uniongas
A Spectra Energy Company

August 28, 2015

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

RE: EB-2015-0029 – Union Gas Limited ("Union") – 2015-2020 DSM Plan - Undertaking Responses

Dear Ms. Walli,

Please find attached Union's responses to the following undertakings received in the above case: J1.2, J1.3, J1.6, J1.11, J3.4, J3.17, J3.18 and J4.7.

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

Yours truly,

[*original signed by*]

Vanessa Innis
Manager, Regulatory Initiatives

Encl.

cc: Lawrie Gluck, Board Staff
Alex Smith, Torys
All Intervenors (EB-2015-0029)

UNION GAS LIMITED

Undertaking of Ms. Lynch
To Mr. Shepherd

To estimate the average cost per cubic metre associated with that 15 percent uplift built into Union's TRC calculations.

Response:

For 2016, the 15% TRC adder equates to \$36.9 million in TRC. For 2016, Union is forecasting 1.161 billion cumulative m^3. This equates to \$0.03 of TRC per cumulative m^3.

UNION GAS LIMITED

Undertaking of Ms. Lynch
To Mr. Shepherd

To provide a conversion of the carbon prices in the table on page 20 of the GEC compendium into equivalent per cubic metre costs.

Response:

Please see Table 1 and 2 below. Union has provided the requested conversion based on an assumed natural gas combustion conversion factor of 1,879 grams CO2(e)/m^3.[1]

Table 1: From page 20 of Exhibit K1.2

Qualified Bid Price Summary Statistics ($/tonne)	Current Vintage		2018 Vintage	
	USD	CAD	USD	CAD
Auction Reserve Price	$ 12.10	$ 14.78	$ 12.10	$ 14.78
Settlement Price	$ 12.29	$ 15.01	$ 12.10	$ 14.78
Maximum Price	$ 45.21	$ 55.21	$ 18.59	$ 22.70
Minimum Price	$ 12.10	$ 14.78	$ 12.10	$ 14.78
Mean Price	$ 13.93	$ 17.01	$ 12.46	$ 15.22
Median Price	$ 12.50	$ 15.27	$ 14.52	$ 17.73
Median Allowance Price	$ 12.63	$ 15.42	$ 12.18	$ 14.87

Table 2: m^3 Equivalent

$/$m^3$	Current Vintage		2018 Vintage	
	USD	CAD	USD	CAD
Auction Reserve Price	0.02	0.03	0.02	0.03
Settlement Price	0.02	0.03	0.02	0.03
Maximum Price	0.08	0.10	0.03	0.04
Minimum Price	0.02	0.03	0.02	0.03
Mean Price	0.03	0.03	0.02	0.03
Median Price	0.02	0.03	0.03	0.03
Median Allowance Price	0.02	0.03	0.02	0.03

[1] Environment Canada's CO2 emission factor (https://ec.gc.ca/ges-ghg/default.asp?lang=En&n=AC2B7641-1).

UNION GAS LIMITED

Undertaking of Mr. Dibaji
To Mr. Buonaguro

To explain the balancing mechanic and/or inform as to where it is.

Response:

In the example below Union demonstrates the balancing mechanism of shifting budget from lower yield[1] programs to higher yield programs and the impacts to the overall scorecard results. This example is meant to be illustrative based on the discussions found at EB-2015-0029 Transcript ,Volume 1, pp. 160-164.

If Union were to transfer $5 million from the Residential Home Reno Rebate (HRR) offering budget (promotion and customer incentives) into the Commercial/Industrial program, the result would be an overachievement of the cumulative natural gas savings m^3 metric but a significant underachievement on the Home Reno Rebate participant metric.

In 2016 the HRR Participant metric target is 3,000 homes. Shifting $5 million in budget (promotion and customer incentive) from the HRR offering would result in a significant underachievement of approximately 926 homes or 31% metric achievement. Moreover, this would greatly reduce the natural gas savings contribution, from HRR, to the scorecard's first metric (cumulative natural gas savings m^3). The $5 million budget was subsequently moved into the Commercial/Industrial program. Union assumed a linear relationship between additional budget and forecasted achievement for the Commercial/Industrial program. This shift in budget resulted in an achievement of approximately 125% on this metric.

Table 1: 2016 Resource Acquisition Scorecard Achievement Example

2016 Resource Acquisition Scorecard					*Metric Results*	*Metric Achievement*	*Contribution*
Metrics	**Metric Target Scorecard**			**Weight**	(a)	(b)	(c) = (a) + (b)
	Lower Band	**100%**	**Upper Band**				
Cumulative Natural Gas Savings m^3	832,223,742	1,109,631,656	1,387,039,570	75%	1,384,591,303	125%	94%
Home Reno Rebate Participants	2,250	3,000	3,750	25%	926	31%	8%
					Scorecard Achievement		***101%***

For the example above, the overall impact would be Union achieving approximately 100% on the scorecard, which would be the same result if Union did not shift budgets between programs in an

[1] Yield is defined as cumulative natural gas savings per promotion and customer incentive budget (m^3/$).

attempt to overachieve on an individual metric. In this case, there is no benefit to Union from shifting budget to programs with a "better bang for your buck"[2].

Additionally, in the example above, the scorecard results would impact Union's scorecard targets in the next year based on the formulaic approach to target setting. The following year's cumulative natural gas savings metric target will be higher based on the formulaic approach. This is due to the results being driven by a much higher yield program[3]. The underachievement in HRR will actually not impact the following year's target, which is based on cost-effectiveness (homes per dollar spent), ensuring they are still aggressive. Based on the scorecard design and the formulaic target approach discussed above there is a balancing mechanism that ensures shifting the budget from lower yield programs to higher yield programs is not beneficial to Union.

[2] EB-2015-0029 Transcript, Volume 1, page 162.

[3] The savings results from the Commercial/Industrial program produce a higher yield (m^3/$) than the Residential program. Given that the formulaic target is based on program yield (m^3/$) the following year's target would be adjusted higher to account for this change.

UNION GAS LIMITED

Undertaking of Ms. Brooks
To Mr. Quinn

To provide the proactive steps that may be taken in this area, what assumptions have been made, possibly testing those assumptions in or outside of this proceeding, moving forward.

Response:

Union relied on its experience in the multi-family market and discussions it had with multi-family customers to apply the discount factors outlined in Exhibit A, Tab 3, Appendix A, page 93. Union is performing a demonstration project in 2015 to gain further insight on the market rate multi-family market segment. Details of this demonstration project can be found at Exhibit A, Tab 3, Appendix A, page 87.

UNION GAS LIMITED

Undertaking of Mr. Goulden
To Mr. Shepherd

With reference to projects listed on page 32 of exhibit K2.4, UNION to advise the amount the 2013 incentive would have been reduced in dollars if the large volume projects with less than one year payback had been excluded.

Response:

If Large Volume projects with a payback period of less than one year were excluded from the program at the time the 2013 targets were set, there would be no impact on the incentive. If, on the other hand, projects with a payback period of less than one year were excluded from the post-audit result for the Large Volume scorecard retroactively, then the incentive would be reduced by $1.115 million.

UNION GAS LIMITED

Undertaking of Ms. Lynch
To Ms. Duff

To translate the amount of the $2.6 billion to rate making effects that have happened to customers since 1997.

Response:

The amount of $2.6 billion represents net TRC benefits which reflect natural gas, electricity and water savings customers would receive as a result of participating in DSM programs.

While they cannot be specifically quantified, the following “rate-making” effects have impacted customers since 1997:

- Lower overall gas bill because of volume savings associated with 7.5 billion cubic metres of natural gas; and,
- Some level of avoided distribution, transmission and storage costs.

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.

UNION GAS LIMITED

Undertaking of Mr. Goulden
To Mr. Poch

To advise, of the large volume customer budget that is not self-directable, how much is for the low-income versus admin costs.

Response:

Approximately 68% of the Large Volume program and portfolio budget is for direct access customer incentives. The remainder of the allocation is for program administration, program evaluation and portfolio costs. Large Volume rate classes would incur an additional 16% to account for the Low Income program and portfolio budget.