

REQUESTOR NAME: **BC Sustainable Energy Association and Sierra Club BC**
INFORMATION REQUEST ROUND NO: **3**
TO: **FortisBC Energy Inc. (FEI)**
DATE: **October 31, 2018**
PROJECT NO: **1598946**
APPLICATION NAME: **2017 Long Term Gas Resource Plan**

64.0 Topic: ICG Evidence

Reference: Exhibit B-11, FEI Rebuttal Evidence, cover letter, p.2; ICF Report, page 22; Exhibit A-9, BCUC IR 3.81.1

FEI submits as rebuttal evidence the following point:

“2. ICF also finds that, among natural gas utilities, exploring the potential for DSM to be used for infrastructure deferral is an emerging practice with an uncertain track record. Any pathway proposed at this early point could change based on the outcomes of the various examination activities. For this reason, FEI is currently uncertain whether and when its ongoing activities and the further activities identified by ICF would lead to a definitive understanding of the pathway for determining if DSM could be used to defer infrastructure projects. As such, FEI currently cannot “submit to the BCUC a proposal and timeline for conducting the analyses that will allow it to fairly consider DSM alternatives to infrastructure investments in the early stages of any project development”¹ as proposed by Mr. Grevatt. However, FEI will report on the progress it has made on its activities when filing the next LTGRP.” [underline added]

- 64.1 Is FEI’s objection to submitting a “proposal and timeframe for conducting the analyses that will allow it to fairly consider DSM alternatives to infrastructure investments in the early stages of any project development” that FEI cannot commit in advance that the outcome of its analysis will necessarily be favourable to the concept of considering DSM alternatives to infrastructure investments?
- 64.2 FEI says it will report on the progress it has made on its activities when filing the next LTGRP. Please confirm the year in which FEI expects to file the next LTGRP.
- 64.3 Would FEI disagree with submitting an annual report on the progress of its activities (toward an analytical framework for considering DSM alternatives to infrastructure investments in the early stages of any project development)?
- 64.4 Further to FEI’s anticipated response to BCUC IR 81.1, would FEI agree that a defined timeline for progress reports would help ensure that the research is prioritized?
- 64.5 Please elaborate regarding FEI’s “ongoing activities and the further activities identified by ICF.” Are FEI’s ongoing activities being conducted by ICF? Do FEI’s ongoing activities in this area go beyond providing the rebuttal evidence? Does FEI anticipate that ICF will carry out the further activities referred to?

64.6 Has ICF ever been under contract to conduct an analysis where “pathway[s] proposed at...[an]...early point could change based on the outcomes of the various examination activities?” If yes, how did ICF address the uncertainty in its contract Scope of Work?

**65.0 Topic: Cost Effectiveness of DSM Alternatives to Gas Infrastructure
Reference: Exhibit B-11, FEI Rebuttal Evidence**

ICF says that “natural gas DSM would be even less cost-effective in most other jurisdictions where the comparative cost of gas infrastructure is much lower than in New York.” [p.10]

65.1 What cost-effectiveness test does ICF assume in making this assertion?

65.2 Does the cost-effectiveness test that ICF assumes in making this assertion include the full spectrum of benefits provided by DSM, such as customer bill savings, environmental benefits, reduced energy procurement costs, etc., in addition to avoided infrastructure costs?

**66.0 Topic: October 2018 Supply Interruption
Reference: Exhibit B-11, FEI Rebuttal Evidence,**

A service alert on FEI’s website states:

“Natural gas supply will be limited this winter, please reduce your use

October 22, 2018 2:05 p.m.

Natural gas system will be challenged in times of high demand this winter

Due to gas supply constraints as a result of Enbridge’s natural gas transmission pipeline rupture, FortisBC customers should know that that our regional natural gas supply, including the entire province, will be limited to 50 to 80 per cent of normal levels. This means that the natural gas system will be challenged in times of high demand throughout the winter. As such, FortisBC is asking all of its customers to be conscious of their natural gas use and conserve energy wherever possible.

On Friday, October 19, Enbridge released a statement announcing that they expect their ruptured 36-inch natural gas transmission line to be repaired and in service by mid-November. However, both the 36 and 30-inch transmission lines will only be running at 80 per cent capacity and are not expected to return to maximum operating pressure throughout the winter.

We are actively working to make more gas available for our customers. For example, we’ve worked with TransCanada to maximize output of the Southern Crossing pipeline that feeds into the Interior from Alberta and are actively working with industrial customers to optimize their energy use – keeping them running while minimizing system impacts. We are also

working on securing additional natural gas in the open marketplace to best support the province's gas supply.

We appreciate the efforts that have been made by our customers to conserve natural gas and encourage them to continue to limit their natural gas use wherever possible to ensure all British Columbians are able to access natural gas for essential uses."

[<https://www.fortisbc.com/NaturalGas/Alerts/Pages/Service-Alert.aspx>, accessed October 30, 2018]

An earlier service alert, dated October 10, 2018, 7:53 p.m., states in part:

"FortisBC asks customers to continue reducing natural gas use following Enbridge pipeline rupture
October 10, 2018, 7:53 p.m.

We're very thankful to our customers who've been helping today to reduce their use of natural gas, resulting in a reduction of about 20 per cent province-wide. This means we have more time to keep gas flowing through the system for essential uses.

However, we still need more customers to reduce their natural gas usage as much as possible for now, as we continue to work with Enbridge and confirm the impact on the system. We're asking all of our natural gas customers across the province to turn off their thermostats and to reduce their use of all other natural gas appliances." [underline added]

- 66.1 Has FEI provided a report or reports to the BCUC regarding the implications for FEI of the October 9, 2018 supply interruption event? If so, please provide copies. If not, please explain how and when FEI will report to the Commission.
- 66.2 Has the 20 percent province-wide reduction in system use, reported on October 10, 2018, been maintained subsequently?
- 66.3 Is FEI able to estimate how much of the post-incident province-wide reduction in gas use is a result of curtailment and how much is a result of voluntary actions by customers?
- 66.4 Please explain the difference between curtailment of firm service and interruptibility agreements. [Reference to BCUC IR 3.77.1 regarding the feasibility of interruptibility agreements.]

On page 16, ICF states:

"Hence, a successful geo-targeted DSM program would need to be approved and put into motion approximately three to five years before the expected in-service date of the targeted facility investment." [underline added]

- 66.5 Does the quick response by customers to FEI's request for usage reductions in October 2018 provide any insights into the feasibility of a

shorter lead time than three to five years for implementing certain DSM measures that would defer infrastructure investments?

66.6 Is FEI satisfied that the 2017 LTGRP adequately addresses the possibility of a contingency such as the October 2018 supply interruption? In what ways, if any, should the 2017 LTGRP be modified in response to lessons learned from the October 2018 supply interruption?

66.6.1 Alternatively, please confirm that FEI intends to examine the long term planning implications of the October 2018 supply interruption and briefly explain the process by which the outcome will be brought to the Commission.

67.0 Topic: October 2018 Supply Interruption
Reference: Exhibit B-11, FEI Rebuttal Evidence, ICF Report, p.12

ICF describes “System Outage Risk” as it relates to the use of gas DSM for infrastructure deferral and says that “Insufficient infrastructure could lead to a system shut down during the coldest part of the winter, leaving residential and commercial customers without heat during extremely cold weather.” [p.12]

67.1 Please explain how this hypothetical situation is different from the current situation in which FEI’s customers are being asked to curtail their usage due to an infrastructure failure.

68.0 Topic: Navigant Evidence
Reference: Exhibit B-11, FEI Rebuttal Evidence, Navigant Report

On page 2, Navigant states:

“As described in the BC CPR, “Market potential is a subset of economic potential that considers the likely rate of DSM acquisition, given factors like the rate of equipment turnover (a function of a measure’s lifetime), simulated incentive levels, consumer willingness to adopt efficient technologies, and the likely rate at which marketing activities can facilitate technology adoption. The adoption of DSM measures can be broken down into calculation of the “equilibrium” market share and calculation of the dynamic approach to equilibrium market share [reflecting barriers to market adoption], as discussed in more detail below.”⁴”

On page 2, Navigant cites FEI’s response to BCSEA IR 1.18.3 in part as follows:

“...Beyond the first year of the CPR, the market dynamics (e.g., equipment turnover, new construction and customer willingness to adopt) forecast by the CPR model drove the levels of annual market potential.”

Navigant says that calibration to historical performance affects the dynamic approach to equilibrium market share but not the equilibrium market share, and that “together these two components of the simulation act as the final determinant of the market potential.” [p.3] Navigant further says that “Calibration influences the starting point for the model (i.e. 2016), but does not dictate the long-run market equilibrium.” [p.9]

- 68.1 Please confirm that, in effect, market potential results from equilibrium market share adjusted downward by the rate of change between the starting point and the equilibrium market share. If not confirmed, please explain.
- 68.2 Is Navigant saying that calibration of the model to historical performance had no impact whatsoever beyond the first year of the CPR? Or that it had an impact that Navigant considers to be small?
- 68.3 What is the directional effect of historical performance on market potential? If historical performance is relatively weak, does this result in a reduced market potential, other things being equal? If FEI had achieved more savings, or savings at less cost, in recent years, would the Market Potential savings be greater?