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May 19, 2020

FortisBC Energy Inc.
16705 Fraser Highway
Surrey, B.C. V4N 0E8
By Email: gas.regulatory.affairs@fortisbc.com
Attn: Doug Slater

Dear Sir:

Re: BCUC Project No. 1599033, FortisBC Energy Inc., Revelstoke Propane Portfolio Cost Amalgamation Application
B.C. Sustainable Energy Association Information Request No. 3

Attached please find BCSEA's Information Request No. 3 to FEI. A version in Word format will be provided separately. If you have any questions, please do not hesitate to contact me.

Yours truly,

William J. Andrews

Barrister & Solicitor

Encl.

REQUESTOR NAME: **BC Sustainable Energy Association**
INFORMATION REQUEST ROUND NO: **3**
TO: **FortisBC Energy Inc.**
DATE: **May 19, 2020**
PROJECT NO: **1599033**
APPLICATION NAME: **FortisBC Energy Inc. Revelstoke Propane Portfolio Cost Amalgamation Application**

20.0 Topic: Correlation between residential UPC and HDDs
Reference: Exhibit B-15, FEI Rebuttal Evidence, Figure 1 – Average (10-year) Residential UPC and HDD over 54 Cities in FEI's Service Areas; Figure 2 – Linear Regression between FEI's Residential UPC and HDD over 54 Cities in FEI's Service Areas

On page 1 of its rebuttal evidence FEI quotes from paragraph 7 of Mr. Suchy's evidence: "A building located in Revelstoke should therefore consume 66% more heating energy than the same building in Vancouver." [underline added]

20.1 Would FEI agree that comparing heating energy usage between Vancouver and Revelstoke for "the same building" controls for other factors such as building size, insulation, number of residents, hot tub, swimming pool, outdoor patio heating, etc.?

On page 2 of its rebuttal evidence, FEI states, "there is no supporting evidence from Mr. Suchy that residential energy use is directly proportional to HDDs."

20.2 Would FEI agree that Mr. Suchy's evidence does not state that "residential energy use is directly proportional to HDDs," but states (or implies) that residential heating energy use for the same building is proportional to HDDs?

20.3 Setting aside what evidence is or is not included in Mr. Suchy's filed evidence, and setting aside the term "directly proportional," does FEI agree that residential heating energy use is positively correlated with HDDs?

20.4 Does FEI disagree with Mr. Suchy's evidence (a) that FEI's piped propane customers in Revelstoke also use cordwood, wood pellets and other sources of energy for home heating; and (b) that they do so to a larger extent than FEI's natural gas customers whose average Residential UPC of natural gas is roughly 90 GJ/y?

20.5 Does FEI acknowledge that both Figure 1 and Figure 2 of the rebuttal evidence define Residential UPC (10-year average) in terms of natural gas or piped propane delivered by FEI and not in terms of the total of all energy sources used for home heating?

20.6 Please confirm that "Figure 1 – Average (10-year) Residential UPC and HDD over 54 Cities in FEI's Service Areas" shows 54 cities arranged from lowest heating degree days on the left to highest heating degree days on the right, as indicated by observing that the red line for HDD appears to be level or climb from left to right.

20.7 Would FEI agree with the observation that all the cities on Vancouver Island and in the Lower Mainland (including, or plus, Sechelt and Powell River), on the left of the figure, have heating degree days ranging from about 2700 to about 3000 (per year), a relatively narrow range of about 300 HDDs?

20.8 Would FEI agree that all the cities in the Interior, on the right of the figure, have HDDS ranging from about 3100 to about 6800 (per year), a relatively broad range of about 3700 HDDs?

20.9 Would FEI agree that for the cities on Vancouver Island and in the Lower Mainland there is a marked differentiation, unrelated to HDDs, in that the all the cities on Vancouver Island have Residential UPCs of less than 40 GJ/y (except for Port Alberni and Qualicum Beach, which have UPCs of just over 40 GJ/y), and all the cities in the Lower Mainland have Residential UPCs greater than 60 GJ/y (except for Sechelt and Power River)?

20.10 Would FEI agree that for the cities on Vancouver Island and in the Lower Mainland, separately or together, there is no apparent correlation between Residential UPC and the number of HDDs within the relatively narrow range of HDDs?

20.11 Would FEI agree that for all the cities (and towns) in the Interior, Figure 1 indicates a positive correlation between Residential UPC and HDDs over a wide range of HDDs?

20.12 Please provide a revised version of Figure 2 showing the results of a linear regression of the Interior cities Residential UPC (10-year average) against HDDs.

FEI states, “Further, Mr. Suchy has not provided any evidence with actual supporting historical data that would suggest Revelstoke would be an outlier when compared against other cities within FEI’s service areas.” [p.2]

20.13 Would FEI agree that Figure 1 and Figure 2 provide evidence that Revelstoke is an outlier in terms of Residential UPC (10-year average) for piped propane in relation to HDDs when compared against other cities within FEI’s service areas?

21.0 Topic: Bill impacts under hypothetical scenarios
Reference: Exhibit B-15, FEI Rebuttal Evidence, pp.3-5

On line 22 of Table 1 of the rebuttal evidence, FEI provides Average Midstream Rate Impact to FEI's Customers ($/GJ) of 0.019 and 0.032, for the 72 GJ/y scenario and the 150 GJ/y scenario respectively.

21.1 Please provide a table showing the total average midstream revenue recovery impact to FEI’s customers for the 72 GJ/y scenario and the 150 GJ/y scenario. To clarify, the request is for total $ as distinct from $/GJ.

21.2 Please provide a version of Table 5-1 in Exhibit B-1, showing Average Annual Bill Impacts, revised to provide columns for the 72 GJ/y scenario and the 150 GJ/y scenario.

22.0 Topic: Potential impact to GHG emissions
Reference: Exhibit B-15, FEI Rebuttal Evidence, pp.6-7

On line 19 of Table 3 of the rebuttal evidence, FEI estimates a Simple Payback of 9 years for conversion of an Oil Furnace to Propane Furnace. FEI's conclusion is that "the data suggests that conversion activity will be limited by a lack of savings or long payback periods or both." [p.6]

22.1 Would FEI agree that a Simple Payback of 9 years for conversion of an Oil Furnace to Propane Furnace, and FEI's conclusion that "the data suggests that conversion activity will be limited by a lack of savings or long payback periods or both," make it unlikely that subsidizing the propane rates for Revelstoke customers would encourage other Revelstoke energy users to switch from higher-carbon heating oil to propane?