a program might be impacted by operational issues. Can you give any examples of that?

MR. RUSSELL: Yes. Specifically, recently, as recently as last Friday, we -- London District Energy staff observed a significant steam leak emanating from our distribution line related to a leaking safety relief valve, which is there to relieve pressure if the pressure gets too high for safety purposes.

That was identified, and despite our intentions to rectify that as soon as possible - in a perfect world we would have shut the system down then and there to effect the repair, because essentially we see steam and energy dollars just puffing out into the air - we were forced to wait.

It was about minus 15 or 16, I believe, in London on that weekend, and we had customers connected to that, four customers connected to that pipe, who could not see their thermal load, their thermal supply go down.

So we made the decision -- we were looking forward at the weather. The Monday and Tuesday of this previous week was warmer, and so we were able to effect the repair then.

MR. FRANK: Yesterday, put into evidence was a letter, and I'm just trying to get the exhibit number. It was a letter from Veresen to the Board.

MR. SMITH: I believe it was K1.2.

MR. FRANK: Do you have a copy of a letter dated October 11, 2011, Mr. Russell, from Veresen to the Board?

MR. RUSSELL: I don't believe I do.

MR. WOLNIK: Here.

MR. RUSSELL: Thanks, John. Oh, yes, thank you.

MR. FRANK: Now, I understood you to say earlier that LDE is of the view that opt-out should be available?

MR. RUSSELL: Yes.

MR. FRANK: And can you please explain why LDE's views are like that today, notwithstanding what was in the letter of October 2011?

MR. RUSSELL: Yes. I think it can be most simply put as London District Energy was not fully aware of the full cost of the incentive payments in the various accounts and as they would be impacting our operating budgets.

MR. FRANK: Okay. And do you know anything about the circumstances under which the letter was written?

MR. RUSSELL: From what I understand from my colleagues at Veresen, that letter was written at the request of Union.

MR. FRANK: That completes my examination-in-chief.

MS. CONBOY: Thank you very much. As far as the order of cross-examination, I know that Union has asked to go last. So unless there are any objections, I see Mr. Wanless reaching for his button. Go ahead, Mr. Wanless.

MR. WANLESS: Yes, thank you. I have canvassed with my colleagues, and it's agreed, subject to your thoughts, that I would perhaps go first.