STAFF INTERROGATORY #30

INTERROGATORY

Ref: Exhibit C / Tab 5 / Schedule 2 / pp. 12-17

Preamble:
Enbridge Gas provides details on its RNG Enabling Program and Geothermal Energy Services Program proposals that it filed separately with the OEB (EB-2017-0319). Enbridge Gas notes that these programs have a profitability index equal to or greater than 1.0, which will ensure that the recipients of the programs' services will pay the full cost of the programs. Enbridge Gas also notes that it is not seeking any approval or other relief related to these proposals in this proceeding.

Enbridge Gas explains that the best methodology to address annual utility revenue sufficiencies and deficiencies associated with these programs is to treat them as cost of carbon abatement. Enbridge Gas proposes that the Greenhouse Gas Emissions Compliance Obligation Customer-Related Variance Account (GHG-Customer VA) be used to capture the sufficiencies and deficiencies associated with these programs and be periodically cleared to ratepayers.

Questions:

a) Please provide Enbridge Gas' anticipated deficiencies/sufficiencies associated with these programs for each year over the 2018-2022 period.

b) Please explain with rationale which customer rate classes Enbridge Gas proposes to periodically recover/refund the deficiencies/sufficiencies associated with these programs.

c) Please provide a table that depicts the allocation by customer rate classes of the deficiencies or sufficiencies identified in part a) of this question. Please also provide the estimated annual bill impact, if applicable, for a typical residential customer over the 2018-2022 period.

Please explain if the occurrence of these deficiencies/sufficiencies differ from other types of investments (e.g. differences in revenue stream and cost stream for a new sub-division). Please contrast the treatment proposed here to the ratemaking treatment normally used by Enbridge Gas.

Witnesses: A. Chagani
S. McGill

RESPONSE

As required under the Cap & Trade Framework, the Company has presented its proposals for the RNG Enabling Program and the Geothermal Energy Services Program for approval in a separate proceeding (EB-2017-0319). The Company has filed evidence supporting the proposals in that proceeding. While the Company expects that detailed questions about these proposals will be addressed in the EB-2017-0319 proceeding, it has prepared high-level responses to this interrogatory, as set out below.

a) For details and as to the Company's proposed treatment of anticipated revenue deficiencies / sufficiencies associated with Enbridge's proposed the RNG Enabling Program and Geothermal Energy Services Program proposals please see the Company's evidence in EB-2017-0319, paragraphs 28 through 30.

b) The abatement costs / benefits associated with Enbridge's proposed RNG Enabling and Geothermal Energy Services Programs would comprise part of the Company's "Weighted Average Cost of Compliance" and be allocated across the Company's customer rate classes in the same manner as all other customer related Cap and Trade compliance costs.

c) The information requested concerning the estimated bill impact for the Company's RNG Enabling Program can be derived from EB-2017-0319, Exhibit B, Tab 1, Schedule 1, Appendix 6, page 2, Column 7 (RNG Upgrading) and Exhibit B, Tab 1, Schedule 1, Appendix 7, page 1, Column 3 (RNG Injection). These figures are based on a sample calculation for a single RNG upgrading and injection facility with an initial total capital cost of $12.9 million. For the 2018 through 2022 period, the maximum revenue deficiency of the RNG Upgrading Service is $3,628. Based on 2.2 million customers this equates to an annual bill impact of $0.0016 for the RNG Upgrading Service. The comparable figures for RNG Injection Services are $68,864 and $0.031.

   The information requested concerning the estimated bill impact for the Company's Geothermal Energy Services Program can be derived from EB-2017-0319, Exhibit B, Tab 1, Schedule 1, Appendix 12, page 1, Column 2. For the 2018 through 2022 period, the maximum revenue deficiency of the Geothermal Energy Services Program is $1,354,594. Based on 2.2 million customers this equates to an annual bill impact of $0.62.

   The Company's EB-2017-0319 evidence indicates that both the RNG Enabling Program and Geothermal Energy Service Program are expected to generate revenue sufficiencies in later years of the underlying assets lives that will be credited to the account of ratepayers. Enbridge's evidence is that there will be net sufficiencies over the lives of these programs.

The Company has not as of yet compiled a table depicting the allocation by customer rate classes of the deficiencies or sufficiencies referred in part a) of this question. The revenue requirement and discounted cash flow analyses supporting the Company's evidence in the EB-2017-0319 proceeding have all been prepared based on the requirements of the Board's EBO 188 feasibility guideline.

For other types of utility investments (e.g., new sub-division) the EBO 188 Guideline requires these investments to achieve a minimum project Profitability Index ("PI") of 0.8 and that both the Company's Rolling Project Portfolio and Investment Portfolio maintain PIs greater than or equal to 1.0. This mechanism insures that these investments are not subsidised by existing ratepayers on a forecast discounted cash flow basis.

The short term revenue deficiencies and longer term revenue sufficiencies associated with these traditional investments are socialized in rates through the determination of the Company's revenue requirement. The difference between the above-described treatment and that proposed by the Company for the RNG Enabling and Geothermal Energy Service programs is that the fees set for these services will be set so as to achieve forecast PIs of *at least* 1.0 with the associated short term revenue deficiencies and longer term revenue sufficiencies tracked separately in the GHG-Customer VA and periodically cleared to ratepayers.

Witnesses: A. Chagani
S. McGill

STAFF INTERROGATORY #31

INTERROGATORY

Ref: Exhibit F / Tab 1 / Schedule 1 / p. 2, #6

Preamble:
Enbridge Gas states that in 2015 and 2016, Enbridge Gas incurred administrative costs in relation to the implementation of the Cap and Trade program. The administrative costs captured in the 2016 GGEIDA amount to $0.840M (exclusive of interest).

Questions:

a) Please explain how Enbridge Gas proposes to recover the 2016 GGEIDA amounts and over what time period. Please provide Enbridge Gas' disposition methodology, including the following:
   i. The allocation factors by rate class for each of the cost items in Exhibit D / Tab 1 / Schedule 2 / p. 2, Table 1, and the amount allocated by rate class
   ii. Timing of the 2016 GGEIDA disposition
   iii. Disposition period (one time, multiple months, etc.)

b) Please provide an indication of the average bill impact for a typical residential customer.

RESPONSE

a) In the Regulatory Framework for the Assessment of Costs of Natural Gas Utilities' Cap and Trade Activities (EB-2015-0363), the Ontario Energy Board determined that administrative costs relating to the implementation and ongoing operation of the Cap and Trade program will be allocated and recovered from all customers in the same manner as existing administrative costs. Accordingly, the Company proposes to clear the balance of the 2016 GGEIDA to various customer classes based on the number of customers in each rate class.

   The Company proposes to clear the balance of 2016 GGEIDA together with the amounts approved for clearance at the upcoming application for clearance of the 2017 Deferral and Variance Account balances proceeding. Following the Board's Decision and Order in that proceeding, the Company would clear the balances to customers in the next practical QRAM.

Witness: A. Kacicnik

The proposed disposition could either be one or two one-time billing adjustments. This will be determined by whether the billing adjustment (which includes balances from other deferral and variance accounts) is material enough to warrant more than a single billing adjustment.

b) The average bill impact for a typical residential customer using 2,400 m^3 of natural gas per year is approximately $0.41 per year.

APPrO INTERROGATORY #8

INTERROGATORY

Reference: i) EB-2017-0224 Exhibit A Tab 2 Schedule 1 page 6:
ii) EB-2017-0224 Exhibit D Tab 1 Schedule 2
iii) EB-2017-0224 Exhibit F Tab 1 Schedule 1

Preamble: It is not clear what the rate effects will be from the disposition of the 2016 Greenhouse Gas Emissions Impact Deferral Account ("**GGEIDA**").

Questions:

a) At reference ii) paragraph 4 Enbridge indicates that it is seeking to clear the 2016 GGEIDA in this proceeding, however in reference ii) Enbridge indicates that it is seeking approval to recover the amounts in the 2016 GGEIDA and an order approving the clearance of such amounts in the next practical QRAM. Please clarify if Enbridge is seeking an order in this proceeding to adjust rates to recover the GGEIDA amounts.
b) In the event that Enbridge is looking to recover the GGEIDA amounts in this proceeding please provide the necessary schedules illustrating how the total amount is proposed to be allocated to rate classes and the respective recovery mechanism.
c) In the event that Enbridge is only seeking for approval of the total 2016 GGEIDA amount in this proceeding, will Enbridge seek approval of the disposition and recovery methodology in a subsequent QRAM proceeding?

RESPONSE

a) Under 2016 Earnings Sharing Mechanism and Other Deferral and Variance Accounts Clearance Review Settlement Proposal (EB-2017-012, Exhibit N1, Tab 1, Schedule 1, page 12), approved by the Board on August 31, 2017, the determination of the disposition of the balance in the 2016 Greenhouse Gas Emissions Impact Deferral Account (2016 GGEIDA) will be made in the Enbridge's 2018 Compliance Plan Proceeding (EB-2017-0224).

   Enbridge is seeking an order approving the clearance of 2016 GGEIDA balance in this proceeding. The 2016 GGEIDA balance is approximately $0.840 million (exclusive of interest).

Witnesses: A. Kacicnik
A. Langstaff

b)

TOTAL	RATE 1	RATE 6	RATE 9	RATE 100	RATE 110
($000)	($000)	($000)	($000)	($000)	($000)
840.3	775.0	65.1	0.0	0.0	0.1

Also, please see the response to Board Staff Interrogatory #31 filed at Exhibit I.4.EGDI.STAFF.31.

c) Please refer to Board Staff Interrogatory #31, filed at Exhibit I.4.EGDI.STAFF.31.

Witnesses: A. Kacicnik
A. Langstaff

SEC INTERROGATORY #20

INTERROGATORY

[D-1-2] Please work with Union to provide a single response to this interrogatory:

a. Please provide a table showing a comparison broken down by common categories of the 2016 actual administrative costs. Please provide an explanation of any differences +/- 10% between utilities per category.
b. Please provide a table showing a comparison broken down by common categories of the 2017 actual administrative costs. Please provide an explanation of any differences +/- 10% between utilities per category.
c. Please provide a table showing a comparison broken down by common categories for the 2018 administrative costs. Please provide an explanation of any differences +/- 10% between utilities per category.

Witnesses: A. Langstaff
F. Oliver-Glasford

RESPONSE

Although Union and EGD have made efforts to be responsive to this question, each entity developed their Cap and Trade programs independently to meet their individual requirements. Accordingly, there are differences in the incremental costs associated with facilitating Cap and Trade. Further, Union and Enbridge continue to operate separately, please see the response to Board Staff Interrogatory #16 at Exhibit I.1.EGDI.STAFF.16.

The response to this interrogatory corresponds with SEC #20 for Enbridge Gas Distribution ("Enbridge") and SEC #15 for Union Gas Limited ("Union") (collectively, the "Utilities").

	2016 EGD	2016 UG	% Δ	2017 EGD	2017 UG	% Δ	2018 EGD	2018 UG	% Δ
	Actuals ($000s)	Actuals ($000s)		Actuals ($000s)	Actuals ($000s)		Forecast ($000s)	Forecast ($000s)	
IT Billing System (Revenue Req't on capital)	(99.5)	(4)	96%	97.6	90	-8%	191	193	1%
Staffing Resources	533.3	1,682	215%	694.6	2,437	251%	1,500	2,598	73%
Market Intelligence & Consulting Support	268.2	264	-2%	156.8	236	51%	400	420	5%
Customer Education & Outreach	44.8	50	12%	12.9	2	-84%	0	8	
External Legal Counsel	93.5	135	44%	363.6	40.8	-89%	400	150	-63%
Incremental C&T Framework related GHG Reporting and Verification Audit	0	35		9.5	63	563%	40	100	-60%
Bad Debt Provision	-	-	n/a	600	141.4	-76%	960	425	126%
Low Carbon Initiative Fund ("LCIF")	-	-	n/a	-	-	n/a	2,000	2,000	0%
OEB Cap & Trade related Consultations (e.g., LTCPF, MACC, working group)	-	-	n/a	318	112.3	-65%	100	50	100%
Other	0	63		20.7	96	364%	60	60	0%
Total	**840.3**	**2,225**	**165%**	**2,273.7**	**3,218.5**	**42%**	**5,251**	**6,004**	**14%**

To more efficiently respond to this question, Union and Enbridge have addressed parts a through c in the response following, as rationale for cost differences were similar on a year to year basis. The information related to Enbridge is provided by Enbridge, while the Union information is provided by Union.

Incremental requirements related to Cap and Trade differed in several areas for each company, and the primary differences have been highlighted below.

IT Billing Cost/Revenue Requirement

The variances in each company's IT billing system revenue requirements are primarily driven by differences in the total installed system costs, existing systems' adaptability to changes, and respective company's accounting policies and assumptions.

Staffing Resources

Enbridge and Union incurred incremental staffing requirements as a result of the Ontario government's implementation of a Cap and Trade program. Each company independently assessed the program and in turn identified the number of staff necessary to successfully implement the program and sustain its operation.

Enbridge's incremental FTEs are dedicated staff to support implementation of Cap and Trade. Additional Enbridge staff provide support to the Cap and Trade function, in addition to the roles that those staff members play in other areas of Enbridge's operations. Given that these additional staff members are partly performing roles that were contemplated at the time that Enbridge's Custom IR model was approved, and therefore their costs are included in the Custom IR model, Enbridge is not seeking recovery for their costs through the GGEIDA.

Union, operating under a different IR model (40% of inflation price cap), is appropriately treating all eligible Cap-and-Trade resources as incremental.

The table below highlights both Enbridge and Union's average incremental staffing requirements from 2016 through to 2017. Staffing requirements for 2018 are forecasted as per each company's respective Compliance Plan.

Table 1: Union and Enbridge 2016-2018 Average Incremental Staffing Requirements

Company	2016 average incremental staffing requirements	2017 average incremental staffing requirements	2018 incremental staffing requirements (forecasted)
Enbridge	2.8	4.4	8.0
Union	8.0	10.0	12.5

Witnesses: A. Langstaff
F. Oliver-Glasford

A detailed breakdown of Union's 2016 actual and 2018 forecast staffing requirements can be found in EB-2017-0255 Exhibit 6, page 6, and Exhibit 3, Tab 5, Schedule 2, respectively.

In 2016, Union's costs were comprised of 13 Full Time Equivalents ("FTE") new roles and portions of existing roles totaling 0.5 full time employees. The new roles were added throughout the year, and the average incremental FTE for the year was 8. In addition to resources required to administer the Cap and Trade program (eg. procurement, GHG reporting, compliance planning), Union forecasted up to 5.0 FTE of business development and technology and innovation roles in 2016, and began to ramp up these activities through 2017, continuing into 2018. These resources have supported the development of the methodologies that facilitate the Initiative Funnel and pursue the technologies listed at OEB 21a & b).

In 2017, Union forecast that a similar 13.5 FTE roles would be required. In actuality, Union's average incremental FTE for the year was less, due to changes in contact centre requirements (please refer to Union IRR EB-2017-0255 OEB 11b), two unfilled vacancies, and the incremental workload for one Finance role distributed across multiple roles in Finance, with no individual committing more than 25% of their time to Cap and Trade activities.

For 2018 Union's forecast includes one less FTE than forecast for 2017. The difference is due to the Finance role that was expected to be allocated to Cap and Trade on a permanent basis.

As outlined in EB-2017-0255, Exhibit 6, Union uses a decision tree and process to evaluate the requirement for FTEs on an annual basis and ensure that salaries and wage costs related to Cap and Trade accountabilities are properly accounted for. If an employee will not be committing greater than 25% of their time to Cap and Trade activities, then an allocation of that FTE is not included in the staffing costs.

Enbridge's 2018 forecast, 2017 forecast and 2016 actual staff costs are available at EB-2017-0224 Exhibit D, Tab 1, Schedule 1, EB-2016-0300, Exhibit C, Tab 3, Schedule 6 and Exhibit D, Tab 1, Schedule 2, respectively.

In 2016, Enbridge's Cap and Trade team consisted of approximately 2.8 FTE with a new FTE beginning in Q1. An average of 4.4 FTEs were included on Enbridge's Cap and Trade team in 2017. As noted in EB-2016-0300, Exhibit C, Tab 3, Schedule 6, paragraph 11, Enbridge will draw on experience from other parts of the business to assist with the implementation and sustainment of the Cap and Trade program.

Witnesses: A. Langstaff
F. Oliver-Glasford

Market Intelligence and Consulting Support

The actual costs incurred in 2016 and forecasted 2018 costs for market intelligence and consulting support are similar between the two companies.

Due to the level of support deemed necessary by each company, market intelligence and consulting support costs differed in 2017.

External Legal Counsel

Differences in external legal costs between Union and Enbridge can be attributed to each company's respective legal counsel providers and the individual requirements of each company. Union and Enbridge continue to engage external legal counsel in respect of each company's Compliance Plan.

Enbridge's external legal costs are inclusive of all legal costs related to OEB regulatory proceedings, which include, but are not limited to, evidence review, witness and argument preparation. Additionally, Enbridge's legal costs also would include costs incurred for external regulatory interpretation and assistance. Enbridge's legal costs associated with Cap and Trade are not included in the Custom IR base rates.

Union's legal costs are related to interpretation of climate regulations and to ensure Union's compliance with regulatory requirements and legislation. Legal costs associated with regulatory proceedings, similar to those noted for Enbridge above, are included in Union's existing rates. See also Exhibit B, Staff 12.

Incremental C&T Framework related GHG Reporting and Verification Audit

Beginning in 2016 Union incurred costs related to GHG Reporting and Forecasting in order to meet new regulatory GHG emissions reporting requirements associated with the implementation of Cap and Trade in Ontario, including O. Reg. 452. In 2016, Union's incremental costs were directly attributed to the development of new reporting tools to facilitate reporting and forecasting of GHG emissions for a natural gas distributor, critical review of calculation methodologies, and assistance with submissions in response to the Greenhouse Gas Reporting Guideline[1].

In 2017, Union initiated a voluntary pre-audit verification process for GHG reporting related to Cap and Trade assess calculations of ON.400 emissions to ensure compliance with the regulations. Union also incurred incremental consulting costs to

[1] Guideline for Quantification, Reporting And Verification Of Greenhouse Gas Emissions-2017, https://www.ontario.ca/page/report-greenhouse-gas-ghg-emissions

support the consultation process for changes to the GHG Reporting Regulation and Guideline. Union plans to continue engagement of consultants to complete incremental work related to GHG reporting and forecasting in 2018.

In 2017, Enbridge also incurred incremental GHG reporting costs relating to a pre-audit verification process for GHG reporting related to natural gas distribution. The costs of this audit were $9,500. These costs were incremental to the pre-existing facility related GHG verification costs, which are charged to Enbridge's Operations and Maintenance budget. For additional information, please refer to EB-2016-0300, Exhibit C, Tab 3, Schedule 6.

For 2018, Enbridge anticipates that it will incur $40,000 related to incremental GHG reporting and verification audit costs as a result of the implementation of the Cap and Trade program. Please refer to EB-2017-0224, Exhibit D, Tab 1, Schedule 1.

Customer Education and Outreach

Prior to the Board's direction to develop consistent messaging between the Utilities, Union and Enbridge worked together to ensure messaging was available to customers across the Utilities respective service areas. However, differences existed in research undertaken, communication tactics, customer numbers and frequency of communications.

Enbridge completed one focus group and a standalone bill insert in 2016. In 2017, the majority of the costs incurred in this component were associated with training requirements for the call centre staff. Throughout 2017, Enbridge relied primarily on non-cost communication methods, such as website, call centre, on-bill message and social media tools, to communicate with customers about Cap and Trade.

In 2016, Union incurred incremental costs related to the development of customer communications material including design and content for the new Cap and Trade section of its website, as well as two customer research studies. The first study included focus group sessions to assess general awareness of the government's Cap and Trade plan, reactions to the plan and to Cap and Trade costs, and preferences related to how Cap and Trade costs might appear on natural gas bills. In the second study, Union engaged a consultant to conduct customer surveys among Residential and General Service business customers to evaluate the effectiveness of Union's Cap and Trade customer communications.

Bad Debt

As explained in EB-2017-0255 Exhibit 3, Tab 5, Union used a simplified method to estimate Cap and Trade related bad debts for 2017, assuming that a 10% increase in customer bills as a result of Cap and Trade costs would result in a 10% increase in bad debt. This simplified method was employed because Union had no previous experience with bad debt in a Cap and Trade environment. For the 2018 forecast, Cap and Trade related bad debt is estimated using Union's corporate bad debt forecast methodology, and is calculated by taking Union's forecast compliance obligation costs for General Service customers and applying Union's average actual write-off factor from the past five years.

As outlined in Union's 2017 compliance plan interrogatory response at EB-2016-0296, Exhibit B, FRPO 1, the actual incremental bad debt amount directly related to Cap-and-Trade in 2017 was expected to be lower than the estimate in 2017 due to the implementation of Cap-and-Trade commencing January 1, 2017 and the lag time before Cap and Trade amounts would be included in customer accounts that were written off. Only the actual costs will be captured in a deferral account for future disposition; the forecast for 2017 of $0.6 million was not in rates and was not in a deferral account. The amount of bad debt recognized in actuals is included in the Greenhouse Gas Emissions Impact Deferral Account. For 2017 the actual amount of bad debt included in the GGEIDA is approximately $141,000. Union's actual bad debt write-offs are lower in 2017 due to the time lag described above, which results in only partial year impacts in 2017. For 2018, Union will realize a full year of bad debt write-offs in the GGEIDA.

As identified in paragraphs #27 through 30 of EB-2017-0224, Exhibit D, Tab 1, Schedule 1, Enbridge utilized the Company's total revenue requirement, total forecasted cost of compliance and corporate bad debt forecast to calculate a forecasted cost of bad debt associated with Enbridge's cap and trade program. In 2017, Enbridge forecasted $900k. Based on the actual bad debt realized in 2017, Enbridge incurred $600k associated with the cap and trade program.

OEB Cap and Trade Related Consultations

Both Enbridge and Union incurred costs related to the OEB Cap and Trade related consultations in 2017. The costs were allocated as per the Board's methodology. The difference between the two companies stems from the assignment of consultation costs. Enbridge included the costs of the "Report of the Board – Regulatory Framework for the Assessment of Costs of Natural Gas Utilities' Cap and Trade Activities" (EB-2015-0363) ("Framework") and "Marginal Abatement Cost Curve for Assessment of Natural Gas Utilities' Cap and Trade Activities" ("MACC") (EB-2016-0359) in the 2017 OEB Cap & Trade related consultation costs component.

Witnesses: A. Langstaff
F. Oliver-Glasford

Union's costs incurred for the Framework and MACC were included in Union's existing rates and 2017 Cap and Trade related consultation costs, respectively.

Each company forecasted different amounts related to the upcoming Long Term Carbon Price Forecast refresh and any other related stakeholdering. Cost associated with the OEB Cap and Trade related consultations will be allocated to each company based on the Board's methodology.

In 2018, Union has forecast its portion of OEB costs to be approximately half of the cost charged in 2017 as a MACC refresh is not within scope. Similarly, Enbridge's forecast is based on 60% of 2017's consultation costs.

Witnesses: A. Langstaff
F. Oliver-Glasford