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British Columbia Utilities Commission
Suite 410, 900 Howe Street
Vancouver, BC V6Z 2N3

Attention: Mr. Patrick Wruck, Commission Secretary

Dear Sirs/Mesdames:

Re: FortisBC Energy Inc. (“FEI”) 2022 Long Term Gas Resource Plan – Project No. 1599324 - Supplemental Argument

In accordance with the regulatory timetable in the above proceeding, we enclose for filing the Supplemental Argument of FortisBC Energy Inc., dated November 30, 2023.

Yours truly,

FASKEN MARTINEAU DuMOULIN LLP

[Original signed by]

Christopher Bystrom*
*Law Corporation

Encl.

cc (email only): Registered Interveners.



British Columbia Utilities Commission

FortisBC Energy Inc.

2022 Long-Term Gas Resource Plan

Supplemental Argument of

of

FortisBC Energy Inc.

November 30, 2023

Table of Contents

A. Introduction	3
B. The 2022 LTGRP is Aligned with Provincial GHG Emission Reduction Targets.....	4
C. The 2022 LTGRP Includes Initiatives to Assist in Meeting Sectoral Targets	6
D. FEI’s DEP Scenario is Supported by BC’s Policy Position on Reducing GHG Emissions	9
E. Conclusion.....	10

A. Introduction

1. As requested by the Panel,¹ FEI is filing these supplemental final submissions in response to the letter filed by the Ministry of Energy, Mines and Low Carbon Innovation (Ministry).² In the letter, the Ministry confirmed that “the policy position of the Ministry and the Government of British Columbia (Government) is to support projects and initiatives that will lead to emission reductions from all sectors of the economy. Advancing these projects and initiatives is key to reaching the Province’s legislated emission reduction targets.” The Ministry also expressed its interest in hearing from interveners on “whether FEI’s 2022 Long-Term Gas Resource Plan (2022 LTGRP) will meet Energy Objective 2 (g) (to reduce BC greenhouse gas emissions).” FEI clarifies that the requirement of section 44.1(8) of the *Utilities Commission Act* is that the BCUC “consider...the applicable of British Columbia’s energy objectives” when determining whether to accept a long-term resource plan.

2. Consistent with FEI’s Final Argument,³ FEI submits that the BCUC’s consideration of British Columbia’s energy objective in section 2(g) of the *Clean Energy Act* should strongly support the conclusion that the 2022 LTGRP is in the public interest. As discussed below, FEI’s Diversified Energy (Planning) Scenario (DEP Scenario) in the 2022 LTGRP plans for emission reductions that match the applicable emission reduction targets for the province as a whole in the *Climate Change Accountability Act*.⁴ FEI’s DEP Scenario also provides initiatives to assist customers in meeting the sectoral targets in the *Climate Change Accountability Act*. As FEI’s 2022 LTGRP will lead to broad emission reductions across multiple sectors in the province, the Ministry’s letter confirms that the 2022 LTGRP is supported by Government policy and is key to reaching the Province’s legislated emission reduction targets.

3. FEI has organized this submission around the following points:

- The 2022 LTGRP aligns with the GHG emission targets for the province as a whole.

¹ Exhibit A-20.

² Exhibit E-6.

³ FEI Final Argument, November 1, 2023, paras 187-188.

⁴ S.B.C. 2007, c. 42. Note that section 2(g) also set the targets for 2012, 2016, and 2020, which have since passed.

- The 2022 LTGRP provides initiatives to assist customers in meeting sectoral targets.
- FEI's vision for a diversified energy future supports BC's policy on reducing GHG emissions.

B. The 2022 LTGRP is Aligned with Provincial GHG Emission Reduction Targets

4. FEI designed the 2022 LTGRP's DEP Scenario to align with provincial policy on GHG emissions reduction, both legislated and proposed. In particular, the DEP Scenario reflects FEI undertaking all available and reasonable GHG emission reduction initiatives to meet the Province's legislated 2040 target, which is the closest target to the bookend year in FEI's 20-year planning horizon, and the proposed and more stringent BC Greenhouse Gas Reduction Standard (GHGRS) emissions cap on FEI's customers' emissions.⁵ In alignment with the ambitious but achievable plan established by FEI's Clean Growth Pathway, the 2022 LTGRP reflects FEI's plans to reduce emissions in alignment with the legislated targets set for provincial emission reductions below 2007 levels:⁶

- 16 percent by 2025;⁷
- 40 percent by 2030;⁸
- 60 percent by 2040;⁹ and
- 80 percent by 2050.¹⁰

5. The figure below compares the emission reductions resulting from FEI's DEP Scenario with the Province's legislated 2030, 2040 and 2050 targets, in addition to the Province's proposed

⁵ Exhibit B-1, 2022 LTGRP, p. 9-2; Exhibit B-23, BCUC IR2 74.1.

⁶ The 2007 baseline GHG emissions are publicized by the Minister of Environment pursuant to s. 3 of the *Climate Change Accountability Act*. The British Columbia Greenhouse Gas Inventory Report 2007 was published by the Minister of Environment in July 2009: <https://www2.gov.bc.ca/assets/gov/environment/climate-change/data/provincial-inventory/2007/pir-2007-full-report.pdf>.

⁷ Ministerial Order No. M446 (December 9, 2020), made under the authority of the *Climate Change Accountability Act*, s. 2(2.1).

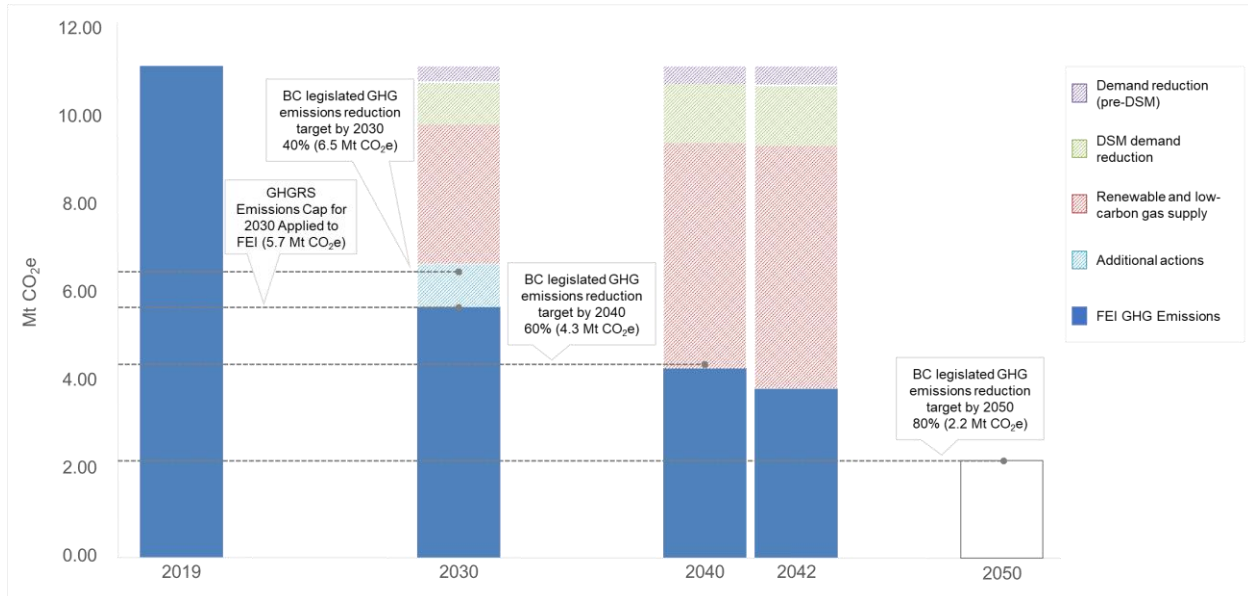
⁸ *Climate Change Accountability Act*, s. 2(1)(a.1).

⁹ *Climate Change Accountability Act*, s. 2(1)(a.2).

¹⁰ *Clean Energy Act*, s. 2(g)(iv); *Climate Change Accountability Act*, s. 2(1)(b).

GHGRS, which would place an even more stringent GHG emissions cap (rather than target) on FEI's customer emissions.

Revised Figure 9-1 from the 2022 LTGRP¹¹



6. As the above figure illustrates, the initiatives included in the DEP Scenario will lower FEI's customers' emissions proportionally more than the 2030 target set by the Province. Emissions continue to be reduced year-over-year, again exceeding the 2040 target. While the 2050 target is beyond the planning period for the 2022 LTGRP, the DEP Scenario sets FEI on a trajectory to meet or exceed the 2050 emission reduction target as well.

7. In summary, the DEP Scenario and the Action Plan in the 2022 LTGRP reflect FEI's plans to pursue all reasonable GHG emission reduction initiatives that were available at the time of filing the 2022 LTGRP and align with the Province's GHG reduction targets for the province as a whole. However, FEI's ability as a regulated public utility to reduce its emissions is constrained by legislation. The recent amendments to the *Demand-Side Measures Regulation* (DSM Regulation) illustrate this reality, as these amendments removed opportunities for emissions reductions through incentives for high efficiency gas space and water heating equipment.

¹¹ Exhibit B-1, 2022 LTGRP, Figure 9-1 illustrates the GHG emission reductions for residential, commercial and industrial customers under the DEP Scenario. Figure 9-3 shows the emissions reductions that result from growth in the transportation and global LNG export sectors.

Nonetheless, consistent with the DEP Scenario and the Action Plan in the 2022 LTGRP, FEI will continue to pursue all available and reasonable GHG emission reduction initiatives and advocate for legislative support for these activities. FEI's next long-term resource plan will reflect the latest policy and legislative developments, and will provide estimates of all reasonable GHG reduction initiatives available to FEI to help meet provincial GHG reduction targets.

C. The 2022 LTGRP Includes Initiatives to Assist in Meeting Sectoral Targets

8. The 2022 LTGRP also presents initiatives that will assist in meeting the sectoral GHG reductions set under *Climate Change Accountability Act*. The *Climate Change Accountability Act* does not assign responsibility for achieving the emission reduction targets; nor does it prescribe the methods that should be used to reach them. However, the BC Government has oriented its province-wide GHG emission reduction targets around the following four sectoral targets:

- Transportation – 27 to 32 percent;
- Industry – 38 to 43 percent;
- Oil and Gas – 33 to 38 percent; and
- Buildings and Communities – 59 to 64 percent.¹²

9. While FEI does not fall into any of these sectoral categories itself, it recognizes that its gas supply is a source of GHG emissions for its customers in the transportation, industry, and buildings and communities (residential and commercial) sectors. FEI serves more than 1 million customers across BC in 135 communities. This wide reach enables FEI to play an important role in providing services to customers that help BC meet these objectives.¹³

10. In recognition of FEI's potential for assisting its customers in meeting their targets, the four pillars of the Clean Growth Pathway will support FEI's customers to reduce their GHG emissions in their respective sectors by both reducing the carbon intensity of their gas supply, and empowering them with more options to decarbonize their applications:

¹² Section 2(4)(a) of the *Climate Change Accountability Act* requires the Minister to establish GHG emission targets for individual sectors by order: BC Ministerial Order No. M138 (2021).

¹³ Exhibit B-1, 2022 LTGRP, p. 1-8.

- **Pillar One:** FEI plans to acquire and allocate 99 PJ of renewable and low-carbon gas to residential, commercial and industrial customers by 2040, resulting in 4.9 Mt CO₂e of GHG emission reductions.¹⁴
- **Pillar Two:** FEI selected the most ambitious suite of cost-effective DSM measures to maximize the energy savings and GHG reduction potential of DSM, resulting in 1.3 Mt CO₂e of GHG emission reductions by 2040.¹⁵
- **Pillar Three:** FEI will invest in low-carbon transportation (LCT) to reduce GHG emissions from the transportation industry, which makes up the largest share of overall provincial emissions. FEI's initiatives leverage the market readiness of CNG and LNG medium and heavy-duty vehicle technology to achieve emissions reductions through the planning horizon to 2040 and beyond.¹⁶ These emission reductions are represented in Figure 9-3 of the 2022 LTGRP as part of the GHG Emission Reductions Accounted for Within BC.
- **Pillar Four:** FEI will invest in LNG to lower GHG emissions in marine fueling and global markets, helping to reduce GHG emissions both within and outside of BC and significantly improving local air quality.¹⁷ FEI's marine fueling initiatives that result in GHG emission reductions in BC are also represented in Figure 9-3 of the 2022 LTGRP as part of the GHG Emission Reductions Accounted for Within BC. In total, the emission reductions from FEI's initiatives within BC as a result of Pillars 3 and 4 of the Clean Growth Pathway total 0.45 Mt CO₂e in 2040.

11. Pillar One of the Clean Growth Pathway provides the greatest opportunity for FEI's customers to reduce their emissions by transitioning to renewable and low-carbon gases, including renewable natural gas (RNG), hydrogen, syngas and lignin. In recognition of its decarbonization potential, Pillar 1 is the cornerstone of the 2022 LTGRP and is incorporated into all aspects of FEI's resource planning process and reflected as FEI's 2022 LTGRP Action Item 1, which is to "[a]ccelerate the development and acquisition of renewable and low-carbon gas supplies to meet customer energy needs and contribute to provincial emission reduction targets".

¹⁴ The decarbonization potential of FEI's renewable and low-carbon gas projects and initiatives is discussed in Part Two, Section (B)(a) of FEI's Final Argument.

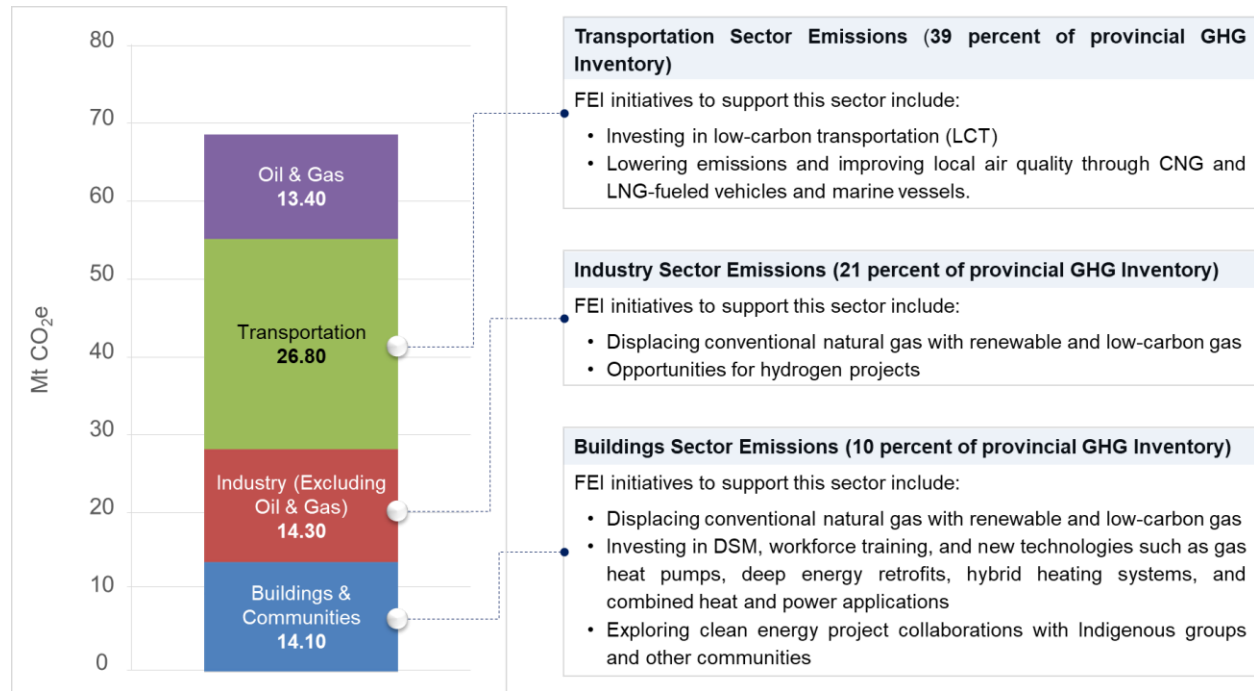
¹⁵ FEI's plans to invest in DSM to reduce energy use among residential, commercial and industrial customers, are described in Part Two, Section (B)(b) and Part Three, Section B of FEI's Final Argument. See also: Part Four, Section B, for a discussion of FEI's intention to pursue adequate, cost-effective DSM as prescribed by legislation.

¹⁶ Exhibit B-1, 2022 LTGRP, Section 2.5; FEI Final Argument, Part Two, Section B(c).

¹⁷ Exhibit B-1, 2022 LTGRP, Section 3.6; FEI Final Argument, Part Two, Section B(d).

12. Figure 3-2 of the 2022 LTGRP illustrates BC’s 2019 GHG emissions inventory by sector and describes FEI’s initiatives to address these sectoral emissions:

Figure 3-2: 2019 GHG Emissions by Sector in BC and FEI Initiatives to Support Decarbonization¹⁸



13. As demonstrated in the above figure, the renewable and low-carbon gas initiatives set out in FEI’s 2022 LTGRP will reduce emissions in every sector of the economy that FEI serves. Renewable and low-carbon gas initiatives are particularly valuable to industrial and transportation customers due to the absence of decarbonization alternatives currently available for their carbon-intensive energy needs, and particularly valuable to residential and commercial customers in lowering their emissions while continuing their affordable and reliable space and water heating service. As renewable and low-carbon gas supply increases to meet government emission reduction targets, FEI intends to distribute that supply to all sales customers.¹⁹

¹⁸ See Exhibit B-1, 2022 LTGRP, 3.2.1 for further discussion of how FEI designed the Clean Growth Pathway to address BC’s GHG sectoral emissions. Section 3.2.2.4 also sets out how the Clean Growth Pathway supports emerging decarbonization technologies and innovation in BC.

¹⁹ Exhibit B-1, 2022 LTGRP, p. 3-11. In the near-term, FEI intends to distribute RNG supply to all sales customers (as applied for in FEI’s December 2021, Comprehensive Review and Application for a Revised Renewable Gas Program application). Further into the planning period, FEI intends to commence blending hydrogen across segments of its low-pressure gas distribution system (for further discussion, see Part Two, Section B(a) of FEI’s Final Argument).

D. FEI's DEP Scenario is Supported by BC's Policy Position on Reducing GHG Emissions

14. The Province's policy emphasis on supporting "projects and initiatives that will lead to emission reductions from all sectors of the economy" to reach legislated emission reduction targets directly corresponds with the approach FEI took to designing the Clean Growth Pathway and the DEP Scenario, where FEI leverages *all* reasonable measures to lower GHG emissions in *all* sectors of the economy that it serves. By implementing a whole economy, or diversified energy, approach to decarbonization, the DEP Scenario and Clean Growth Pathway leverage the unique strengths of its gas infrastructure to provide the most impact and value to reducing GHG emissions in BC.

15. A diversified approach that applies all reasonable initiatives to decarbonize all sectors of the economy recognizes the cumulative potential of leveraging a diverse set of decarbonization tools. For example, the DEP Scenario stacks the decarbonization potential of renewable and low-carbon gas with innovative DSM technologies in buildings and industry, while displacing more GHG-intensive fuels in the transportation sector, which accounts for the largest share of overall provincial emissions. The DEP Scenario also recognizes the decarbonization potential of electrification and considers that initiatives that decarbonize the gas system are complementary to electrification initiatives.²⁰ However, the DEP Scenario accounts for the reality that electrification cannot be the only, or even the primary, method of decarbonization if the Province's targets are to be achieved.²¹

²⁰ For instance, FEI's planning scenario incorporates the GHG reduction potential of electrification alongside the GHG reduction potential of the Clean Growth Pathway Pillars. The DEP Scenario is modelled with the assumption that 25% of residential and commercial gas demand, and 10% of industrial gas demand is electrified by 2050, with a straight-line interpolation for each year of the forecast period (see Exhibit B-1, 2022 LTGRP, Section 4.5.1 and Appendix B-2, pp. 11-12).

²¹ The 2022 LTGRP is a diversified energy plan that reflects the findings of extensive independent academic studies (Exhibit B-1, Appendix A-9), studies commissioned by FEI (Exhibit B-1, Appendix A-2), and studies undertaken by FEI and FBC internal experts (Exhibit B-20, Kelowna Electrification Case Study), that conclude there are unintended consequences and risks of an electrification-centric approach to energy planning in BC, including stalling progress on reaching provincial GHG reduction targets.

E. Conclusion

16. As described in these submissions, in the 2022 LTGRP, FEI's DEP Scenario charts a course that is aligned with FEI's Clean Growth Pathway and government policy and legislated GHG emission reduction targets. The DEP Scenario and Clean Growth Pathway are also the least cost way to meet these targets as they leverage the strengths of both the gas and electric systems, keeping rates as affordable as possible for all British Columbians.

ALL OF WHICH IS RESPECTFULLY SUBMITTED

Dated:	November 30, 2023	<i>[original signed by Christopher Bystrom]</i>
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		Christopher Bystrom
		Counsel for FortisBC Energy Inc.

Dated:	November 30, 2023	<i>[original signed by Courtney Gibbons]</i>
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		Courtney Gibbons
		Counsel for FortisBC Energy Inc.