Sarah Walsh
Director, Regulatory Affairs

Gas Regulatory Affairs Correspondence
Email: gas.regulatory.affairs@fortisbc.com

Electric Regulatory Affairs Correspondence
Email: electricity.regulatory.affairs@fortisbc.com

FortisBC
16705 Fraser Highway
Surrey, B.C. V4N 0E8
Tel: (778)578-3861
Cell: (604) 230-7874
Fax: (604) 576-7074
www.fortisbc.com

April 18, 2023

Commercial Energy Consumers Association of British Columbia
c/o Owen Bird Law Corporation
P.O. Box 49130, Three Bentall Centre
2900 – 595 Burrard Street
Vancouver, BC V7X 1J5

Attention: Christopher P. Weafer

Dear Christopher P. Weafer:

Re: FortisBC Energy Inc. (FEI)

Revised Renewable Gas Program Application – Stage 2 (Application)

Response to Commercial Energy Consumers Association of British Columbia (CEC) Information Request (IR) No. 1 on FEI's Rebuttal Evidence to the Brattle Group (Brattle) and Citizens for My Sea to Sky Society (MS2S)

On December 17, 2021, FEI filed the Application referenced above. In accordance with the amended regulatory timetable established in Exhibit A-47, FEI respectfully submits the attached response to CEC IR No. 1 on FEI's Rebuttal Evidence to Brattle and MS2S.

If further information is required, please contact the undersigned.

Sincerely,

FORTISBC ENERGY INC.

Original signed:

Sarah Walsh

Attachments

cc (email only): Commission Secretary
Registered Parties

1. Reference: Exhibit B-66, Rebuttal MS2S and Brattle A and Exhibit B-11, pages 18 and 19, and Exhibit B-22, CEC 1.6.1 and 1.6.2

> **Q3: Please summarize FEI's evidence on price elasticity of RNG.**
>
> A3: FEI's evidence in this proceeding[1] concludes that it is impractical to perform a robust price elasticity analysis for renewable natural gas. This is because price elasticity studies require demand and price data that reflect market forces with consumer demand being driven by the pricing of competitive options. However, this kind of market data is not available for *voluntarily* purchased RNG. This is because, under the various Biomethane Energy Recovery Charge (BERC) rate setting mechanisms, the price of RNG has not been allowed to rise and fall with demand. FEI was also unable to find any third party studies that are explicitly focused on price elasticity of renewable gases.
>
> As an alternative to a price elasticity analysis, FEI surveyed its customers on RNG and conventional natural gas price differentials to gain some directional insight into their thinking.[2] The survey results indicate that customers are sensitive to the price differential between conventional natural gas and RNG. In other words, RNG demand is likely elastic when considered relative to conventional natural gas prices since the two fuels are substitutes and a customer can easily either reduce its share of RNG or completely opt-out of receiving Voluntary RNG service.

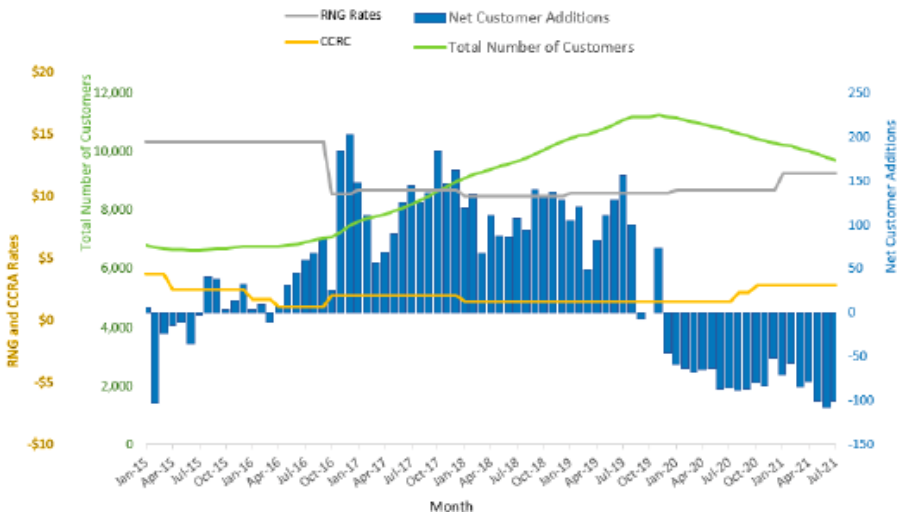
Growth in customer enrolments in the Renewable Gas Program was steady following its launch in 2011; however, by the beginning of 2014, the program began experiencing a challenge to its continued success. As of January 2014, the rate of new enrolments dropped from approximately 200 customers per month to approximately 20 customers per month (a 90 percent decline in new As of January 2015, the program's total number of participants began declining from month to month. As FEI described in its 2015 BERC Application, the premium paid for Renewable Gas over conventional gas had increased to the point of discouraging voluntary customers from enrolling in the Renewable Gas Program. In that application, FEI provided feedback from large volume customers that the BERC rate was too high to consider increasing their purchase volumes. As a result, FEI filled its 2015 BERC Application requesting approval from the BCUC to change the BERC rate setting methodology in order to address declining program enrolments due to the apparent price sensitivity of customers.

6.1 Please overlay the price of RNG and the price of natural gas on the above graph.

Response:

Please refer to the graph below for the price of RNG with the price of natural gas (CCRC) added.

Revised Figure 2-2: Renewable Gas Program Monthly Net Customer Additions and Total Customers



6.2 Please describe the influences FEI assesses as causing the net attrition from 2020 on.

Response:

The reduction in customer additions towards the end of 2019 to mid-2021, as shown in Figure 2-2 above, was due to a temporary closure of the existing RNG Program to new participants because RNG supply did not materialize as anticipated and fell short of demand.

The temporary closure of the RNG Program led to the steady erosion of the total number of customers enrolled, due to the natural exiting of customers from the Program over time which were not replaced by new participants.

1.1 Please confirm that the above information provides specific evidence of price elasticity for the voluntary purchase of RNG.

Response:

The information referenced in the preamble provides some evidence of RNG customers' sensitivity to a price premium charged over conventional natural gas; however, this information is not sufficient to calculate a reliable price elasticity estimate for RNG.

Specifically, Figure 2-2 provides some information that points towards the RNG customers' sensitivity to an RNG premium paid over the conventional natural gas prices. As shown, in the period from January to October 2015, when the price premium charged for RNG was high, customer enrollment in the RNG Program was low, whereas when the price premium was limited

to $7/GJ through the updated BERC Rate methodology, customer enrollment improved. However, this is not sufficient evidence on which to evaluate the price elasticity of demand for RNG.

The remainder of the data after the updated BERC rate methodology was implemented does not provide further insight as to how the demand for RNG reacts to changes in the price premium versus conventional natural gas. For instance, and as discussed in the response to CEC IR1 6.2 (Exhibit B-22), in 2019 when FEI's anticipated RNG supply did not materialize and fell short of demand, FEI temporarily closed the program to new entrants rather than increasing the price to balance out the supply and demand. This type of non-market-based approach to balancing supply and demand makes it impossible to calculate a reliable price elasticity of demand estimate.

1.2 Is it fair to expect that elasticity for certain products changes with the economic environment? For instance, in a period of rapid inflation, is it reasonable to expect that customers may cut back spending on products/services they consider to have lower necessity, such as RNG, than others such as conventional natural gas? Please explain why or why not.

1.2.1 If yes, how does FEI expect the current inflationary environment to impact its voluntary sales of RNG, if at all? Please explain.

Response:

Yes, the economic environment can impact elasticity estimates. For example, one of the factors that can influence price elasticity estimates is the so-called "income effect" which is the change in demand for a good or service caused by a change in consumers' purchasing power or real income. Demand for so-called "normal goods" such as energy products has a positive correlation with income, meaning that when the household real income increases, the share of energy in the overall household budget will also increase.

Inflation can reduce consumers' real income which can, in turn, cause a decrease in demand for energy products; although the extent of that may depend on factors such as share of energy in the household budget and whether the household real income is impacted by inflation (unlike low income earners, high income earners can often adjust their income for inflation and maintain their real income levels even during inflationary periods). For example, if one assumes that the majority of Voluntary Renewable Gas service customers are high income earners and/or those that can adjust their income based on inflation, there would be little impact on RNG demand.