

OEB STAFF PUBLIC INTERROGATORIES
Enbridge Gas Limited
Cap and Trade Compliance Plan
EB-2017-0224

January 26, 2018

Issue 1 – Cost Consequences

Staff IR EGD #12 Public

Topic: Administrative Costs

Ref: Exhibit D / Tab 1 / Schedule 1 / p. 1, #1
 Exhibit C / Tab 5 / Schedule 2 / p. 3
 Exhibit C / Tab 5 / Schedule 1 / p. 11, #28
 Exhibit D / Tab 1 / Schedule 1 / p. 2, Table 1

Preamble:

Enbridge Gas states that it forecasts its 2018 Administrative Costs to be captured in the 2018 GGEIDA to be a total of \$5.2 million; of that amount, \$2.0 million is related to the Low Carbon Innovation Fund. Enbridge Gas also states that it is requesting approval of two new FTEs to support investigation, planning and project management activities, to be funded through the GGEIDA.

Enbridge Gas estimates that the 2018 cost associated with the two additional FTEs will be approximately \$350,000.

Enbridge Gas has provided the following Table 1 as a summary of its 2018 Forecasted Administrative Costs:

Table 1: 2018 Forecasted Administrative Costs

Cost Element	Forecasted Amount
Revenue requirement implications of IT billing system upgrades	\$191,000
Staffing Resources	\$1,500,000
Low Carbon Initiative Fund ("LCIF")	\$2,000,000
Consulting Support and Market Intelligence	\$400,000
OEB Cap and Trade related Consultation	\$100,000
Incremental Cap and Trade related GHG Reporting and Verification Audit	\$40,000
Bad Debt Provision	\$960,000
Other Miscellaneous Costs	\$60,000
Applicable Compliance Plan Proceeding Costs	TBD
Total 2018 Forecast Administrative Costs for GGEIDA	\$5,251,000

OEB STAFF PUBLIC INTERROGATORIES
Enbridge Gas Limited
Cap and Trade Compliance Plan
EB-2017-0224

January 26, 2018

Questions:

- a) Please complete the table below. For the 2017 Actual column, please provide year-to-date actuals and the remainder of the 2017 year as a forecast.

Administrative Cost Item	2017 Forecast	2017 Actual	2018 Forecast
Staffing Resources (Salaries and Wages)	\$1,120,000		\$1,500,000
Consulting	\$561,000		\$400,000
Bad debt related to cap and trade	\$900,000		\$960,000
IT Billing System Updates	\$76,100		\$191,000
Customer Education and Outreach	\$115,000		
External Legal Counsel	\$125,000		
OEB Costs			\$100,000
C+T GHG reporting and verification costs	\$20,000		\$40,000
Other (travel expenses, market research and communications)			\$60,000
SUB-TOTAL	\$2,917,100		\$3,251,000
Low Carbon Initiative Fund	n/a		\$2,000,000
TOTAL			\$5,251,000

- b) Please explain why Enbridge Gas' customer education and outreach costs went from \$115,000 in 2017 to \$0 in 2018.
- c) Please discuss the rationale and appropriateness of the difference in bad debt related to cap and trade costs proposed by Enbridge Gas (\$960,000 in 2018) and Union Gas (\$425,000 in 2018).
- d) Please explain why Enbridge Gas' forecast bad debt related to cap and trade for 2018 is \$60,000 more than its forecast bad debt for 2017, while Union Gas'

OEB STAFF PUBLIC INTERROGATORIES
Enbridge Gas Limited
Cap and Trade Compliance Plan
EB-2017-0224

January 26, 2018

forecast bad debt related to cap and trade for 2018 is \$175,000 less than its forecast bad debt for 2017.

- e) Please explain whether the 2018 cost associated with the two additional FTEs that Enbridge Gas has requested is included in Exhibit D / Tab 1 / Schedule 1 / p. 2, Table 1.
- f) Enbridge Gas and Union Gas filed a MAAD application¹ with the OEB. Please explain whether, and if so how, Enbridge Gas will realize any economies of scale in relation to FTEs that are working on cap and trade.
- g) For the table in a), please provide an explanation for any line item where:
 - i. The cost difference between 2017 Forecast and 2017 Actual is greater than 10 percent.
 - ii. The cost difference between 2017 Actual and 2018 Forecast is greater than 10 percent.

Staff IR EGD #13 Public

Topic: Administrative Costs

Ref: Exhibit D / Tab 1 / Schedule 1 / p. 6-7

Preamble:

Enbridge Gas notes that it receives support from experts and consultants for development and execution of its Cap and Trade activity. It also notes that consulting and market intelligence costs are forecasted to be approximately \$400,000, which includes expert insights and support related to Enbridge Gas' development and implementation of its Compliance Plan; Specific offset market insight to build an effective offset strategy as well as help support development of an active offset market; Carbon market and related climate policy insight and analysis; and Legal and/or technical review of regulation amendments and commercial contract support where required.

Questions:

¹ EB-2017-0306

OEB STAFF PUBLIC INTERROGATORIES
Enbridge Gas Limited
Cap and Trade Compliance Plan
EB-2017-0224

January 26, 2018

a) Please explain how many consultants Enbridge Gas is using or intends to use to fulfill all of the support activities described.

b) Please complete the table below:

Consultant	2018 Costs
Total	\$400,000

c) Please describe whether Enbridge Gas undertook or will undertake a competitive procurement process when selecting each of its consultants.

d) Enbridge Gas and Union Gas filed a MAAD application² with the OEB. Please explain whether, and if so how, Enbridge Gas will realize any economies of scale in relation to external consultants working on issues related to cap and trade.

Issue 1.1 – Are the volume forecasts used reasonable and appropriate?

Issue 1.2 – Are the GHG emissions forecasts reasonable and appropriate?

Staff IR EGD #14 Public

Topic: Volume Forecasts

Ref: Exhibit B / Tab 2 / Schedule 1 / p. 2 and p. 6, Table 1
 Exhibit C / Tab 5 / Schedule 2 / p. 26, Table 3

Preamble:

Enbridge Gas provides a 2018 volume forecast that remove 31,139,000m³ due to demand side management (DSM) volumes. Enbridge Gas indicates that this is a partially effective volumetric reduction.

² EB-2017-0306

OEB STAFF PUBLIC INTERROGATORIES
Enbridge Gas Limited
Cap and Trade Compliance Plan
EB-2017-0224

January 26, 2018

In Exhibit C, Tab 5, Schedule 2, on Existing Customer Abatement Programs, Enbridge Gas indicates that the savings from its DSM Plan in 2020 (including recurring annual savings achieved as a result of DSM efforts in 2018, 2019, and 2020 respectively) is 225,560,390m³.

Questions:

- a) Please explain what Enbridge Gas means by “partially effective” volumetric reduction.

- b) Please explain whether and how the DSM volume reduction included in the 2018 volume forecast in Exhibit B is consistent with the 2020 DSM Plan savings analysis in Exhibit C, since the DSM analysis includes annual savings that result from DSM efforts in 2018, 2019, and 2020.
 - i. If it is not consistent, please explain why not.

1.7 Has the gas utility reasonably and appropriately presented and conducted its Compliance Plan risk management processes and analysis?

Staff IR EGD #15 Public

Topic: Governance and Accountability

Ref: Exhibit C / Tab 1 / Schedule 1 / p. 11, #40

Preamble:

Enbridge Gas states that it has created a Carbon Strategy Working Group to monitor the implementation of the Compliance Plan and underpin the function of the Carbon Procurement Governance Group (CPGG). The Working Group will include members from the Carbon Strategy, Contract and Legal departments.

Questions:

- a) Please explain the roles and responsibilities of the Carbon Strategy Working Group and how it differs from the CPGG.

Staff IR EGD #16 Public

Topic: Allowance and Procurement Strategy

OEB STAFF PUBLIC INTERROGATORIES
Enbridge Gas Limited
Cap and Trade Compliance Plan
EB-2017-0224

January 26, 2018

Ref: Exhibit C / Tab 3 / Schedule 1 / p. 8-9

Preamble:

In the WCI linked market, Enbridge Gas states that it is considered a related person with two entities: Union Gas and Gazifère Inc.

Enbridge Gas and Union Gas also filed a MAAD application³ with the OEB.

Questions:

- a) For 2018, please explain whether, and if so how, Enbridge Gas will realize any economies of scale in relation to the following cap and trade activities:
 - i. Research and development, including RNG research and development
 - ii. Back office functions
 - iii. FTEs related to cap and trade
 - iv. Cap and trade consultants
 - v. Abatement activities

- b) Do Enbridge Gas and Union Gas intend to file individual and separate compliance plans for 2019-2020? Please explain.

Staff IR EGD #17 Public

Topic: Key Assumptions

Ref: Exhibit C / Tab 1 / Schedule 1 / p.2

Preamble:

Enbridge Gas states that it will have to share and allocate the purchase and holding limits between three entities (Enbridge Gas, Union Gas and Gazifère Inc.).

Union Gas, in its 2018 Compliance Plan⁴, states that it intends to apply to the MOECC for a holding limit exemption in the fall of 2017 under Section 41 of the Cap and Trade Regulation.

Questions:

³ EB-2017-0306

⁴ EB-2017-0255, Ex 3/T2/p.11

OEB STAFF PUBLIC INTERROGATORIES
Enbridge Gas Limited
Cap and Trade Compliance Plan
EB-2017-0224

January 26, 2018

- a) Does Enbridge Gas intend to apply to the MOECC for a holding limit exemption? Please explain.

Staff IR EGD #18 Public

Topic: Carbon Market Transaction Mechanisms and Data Sources

Ref: Exhibit C / Tab 1 / Schedule 1 / p. 12
Exhibit C / Tab 3 / Schedule 1 / p. 8

Preamble:

Enbridge Gas notes that it can continue to use its existing Compliance Instrument Tracking System Service (CITSS) account upon linkage of Ontario with the WCI market.

Enbridge Gas states that under Ontario Regulation 144/16, The Cap and Trade Program, related capped participants must share the purchase limit of 25%. In the WCI linked market Enbridge Gas is a related person with two entities – Union Gas and Gazifère Inc.

Questions:

- a) How many CITSS accounts does Enbridge Gas have?
i. Please describe each of Enbridge Gas' CITSS accounts
- b) Do Union Gas, Enbridge Gas and Gazifere share a CITSS account? Please explain.
- c) Please explain how Union Gas, Enbridge Gas and Gazifere will coordinate and report their accumulated compliance instruments to demonstrate compliance.

Issue 1.9 - Are the gas utility's proposed longer term investments reasonable and appropriate?

Issue 1.10 - Are the gas utility's proposed new business activities reasonable and appropriate?

Issue 1.11 - Are the gas utility's proposed greenhouse gas abatement activities reasonable and appropriate?

OEB STAFF PUBLIC INTERROGATORIES
Enbridge Gas Limited
Cap and Trade Compliance Plan
EB-2017-0224

January 26, 2018

Staff IR EGD #19 Public

Topic: Abatement Overview

Ref: Exhibit C / Tab 5 / Schedule 1 / pp. 2-3

Preamble:

Enbridge Gas states that “With the increasing cost of carbon and the increasing recognition of the value of avoiding GHG emissions, attractiveness of GHG abatement will evolve.”

Questions:

- a) Please discuss why Enbridge Gas has prioritized RNG as an abatement activity in its 2018 Compliance Plan. Please provide all supporting documentation including analysis.

- b) Please explain why, as the cost of carbon increases, Enbridge Gas is not looking to undertake any of the abatement opportunities outlined in the OEB’s Marginal Abatement Cost Curve⁵ (OEB MACC). Please provide all supporting documentation, including data and analysis.

Staff IR EGD #20 Public

Topic: The Abatement Construct and Customer Abatement Activities

Ref: Exhibit C / Tab 5 / Schedule 1 / p. 3, #8
Exhibit C / Tab 5 / Schedule 2 / p. 3, Table 1

Preamble:

Enbridge Gas states that it worked collaboratively with Union Gas to outline an Abatement Construct to guide abatement initiatives which is expected to be subject of continuous improvement.

Enbridge Gas provides the following Table 1, which is a summary of its proposed abatement initiatives and required approvals:

⁵ EB-2016-0359

OEB STAFF PUBLIC INTERROGATORIES
Enbridge Gas Limited
Cap and Trade Compliance Plan
EB-2017-0224

January 26, 2018

Table 1: Abatement Initiatives Summary

Initiative Development Stage	Initiative	2018 OEB Approvals Required
Stage 3: Propose	Renewable Natural Gas Procurement	Approval to procure RNG in 2018 as per the model identified in this exhibit.
	Natural Gas Renewable Enabling Program	Approval of new rates for RNG processing and injection, and approval to record deficiency and sufficiency in the applicable variance account. This program will be addressed in EB-2017-0319.
	Geothermal Energy Services Program	Approval of geothermal energy service fees and approval to record deficiency and sufficiency in the applicable variance account. This program will be addressed in EB-2017-0319.
Stage 2: Formulate	Hydrogen (Power to Gas)	Approval for 2 FTEs to support investigation, planning and project management activities, to be funded through the GGEIDA. Approval of funding of up to \$2M starting in 2018 in the Low Carbon Innovation Fund ("LCIF") to advance pilot projects and research throughout stages one to three of the Initiative Funnel that would enable a more complete assessment of promising technologies and opportunities for eventual implementation. The LCIF would be tracked through the GGEIDA.
	Net-Zero Homes/ Micro-Generation	
	Expanded NGV Program	
	Natural Gas Air-Source Heat Pumps	
Stage 1: Conceptual	Smart Metering	The LCIF would be tracked through the GGEIDA.
	RNG – Gasification	
	Carbon Capture	
Implementation / Existing Activity	Demand Side Management	Enbridge's 2015 to 2020 DSM Plan has already been approved in EB-2015-0029/49. The DSM mid-term review which as one component is assessing the interconnection between DSM and Cap and Trade is in progress (EB-2017-0127 and EB-2017-0129).
	Green Investment Fund Program	Enbridge's incremental residential energy efficiency abatement through the Green Investment Fund has been in place since 2016 and does not require an approval through this 2018 Compliance Plan.

Questions:

- a) Please provide Table 1 (above) with the following columns added on:
 - i. The cost per tonne of CO_{2e} (\$/tonne CO_{2e}) for each abatement initiative.
 - ii. A description of the funding that Enbridge Gas has requested or will request, if any, from the provincial government for each abatement initiative.
 1. An explanation of why these abatement initiatives require government funding.

- b) Please provide all supporting documentation, including data, analysis and assumptions, used to calculate the \$/tonne CO_{2e} for each abatement activity in a).

- c) For any abatement activity in Table 1 that is more expensive per tonne of CO_{2e} than the abatement activities on the OEB MACC, please explain why Enbridge Gas selected these activities instead of the less expensive abatement activities on the OEB MACC. In Enbridge Gas' response, please provide all supporting documentation, including data, assumptions and analysis.

OEB STAFF PUBLIC INTERROGATORIES
Enbridge Gas Limited
Cap and Trade Compliance Plan
EB-2017-0224

January 26, 2018

Staff IR EGD #21 Public

Topic: The Abatement Construct, Abatement Screening Criteria

Ref: Exhibit C / Tab 5 / Schedule 1 / pp. 4-6

Preamble:

Enbridge Gas states that “abatement investments require complementary criteria to be applied in the assessment and selection of abatement programs that would be put forward as part of a Compliance Plan.” Enbridge Gas then outlines its selection and screening criteria for the Abatement Construct, including:

- Funding
- Timely advancement of technology
- Support for government targets
- Efficient and rational development
- Respect for appropriately modified regulatory constructs

Questions:

- a) In the OEB’s Cap and Trade Framework⁶, the OEB indicates that its assessment of the gas utility’s Compliance Plan will be guided by six principles, the first of which is cost-effectiveness. Please explain why cost-effectiveness is not one of Enbridge Gas’ guiding principles for abatement.
 - i. Please explain how each of Enbridge Gas’ abatement guiding principles upholds the Cap and Trade Framework’s guiding principles of rate predictability, cost recovery, transparency, flexibility and continuous improvement.
- b) Please explain how Enbridge Gas used its abatement guiding principles in its decision to pursue RNG Procurement, RNG Enabling, and Geothermal Energy Services Program for its 2018 proposed customer abatement activities.
 - i. Please explain whether Enbridge Gas considered the cost-effectiveness of RNG Procurement, RNG Enabling, and Geothermal Energy Services.
- c) In regards to the second principle, “timely advancement of technology”, please explain what Enbridge Gas believes its role is in advancing the adoption of new technology in Ontario.

⁶ EB-2015-0363, pp. 7-8

OEB STAFF PUBLIC INTERROGATORIES
Enbridge Gas Limited
Cap and Trade Compliance Plan
EB-2017-0224

January 26, 2018

- d) In relation to the third principle, “support for government targets”, please explain what Enbridge Gas believes its role is in supporting government abatement targets.

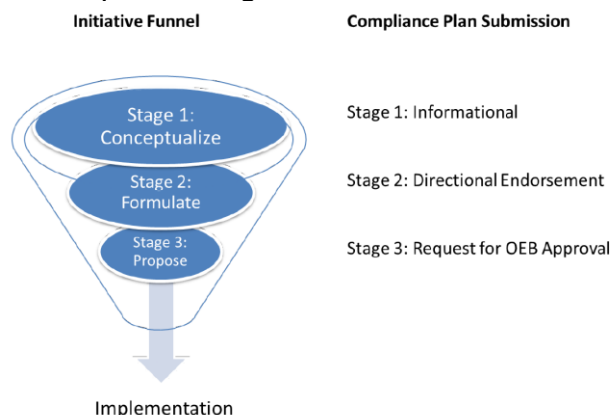
Staff IR EGD #22 Public

Topic: Abatement Initiative Funnel

Ref: Exhibit C / Tab 5 / Schedule 1 / pp. 6-9

Preamble:

Enbridge Gas proposes the following Initiative Funnel for its approach to investigating, planning and implementing abatement activities through its Compliance Plan.



Questions:

- a) Are all the screening criteria equally important or are some of the criteria more important than others? Please explain.
- b) Please explain how Enbridge Gas’ screening criteria will be incorporated into its decision regarding which abatement activity moves through the Funnel stages. Please explain whether the screening criteria are different depending on the stage?
- c) Will Enbridge Gas consider the cost-effectiveness of different abatement initiatives as it moves projects through the Initiative Funnel?
 - i. If yes, please describe how Enbridge Gas will consider and compare the cost-effectiveness of all potential abatement initiatives.
 - ii. If no, please explain why not.

OEB STAFF PUBLIC INTERROGATORIES
Enbridge Gas Limited
Cap and Trade Compliance Plan
EB-2017-0224

January 26, 2018

- d) Please explain whether, and if so how, stakeholder input will be used by Enbridge Gas to made decisions regarding which abatement initiatives to pursue.

Staff IR EGD #23 Public

Topic: Abatement Resourcing Requirements and the LCIF

Ref: Exhibit C / Tab 5 / Schedule 1 / pp. 9-10
Exhibit C / Tab 5 / Schedule 1 / p. 11

Preamble:

Enbridge Gas proposes a \$2 million annual “Low Carbon Initiative Fund” (LCIF) to enable the identification and development of GHG reducing technologies to progress into future abatement opportunities.

Enbridge Gas indicates that “the LCIF will initially provide funding for Enbridge Gas to better define each opportunity in order to successfully qualify for government grants.” It will also provide the means to accelerate innovative technologies necessary for the Province to meet its renewable energy and emissions reduction targets.”

Enbridge Gas also indicates that it will require two additional full time equivalent (“FTE”) employees to support its efforts to identify, formulate and begin to implement on new or expanded abatement activities within the Initiative Funnel.

Questions:

- a) How does Enbridge Gas currently identify abatement activities to pursue? What would change if the LCIF is approved? Please explain.
- i. In 2017, did Enbridge Gas undertake any activities that would, in 2018, fall within the ambit of the LCIF?
 - 1. If yes, please provide: a description of each activity; amounts spent on each activity in 2017; and whether those amounts are included in Enbridge Gas’ 2017 admin costs.
- b) Please explain what work Enbridge Gas intends to undertake in 2018 with the LCIF, if approved.
- i. Please explain how this work is related to the abatement activities proposed in the Initiative Funnel.

OEB STAFF PUBLIC INTERROGATORIES
Enbridge Gas Limited
Cap and Trade Compliance Plan
EB-2017-0224

January 26, 2018

- c) Please provide details of expected resourcing requirements and costs associated with each stage of the Funnel, including implementation, for 2018.
 - i. Please explain whether these costs are incremental to Enbridge Gas' forecast 2018 administration costs.
 - ii. Please explain whether these costs are included in the proposed \$2M LCIF.
- d) Please explain why it is appropriate for Enbridge Gas to receive additional ratepayer funding so that it can qualify for government grants.
- e) Please explain why it is appropriate for Enbridge Gas to obtain ratepayer funding to accelerate technologies to help the Province meet its renewable energy and emissions reduction targets.
- f) Please explain what will happen if the OEB does not approve the proposed \$2M LCIF.
- g) Enbridge Gas and Union Gas filed a MAAD application⁷ with the OEB. Please explain whether, and if so how, Enbridge Gas will realize any economies of scale in relation to activities being undertaken in relation to GHG abatement.
- h) Please provide details of the activities and work that Enbridge Gas' proposed two new FTEs would undertake in 2018.
 - i. Given the Enbridge Gas and Union Gas MAAD application⁸ with the OEB, please explain whether, and if so how, Enbridge Gas has considered any economies of scale in relation to resourcing requirements.
- i) Please provide references to specific cases and/or policy from the OEB and from any other authorities where research and development activities such as consulting, pilot programs, testing, market research, and data analysis is funded by ratepayers.
- j) In the event where Enbridge Gas' research undertaken through the LCIF leads to new technologies that could be marketed resulting in a financial value, would that financial value be shared with the ratepayers?
 - i. If yes, please explain how.
 - ii. If no, please explain why not.

⁷ EB-2017-0306

⁸ Ibid

OEB STAFF PUBLIC INTERROGATORIES
Enbridge Gas Limited
Cap and Trade Compliance Plan
EB-2017-0224

January 26, 2018

Staff IR EGD #24 Public

Topic: Customer Abatement Activities

Ref: Exhibit C / Tab 5 / Schedule 1 / p. 15
Exhibit C / Tab 5 / Schedule 2 / p. 1, #4

Preamble:

Enbridge Gas states that it considered the guidance and information provided in the OEB MACC study to assess whether it should be expanding DSM programs, and Enbridge Gas “concluded that additional DSM programs would not be cost-effective; in some cases the marginal costs of new programs may be higher than the cost of compliance instruments.”

Enbridge Gas also states that it remains in the best position to deliver reliable energy efficiency programs in the Province. Further, Enbridge Gas indicates that since the Government announced its Climate Change Action Plan (“CCAP”), it has been responsive to evolving Government objectives and has made several proposals to advance energy efficiency in the province.

Questions:

- a) Please explain how Enbridge Gas determined that additional DSM programs would not be cost-effective, and in some cases, the marginal costs of new programs may be higher than the cost of compliance instruments. Please provide all supporting documentation including data, assumptions and analysis.
- b) Does Enbridge Gas plan to undertake any customer abatement without provincial funding? Please explain.

Staff IR EGD #25 Public

Topic: Stage 2 (formulate) projects: Power to Gas and Natural Gas Air Source Heat Pumps/Integrated Option

Ref: Exhibit C / Tab 5 / Schedule 2 / pp.19 – 22

Preamble:

Enbridge Gas states it is expected that by 2019 or 2020 hydrogen blending could contribute to its renewable content requirements as part of future cap and trade Compliance Plans. Enbridge Gas also states that it will research and develop hydrogen

OEB STAFF PUBLIC INTERROGATORIES
Enbridge Gas Limited
Cap and Trade Compliance Plan
EB-2017-0224

January 26, 2018

pipeline standards for transportation of pure hydrogen to blending sites within its gas network, and that the additional staffing resources requested will coordinate this work and continue the research into hydrogen gas blending and other opportunities for hydrogen within the low carbon economy, and that “LCIF money will be expended on working with consultant research around the remaining steps required for advancing the introduction of hydrogen into the energy market.”

With regards to natural gas heat pumps, Enbridge Gas indicates that it will expand its work with interested parties in the pursuit of developing natural gas heat pumps and will also support the integrated approach which includes electric heat pumps in the Net Zero program.

Questions:

- a) Please explain why Enbridge Gas is proposing to undertake research on heat pumps and hydrogen technologies using ratepayer funding given that both of these technologies are shown (on the OEB MACC) are high cost compared to other energy efficiency options for space heating, and that hydrogen is more expensive than RNG abatement opportunities.

Staff IR EGD #26 Public

Topic: Stage 1 (Conceptualize) projects

Ref: Exhibit C / Tab 5 / Schedule 2 / pp. 23-24

Preamble:

Enbridge Gas states that its stage 1 (conceptualize) projects include Smart Metering, Gasification, and Carbon Capture.

Questions:

- a) Please explain what activities (such as research and development, pilot projects, market research, etc.) Enbridge Gas intends to do with regards to the stage 1 projects in 2018.
 - i. Please indicate how much Enbridge Gas expects these activities to cost in 2018.

Staff IR EGD #27 Public

Topic: Facility Abatement

OEB STAFF PUBLIC INTERROGATORIES
Enbridge Gas Limited
Cap and Trade Compliance Plan
EB-2017-0224

January 26, 2018

Ref: Exhibit C / Tab 5 / Schedule 3 / pp. 1-6

Preamble:

Enbridge Gas identifies the following stage 1 (conceptual) initiatives for facility abatement: Portable Booster Compressor, High Bleed Pneumatic Devices, Building Efficiency Improvements, and Natural Gas Air Source Heat Pump.

Enbridge Gas states that it has undertaken a study in 2017 to review the electricity and natural gas use and resulting emissions from the operations of six of its office buildings. Enbridge Gas also states that this study identified potential abatement opportunities and suggested several initiatives that can be explored over the next five years.

Enbridge Gas indicates that the initiatives identified above will be reviewed in 2018 to determine if they can be advanced to either Stage 2 (Formulate) for pilot scale testing or Stage 3 (Proposal) for full scale implementation. The results of these initiatives will be reviewed in future Compliance Plans submissions as appropriate.

Questions:

- a) Has Enbridge Gas undertaken a study on facility abatement? If yes, please provide the study.
- b) Has Enbridge Gas undertaken a cost analysis of any of the facility abatement initiatives in its 2018 Compliance Plan?
 - i. If yes, what is the cost in \$/tonne of CO₂e for each of these initiatives? Please provide all analysis and supporting documentation.
- c) Please explain what activities (such as research and development, pilot projects, market research, etc.) Enbridge Gas intends to do with regards to these stage 1 facility abatement projects in 2018. Please indicate how much of the \$2M Enbridge Gas intends to use to further develop the stage 1 projects indicated in the exhibit above.
- d) Please explain how Enbridge Gas will undertake the following: “the initiatives identified above will be reviewed in 2018 to determine if they can be advanced to either stage 2 (Formulate) for pilot scale testing or stage 3 (Proposal) for full scale implementation.”

Staff IR EGD #28 Public

OEB STAFF PUBLIC INTERROGATORIES
Enbridge Gas Limited
Cap and Trade Compliance Plan
EB-2017-0224

January 26, 2018

Topic: Volume Forecasts and Existing Customer Abatement Programs

Ref: Exhibit B / Tab 2 / Schedule 1 / p. 2
Exhibit C / Tab 5 / Schedule 2 / p. 26, Table 3

Preamble:

In Exhibit C, Tab 5, Schedule 2, Table 3, Enbridge Gas compares the savings potential identified in the OEB MACC study and the savings found in Enbridge Gas' DSM Plan. Enbridge Gas adjusted the savings potentials found in the OEB's conservation potential study⁹ (OEB CPS) and the OEB MACC because it claims that they were gross (i.e., did not exclude efficiency upgrades that would occur in the absence of DSM programming).

The OEB CPS indicates it included natural conservation, and notes that it gave special consideration to:

- Naturally-occurring improvements in equipment efficiency
- Expected penetration of more efficient equipment into the building stock
- Known, upcoming changes in building and equipment energy performance codes and standards

Questions:

- a) Please review the totals provided in Table 3 to ensure they are accurate.

- b) Please explain why the province-wide gross residential and commercial savings in Enbridge Gas' Table 3 (second column) do not match those shown in the OEB MACC report (Table 10 indicates that the 2018-2020 commercial sector abatement potential is 108 million m³ for the mid-range LTCPF¹⁰; Table 14 shows that residential sector abatement potential is 144 million m³ for the mid-range LTCPF).

If revisions are required, please update all necessary tables.

- a) Please explain why Enbridge Gas believes that the opportunity identified in the OEB MACC should be adjusted for free ridership.

- b) Please confirm that Enbridge Gas understands that the OEB MACC analysis is based on the data and analysis from the OEB CPS, which indicates that the reference case included natural conservation.

⁹ EB-2015-0117

¹⁰ OEB's Long-Term Carbon Price Forecast, EB-2016-0359

OEB STAFF PUBLIC INTERROGATORIES
Enbridge Gas Limited
Cap and Trade Compliance Plan
EB-2017-0224

January 26, 2018

- c) Please explain how the adjustment factors Enbridge Gas used to reduce the OEB MACC potential are reasonable, given that the reference case included natural conservation.
- d) Please provide Enbridge Gas' data and analysis used to calculate the annual savings achieved at the end of 2020 from Enbridge Gas' DSM plan for the residential, commercial, and industrial sector, including the annual savings achieved in 2018 and 2019. Please indicate the achievement of their targets (in %) assumed for 2017, 2018, 2019, and 2020 in this calculation.
- e) Please explain whether the 2018 annual savings from Enbridge Gas' DSM plan calculated for d) above are consistent with the 2018 DSM volume reductions indicated in Exhibit B.

Issue 3 - Customer Outreach – Are the proposed customer outreach processes and methods reasonable and appropriate?

Staff IR EGD #29 Public

Topic: Customer Outreach

Ref: Exhibit E / Tab 1 / Schedule 1 / pp. 1-6 and Appendix A

Preamble:

Enbridge Gas notes that it will continue its efforts to communicate about the cap and trade program through the most effective existing customer communication channels.

Also, Enbridge Gas states that it has and will continue to listen to the needs of customers as they relate to cap and trade through existing channels. For example, Enbridge Gas monitors the number of cap and trade calls and content trends to the mass market and business customer call centres and the customer Ombud's office. As well, Enbridge Gas will continue to monitor its website traffic and various franchise media outlets for coverage of the topic to garner insight into customer sentiment.

Questions:

- a) Please discuss Enbridge Gas' experience to-date related to the communication material that Enbridge Gas has distributed to its customers.
- b) Please discuss how Enbridge Gas' customer information has generally been received by customers and the volume of inquiries/comments submitted to

OEB STAFF PUBLIC INTERROGATORIES
Enbridge Gas Limited
Cap and Trade Compliance Plan
EB-2017-0224

January 26, 2018

Enbridge Gas' call centres, the customer Ombud's office and its dedicated website.

- c) Has Enbridge Gas received feedback from customers on its cap and trade calculator? If so, please discuss the feedback Enbridge Gas has received.

Issue 4 – Deferral and Variance Accounts

Issue 4.2 – Are the proposed deferral account balances reasonable and appropriate?

Staff IR EGD #30 Public

Topic: RNG Enabling Program and Geothermal Energy Services Program

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.

OEB STAFF PUBLIC INTERROGATORIES
Enbridge Gas Limited
Cap and Trade Compliance Plan
EB-2017-0224

January 26, 2018

- 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.

- d) 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.

Issue 4.3 – Is the disposition methodology reasonable and appropriate?

Staff IR EGD #31 Public

Topic: Deferral and Variance Accounts

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.

OEB STAFF PUBLIC INTERROGATORIES
Enbridge Gas Limited
Cap and Trade Compliance Plan
EB-2017-0224

January 26, 2018

Issue 6 – Implementation – What is the implementation date of the final rates and how will the final rates be implemented?

Staff IR EGD #32 Public

Topic: Cost Recovery Statements

Ref: Exhibit A / Tab 2 / Schedule 1 / p. 5

Preamble:

Enbridge Gas states that it has applied to the OEB, pursuant to Section 36 of the Act, for Interim Cap and Trade Tariffs, to be approved on or before December 1, 2017.

Enbridge Gas' request for the interim approval of their proposed 2018 cap and trade charges was denied by the OEB. Therefore, the final 2017 OEB-approved cap and trade charges have been continued until such time as the OEB completes its review and the OEB makes a determination of the approved 2018 cap and trade charges.

Questions:

- a) How does Enbridge Gas propose to recover the difference between the final 2018 cap and trade charges and the amount Enbridge Gas has recovered since January 1, 2018?