Enbridge
50 Keil Drive N.
Chatham, Ontario, Canada
N7M 5M1

June 11, 2019

BY RESS, EMAIL AND COURIER

Ms. Kirsten Walli
Board Secretary
Ontario Energy Board
2300 Yonge Street, 27th Floor
Toronto, ON M4P 1E4

Dear Ms. Walli:

Re: EB-2018-0331 - Enbridge Gas Inc. 2016-2018 Cap-and-Trade Deferral & Variance Account - Interrogatory Responses (Supplementary Information)

At the request of Mr. Mark Rubenstein on behalf of School Energy Coalition ("SEC"), Enbridge Gas Inc. ("Enbridge Gas") is filing the attached updated response to SEC 2 (Exhibit I.SEC.2) to include the original responses to SEC interrogatories, submitted by Enbridge Gas Distribution Inc. ("EGD") and Union Gas Limited ("Union"), in the 2018 Cap and Trade Compliance Plan proceeding (EB-2017-0224/0255) as attachments.

This updated submission has been filed through the Board's RESS and will be available on Enbridge Gas's website at: www.enbridgegas.com/ratecase; and at www.uniongas.com/about-us/company-overview/regulatory.

If you have any questions with respect to this submission please contact me at 519-436-4558.

Yours truly,

[original signed by]

Adam Stiers
Technical Manager, Regulatory Applications

c.c.: Dennis O'Leary (Aird & Berlis)
All Intervenors (EB-2018-0331)

ENBRIDGE GAS INC.
Answer to Interrogatory from
School Energy Coalition (SEC)

Reference: [EB-2017-0224 I.4.EGDI.SEC.20]

Question: Please update the interrogatory response to include 2018 cap and trade administrative cost actuals and explanation of the variances between Enbridge Gas Distribution and Union Gas as requested in part (c). Please also include a comparison of 2018 Federal Carbon Pricing Program administration costs that is being sought for recovery in this application.

Response

2018 Cap and Trade-Related Administrative Costs
The original responses to SEC interrogatories in the 2018 Compliance Plan proceeding are attached as Attachment 1 (EGD response) and Attachment 2 (Union response).[1]

Table 1 contains a summary of actual 2018 Cap and Trade-related administrative costs for EGD and Union (collectively, the "Utilities") as at December 31, 2018:

Table 1

Particulars	**2018 EGD**	**2018 UG**	**% Δ**
	Actual ($000s)	**Actual ($000s)**	
IT Billing System (Revenue Requirement on Capital)	143	145	1%
Staffing Resources	519	1,380	166%
Market Intelligence & Consulting Support	66	97	47%
Customer Education & Outreach	0	0	
External Legal Counsel	276	52	-81%
Incremental C&T Framework related GHG Reporting and Verification Audit	44	61	39%
Bad Debt Provision	592	631	7%
Low Carbon Initiative Fund ("LCIF")	0	0	
OEB Cap & Trade related Consultations (e.g., LTCPF, MACC, working group)	231	0	-100%
Other	14	45	221%
Total	**1,885**	**2,411**	**28%**

[1] EB-2017-0224 Exhibit I.4.EGDI.SEC.20; EB-2017-0255 Exhibit B.SEC.15.

IT Billing System – Revenue Requirement on Capital
As outlined in the Utilities' responses to SEC interrogatories as part of the OEB's review of 2018 Compliance Plans,[2] the variances between the Utilities' IT billing system revenue requirements are driven by differences in the total installed system costs, existing systems' adaptability to changes, and the respective utilities' accounting policies and assumptions.

Staffing Resources
Please see the response at Exhibit I.STAFF.6, for details of the Utilities' salaries and wages and FTEs from 2016 to 2018.

Market Intelligence and Consulting Support
Please see the response at Exhibit I.CCC.5, for details of the Utilities' consulting costs.

External Legal Counsel
Please see the responses at Exhibit I.CCC.5, and at Exhibit I.CCC.6, for details of the Utilities' external legal counsel costs.

Incremental C&T Framework related GHG Reporting and Verification Audit
Please see the response at Exhibit I.CCC.5, for details of the Utilities' GHG Reporting and Verification Audit costs.

Bad Debt Provision
The increase in Union's bad debts compared to EGD's is attributable to the time lag experienced by Union in realizing bad debts, as detailed in the response at Exhibit I.BOMA 12.

OEB Cap & Trade Related Consultations
The difference between the Utilities' OEB Cap & Trade related Consultations costs is a result of differences in historic accounting practices. As stated in the Utilities' responses to SEC interrogatories as part of the OEB's review of 2018 Compliance Plans,[3]

> EGD 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. 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.

[2] EB-2017-0255 Exhibit B.SEC.15; EB-2017-0224 Exhibit I.4.EGDI.SEC.20.
[3] EB-2017-0255 Exhibit B.SEC.15; EB-2017-0224 Exhibit I.4.EGDI.SEC.20.

Other
The difference between the Utilities' Other costs are primarily attributable to differences in travel-related costs. Higher employee travel-related expenses for Union relates to its attendance at government stakeholder meetings and conferences in 2018, most of which were held in Toronto. Union's expenses associated with these events are higher than those of EGD due simply to the need to travel from Union's head office in Chatham, Ontario. Please see the responses at Exhibit I.VECC.9 and Exhibit I.VECC.18 for details on employee travel costs.

<u>2018 Federal Carbon Pricing Program-Related Administrative Costs</u>
Table 2 contains a summary of actual 2018 Federal Carbon Pricing Program-related ("FCPP") administrative costs for the Utilities as at December 31, 2018:

Table 2

Particulars	2018 EGD Actual ($000s)	2018 UG Actual ($000s)	% Δ
IT Billing System (Revenue Req't on capital)	47	48	0%
Consulting Support	0	1	100%
Staffing Resources	165	245	48%
External Legal Counsel	32	0	-100%
Other	8	17	113%
IT Billing System Development – FCPP	48	0	-100%
Total	**300**	**311**	**3%**

IT Billing System – Revenue Requirement on Capital
Please see Enbridge Gas's Application at Exhibit B, Tab 2, p. 20 and at Exhibit B, Tab 1, p. 19, and the response at Exhibit I.CCC.7, for detail on the Utilities' FCPP-related revenue requirements

Consulting Support
Please see the responses at Exhibit I.CCC.5, for details of the Utilities' consulting costs.

Staffing Resources
The variance in staffing resources for the FCPP is attributable to historical differences between Union's and EGD's staffing costs incurred under the Cap and Trade program, and the FCPP. Union started classifying FTE's under the FCPP upon cancellation of Cap and Trade on July 3, 2018, and EGD did not classify staffing costs under the FCPP until October 1, 2018.

External Legal Counsel
Please see the responses at Exhibit I.CCC.5 and at Exhibit I.CCC.6, for details of the Utilities' external legal counsel costs.

Other
The "Other" costs in Table 2 are primarily related to travel costs, including meals, transportation and accommodations, associated with the implementation of the FCPP. Union's travel costs are higher than EGD's due to the location of some of the government stakeholder meetings. On some occasions, Union staff had to incur additional fees, such as accommodations and meals, as a result of travel distances and interconnections.

IT Billing System Development – Federal Carbon Pricing Program
As outlined in Enbridge Gas's Application at Exhibit B, Tab 1, p. 19, in 2018 EGD incurred development costs for billing system changes required to comply with the FCPP, which are included in the GGEIDA. As outlined at Exhibit B, Tab 2, in 2018 Union did not incur any costs for billing system changes required to comply with the FCPP.

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

Witnesses: A. Langstaff
F. Oliver-Glasford

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

UNION GAS LIMITED

Answer to Interrogatory from
School Energy Coalition ("SEC")

Reference: Exhibit 3, Tab 5

Question: Please work with Enbridge 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.

Response:

a) – c)

Although Union and EGD (collectively the "Utilities") 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, the Utilities continue to operate separately, please see the response at Exhibit B.Staff.14 a).

The response to this interrogatory corresponds with SEC #20 for EGD and SEC #15 for Union.

	2016 EGD	2016 Union	% Δ	2017 EGD	2017 Union	% Δ	2018 EGD	2018 Union	% 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, the Utilities have addressed parts a) - c) in the response following, as rationale for cost differences were similar on a year to year basis.

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
The Utilities 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.

EGD's incremental Full Time Equivalents ("FTE") are dedicated staff to support implementation of Cap-and-Trade. Additional EGD staff provides support to the Cap-and-Trade function, in addition to the roles that those staff members play in other areas of EGD's operations. Given that these staff members are partly performing roles that were contemplated at the time that EGD's Custom incentive regulation ("IR") model was approved, and therefore their costs are included in the Custom IR model, EGD is not seeking recovery for their costs through the Greenhouse Gas Emissions Impact Deferral Account ("GGEIDA").

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

Table 1 below highlights both the Utilities 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 EGD 2016-2018 Average Incremental Staffing Requirements

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

A detailed breakdown of Union's 2016 actual and 2018 forecast staffing requirements can be found in Union's application at Exhibit 6, p. 6, and Exhibit 3, Tab 5, Schedule 2, respectively.

In 2016, Union's costs were comprised of 13 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 8.0. In addition to resources required to administer the Cap-and-Trade program (e.g. 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 in Union's response at Exhibit B.Staff.21 a) & 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 Customer Contact Centre requirements (please see the response at Exhibit B.Staff.11 b)), 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 Union's application at 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.

EGD'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, EGD'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 EGD's Cap-and-Trade team in 2017. As noted in EB-2016-0300, Exhibit C, Tab 3, Schedule 6, paragraph 11, EGD will draw on experience from other parts of the business to assist with the implementation and sustainment of the Cap-and-Trade program.

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 the Utilities can be attributed to each company's respective legal counsel providers and the individual requirements of each company. The Utilities continue to engage external legal counsel in respect of each company's Compliance Plan.

EGD'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, EGD's legal costs also would include costs incurred for external regulatory interpretation and assistance.

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 EGD above, are included in Union's existing rates. Please also see Union's response at Exhibit B.Staff.12.

Incremental Cap-and-Trade 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 to assess calculations of ON.400 emissions to ensure compliance with the regulations. Union also incurred incremental consulting costs to 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, EGD 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 EGD's Operations and Maintenance budget. For additional information, please refer to EB-2016-0300, Exhibit C, Tab 3, Schedule 6.

For 2018, EGD 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 EGD 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.

EGD completed one focus group and a standalone bill insert in 2016. In 2017, the majority of

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

the costs incurred in this component were associated with training requirements for the call centre staff. Throughout 2017, EGD 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 Union's application at 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 GGEIDA. 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, EGD 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 EGD's Cap-and-Trade program. In 2017, EGD forecasted $0.9 million. Based on the actual bad debt realized in 2017, EGD incurred $0.6 million associated with the Cap-and-Trade program.

OEB Cap and Trade Related Consultations

Both EGD 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 Utilities stems from the assignment of consultation costs. EGD 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.

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 stakeholder work. Costs 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, EGD's forecast is based on 60% of 2017's consultation costs.