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May 16, 2022

TransLink
400-287 Nelson's Court
New Westminster, B.C
V3L 0E7

Attention: Mr. Ralf Nielsen

Dear Mr. Nielsen:

Re: FortisBC Energy Inc. (FEI)
Revised Renewable Gas Program Application – Stage 2 (Application)
Response to the TransLink Information Request (IR) No. 1

On December 17, 2021, FEI filed the Application referenced above. In accordance with the amended regulatory timetable established in British Columbia Utilities Commission Order G-103-22, FEI respectfully submits the attached response to TransLink IR No. 1.

For convenience and efficiency, FEI has occasionally provided an internet address for referenced reports instead of attaching lengthy documents to its IR responses. FEI intends for the referenced documents to form part of its IR responses and the evidentiary record in this proceeding.

If further information is required, please contact the undersigned.

Sincerely,

FORTISBC ENERGY INC.

Original signed:

Diane Roy

Attachments

cc (email only): Commission Secretary
Registered Parties

1.0 Reference: Program History and Evaluation

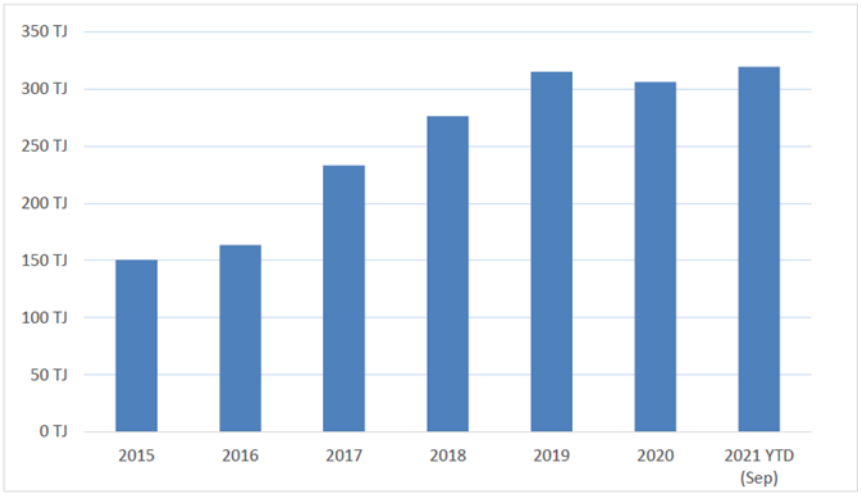
Exhibit B-11, Section 2.1, and Section 2.2.2

On Page 11, Lines 1-2, Figure 2-1, of the Application, FEI indicates the maximum amount of RNG permitted under the applicable regulatory regime during each Phase (e.g., 8.9 PJ/YR for Phase 4 - 2017-2021).

Figure 2-1: Evolution of the Renewable Gas Program

On Page 20, Lines 1-2, Figure 2-3, of the Application, FEI indicates annual sales volumes between 0.2-0.3 PJ (225-325 TJ) for 2017-2021.

Figure 2-3: Renewable Gas Program Annual Sales Volume



1.1 Please explain the significant discrepancy between the annual sales volumes shown in Figure 2-3 and the RNG Program permitted volumes for each Phase shown in Figure 2.1

Response:

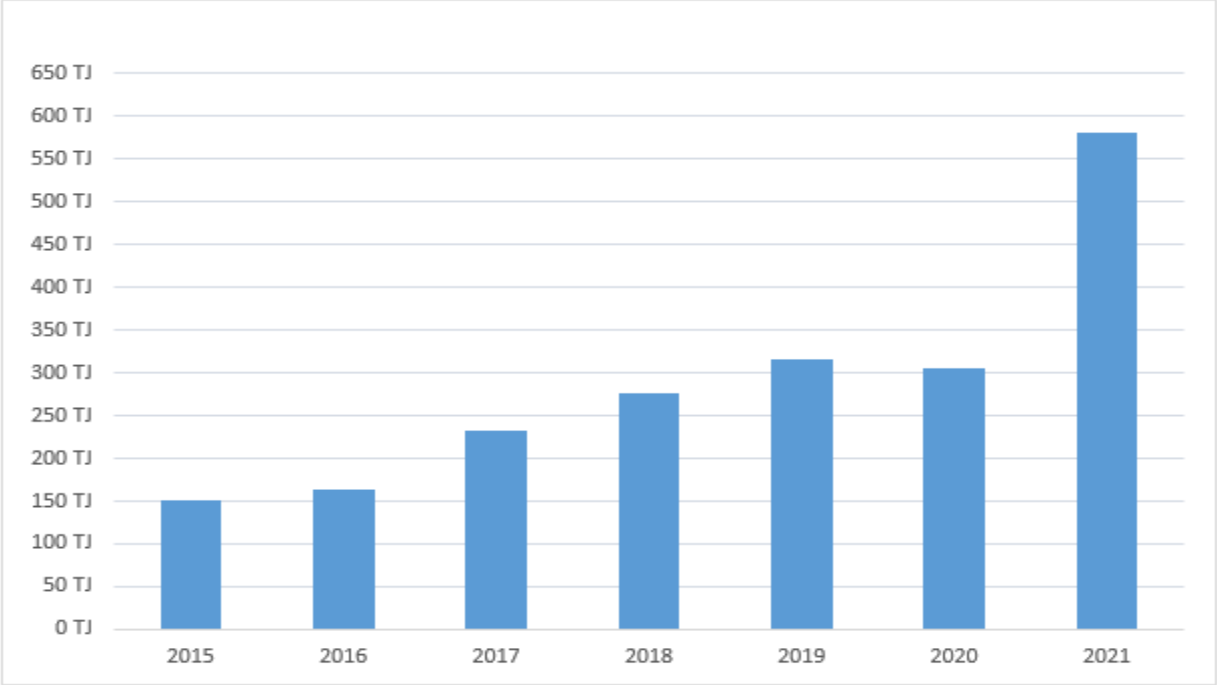
The discrepancy is attributable to the slower than anticipated ramp up in actual supply volumes. The volumes indicated in Figure 2-1 show the maximum volume that FEI was *permitted* to purchase at or below the associated price point. However, Figure 6-2 on page 73 of the Application shows the actual supply volumes that FEI *acquired* in each year, which was less than the permitted amount shown in Figure 2-1. Therefore, the annual sales volumes shown in Figure 2-3 were constrained by the supply of Renewable Gas that was actually available.

1.2 Please update Figure 2-3 to show full year actual sales for 2021.

Response:

Please see the requested revised version of Figure 2-3 below which includes actual sales for all of 2021.

Revised Figure 2-3: Renewable Gas Program Annual Sales Volume



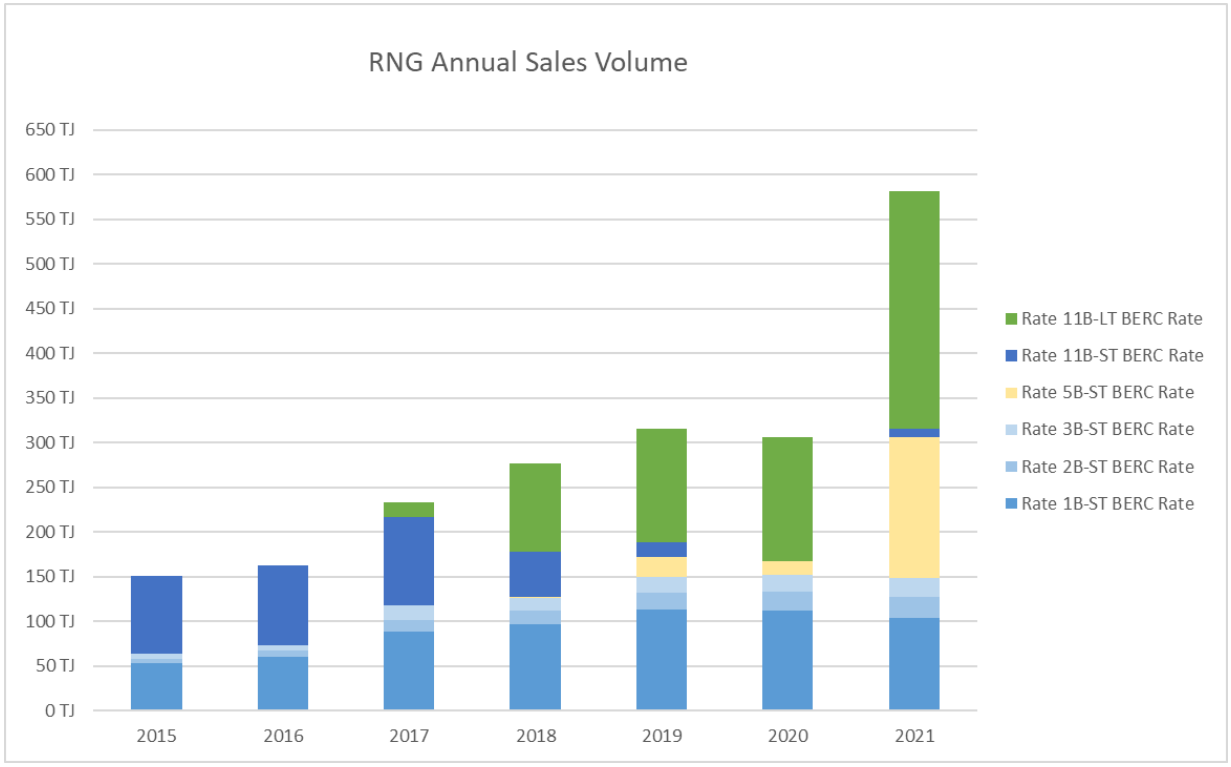
1.3 Please provide a breakdown of the industry sectors who consumed the volumes shown in updated Figure 2-3.

Response:

Please refer to the figure provided below which provides a breakdown by rate schedule of the volumes shown in Figure 2-3. FEI does not track program participation by industry sector; however, each rate schedule generally aligns with the following customer classes:

- Rate 1B = Single Family Residential Customers
- Rate 2B = Small Commercial Customers
- Rate 3B, 5B, 11B = Large Commercial, Industrial, and NGV Customers

Revised Figure 2-3: Renewable Gas Program Annual Sales Volume by Rate Schedule



1.4 Please correlate the volumes of RNG sales by industry sector provided in response to 1.3 above with the Stakeholders consulted as listed in Sections 10.1.1 and 10.1.2 of the Application.

Response:

FEI is unable to provide the requested correlation as information regarding specific stakeholders is confidential and cannot be shared. Moreover, the stakeholders consulted were not necessarily Renewable Gas Program customers and included organizations that have an interest in the development of climate, energy, building and housing-related policy in BC.

2.0 Reference: Evolution of Climate Change Policy

Exhibit B-11, Section 3.4.1.3, Page 31,

On Page 31, Line 3, of the Application, FEI states:

Conventional natural gas is below the current CI threshold in the BC-LCFS. FEI's Compressed Natural Gas (CNG) and Liquefied Natural Gas (LNG) transport customers can earn credits under the BC-LCFS and sell them to other organizations, reducing the cost of adopting a low carbon transportation solution. As an even lower carbon fuel, Renewable Gas presents an opportunity for FEI's customers in the transport sector to further exceed the CI threshold in the BC- LCFS, earn more credits with Renewable Gas, and sell the credits to offset the costs of the Renewable Gas supply.

The CleanBC Roadmap states that the provincial government will increase the stringency of the BC-LCFS. New targets will be developed for medium and heavy-duty vehicles, as the costs and difficulty to electrify these vehicles remain high.

2.1 Please explain how FEI's proposal to recover 100 percent of the average cost of Renewable Gas supply, on a cost per GJ basis, from NGV customers "…presents an opportunity for FEI customers in the transportation sector to further exceed the CI threshold in the BC-LCFS" and is not a disincentive to increase use of RNG in the transportation sector.

Response:

Please refer to the responses to BC Transit IR1 4a and 11a.

3.0 Reference: A Diversified Energy System is in the Best Interest of British Columbians

Exhibit B-11, Section 4.4.1

On Page 50, Line 12, of the Application, FEI states:

The transportation sector accounts for 40 per cent of BC's total emissions, making it a key sector where FEI can achieve significant and immediate carbon reductions with technology that is available today. FEI already provides innovative and clean technology enabling lower emissions throughout the transportation sector; however, decarbonization of this sector is challenging and will require the use of all available tools including cleaner transportation systems, increased investment in fuelling infrastructure, the development of clean trade corridors, and, importantly in the context of this Application, displacing high-carbon transportation fuels with cleaner fuels like natural gas, RNG, biofuels or hydrogen.

3.1 Please provide any analysis or studies that FEI has undertaken that identifies the magnitude, timeline, and financial feasibility of GHG reductions (decarbonization) by industry sector (transportation, buildings, and commercial/industrial) that can be achieved by RNG use in British Columbia.

Response:

Please refer to the responses to BC Hydro IR1 1.6, 1.9 and 1.10.

4.0 Reference: What Customers Need from a Renewable Gas Program

Exhibit B-11, Section 5.2.2.4, and Section 5.7

On Page 59, Line 3, of the Application, FEI states:

All customer segments remain sensitive to the premium paid for Renewable Gas above conventional natural gas, and therefore, the likelihood of signing up for Renewable Gas service declines as the cost to the consumer increases.

On Page 67, Line 25, of the Application, FEI states:

FEI has observed a considerable shift in the thinking of transportation sector customers in recent years. During the first six years of the Renewable Gas Program's operation, this segment of customers, known as NGV customers, expressed only minor interest in purchasing Renewable Gas. During that period, the Program did not have any subscribers from this customer segment. More recently however, NGV customers have shown increased interest in Renewable Gas.

4.1 Given these insights from customers, please provide any analysis or studies that FEI has undertaken on what impact the Application, if approved, would have on the future uptake of RNG in the transportation, buildings, and commercial/industrial sectors.

Response:

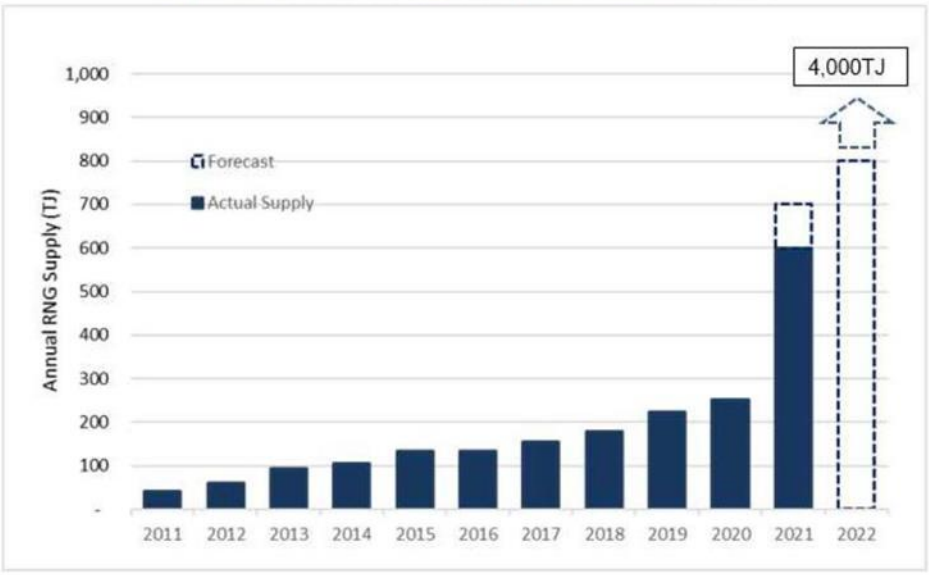
FEI has not studied how the specific proposals described in the Application would impact the future uptake of Renewable Gas in the transportation, buildings, and commercial/industrial sectors. However, prior to completing the Application, FEI interviewed a number of large volume commercial customers and NGV customers. In these interviews, FEI discussed with these customers, among other things, how customers view Renewable Gas, what alternatives to Renewable Gas are at their disposal, and how they might respond to higher priced Renewable Gas. The results of these surveys can be found in Appendix B-2 of the Application. The feedback gathered from these interviews helped inform the forecast of Renewable Gas demand from NGV and commercial/industrial sectors as presented in Figure 8-3 of the Application. For example, based on the feedback from NGV customers on their likelihood of purchasing Renewable Gas at $20 per GJ, FEI reduced the demand from NGV customers in its forecast.

5.0 Reference: Growth in Renewable Gas Supply

Exhibit B-11, Section 6.2.1

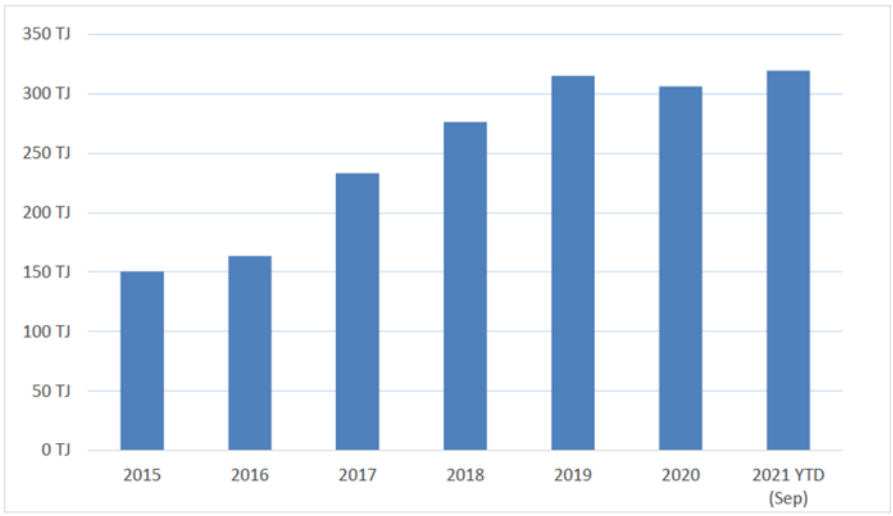
On Page 73, Line 5, Figure 6-2, of the Application, FEI indicates the annual RNG supply in 2019, 2020 and 2021 to be approximately 220, 250, and 600 TJ respectively.

Figure 6-2: Total RNG Supply History and Short Term Forecast



However, on Page 20, Lines 1-2, Figure 2-3, of the Application, FEI indicates annual sales volumes in 2019, 2020, and 2021 to be approximately 320, 310 and 320 TJ respectively.

Figure 2-3: Renewable Gas Program Annual Sales Volume



5.1 Please explain the discrepancy between the volume figures provided in Figures 6-2 and 2-3.

Response:

The difference is attributable to sales volumes exceeding the available supply of Renewable Gas. For customers in Rate Schedules 1B, 2B, 3B, and 5B, FEI may use purchased carbon offsets to make up for a shortfall in supply versus demand.

In the mid-2010s this shortfall appeared to be both manageable, using purchased carbon offsets for customers in Rate Schedules 1B, 2B, 3B, and 5B, and temporary, as FEI expected that Renewable Gas supply would increase to eliminate the shortfall. However, by mid-2019, it was apparent that the growth in supply would not occur as anticipated and continued to lag behind demand. In response, FEI paused new customer enrollments in the Renewable Gas Program, and curtailed service to interruptible customers in order to keep demand more in line with supply.

With the benefit of navigating this supply shortfall, and the addition of new supply contracts (as described in Section 6 of the Application), FEI is significantly better positioned to avoid an extended period of supply and demand imbalance in the future.

6.0 Reference: Growth in Renewable Gas Supply

Exhibit B-11, Section 6.4

On Page 80, Line 14, of the Application, FEI states:

FEI has developed and implemented strategies to mitigate Renewable Gas supply growth risk. The current supply forecast for Renewable Gas can be affected by external factors such as equipment failure, feedstock supply challenges and weather events. In this section, FEI will discuss how these supply risks are mitigated by increasing FEI's supply volumes within BC and outside of BC, monitoring new technology, diversifying the supply portfolio, working with stakeholders to get products ready for market and working with government to update policies in order to enable growth.

6.1 Please describe what business-to-business measures (e.g., co- investment, joint ventures, financial incentives, risk management, contract structures, etc.) FEI is taking or is planning to take to ensure the growth of supply volumes from its approved, anticipated, and future supply projects.

Response:

FEI is exploring a variety of business-to-business measures to ensure the growth of Renewable Gas supply volumes. While FEI is keeping these measures confidential in order to maintain its commercial advantage in the market, FEI has filed all Renewable Gas supply agreements with the BCUC.

6.2 Please describe what measures FEI is taking to coordinate investment and financing in RNG supply projects with senior levels of government, cities, municipalities, and the private sector.

Response:

Over the history of the Renewable Gas Program, FEI has played a leadership role in advancing RNG supply, demand and enabling policies requiring coordination between the private sector as well as provincial, Indigenous, local and regional governments in some cases. Examples of actions that FEI has taken include:

- Coordinating with both local governments and the private sector in making investments in RNG supply projects. For example, FEI invested in a biogas upgrading plant at the Glenmore landfill owned by the City of Kelowna and has worked directly with private sector RNG suppliers by investing in stations and pipeline to connect the sources of RNG to the existing FEI system.
- Working with the provincial government in the development and amendment of the GGRR to enable increased investment in, and financing of, RNG projects. FEI continues to

collaborate with the provincial government to further develop opportunities in investment and financing for Renewable Gas projects.

- Securing approval from the BCUC for the Clean Growth Innovation Fund (CGIF), a mechanism that allows FEI to co-fund innovative energy projects over the next four years in partnership with governments and industry.
- Issuing a green bond in 2020 to provide low-cost capital for projects including renewable energy, RNG, energy efficiency, clean transportation and pollution prevention. FEI will look at further opportunities to use green bond financing to support future Renewable Gas projects.

7.0 Reference: Proposed Renewable Gas Program

Exhibit B-11. Section 7.4.3.2

On Page 104, Line 6, of the Application, FEI states:

FEI proposes that the rate for NGV and T-Service customers be set to recover 100 percent of the average cost of Renewable Gas supply, on a cost per GJ basis. The rationale for this change is discussed below.

There are two reasons for increasing the rate for NGV customers. First, any GHG emission reductions resulting from the sale of Renewable Gas to NGV customers will not contribute to achieving the GHG reduction policy described in the CleanBC Roadmap. …. Second, Renewable Gas has a higher value to NGV customers than to other customer types. NGV customers receiving compressed natural gas (CNG) service and liquefied natural gas (LNG) service in British Columbia are eligible for Part 3 fuel supplier status under the BC-LCFS.

On Page 104, Line 27, of the Application, FEI states:

In effect, the current BC-LCFS provides these customers with a financial incentive to reduce their GHG emissions by purchasing Renewable Gas, as discussed in Section 5.7.2.

7.1 Given the CleanBC Roadmap to 2030 direction of "…Increased clean fuel requirements and doubling the target for renewable fuels produced in B.C. to 1.3 billion litres by 2030"[1] please explain, by reference to the provisions of the CleanBC Roadmap to 2030 directed at the energy and transportation pathways, why FEI states "…the sale of Renewable Gas to NGV customers will not contribute to achieving the GHG reduction policy described in the CleanBC Roadmap."

Response:

Please refer to the response to BC Transit IR1 4a.

7.2 Please provide an estimate of the future net RNG costs per GJ factoring in carbon intensity and carbon credits for transportation customers who use greater than 500,000 GJ / year and a typical bill/invoice.

[1] CleanBC Roadmap to 2030, Province of British Columbia, 2021. Page 8, 13, 28, 67, 68. URL: https://www2.gov.bc.ca/assets/gov/environment/climate-change/action/cleanbc/cleanbc_roadmap_2030.pdf.

Response:

Assuming 42,000 GJ of consumption per month (504,000 GJ per year) under Rate Schedule 5, and a $400 per credit price for the BC-LCFS credits, a customer would pay a net cost of approximately $4.11 per GJ for Renewable Gas. Please note that this is substantially less than any other Renewable Gas Program customer pays for Renewable Gas, and also less than customers pay for conventional natural gas.

Please refer to Attachment 7.2 for a fully functional Excel spreadsheet showing a typical invoice mockup and calculation of the net Renewable Gas cost per GJ.

7.3 Please provide the forecast rate impact to transportation customers from 2023 to 2033 based on FortisBC's RNG acquisition cost forecast.

Response:

Please refer to the response to BC Transit IR1 11c.

7.4 By reference to each ratepayer class affected by the Application, please explain how the proposed rates are not unjust, unreasonable, unduly discriminatory, or unduly preferential across the affected ratepayer classes.

Response:

Please refer to the response to BCUC IR1 16.2.

8.0 Reference: Consultation and Engagement

Exhibit B-11, Section 10.1.1 and 10.1.2

On Page 135, Line 4, of the Application, FEI states:

FEI engaged with 176 individual stakeholders, including interveners and interested parties, industry, associations, an environmental non-governmental organization, community associations, local and provincial governments. The subset of industry engaged include: builder/developers, energy consultants, trades, building and trades associations, manufacturers and a Renewable Gas supplier.

On Page 135, Line 21, of the Application, FEI states:

Public consultation is an integral component of FEI's application development process and provides an opportunity for stakeholders to ask questions, provide input and inform FEI's proposals.

On Page 136, Line 8, Table 10-1, of the Application, FEI provides a list of stakeholders consulted in Phase 1.

On Page 138, Line 18, Table 10-2, of the Application, FEI provides a list of stakeholders consulted in Phase 2.

8.1 Please explain why the current transportation sector users of RNG are not listed as stakeholders and do not appear in Tables 10-1, and 10-2.

Response:

Please refer to the responses to BC Transit IR1 12 and 13.

Attachment 7.2

REFER TO LIVE SPREADSHEET MODEL

Provided in electronic format only

(accessible by opening the Attachments Tab in Adobe)