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November 6, 2015

Via Email
Original via Mail

British Columbia Public Interest Advocacy Centre
Suite 208 – 1090 West Pender Street
Vancouver, B.C.
V6E 2N7

Attention: Ms. Tannis Braithwaite, Executive Director

Dear Ms. Braithwaite:

Re: FortisBC Energy Inc. (FEI)

Application for Approval of Biomethane Energy Recovery Charge (BERC) Rate Methodology (the Application)

Response to the British Columbia Public Interest Advocacy Centre representing the British Columbia Old Age Pensioners' Organization, Active Support Against Poverty, Disability Alliance BC, Council of Senior Citizens' Organizations of BC, and the Tenant Resource and Advisory Centre *et al.* (BCOAPO) Information Request (IR) No. 1

On August 28, 2015, FEI filed the Application referenced above. In accordance with the British Columbia Utilities Commission Order G-147-15 setting out the Regulatory Timetable for the review of the Application and Exhibit A-4 granting an extension to the deadline for filing the IR responses, FEI respectfully submits the attached response to BCOAPO IR No. 1.

If further information is required, please contact the undersigned.

Sincerely,

FORTISBC ENERGY INC.

Original signed by: Michelle Carman

For: Diane Roy

Attachments

cc: Commission Secretary
Registered Parties (email only)

1.0 Reference: Exhibit B-1-1, pages 2-3, and Exhibit B-1, Schedule 3, Rate Impacts and Volumes

The first referenced pages state:

FEI estimates that the rate impact to non-RNG customers of the proposed approach is approximately $9 million recovered through Storage and Transportation rates over the next five years, or an average of $0.015 per GJ, and approximately $13 million recovered through delivery rates over the next five years, or an average of $0.015 per GJ. For a Mainland Residential customer consuming approximately 90 GJs per year, these two impacts equate to an annual bill impact of less than $3 per year (approximately $15 over five years).

The referenced schedule refers to "Non-bypass Sales Volume" for transfers to storage and transportation rates and for transfers to delivery rates.

1.1 Is the use of the term "sales volume" intended to only include those customers for whom FEI procures commodity gas or does it refer to all delivery customers?

Response:

The term "sales volume" includes the volumes for those customers for whom FEI procures commodity gas in addition to FEI's Customer Choice customers as they are also responsible for the payment of the Storage and Transport Charge per gigajoule.

More specifically, sales volume customers include those customers taking service under Rate Schedules 1, 1B, 1U, 2, 2B, 2U, 3, 3B, 3U, 4, 5, 5B, 6, 6A, 6P, and 7.

1.2 Please provide the comparable annual bill impacts and consumptions for (i) a typical commercial customer and (ii) a typical industrial customer.

Response:

The estimated annual impact for a Mainland Large Commercial customer consuming approximately 3,602 gigajoules per year is $108. The estimated annual impact for a Mainland Industrial customer consuming approximately 10,443 gigajoules per year is $313.[1]

[1] Per Rate Schedules 3 and 5 use rates based on 2015 forecasted use rates for the Mainland Service Area as per the Commission filed Tariff Continuity and Bill Impact Schedules. These amounts generally represent the average use for the Rate Schedule.

2.0 Reference: Exhibit B-1, Schedule 2, line 2, and B-3, Tab 1, and Exhibit A-3, BCUC IR 23.2, Forecasted Demand

The first referenced schedule shows residential volumes increasing from 68,058 GJ in 2015 to 120,317 GJ in 2020, for a compounded annual increase of about 12% per year while the proposed BERC rate increases by about 1.2% per year in nominal terms and approximately zero in real terms.

2.1 Is the Schedule 2 data sufficient to calculate an implicit elasticity of demand?

Response:

FEI does not believe the Schedule 2 data is sufficient to calculate an implicit elasticity of demand in terms of the consumption in GJ. The demand elasticity for the consumption is not only a function of the BERC rate, but also a function of many factors including:

1) uptake rate for various blending levels;
2) average consumption for customers groups at various blending levels;
3) the competitive position of RNG relative to other alternatives including natural gas pricing such as price premiums; and
4) other external factors such as municipal, provincial and federal policy and other market drivers.

Please refer to the response to BCUC IR 1.23.1 for the elasticity of demand regarding the take up rate at various blending levels.

2.2 Does the Schedule 2 data indicate a shifting demand curve for residential customers over the period 2015-2020 or a very elastic demand curve (in the face of a slightly falling real price) or both?

Response:

The elasticity of demand cannot be estimated based on the Schedule 2 data. Please refer to the response to BCOAPO IR 1.2.1. As such, it is not possible to infer whether there exists a significant shift or to comment on the exact magnitude of the elasticity.

2.3 If FEI has estimated demand equations to support the forecasts in this schedule, please provide the estimated equations, a description of the variables, and the summary statistical outputs associated with the estimates.

Response:

Please refer to the responses to BCUC IR 1.33.1 and BCOAPO IR 1.2.1.

3.0 Reference: Exhibit B-1, page 6 and page 53, Accounting Treatment and Rate Setting, Cost Recovery and Rate Rider

3.1 Can FEI confirm that under their proposed accounting treatment, recoveries from all non-bypass customers would be the same as if the BCUC suggestion that a rate rider were used for this recovery, in terms of the amounts recovered from customers and rate classes in both cases?

Response:

No, FEI cannot confirm that the amounts recovered by customers and rate classes would be the same. While FEI would expect that the proposed accounting treatment recoveries from all non-bypass customers may be the same if a rate rider were used for recoveries in terms of amounts recovered from customers and by rate classes, the result would depend on the methodology used to determine the rate rider. That is, for delivery rate riders, FEI typically determines the rider amount by first allocating the total amount for refund or recovery to the applicable rate schedules based on each rate schedule's contribution to margin. This approach will generally result in the same net impact; however, it is possible that an alternate approach for this rate rider could be taken where a single rate rider is calculated and applied to all customers.

3.2 Does FEI understand the BCUC rate rider suggestion as meaning that the same fixed dollar amount per GJ should be recovered from all customers in all classes or should separate rate riders be calculated for each class?

Response:

It is FEI's understanding that a separate rate rider may be calculated for each Rate Schedule because this is a delivery-related rate rider. This approach is consistent with the most recently approved delivery-related rate riders. However, as noted in the response to BCOAPO IR 1.3.1, it is possible for a single rate rider to be applied to all Rate Schedules.

3.3 Please provide a brief explanation as to how FEI would calculate a rate rider for each class if the BCUC ordered a rate rider approach for RNG cost recovery.

Response:

Please refer to the response to BCUC IR 1.40.4.1.

3.4 Are there any customers or classes that will not be required to contribute to recoveries from non-RNG customers under FEI's proposal?

Response:

Yes. Bypass customers, customers with special contracts and Rate Schedule 46 customers would not be included. This is because these contracts and Rate Schedules are not subject to delivery rate changes.

4.0 Reference: Exhibit B-1, page 2, Proposed Transfers from BVA to MCRA

4.1 Would it be fair to say that if FEI's forecasted demand for RNG were more accurate, there would be less need to transfer amounts from the BVA to the MCRA, i.e., if the forecasted volumes were accurate on average, there might be no need for such transfers?

Response:

No.

The transfer of unsold RNG to the MCRA is being proposed to manage the potential mismatch between supply and demand on an ongoing, regular basis. FEI does not have the flexibility to adjust supply in accordance with demand forecasting, which is done regularly (quarterly). The actual amount of transfer is based primarily upon a relatively predictable and fixed supply and a fluctuating demand in a given year. Therefore, improved accuracy of the demand forecast would only serve to improve the accuracy of forecasting the amount of transfer and not whether or not the transfer is needed.

4.2 Does FEI intend to revise its forecasting methodology in respect of RNG demand going forward?

Response:

FEI does not intend to revise the model used to forecast demand, but will continue to review the methodology for calculating the inputs to the model based on actual results, market forces and other relevant factors.

4.3 In terms of procuring RNG supply, please elaborate on the short-term and long-term flexibility FEI has to adjust the supply volumes (i) it provides or (ii) otherwise obtains in order to better match supply with demand.

Response:

FEI enters into long term (10 years minimum) contracts with suppliers. During an agreed upon contract term, FEI cannot accept less than the agreed upon volume from the supplier. However, typically within the contract term, there is an option to purchase supply over the contracted volume at a specified price if excess supply is available.

From FEI's experience, it takes 24-36 months from entering negotiations with prospective suppliers before the first molecule of RNG is injected into FEI's system, and then another 6-18 months before the suppliers are working at full capacity and injecting the anticipated supply volumes.

Based on this experience, FEI has very little flexibility in altering short term supply, but FEI does have flexibility in terms of increasing long term supply within a 3-4 year window.

FEI has two options for dealing with a short term supply shortfall. First, all of FEI's RNG tariffs contain curtailment clauses (please refer to the response BCUC IR 1.27.2); and, second, FEI can source offsets as an alternative to RNG.

4.4 Does FEI agree that under its proposal that it has a financial incentive via increased return on equity to maximize the use of its upgraders and other equipment – and possibly oversupply RNG?

Response:

FEI does not agree that under its proposal there is incentive to maximize the use of upgraders and to oversupply.

In accordance with Order G-210-13, FEI is limited to owning and operating upgraders in cases where the partner is a regional or municipal government (2013 Biomethane Decision, page 100). In all other cases, FEI is limited to investing in interconnection facilities only. The expected investment in interconnection stations and associated connecting pipeline is expected to be less than $1 million per project, which yields an annual return on equity of approximately $33 thousand in the first year, and declining each year as the assets are amortized.

5.0 Reference: Exhibit B-1, page 36, Table 5-1

Preamble: Some of the utilities identified in Table 5-1 show a high participation rate and a high premium or bill impact. For example, Wellesley Municipal Light Plant has a participation rate of 11.05% with an $11.11/GJ premium and a $20-$30 monthly bill impact. PacifiCorp (Blue Sky Usage and Habitat) has a participation rate of 8.9% with a $2.92/GJ premium and a $20-$25 monthly bill impact.

5.1 Does FEI have any information on what accounts for the high participation rates achieved by these utilities?

Response:

Based on the interviews with three of the top ten utilities, the following characteristics appear to be common across their programs:

- Lower premiums
- They are primarily electricity based programs, and have been in the market longer. Customer awareness of electrical renewable energy is generally higher than that of gas renewable energy.
    - Many of the electric programs are block-based, rather than blend-based programs, which allow customers to fix the dollar amount paid per month regardless of the amount of energy they consume. This may increase participation in the program, but not necessarily increase the volume of energy sold.
- Higher marketing investment and more sophisticated marketing campaigns

The proposal in this application to lower the BERC rate addresses the first characteristic, while FEI's customer education and awareness focus as described in section 7.4 of the Application addresses the third characteristic. In addition, as the program is in market longer and more people become aware of the program it would be anticipated that participation will increase. Please also refer to the response to BCUC IR 1.14.1.

5.2 Has FEI investigated the potential for changes to legislation that would assist in the sale of RNG? For example, in the Creative Energy NES NEFC CPCN

Application FEI proposed to supply NEFC customers with RNG as a low carbon alternative to the DES proposed by Creative Energy, but such RNG supply could not be made mandatory in a particular area due to legislative constraints.

Response:

FEI has considered legislative changes as options with respect to the broad RNG program. However, with respect to the example noted in the question, FEI believes in customer choice, as noted in the Creative Energy proceeding, and therefore favours voluntary enrollment for customers wishing to directly purchase RNG.

6.0 Reference: Exhibit B-1, page 40

Preamble: Bullfrog Power *"does not clean the gas to meet full pipeline quality standards as FEI's supply does. The gas is injected into a transmission pipeline and diluted by mixing it with large volumes of natural gas pipeline in order to keep the gas quality within specification limits."*

6.1 Could this be done in BC to reduce the cost of the RNG supply? Why or why not?

Response:

The particular project that Bullfrog Power uses as a source of "green gas attributes", as FEI understands it, relies on the dilution of low quality gas into a pipeline that flows a relatively large amount of gas. FEI understands that the biomethane is produced in Ontario. Regulations, pipeline capacity and load as well as operational considerations may be different than those in BC.

FEI does not believe that the Bullfrog Power model should be followed in BC. Biomethane must meet the current pipeline specifications at a minimum to ensure customer and asset safety and the continued reliability of the gas distribution system.[2] If the quality of gas does not meet pipeline standards, customers who are in close proximity to the supply source may be adversely affected by the varying heat content and quality. FEI is not willing to accept the safety, reliability or reputational risk of injecting gas into its natural gas system that does not meet pipeline quality standards.

Finally, FEI believes that the proposed change in methodology in this Application provides a way in which to increase RNG demand while balancing the impact on Non-RNG customers without having to amend the established RNG supply principles and parameters.

[2] 2010 Biomethane Application, FEI Final Argument, pages 29-30.