

**UNION GAS LIMITED  
CLEARANCE OF 2014 DSM VARIANCE AND DEFERRAL ACCOUNTS  
EB-2015-0276**

**OEB STAFF INTERROGATORIES**

**February 22, 2016**

**INTERROGATORY #1**

Ref: Exhibit A / Tab 2 / p. 11

**Preamble:**

The OEB's Decision and Order on Union's clearance of its 2013 DSM accounts application (EB-2014-0273) stated the OEB is supportive of the proposed boiler efficiency base case study in 2015 to be conducted in co-operation with Enbridge with the findings being incorporated in the evaluation of the 2014 results. In its application, Union stated that the Technical Evaluation Committee (TEC) initiated the boiler baseline study in March 2015 and the study results are anticipated in 2016.

**Questions:**

- a) Please provide the current status of the baseline boiler study.
- b) Please provide the meeting minutes from the September 2015 TEC meeting. Please also provide any other documentation providing further insight into the delay in completing the baseline boiler study.
- c) Please explain Union's position related to applying the results of the boiler baseline study on a prospective basis following the completion of the study (e.g., not applying the results of the study until 2017) in the context of the OEB's Decision and Order on Union's clearance of its 2013 DSM accounts application (EB-2014-0273) and the OEB's combined Decision and Order on Union and Enbridge's DSM Plans (EB-2015-0029/EB-2015-0049). In your response, please reconcile not applying the results of the boiler baseline study to the program evaluation results of 2014, 2015 and 2016 with the need to ensure that the best and most accurate results are being used when determining lost revenues and shareholder incentive amounts.
- d) Please confirm how long the current boiler baseline efficiency figure of 80.5% has been used by Union to evaluate and calculate final program results.
- e) Please provide the number of projects that rely on a boiler efficiency base case of 80.5%.
- f) Please provide the total amount of savings and the percentage of savings relative to all programs and to only commercial and industrial programs that were attributable to boilers with a thermal efficiency assumed to be 80.5%.

- g) Please quantify the shareholder incentive associated with the savings claimed from commercial boilers with 80.5% efficiency.
- h) Please compare the current boiler baseline efficiency figure used by Union to those which are used in other leading jurisdictions.
- i) Please re-calculate the 2014 shareholder incentive amount using a boiler baseline efficiency standard of 85%.

## **INTERROGATORY #2**

Ref: Exhibit A / Tab 3 / p. 1

### **Preamble:**

The Lost Revenue Adjustment Mechanism (LRAM) deferral account has a debit balance of \$0.848 million which includes volume savings for contract rate classes related to 2013 audited full year DSM activities at 2014 rates and the audited monthly volumes related to 2014 DSM activities at 2014 rates. The balance does not include volume variances for general service rate classes, as the LRAM volume impacts were captured in the Normalized Average Consumption deferral account that was disposed of in Union's 2014 Disposition of Deferral Account Balances (EB-2015-0010) proceeding. Union notes that this treatment is consistent with the Settlement Agreement approved by the OEB in Union's 2014-2018 Incentive Regulation Mechanism (IRM) Agreement (EB-2013-0202).

### **Questions:**

- a) Please explain why the LRAM deferral account includes amounts related to 2013 DSM activities and why these amounts were not subject to disposal in a previous proceeding.
- b) Please explain, and provide specific references, for how the LRAM volume impacts for the general service class was captured in the Normalized Average Consumption deferral account that was disposed of in Union's 2014 Disposition of Deferral Account Balances proceeding (EB-2015-0010).
- c) Please provide details on the treatment of lost revenues compared to forecasted DSM impacts as outlined in the Settlement Agreement approved by the OEB in Union's 2014-2018 IRM proceeding (EB-2013-0202).
- d) Please discuss, and provide the detailed calculations with live excel working files, of Union's load forecast that was used to determine the 2014 LRAM balance of \$0.848 million. In particular, please discuss and clearly show the following:
  - i. How the load forecast was adjusted to account for DSM activity,

- ii. What assumptions were used related to DSM savings estimates for different programs (and offerings) and how these estimated savings were allocated to the applicable rate classes,
  - iii. What level of historic DSM savings (those from previous years that are assumed to persist in the future) were built into the load forecast regression analysis;
  - iv. What level of new, estimated DSM savings for future year DSM programs (e.g., those included within the 2015-2020 DSM plan) were built into the load forecast through a manual adjustment, and
  - v. Clearly show how Union has applied its final DSM evaluation results to the reductions made to its load forecast in order to calculate the LRAMVA amount.
- e) Please discuss and clearly show the programs (and/or offering) and the final net savings from these programs (and/or offerings) that contributed to the actual net partially effective savings figures for all rate classes outlined in the table shown in Exhibit A, Tab 3, Schedule 2, Page 3 of 3 - LRAM 2014 – Audited. If appropriate, please similarly comment on the programs that have contributed savings in Table 11.0 – 2014 LRAM Statement, Page 106 of Union’s 2014 Annual Report.
  - f) Please show how the savings shown in Appendix E of Union’s 2014 annual report have been attributed to the available DSM programs offered to customers and how the total savings from Union’s DSM programs have been applied to the various rate classes.
  - g) Please discuss why there have been no LRAM volumes in 2014 rates from either the 2013 or 2014 program years.
  - h) Please discuss the process that Union undertakes in updating its load forecast to account for DSM savings and the regularity of updates made to its forecast to account for new reductions in natural gas usage attributable to DSM programs (e.g., is this on an annual basis, at the time of Union’s cost of service, etc.).
  - i) Please explain your approach to developing your load forecast and taking into account impacts of DSM activities in the context of Section 12 of the DSM Guidelines (EB-2008-0346) which states:

“Utilities recover their allowed distribution revenues through both a fixed and a variable distribution rate. These rates are based on forecast consumption levels for their respective franchise area that **take into account, among other things, the expected impact of naturally occurring energy conservation and the impact of planned DSM activities** [emphasis added]. If the actual impact of natural gas DSM activities undertaken by the natural gas utility in its franchise area results in greater (less) natural gas savings than what was incorporated into the

forecast, the natural gas utility will earn less (more) distribution revenue than it otherwise would have, all other things being equal.

Further, the DSM Guidelines state:

“...the LRAM amount is a retrospective adjustment and may be an amount refundable to or receivable from the utility’s customers, depending respectively on whether the actual natural gas savings resulting from the natural gas utility’s DSM activities are less than or greater than what was included in the forecast for rate-setting purposes.”

### **INTERROGATORY #3**

Ref: Exhibit B / Tab 3 / pp. 4-5

#### **Preamble:**

In response to the 2014 Audit recommendation #5, Union discusses that it has developed a formalized approach to capture customer’s standard maintenance and operations practices via a standard form. Union stated it will use this form to support the base case and demonstrate incremental savings from the customer’s standard practices.

#### **Questions:**

- a) Please provide a copy of the standard form for Operations & Maintenance (O&M) projects used for the 2015 audit.
- b) Please discuss the approach that Union plans to undertake in documenting the baseline for 2015 O&M projects.
- c) Please discuss whether or not Union has developed specific questions to solicit proper documentation of the baseline for behavioural and maintenance projects.

### **INTERROGATORY #4**

Ref: Exhibit B / Tab 3 / pp. 5-6

#### **Preamble:**

In the 2014 Audit recommendation #6, the Auditor noted that “to identify obvious free riders, a possible criterion is to have projects with a simple payback of less than one year be ineligible for the program. In the 2014 Audit recommendation #8, the Auditor noted that steam leaks, steam traps repairs, and condensate leaks fall into this category, each often resulting in paybacks of less than one year. In Union’s response

to these recommendations, Union confirmed that it will no longer be incenting projects classified as O&M Repair as of 2016.

**Questions:**

- a) Please explain why Union did not apply the 2014 Audit recommendation in the 2014 results.
- b) Please discuss how Union is planning to incorporate the audit recommendations into the 2015 audit.

**INTERROGATORY #5**

Ref: Exhibit B / Tab 1 / p. 97 and Exhibit B / Tab 2 / p. 11

**Preamble:**

Union's Audit Committee (AC) accepted the 2013 Audit recommendation #7 that "interactions between Union and customers need to be documented in the project file as they occur if they are to be used as support for claiming projects are not free riders." In the status update, Union stated that it will continue to refine the custom project documentation included in project files.

In the 2014 Audit Report, the Auditor revealed that in conversations with Union during the audit process, there has still been no significant process to date on documenting standard maintenance practices. The Auditor further noted that the verifiers were unaware that maintenance practices needed to be documented ... [and] it was clear from our meetings and the CPSV reports that the verifiers had not considered this as part of their job requirements" (p. 11 of 2014 DSM Audit Report).

**Questions:**

- a) Please explain why Union did not put greater effort into documenting the customer's maintenance practices to substantiate the 2014 project savings.
- b) Please explain how the lack of documentation of standard practices has affected the estimation of 2014 project savings.

**INTERROGATORY #6**

Ref: Exhibit B / Tab 3 / p. 4

**Preamble:**

In response to the 2014 Auditor's recommendation #3, Union discusses that conducting new free ridership studies each year using a sample from the current year's custom participants is unreasonable given the separate net-to-gross study underway.

**Questions:**

- a) Please discuss what changes are required to Union's audit process to incorporate annual free ridership assessments in the 2015 CPSV custom project review.
- b) Please discuss the issues, if any, in implementing free ridership assessment questions as part of the 2015 custom project review.
- c) Please discuss the general approach and what evidence should be collected from customers to determine how project advancements will be determined in the 2015 audit. This question seeks to follow-up on the C/I verifier's comment that "there was no hard evidence to suggest *which* measures would have been excluded and *when* this may otherwise have occurred" (Exhibit B / Tab 2 / 2014 C&I Custom Projects, p. 7).

**INTERROGATORY #7**

Ref: Exhibit B / Tab 2 / p. 19

**Preamble:**

The Auditor noted that an adjustment of 50% has been applied to all projects involving steam leak repairs. Further, the Auditor noted that a 50% adjustment is based on professional judgment, as it was beyond the scope of the audit to attempt to quantify actual savings above baseline for these measures.

**Questions:**

- a) Please confirm whether the 50% reduction to the steam leak savings projects is based on evidence or any past practice from prior audits.
- b) Please provide any additional reference, or rationale, for why a 50% reduction was chosen.
- c) Please discuss whether Union's AC or the TEC has commented on the appropriateness of a 50% reduction to the savings from steam leak repairs.

**INTERROGATORY #8**

Ref: Exhibit B / Tab 2 / Tables 6-9 (Low Income Custom Projects) / pp. 15-18  
Exhibit B / Tab 2 / Tables 10-13 (Commercial/Industrial Custom Projects) / pp. 21-29  
Exhibit B / Tab 2 / Tables 14-17 (Large Volume Projects) / pp. 32-41

**Questions:**

- a) Please provide a table indicating whether the Auditor considered there was adequate documentation of the baseline conditions with the projects listed in the references above.
- b) In a separate table, please indicate the type and number of studies that have been financed by Union and the corresponding projects.

**INTERROGATORY #9**

Ref: Exhibit B / Tab 2

**Preamble:**

For the large volume portfolio, 13 of 22 large volume custom projects audited (with exception to 2014-IND-0452, 2014-IND-0675, 2014-IND-0371, 2014-IND-0612, 2014-IND-0615, 2014-IND-0608, 2014-IND-0622, 2014-IND-0431, 2014-IND-0609) did not have sufficient data for the Custom Project Savings Verification (CPSV) contractor to conduct an evaluation of savings using an IPMVP protocol, so the CPSV contractor used another procedure to evaluate these project's savings.

**Questions:**

- a) Please explain the Auditor's approach in reviewing the appropriateness of custom project savings which were not evaluated using International Performance Measurement & Verification Protocol (IPMVP) by the verifiers.
- b) Please provide the Auditor's assessment of the evaluation of savings associated with each of these projects.

**INTERROGATORY #10**

Ref: Exhibit B / Tab 2 / Tables 6-9 (Low Income Custom Projects) / pp. 15-18

**Questions:**

Please provide a new table in Excel format that includes the following:

- a) Annual gas savings for each project.
- b) Annual electricity, water and other savings for each project, if any.
- c) Total annual cost savings associated with a) and b) above.
- d) Incremental costs of the project.
- e) Incentive amount provided to the customer.
- f) Simple payback based on the information above (before the incentive was provided).

### **INTERROGATORY #11**

Ref: Exhibit B / Tab 2 / Tables 10-13 (Commercial/Industrial Custom Projects) / pp. 21-29

#### **Questions:**

Please provide a new table in Excel format that includes the following:

- a) Annual gas savings for each project.
- b) Annual electricity, water and other savings for each project, if any.
- c) Total annual cost savings associated with a) and b) above.
- d) Incremental costs of the project.
- e) Incentive amount provided to the customer.
- f) Simple payback based on the information above (before the incentive was provided).

### **INTERROGATORY #12**

Ref: Exhibit B / Tab 2 / Tables 14-17 (Large Volume Projects) / pp. 32-41

#### **Questions:**

Please provide a new table in Excel format that includes the following:

- a) Annual gas savings for each project.
- b) Annual electricity, water and other savings for each project, if any.
- c) Total annual cost savings associated with a) and b) above.
- d) Incremental costs of the project.
- e) Incentive amount provided to the customer.
- f) Simple payback based on the information above (before the incentive was provided).

### **INTERROGATORY #13**

Ref: Exhibit B / Tab 2

#### **Preamble:**

OEB staff compiled the following information based on a review of the large volume custom projects:

Large Volume Custom Project	Project identified to have "add-on" (Element #22 of CPSV template)
2014-IND-0356	Yes
2014-IND-0452	Yes
2014-IND-0371	Yes
2014-IND-0620	Yes



2014-IND-0612	Yes
2014-IND-0615	Yes
2014-IND-0608	Yes
2014-IND-0622	Yes
2014-IND-0431	Yes
2014-IND-0299	Yes
2014-IND-0287	Yes
2014-IND-0543	Yes
2014-IND-0609	Yes
2014-IND-0630	Yes
2014-IND-0632	Yes
2014-IND-0667	Yes

**Questions:**

- a) For the projects identified to have add-on components, please clarify the definition of an “add-on” as it did not appear to be consistently defined for all projects.
- b) Please identify, where appropriate, the add-on component of the project as it was not clearly described for all cases noted above.
- c) Please clarify the definition of a “boiler efficiency factor” that was associated with each of these projects.
- d) Please clarify whether the boiler efficiency factor represents the enhanced boiler base case efficiency that has resulted from the “add-on” to the project, and if it has been taken into consideration for the estimation of savings.

**INTERROGATORY #14**

Ref: Exhibit B / Tab 2

Projects 2014-IND-0670, 2014-IND-0487, 2014-IND-0287, 2014-IND-0630, 2014-IND-0632, 2014-IND-0667

**Preamble:**

For various large volume projects ranging from steam leaks to insulation replacements, a 20% reduction was applied to the savings assuming that 20% of the work performed was not driven by energy conservation, but due to safety concerns.

**Questions:**

- a) Please explain how the 20% reduction to annual savings was determined.
- b) Please clarify whether this adjustment is based on specific information communicated by the customer to the custom project verifier.

- c) Please confirm the specific questions asked during the verifier's on-site visit to derive this adjustment.
- d) Please provide the reason for each project that was applied a 20% reduction to its annual savings.

## **INTERROGATORY #15**

Ref: Exhibit B / Tab 2 / pp. 43-44

### **Preamble:**

For the Commercial & Industrial (C/I) portfolio, the Auditor noted in recommendation #8 that steam leaks showed very high leak rates and repairs were urgent, however, the savings for the repairs were included in the claimed savings. The Auditor further noted that these repairs likely would have been made for safety or severity reasons regardless of program availability.

### **Questions:**

- a) Please provide the source of the Auditor's observation that "steam leaks showed very high leak rates and repairs were urgent" as the additional information did not appear to be documented in the C/I project review.
- b) Please explain the appropriateness to claim savings from steam leak repairs that would have been made for safety or severity reasons regardless of program availability.
- c) Please explain why a reduction in savings associated with steam leaks such as the one applied in the large volume projects was not applied to the C/I projects.

## **INTERROGATORY #16**

Ref: Exhibit B / Tab 3 / pp. 6-7

### **Preamble:**

The Auditor noted in recommendation #9 that a number of greenhouse expansion and new construction projects had no previously existing building referenced as a baseline condition. As a result, Union has customized greenhouse baselines based on what the customer would commonly and reasonably have chosen to do.

On a go-forward basis, the AC agreed to use the 2014 C/I verifier's preliminary opinion as standard practice for its new greenhouse baseline determination to simplify the evaluation and auditing process.

### **Questions:**

- a) Please provide the verifier's estimate of the standard practice baseline for greenhouse expansion projects. Please reference the source(s) that were used to determine the standard baseline.
- b) Please provide the magnitude of the savings increase (or decrease) this can contribute to the 2014 greenhouse expansion baseline projects.

### **INTERROGATORY #17**

Ref: Exhibit B / Tab 2 / p. ii

#### **Preamble:**

Union's market transformation program, Optimum Home, achieved a shareholder incentive of \$557,358 (as noted in Exhibit B, Tab 1, p. 108) but does not appear in the Auditor's list of programs that were reviewed as part of the Audit.

#### **Question:**

- a) Please confirm whether or not the market transformation program was verified or audited, as there were no explicit comments on the verification of the program. If it was not verified, please provide rationale for its exclusion.

### **INTERROGATORY #18**

Ref: Exhibit B / Tab 2 / pp. ii-iii

#### **Preamble:**

The audit report specified that the prescriptive and quasi-prescriptive C/I programs was reviewed as part of the Audit. The audited net cumulative gas savings for C/I prescriptive makes up more than 10% (e.g. 216,057,244 CCM/1,889,459,431 CCM in the audit report) of Union's overall CCM claim.

#### **Questions:**

- a) Please indicate how the C/I prescriptive savings claim was verified and audited. Specifically, please indicate how the Auditor ensured that best available input assumptions was used to calculate savings and how the unit installations were confirmed.
- b) If this program was not verified or audited, please provide rationale for its exclusion.