

BOMA INTERROGATORY #7

INTERROGATORY

Ref: Exhibit B, Tab 1, Schedule 2, pp1-15

- (a) What is the forecast volume of targeted savings in each year of the six-year conservation term that will be determined by the application of the estimated measure savings contained in the application, together with measure savings estimates that have already been approved and are in use? What percentage of forecast annual savings do they represent?
- (b) What was the comparable actual volume of 2015 and 2016 savings that were estimated using the measures, and what percentage of total achieved savings did they constitute?
- (c) Did the utilities conduct sample measurements to determine the accuracy of the engineering estimates for the 2015 and 2016 savings (i.e. to see how they compared with actual savings for the buildings in which the measures were installed)? If not, why not? If yes, please describe the sample size and how the measurements were carried out, and the actual results achieved compared to the forecast results.
- (d) Do the utilities plan to conduct similar sample studies in the remaining four years of the program to verify the validity of the demand savings forecast methodology, described in the TRM? If so, please describe the sample size, the measures that will be sampled, and how the measurements will be carried out. If not, why not?

RESPONSE

- a) In the Utilities' respective 2015 Demand Side Management ("DSM") Draft Annual Reports, forecasted volumes of targeted savings were presented in Section 3, Table 3.6. The Utilities have used this information to inform the response.

Witnesses: D. Bullock  
L. Kulperger

Union:

**Annual natural gas savings targets (m3)<sup>1</sup>**

Scorecard	2015	2016	2017	2018	2019	2020
Resource Acquisition	816,561,818	1,214,104,360	1,496,939,054 <sup>3</sup>	1,700,748,492 <sup>3</sup>	1,715,289,268 <sup>3,4</sup>	1,749,595,053 <sup>3,4</sup>
Low-Income	43,600,000	56,642,187	64,186,528 <sup>3</sup>	71,499,683 <sup>3</sup>	76,151,889 <sup>3,4</sup>	83,580,811 <sup>3,4</sup>
Large Volume	1,236,097,404	1,058,588,072 <sup>2</sup>	996,825,303 <sup>3</sup>	1,005,036,313 <sup>3</sup>	1,040,552,894 <sup>3,4</sup>	1,034,420,933 <sup>3,4</sup>

1 – Values are cumulative gas savings at the target (100%) band for programs launched in indicated year.

2 – Draft.

3 – Target is formulaic based on performance in previous year(s). Draft value presented here assumes Union achieves 100% of its cumulative gas savings target in previous year(s) and spends 100% of its budget.

4- Target setting methodology for 2019 and 2020 assumes same approach as outlined in Decision for 2016-2018 scorecards.

Note: Targets presented do not depend on the measure savings estimates provided in this Application.

Over the past two years, prescriptive measures have contributed an average of 19% towards Union’s Resource Acquisition Scorecard and 22% towards Union’s Low-Income Scorecard.

For illustrative purposes, the average prescriptive contribution percentages have been applied to the estimated 100% cumulative gas savings targets from Table 3.6.

Scorecard	2015	2016	2017	2018	2019	2020
Resource Acquisition	157,160,858	233,674,510	2,881,107,360	3,273,372,409	330,135,854	336,738,571
Low-Income	9,787,793	12,715,642	144,092,761	160,510,111	17,095,388	18,763,111

Enbridge:

2017 to 2020 targets are formulaic based on performance in previous year(s). Draft values presented below assume Enbridge achieves 100% of its cumulative gas savings target in previous year(s) and spends 100% of its total budget.

Over the past 4 years, on average, prescriptive measures have historically contributed approximately 15% to Enbridge’s Resource Acquisition Scorecard and 8% towards Enbridge’s Low-Income Scorecard.

Witnesses: D. Bullock  
 L. Kulperger

**Annual natural gas savings targets (m<sup>3</sup>)<sup>1</sup>**

Scorecard	2015	2016	2017	2018	2019	2020
Resource Acquisition	1,011,901,200 <sup>2</sup>	983,790,685 <sup>2</sup>	1,154,031,305 <sup>3</sup>	1,286,622,037 <sup>3</sup>	1,278,720,893 <sup>3,4</sup>	1,330,726,132 <sup>3,4</sup>
Low-Income	92,800,000 <sup>2</sup>	96,690,000 <sup>2</sup>	103,428,996 <sup>3</sup>	110,312,532 <sup>3</sup>	116,621,767 <sup>3,4</sup>	118,966,883 <sup>3,4</sup>

<sup>1</sup> For illustrative purposes, values are cumulative cubic meters savings at 100% target achievement. Total program budgets were utilized in the calculation of the following year's targets.

<sup>2</sup> OEB *Decision and Orders* (EB-2015-0049)

<sup>3</sup> Target is formulaic based on performance in previous year. Values assume Enbridge achieves 100% of its cumulative gas savings target and spends 100% of its total budget in previous year.

<sup>4</sup> Target setting methodology for 2019 and 2020 assumes same approach as outlined in Decision for 2016-2018 scorecards.

For illustrative purposes, the average prescriptive contribution percentages noted above have been applied to the estimated 100% cumulative gas savings targets from Table 3.6 above.

Scorecard	2015	2016	2017	2018	2019	2020
Resource Acquisition	151,785,180	147,568,603	173,104,696	192,993,306	191,808,134	199,608,920
Low-Income	7,424,000	7,735,200	8,274,320	8,825,003	9,146,805	9,517,351

- b) Consistent with Section 9.5 of the Board's EB-2015-0029/EB-2015-0049 Decision and Order, updated Technical Reference Manual ("TRM") assumptions in this filing will be applied prospectively and were not used in determining 2015 and 2016 scorecard achievement, except in the case of new measures added to the TRM or TRM measures filed and approved in the joint input assumptions filing, EB-2014-0354, filed March 27, 2015.

In general, prescriptive measures represented 14% of Union's total achieved savings in 2015 and 13% in 2016, pre-audit. For Enbridge, prescriptive measures represent 16% of achieved savings in 2015 and approximately 22% in 2016, pre-audit.

- c) No, the Utilities did not conduct sample measurements to determine the accuracy of the engineering estimates for 2015 and 2016 savings.

As outlined in the Filing Guidelines to the DSM Framework for Natural Gas Distributors (2015 to 2020), (EB-2014-0134), Section 7.1, and further detailed in the August 21, 2015 letter from the Board in the 2015 to 2020 DSM Evaluation Process of Program Results (EB-2015-0245), the new DSM evaluation governance involves

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a third party Evaluation Contractor (“EC”) retained by the Board. The EC will carry out the evaluation and audit processes of all DSM programs.

In executing these duties, the EC has drafted an Evaluation, Measurement & Verification (“EM&V”) Plan for the natural gas utilities’ DSM programs, with input from the Evaluation Advisory Committee (“EAC”).

The EM&V Plan has made a number of recommendations on activities to be undertaken in verifying assumptions used for energy savings. The prioritization, timing and method of this work are the responsibility of the EC.

- d) Please see the response to part c) above. The EM&V Plans are for the period of 2016 to 2018.

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