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British Columbia Utilities Commission
Suite 410, 900 Howe Street
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Attention: Patrick Wruck, Commission Secretary

Dear Sirs/Mesdames:

**Re: FortisBC Inc. - Application for a Certificate of Public Convenience and Necessity
for Approval of the Fruitvale Substation Project**

We enclose for filing in the above proceeding the Final Submission of FortisBC Inc., dated June 27, 2024.

Yours truly,

FASKEN MARTINEAU DuMOULIN LLP



Christopher Bystrom*
*Law Corporation

Encl.

cc (email only): Registered Interveners



British Columbia Utilities Commission

FortisBC Inc.

**Certificate of Public Convenience and Necessity for the
Fruitvale Substation Project**

Final Argument of

of

FortisBC Inc.

June 27, 2024

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PART ONE: INTRODUCTION

1. Further to British Columbia Utilities Commission (BCUC) Order G-135-23, FortisBC Inc. (FBC) filed its Application for Approval of a Certificate of Public Convenience and Necessity for the Fruitvale Substation Project (Application)¹ on February 29, 2024. The Fruitvale Substation Project (Project) includes decommissioning FBC's existing Fruitvale (FRU) and Hearn's (HER) substations and constructing a new substation at 2064 Grieve Road (Grieve Location) in Fruitvale, BC (New FRU Substation).² Based on the evidence in this proceeding, FBC respectfully submits that the BCUC should grant a Certificate of Public Convenience and Necessity (CPCN) for the Project and permission for FBC to decommission the existing FRU and HER substations.

2. FBC submits that the Application and responses to information requests (IRs) have provided comprehensive and compelling evidence that the Project is in the public interest. It is clear that the age and condition of the equipment at the FRU and HER substations have advanced to a point where replacement of the equipment is required to maintain safe and reliable supply of electricity to customers in Fruitvale and the surrounding area. It is equally clear that the alternative that best meets the need for the Project is to build a single new substation on a new property close to the load centre, and that – based on FBC's lengthy and detailed search for a suitable new location – the Grieve Location is the only suitable property on which to construct the new substation.

3. The forecast in-service date for the Project is Q4 2026 and the total Class 4 estimated Project cost is \$18.867 million in as-spent dollars, including cost of removal and Allowance for Funds Used During Construction (AFUDC). The Project is estimated to result in a levelized rate impact of 0.29 percent over the 53-year analysis period. For an average FBC residential customer consuming 11,000 kWh per year, this is equivalent to an average annual bill impact of approximately \$4.56 in 2027.³

¹ Exhibit B-1.

² Exhibit B-1, Application, p. 1.

³ Exhibit B-1, Application, pp. 5-6.

4. FBC's consultation and engagement activities for the Project commenced in 2019 and have provided stakeholders and rights holders a meaningful opportunity to learn about the Project and provide feedback and input to inform FBC's decision making on the Project. FBC has responded to questions and concerns raised through the consultation and engagement process, and incorporated feedback and input into its process to identify a suitable site for the New FRU Substation. FBC's engagement with stakeholders and rights holders is ongoing and will continue throughout the duration of the Project. In particular, FBC will continue to conduct in-person consultation with neighbouring property owners to discuss feedback on greening, screening, and station aesthetics, as well as to mitigate any issues related to construction.⁴

5. In FBC's submission, the Project is needed to maintain the safe and reliable supply of electricity, aligned with British Columbia's energy objectives, consistent with FBC's most recently accepted long-term resource plan, and in the public interest. Therefore, FBC submits that the BCUC should grant the approvals sought in the Application. A draft Order is attached as Appendix H-2 to the Application.

6. While FBC relies on the entirety of its evidence filed in this proceeding, the remainder of this final argument focusses on the main topics explored in IRs, as follows:

- Part Two addresses the need for the Project, including equipment condition and aging infrastructure and risk to the reliability of electricity supply.
- Part Three addresses FBC's analysis of alternatives to the Project, including how the New FRU Substation at the Grieve Location is the most reasonable alternative for the Project.
- Part Four addresses FBC's consultation and engagement process, including how FBC has responded to concerns raised and incorporated feedback and input into its Project decision making, such as its process for selecting a suitable site for the New FRU Substation.

⁴ Exhibit B-3, BCUC IR1 13.6.

PART TWO: THE PROJECT IS NEEDED TO ADDRESS EQUIPMENT CONDITION AND RELIABILITY OF SUPPLY

7. FBC submits that the need for the Project is clear and, given the amount of time required to locate a suitable property for the New FRU Substation, FBC must now complete the Project as soon as reasonably possible.⁵

8. The Project is needed for two key reasons:

- Equipment condition and aging infrastructure at both the FRU and HER substations; and
- Risks to the reliability of the electricity supply in Fruitvale and the surrounding area.

Each of these drivers of project need are addressed below.

A. Equipment at FRU Substation is at Risk of Failure in the Near Term and Needs To Be Replaced

9. Much of the equipment at the FRU substation is in poor condition, at risk of failure in the near term, and therefore needs to be replaced. The FRU substation has a single 63/13 kV transformer referred to as the Fruitvale T1 transformer (FRU T1). The station is supplied by the transmission line 20L through high voltage fuses and disconnects supported by wood framed structures. The station also has a capacitor bank, metal-clad switchgear, and a small control building. The metal-clad switchgear contains all distribution line breakers and auxiliary equipment and is housed inside the control building.⁶

(a) FRU Switchgear and Breakers Need to be Replaced Due to Poor Condition

10. The FRU substation switchgear and breakers are at risk of failure due to poor condition and need to be replaced.⁷ The switchgear was manufactured in 1967 and is now 56 years old.

⁵ Exhibit B-1, Application, p. 47.

⁶ Exhibit B-1, Application, p. 13.

⁷ Exhibit B-3, BCUC IR1 1.2.

Due to the aging of the components, the breakers are operating slowly and show signs of extensive arcing during fault interruption.⁸

11. In 2017, METSCO, a qualified third-party contractor, performed a comprehensive condition assessment of FBC's stations with metal-clad switchgear.⁹ At the time of assessment, METSCO determined that the FRU substation metal-clad switchgear had a health index of 31.25 percent, which is poor.¹⁰ METSCO noted that the switchgear circuit breaker contact resistance is outside the specification limit. FBC's 2024 maintenance records confirm that, despite FBC's efforts, the condition of the circuit breaker has not improved, and the breaker's operating time remains outside of the normal bandwidth.¹¹ While the actual age of the equipment is 50, METSCO determined in 2017 that it had an effective age of 95 years. The effective age of 95 years represents the advanced/accelerated aging of the asset due to its condition,¹² and is an indication that the equipment has exceeded its normal life expectancy.¹³ Based on its analysis, METSCO found that the FRU metal-clad switchgear was in the poorest condition of all of FBC's stations evaluated and identified it as the highest priority for replacement.¹⁴

12. FBC attempted to repair the equipment in 2018 and 2024, with no improvement to condition. Further, a retrofit/refurbishment of the FRU breakers and switchgear would not be cost effective, extend the life of the electrical equipment, or improve safety and reliability. Notably, a switchgear breaker retrofit is more costly than purchasing new breakers.¹⁵

13. If this equipment were to fail, switchgear replacement could take up to one year and replacing the equipment on an urgent basis is likely to be more costly than through a planned upgrade. A failure of the switchgear would result in an outage to customers served by the FRU

⁸ Exhibit B-1, Application, p. 20.

⁹ Exhibit B-1, Appendix A.

¹⁰ Exhibit B-1, Application, p. 20.

¹¹ Exhibit B-5, CEC IR1 2.2.

¹² Exhibit B-1, Application, p. 20 and Appendix A, pp. 14-15.

¹³ Exhibit B-5, CEC IR1 2.2.

¹⁴ Exhibit B-1, Application, p. 20.

¹⁵ Exhibit B-6, ICG IR1 3.2.

substation for as long as required to either replace the equipment or to install a mobile transformer.¹⁶

(b) FRU T1 Needs to be Replaced

14. FBC's engineering analysis recommends that FRU T1 be replaced in the next two to three years given its poor condition and risk of failure. FRU T1 is an industrial transformer that has been retrofitted over the years. FBC engineers assessed the condition of FRU T1 in 2023. The resulting Condition and Life Assessment Report¹⁷ recommended the replacement of FRU T1 in the next two to three years due to the deterioration of the solid and liquid insulation.¹⁸ The engineering report noted that FRU T1 had a poorly designed cooling system, characteristic of industrial transformers, which have a shorter useful life than network transformers. Industry statistics indicate that probability of failure for industrial transformers exponentially increases after 20 years and there are no industrial transformers older than 50 years remaining in service. The report estimated the probability of failure of FRU T1 as upwards of 15 percent (1 in 7 chance of failure per year).¹⁹

(c) Additional Equipment Issues: Switches, Wood Structures and Fuses

15. Additional equipment issues at the FRU substation include the following:

- There are hot spots on the 63 kV transmission switches FRU 20-1 and 20-2, which show signs of contact overheating during peak load conditions.²⁰
- The wood structures within the station are in poor condition and require replacement.²¹
- The FRU substation is supplied by the transmission line 20L through high voltage fuses, which are slow, do not have SCADA or event recording capabilities, and do not protect against all station faults. Furthermore, a station design using high voltage fuses with distribution switchgear creates a higher arc flash hazard,

¹⁶ Exhibit B-1, Application, p. 20.

¹⁷ Exhibit B-3, Attachment 1.1a: Condition and Life Assessment Report Fruitvale T1 Transformer.

¹⁸ Exhibit B-3, BCUC IR1 1.1.

¹⁹ Exhibit B-3, Attachment 1.1a: Condition and Life Assessment Report Fruitvale T1 Transformer.

²⁰ Exhibit B-1, Application, p. 20.

²¹ Exhibit B-1, Application, p. 20.

increasing employee safety risk and risk of damage to surrounding equipment. To improve safety and reliability, new FBC substation designs replace high voltage fuses with high voltage circuit breakers.²²

B. Equipment at HER Substation is at Risk of Failure in the Near Term and Needs To Be Replaced

16. As with the FRU Substation, the equipment at the HER substation is in poor condition, at risk of failure in the near term, and therefore needs to be replaced. The HER substation was constructed in the 1950s to supply an industrial customer adjacent to the property, but now supplies electricity to 216 residential, commercial, and irrigation customers in the Park Siding area.²³ The substation has three single phase 66/13 kV transformers, which together are referred to as the Hearn's T1 transformer (HER T1).²⁴

17. The primary issue at the HER substation is HER T1, which was manufactured in 1950 and is now 73 years old. FBC engineers assessed the condition of HER T1 in 2023. The resulting Condition and Life Assessment Report²⁵ concluded that HER T1 has reached the end of its useful life based on the determination of the solid and liquid insulation. Industry statistics indicate that the probability of failure for network transformers of this kind exponentially increases after 40 years with no network transformers older than 70 years remaining in service. Therefore, given the age of HER T1, the failure probability of this unit is estimated to be extremely high. This means that any transient system disturbance has a reasonable chance of causing a transformer failure. Considering the current state of the equipment and the potential risk of failure, FBC concluded that HER T1 should be replaced in the next two to three years.²⁶

18. Additional equipment issues found at the HER substation include the wood structures within the station, which are in poor condition,²⁷ and HER Reg-B, which is at end of life.²⁸

²² Exhibit B-1, Application, p. 21.

²³ Exhibit B-1, Application, p. 17, as updated in Exhibit B-6, ICG IR1 1.2.

²⁴ Exhibit B-1, Application, p. 17.

²⁵ Exhibit B-3, Attachment 1.1b: Condition and Life Assessment Report Hearn's T1 Transformer.

²⁶ Exhibit B-1, Application, p. 21; Exhibit B-3, BCUC IR1 1.1.

²⁷ Exhibit B-1, Application, p. 21.

²⁸ Exhibit B-3, BCUC IR1 1.2.

C. Reliability of Electricity Supply for Fruitvale and Surrounding Area

19. The Project is also needed to address the single transformer configurations at the existing FRU and HER substations, where a transformer outage results in a complete station outage.

20. Even though unplanned transformer outages are rare, the impact to customers can be significant. In the event of an unplanned FRU T1 outage, which could be due to a failure of the aging switchgear or FRU T1 itself, 439 customers including an industrial customer, representing 39 percent of customers and 59 percent of load served by the FRU substation, would be without electricity. The outage would last for a minimum of 24 hours assuming optimal conditions to transport a mobile transformer to Fruitvale. However, the outage duration could be several days if there were storm conditions, road restrictions or other factors impacting FBC's ability to transport the mobile transformer, or could be several months if the mobile transformer was already installed at another substation.²⁹ In the event of a HER T1 unplanned transformer outage at the same time, customers served by HER would also be without power until a mobile transformer could be transported to Fruitvale, which could take several days or several months.³⁰

21. It is important to note that mobile transformers are not an acceptable solution to supply customers for a long period. Mobile transformers do not have automatic voltage control and could result in power quality issues for customers. Further, when a mobile transformer is installed at a substation, it impacts restoration and planning for the remainder of the FBC system, as it would affect other substations which may require it for emergency or maintenance purposes, impacting other customers and communities.³¹

22. The New FRU Substation will provide superior reliability compared to the existing FRU and HER substations in the event of a transformer outage. The second transformer will ensure minimal customer outages, if any, in the event of an unplanned transformer outage and will remove FBC's current reliance on a mobile transformer during planned transformer

²⁹ Exhibit B-1, Application, p. 23.

³⁰ Exhibit B-1, Application, p. 24.

³¹ Exhibit B-1, Application, p. 24.

maintenance. With the New FRU Substation, FBC will have more flexibility to use its mobile transformer at other substations when needed, thus improving the reliability of FBC's system.³²

23. A single transformer configuration is not suitable for the New FRU Substation. The FRU substation is in a lower-density area and has few distribution ties with other substations, limiting the amount of load that can be offloaded to the neighbouring substations. The FRU substation is also not in close proximity to a mobile transformer storage location.³³

24. While some legacy FBC stations such as FRU were built with non-redundant transformers, industry knowledge and standards have since advanced such that this configuration is no longer acceptable for the New FRU Substation.³⁴ Similarly, some legacy FBC stations were also built with no oil containment, no provision for mobile transformer installation, no future expansion considerations, and little space for maintenance. FBC's standards have necessarily evolve over time based on industry knowledge and safety practices, and any required changes are incorporated when FBC undertakes station rebuilds and/or refurbishment, thus ensuring that FBC's stations are being upgraded to current standards. Thus, as substations are rebuilt due to growth or sustainment needs, FBC considers the addition of a second transformer, along with other current standard requirements such as oil containment.³⁵

25. Reflecting evolving industry standards, FBC has recently added a second transformer when rebuilding a number of substations, including the Salmo, Beaver Park and Playmor substations. As FBC continues to move towards rebuilding existing substations with two transformers, its reliance on a mobile transformer will continue to decrease, further decreasing the risk of long outages and improving flexibility for planned maintenance at the remaining substations with non-redundant transformers.³⁶

³² Exhibit B-3, BCUC IR1 2.2.

³³ Exhibit B-6, ICG IR1 1.5.

³⁴ Exhibit B-4, BCOAPO IR1 1.1.

³⁵ Exhibit B-6, ICG IR1 1.5.

³⁶ Exhibit B-6, ICG IR1 1.5.

D. FBC Needs to Proceed with the Project

26. Based on the need for the Project set out above, it is clear that major equipment at both the FRU and HER substations is at risk of failure in the near term and needs to be replaced. The Project has already been materially delayed due to the extensive amount of time required to locate the property for the New FRU Substation and the added complexity and time required to prepare and undergo a CPCN application review process. As the risk of reliance on the existing FRU and HER substations increases over time, FBC submits that it needs to complete the Project as soon as reasonably possible.³⁷

³⁷ Exhibit B-1, Application, p. 47.

PART THREE: ALTERNATIVE ANALYSIS

27. Based on a thorough analysis of the alternatives, FBC submits that the most reasonable alternative to meet the Project objectives is to replace the FRU and HER substations with a single substation with a two-transformer configuration on a new site close to the load centre (i.e., the New FRU Substation), and that the only suitable location is the Grieve Location.

28. In the following subsections, FBC first provides a summary of the alternatives analysis and then addresses the main topics related to the alternatives analysis that were explored in IRs, which primarily relate to the location for the New FRU Substation.

A. Summary of Alternatives Analysis

29. FBC evaluated four alternatives to determine whether they would meet the Project objectives of: (1) addressing the equipment condition issues and aging infrastructure at the FRU and HER substations; and (2) addressing the reliability of electricity supply risk for Fruitvale and the surrounding area.

30. A summary of this analysis is set out below:

- **Alternative 1: Status Quo is Not Feasible.** The status quo of continuing to operate and maintain the existing FRU and HER substations is not feasible because the status quo does not address the high probability of failure due to the age and condition of the FRU and HER equipment or reliability risks.
- **Alternative 2: Replacing Both the FRU and HER Substations at Existing Locations is Not Feasible or is Inefficient and Uneconomical.** Under this alternative, FBC would replace the equipment at the FRU and HER substations with functionally equivalent equipment meeting current design standards. This alternative was rejected:
 - Replacing the equipment at the FRU substation with functionally equivalent equipment meeting current design standards is not feasible at the current FRU location for three reasons. First, a FRU substation with only one transformer would not meet the reliability objective of the Project. Second, even if a single transformer were acceptable, the existing site is too small to accommodate a substation that meets FBC's current design standards, as illustrated by Figure 4-1 of the Application. Third, using the existing property presents a constructability challenge as the entire substation would need to be demolished prior to constructing the

new substation, and siting a mobile transformer on site during construction is not feasible. A temporary site for a mobile transformer would therefore need to be acquired and necessary upgrades constructed to maintain electricity supply to customers during construction.³⁸

- Replacing the equipment at the HER substation with functionally equivalent equipment meeting current design standards is inefficient and uneconomical as a station at the HER location is not required and the HER load can be permanently transferred to FRU, avoiding the costs associated with rebuilding the substation³⁹ and optimizing O&M costs.⁴⁰
- **Alternative 3: Replacing the FRU and HER Substations with a New Substation on Either the Existing FRU Site or the Existing HER Site is Not Feasible or Not Practical.** Under this alternative, FBC would replace the FRU and HER substations with one new substation with two similarly sized transformers on either the existing FRU or HER substation sites. This alternative was rejected:
 - A new substation on the existing FRU site is not feasible as the current footprint is too small to accommodate a station design meeting current FBC standards. Even if the adjacent neighbouring parcel were acquired, the property would still not meet the minimum station footprint requirement. Further, as noted above, using the existing property presents a constructability challenge as the entire substation would need to be demolished prior to constructing the new substation, and siting a mobile transformer on site during construction is not feasible.⁴¹
 - A new substation on the existing HER site is not practical due to the HER substation's distance from the load centre. The amount of load that can be supplied by a distribution line is constrained by both voltage limits and thermal limits. To adhere to these voltage and thermal limits, locating the New FRU Substation at the existing HER site would require a complete rebuild of the line infrastructure between the HER site and the load centre (i.e., the Village of Fruitvale). This work would significantly increase the Project costs. The required infrastructure would be much larger and more visually impactful than the existing infrastructure and would require additional statutory rights of way (SRW). A portion of the line rebuild would fall within the Agricultural Land Reserve (ALR), which could introduce additional project cost and schedule risk. Moreover, the further a substation is sited from the load centre, the lower the customer reliability, as the electricity needs to travel through longer distribution

³⁸ Exhibit B-1, Application, pp. 27-28

³⁹ Exhibit B-1, Application, pp. 28-29.

⁴⁰ Exhibit B-7, RCIA IR1 6.1.

⁴¹ Exhibit B-1, Application, p. 29.

lines to reach the end user, increasing exposure to outages for a significant number of customers. To minimize the number of customers impacted by distribution line outages, a substation needs to be sited nearby or within the load centre, minimizing the distance between the substation and the majority of the customers.⁴²

- **Alternative 4: Replacing the FRU and HER Substations with a New Substation on a New Property Close to the Load Centre is the Most Reasonable Alternative.** Under this alternative, FBC would replace the FRU and HER substations with a single substation with a two-transformer configuration on a new property close to the load centre. Building one new substation with a two-transformer configuration addresses both Project objectives. Given that the alternatives using the existing FRU and HER sites are either not feasible, inefficient and uneconomic, or not practical, FBC concluded that Alternative 4 is the most reasonable alternative.

31. Having concluded that Alternative 4 was the most reasonable alternative, FBC engaged in a lengthy and detailed search for a suitable property for the New FRU Substation. Taking into consideration the feedback and input from stakeholders, FBC identified 18 possible new locations for the New FRU Substation. Of the 18 locations, the landowners of nine properties were not open to selling, and therefore, these locations were not further evaluated. A further eight locations were considered but ultimately rejected due to the distance from the load centre and/or flooding/terrain/infrastructure challenges. One location, at 2064 Grieve Road (Grieve Location) was found to be suitable and within proximity to the load centre, and FBC purchased this property in June 2023.⁴³

32. Finally, having settled on the Grieve Location, FBC analysed two siting options on the property – the Highway 3B Option and the Old Salmo Road Option. While the Class 4 cost estimates were similar for the two options, the Highway 3B Option had fewer impacts and challenges, including less visual impact, less civil and site preparation which would avoid extensive clearing of the forested area on the property, and less risk for cost escalation.⁴⁴ The

⁴² Exhibit B-1, Application pp. 31-32.

⁴³ Exhibit B-1, Application, p. 45.

⁴⁴ Exhibit B-1, Application, p. 44.

Highway 3B Option on the Grieve Location is therefore the proposed location for the New FRU Substation.

B. Rebuilding FRU With Either One or Two Transformers at the Existing FRU Location Is Not Feasible

33. FBC has been clear that it is not feasible to build the New FRU Substation on the existing FRU location, whether the new substation would have one or two transformers. The FRU substation property is one of the smallest in the FBC service territory at approximately 1,400 m² and is an irregular shape, meaning that not all the space is usable.⁴⁵ Regardless of the number of transformers, there is simply not enough space at the existing FRU site to accommodate new equipment and meet current design standards.⁴⁶ FBC makes three points in this regard below.

34. First, the existing site is too small to accommodate a substation that meets FBC's current design standards.⁴⁷ FBC's current design standards follow good utility practices, Centre for Energy Advancement through Technological Innovation (CEATI) practices, and Institute of Electrical and Electronics Engineers (IEEE) standards and guidelines to provide reliable power to customers and ensure safety to the public and FBC employees that maintain the substations. For example, FBC's design standards ensure adequate protection of station equipment, which, along with load/short circuit interrupting devices such as circuit breakers, ensures station equipment is isolated quickly during any fault situations to avoid catastrophic failures. Good utility practice and IEEE standards also recommend oil containment for power transformers in substations, which the existing FRU substation does not currently have for the transformer, and this would require additional space.⁴⁸

35. Second, to be clear, FBC is not able to replace or refurbish only the equipment that is in poor condition at the FRU substation and is not able to design a substation to fit the property

⁴⁵ Exhibit B-3, BCUC IR1 7.4, 7.4.1 and 7.5.

⁴⁶ Exhibit B-3, BCUC IR1 7.3.

⁴⁷ Exhibit B-1, Application, pp. 27-28

⁴⁸ Exhibit B-3, BCUC IR1 7.4 and 7.4.1.

that would also ensure FBC is following good utility practice, CEATI practices, and IEEE standards and guidelines.⁴⁹

36. Third, even with a non-standard layout or non-standard equipment, the property is still too small due to the size of the required equipment (particularly the two large power transformers, circuit breakers, and switching equipment needed to protect them) and the access required around the equipment for maintenance purposes. For example, as high voltage fuses cannot be used for the New FRU Substation design, the existing high voltage fuses will need to be replaced with high voltage breakers, which take up more space and make the existing FRU substation property not feasible. Further, even if only one transformer were installed, space would still be required for the mobile transformer to be able to take the transformer out of service for maintenance.⁵⁰

37. In short, there are many good reasons why industry standards and practices have evolved since the 1960s, including for the safety of its workers, reliability of electricity supply, and protection of the environment. As substations are long-lived assets and will provide an essential service to the surrounding area for many years, FBC submits that it is in the public interest to build substations such as the New FRU Substation to current design standards.

C. Process to Identify Potential Locations Was Robust and Open

38. FBC submits that it undertook a robust and open process to identify potential sites for the New FRU Substation and that its analysis of the potential sites was thorough and took into consideration the input and feedback from stakeholders.

39. FBC's process for identifying a suitable site for the New FRU Substation was lengthy and complex and involved consultation and assessment activities over several years. FBC engaged with the Village of Fruitvale, the public, and a local realtor throughout 2019 to 2023 to identify and review possible locations. FBC considered many different properties, including the existing FRU and HER substation sites, bare properties and properties containing structures, as well as

⁴⁹ Exhibit B-3, BCUC IR1 7.4 and 7.4.1.

⁵⁰ Exhibit B-3, BCUC IR1 7.4 and 7.4.1.

properties that were on and off the market.⁵¹ Many of the properties that FBC considered were identified by the public.⁵²

40. FBC visited the Fruitvale area on several occasions and viewed the potential locations and surrounding neighborhood from nearby roadways and sidewalks. FBC conducted site visits to select locations if they were deemed a possible candidate at that time.⁵³

41. FBC completed a desktop review for each of the 18 locations identified. The desktop review consisted of evaluation of a detailed list of criteria, including criteria developed through feedback from stakeholders following the Design Workshop in April 2022.⁵⁴ FBC consolidated these criteria as reflected in Figure 4-3 reproduced below.

Figure 4-3: Property Evaluation Criteria



42. FBC rejected nine locations from further evaluation where the owners were not open to selling their property.⁵⁵ FBC made several attempts to negotiate with landowners, but each landowner ultimately exercised their right to decline to subdivide or sell their property. The confidential table in the response to BCUC IR 16.1 provides a high-level summary of the

⁵¹ Exhibit B-3, BCUC IR1 4.1.

⁵² Exhibit B-3, BCUC IR1 13.5.

⁵³ Exhibit B-3, BCUC IR1 4.1.

⁵⁴ Exhibit B-3, BCUC IR1 4.1.

⁵⁵ Exhibit B-1, Application, p. 33.

negotiations with each landowner.⁵⁶ Property D was one of the sites where the landowner was not open to selling. Even if the landowner for Property D was receptive to selling, this location is similar to the Mazzocchi Location, which the Village of Fruitvale voted against selling. Therefore, placing the station at this location would be contrary to the feedback already provided by the community.⁵⁷ This is reflected in the Land Evaluation Matrix provided as Confidential Attachment 16.2, which shows that Property D scored more negatively than the Grieve Location.⁵⁸

43. FBC's detailed scoring for the nine available locations is provided in Appendix B of the Application, as corrected in Exhibit B-1-2. FBC submits that its analysis was thorough and reasonable.

D. Two of the Identified Locations Are Not Practical Due to Distance from Load Centre

44. FBC rejected two of the newly identified locations due to their distance from the load centre: (1) Atco Wood Products – Property A; and (2) Former Atco Wood Products Property.⁵⁹

45. As with the HER substation location discussed above, due to voltage and thermal limits, siting the substation at either of these locations would require completely rebuilding the line infrastructure between these sites and the Village of Fruitvale. Moreover, the further the substation is sited from the load centre, the lower the customer reliability, as the electricity needs to travel through longer distribution lines to reach the end user, increasing exposure to outages for a significant number of customers. Any outage to the line infrastructure between these locations and the load centre would result in a power outage to the entire Village of Fruitvale and also to customers in the Park Siding area previously served by the HER substation. During this outage, a portion of customers could be transferred to FBC's Beaver Park (BEP) substation, but the remaining customers, including an industrial customer, would need to wait for the line infrastructure to be repaired before power could be restored.⁶⁰

⁵⁶ Exhibit B-3, BCUC IR1 16.1.

⁵⁷ Exhibit B-3, BCUC IR1 15.3.1.

⁵⁸ Exhibit B-3, BCUC IR1 16.4.

⁵⁹ Exhibit B-1, Application, pp. 34-36.

⁶⁰ Exhibit B-1, Application, pp. 35-36.

46. To illustrate, FBC developed a high-level Class 5 estimate for the HER substation location, the Atco Wood Products Property A, and the Former Atco Wood Products Property. The estimate indicates that the additional capital cost of building a new substation at these sites compared to the Grieve Location (at a Class 5 level of definition) would be approximately \$9.6 million. As per AACE guidelines, a Class 5 estimate has an accuracy range of -30% to +50%. For the HER substation, the incremental \$9.6 million capital cost would be slightly offset by the cost of the Grieve Location land, as FBC would not incur land acquisition costs for the existing HER substation.⁶¹

47. In addition to the \$9.6 million cost of line upgrade work, there are a number of other factors, including decreased reliability, which detract from siting a new substation at these locations:⁶²

- There will be additional costs when a third distribution circuit is required to be built to serve the Village of Fruitvale, and the third distribution circuit would need to be built on the other side of Highway 3B, resulting in line infrastructure on both sides of the highway.
- The new triple circuit line infrastructure would replace structures on line 20L that have recently been replaced and are still in good working order.
- SAIDI and SAIFI metrics would likely be negatively impacted given the load centre is a significant distance from the source of supply; most outages related to distribution lines and lower voltage transmission (60 kV) are caused by trees and storms, and the triple circuit line infrastructure would be in close proximity to trees.
- The triple circuit line infrastructure would be much larger and more visually impactful than the existing infrastructure.
- The triple circuit infrastructure will require additional SRWs and a portion would be located within the ALR, which would potentially delay project timelines.

⁶¹ Exhibit B-3, BCUC IR1 5.6.

⁶² Exhibit B-3, BCUC IR1 5.6.

48. FBC submits that this analysis confirms that siting the New FRU Substation at any of the three sites further from the load centre would come with increased cost, higher impacts, and decreased reliability, and therefore is not practical.

49. Similarly, expanding the BEP substation to serve all the electricity supply to Fruitvale and the surrounding area is also not a practical solution. The BEP substation is 8 km from the Fruitvale load centre, and therefore, would face similar challenges supplying Fruitvale load as the locations near HER. For instance, due to the BEP substation's distance from the Fruitvale load centre, line upgrades would be required, and there would be a reduction in reliable service to the Village of Fruitvale because the load centre would be exposed to more outages along the long distribution lines running back to the BEP substation. Further, the BEP substation is on an archaeological site, making expansion of the site to accommodate the entire Fruitvale supply complex.⁶³

E. Six of the Identified Locations Not Feasible Due to Flooding Risk, Terrain and/or Infrastructure Factors

50. FBC rejected six sites due to flooding risk, challenging terrain, and/or the need to reconfigure transmission and distribution line infrastructure which made the sites unfeasible.⁶⁴ Each of these factors can cause significant increases in costs and risk. For example, building a substation in a floodplain would significantly increase project costs to mitigate flooding risk, which still may not avoid outages due to flooding. Further, the intensity, frequency, and area of flooding may increase due to the changing climate. FBC therefore considers it unacceptable to locate the New FRU Substation in a floodplain.⁶⁵

51. FBC has explained in the Application the specific engineering challenges leading to the rejection of each site.⁶⁶ FBC has also explained how its conclusions regarding the challenges

⁶³ Exhibit B-3, BCUC IR1 7.1.

⁶⁴ Exhibit B-1, Application, pp. 36 to 40.

⁶⁵ Exhibit B-1, Application, p. 36.

⁶⁶ Exhibit B-1, Application, pp. 37-41.

imposed by steep terrain and flooding are supported by its experience with its existing substations:⁶⁷

With regard to the Highway 3B Property B (Site #8), where the elevation profile was not as extreme [as on Atco Wood Products Property C (Site #6) and Highway 3B Property A (Site #7)], FBC performed a site visit to evaluate the property in January 2023. Based on the site visit, FBC determined that the risk of falling trees was unacceptable on the mountain side of the property. While FBC considered ways to mitigate the risk of falling trees through removing trees around the area of the substation, this would not entirely address the risk, as the steep terrain could still result in trees situated considerably far from the substation and outside of the property boundaries falling down the mountainside and potentially causing damage to the substation. Thus, FBC ultimately considered the complexity of the terrain to be unacceptable. FBC is unable to provide a cost estimate to mitigate this risk because the magnitude of the costs would be dependent on the property and the amount of land that would require tree removal.

FBC has constructed substations on land with similar profiles to that of Highway 3B Property B and has experienced challenges and events that have informed FBC's criteria for the siting of substations. The Cottonwood (COT) substation, situated near Nelson, BC, was built in 2006 and is located at the base of a mountain. The substation was damaged in 2020 when multiple trees fell down the mountain onto the substation during an extreme weather event. To mitigate the risk of another tree falling on the substation, the entire property surrounding the substation was cleared of trees and the risk of falling trees has been mitigated for this substation. However, as discussed above, similar tree removal may not adequately address the risk for a substation built at the Highway 3B Property B site, as the steep terrain could still result in trees situated considerably far from the substation and outside of the property boundaries falling down the mountainside and potentially causing damage to the substation.

Highway 3B Property B is also partially within the floodplain and impacted by spring runoff. FBC's Ruckles (RUC) substation, situated in Grand Forks, BC, is also located within a floodplain. In 2017, FBC received approval of capital expenditures to rebuild the RUC substation to address issues of age and its location in the identified flood zone of the Kettle River. In 2018, FBC undertook work to rebuild the substation on the existing site by raising the site above projected flood levels. In May 2018, significant areas of Grand Forks, including the old Ruckles Substation, experienced extensive flooding. This forced the de-energization of the old station to manage the extreme safety hazards associated with flooded high voltage equipment. Although not all aspects of the project were complete, construction of the new station was sufficiently advanced that the electrical infrastructure was

⁶⁷ Exhibit B-3, BCUC IR1 5.8.

available to provide safe and reliable service. FBC was able to expedite the remaining commissioning and only a short unplanned outage occurred before load was transferred from the unserviceable equipment in the old Ruckles Substation to the new substation equipment. FBC's experience with the RUC substation further supports FBC's assessment that it is unacceptable to relocate an existing substation that does not currently reside within a floodplain into a floodplain or area where overland flooding is a known issue. The existing FRU substation does not reside within a floodplain or have overland flooding issues.

52. FBC submits that it has reasonably and appropriately rejected the six sites for the reasons discussed in its evidence and that its engineering judgement on these matters should be determinative. It would not be reasonable or practical to site the New FRU Substation at any of the six locations rejected due to flooding risk, challenging terrain, and/or the need to reconfigure transmission and distribution line infrastructure.

F. Grieve Location is Only Suitable Location

53. The Grieve Location is the only location of the 18 sites evaluated that was available, close to the load centre, and does not present flooding, terrain and other constructability challenges, and therefore the only suitable location for the New FRU Substation.⁶⁸

54. The Grieve Location has many attributes that make it suitable for the New FRU Substation:⁶⁹

- it is large enough to accommodate the New FRU Substation (9.61 acres in size);
- it does not have flooding or mountainous terrain challenges;
- the property is adjacent to transmission line 20L, which runs parallel to Old Salmo Road;
- it is approximately 750 metres from the existing FRU substation, minimizing transmission and distribution line reconfiguration;
- the required line work is not impacted by the ALR;
- it is not used for public parking;

⁶⁸ Exhibit B-1, Application, p. 41.

⁶⁹ Exhibit B-1, p. 42; Exhibit B-3, BCUC IR1 6.6 and 15.3.1.

- as a privately owned lot, it does not impact public land use;
- it is not located next to public infrastructure such as a park, school, ball field or daycare;
- the property is not designated as a Heritage site; and
- it does not require rezoning as the land zoning for this parcel is currently zoned to allow for utilities.

55. Safety, station aesthetics, siting, and noise impacts are common interests that FBC expects would be brought forward at any location chosen for the Project. However, these impacts can be mitigated as discussed in Part Four below.⁷⁰ Further, the size of the property allowed FBC to site the substation to minimize impacts to the surrounding residents,⁷¹ as discussed in the following subsection.

G. Highway 3B Option Best Addresses Stakeholder Concerns and Other Factors

56. FBC considered two siting options on the Grieve Location, referred to as the “Highway 3B” option and the “Old Salmo Road” option, as shown in Figure 4-12 reproduced below.

⁷⁰ Exhibit B-3, BCUC IR1 15.3.1.

⁷¹ Exhibit B-1, Application, p. 42.

Figure 4-12: Highway 3B Option and Old Salmo Road Option within Grieve Location



57. Based on a consideration of factors from stakeholder feedback, constructability challenges and Class 4 cost estimates for the sites, the Highway 3B option is the most reasonable site for the New FRU Substation:⁷²

- The Class 4 cost estimate for the Old Salmo Road option is approximately \$2.661 million more than the Highway 3B option;
- The Old Salmo Road option has significantly higher impacts and challenges, including:
 - Greater visual impact to the surrounding residents and the public passing by along Old Salmo Road;

⁷² Exhibit B-1, Application, p. 44.

- Greater amount of civil and site preparation, likely resulting in retaining walls and extensive clearing of the forested area of the property;
- Greater risk for cost escalation due to civil and site preparation; and
- Accessibility challenges.

58. In FBC's overall assessment, the Highway 3B option best addresses concerns raised by adjacent landowners, such as noise, visual impacts, wildlife impacts, and tree removal.⁷³ While the Project will be visible regardless of the location, the construction at the Old Salmo Road option would result in the removal of all the trees on the upper area of the property. In addition, the Old Salmo Road option sits on a sloping terrain, which means the possibility of a retaining wall being built which would be visible to adjacent properties with limited visual mitigation options. On the other hand, construction at the Highway 3B option will allow the majority of the treed area to be left undisturbed, which provides more options for visual mitigation. Finally, the Highway 3B option is directly adjacent to the industrial site across Highway 3B.⁷⁴

59. Attachment 6.5 to Exhibit B-3 is a Land Evaluation Matrix for each of the Highway 3B option and the Old Salmo Road option at the Grieve Location. The scoring shows that the Highway 3B option is the preferred option without needing to complete a weighting.⁷⁵

⁷³ Exhibit B-4, BCOAPO IR1 13.2 and 13.4.

⁷⁴ Exhibit B-3, BCUC IR1 14.1.

⁷⁵ Exhibit B-3, BCUC IR1 6.5.

PART FOUR: CONSULTATION AND ENGAGEMENT

60. FBC submits that its consultation and engagement activities for the Project have been reasonable and appropriate and have met the requirements of the CPCN Guidelines. FBC considers that its consultation and communication with stakeholders and rights holders has been useful and productive. FBC has incorporated feedback and input from stakeholders into plans for the Project, including in the evaluation of site locations, the choice of the Highway 3B option on the Grieve Location and through FBC's ongoing collaboration on station aesthetics.

61. FBC's consultation and engagement process for the Project has been lengthy and complex, as described in Section 8 of the Application. FBC initiated stakeholder engagement for the Project in September 2019 with a presentation to the Village of Fruitvale explaining the need for the Project. Throughout 2020 and 2021, FBC searched for a suitable location for the Project. In July 2021, the Village of Fruitvale suggested that the Village-owned land beside Mazzocchi Park (Mazzocchi Location) was a suitable location for the Project. From July 2021 to April 2022, FBC pursued the Mazzocchi Location which included engaging with landowners adjacent to the location, residents, organizations, community groups, local government, and other interested stakeholders. However, in April 2022, the Fruitvale Council ultimately voted against selling the property to FBC.⁷⁶

62. Over the next year, April 2022 to April 2023, FBC continued searching for a Project location. During that search, FBC applied the stakeholder feedback garnered over the three and a half years of consultation. In April 2023, FBC became aware of the Grieve Location. After completing a desktop review of the property and considering the stakeholder feedback already received, FBC determined it was a suitable location for the Project. In May 2023, FBC entered into an agreement to purchase the site and began its consultation with stakeholders adjacent to the property.⁷⁷

⁷⁶ Exhibit B-1, Application, p. 6.

⁷⁷ Exhibit B-1, Application, p. 6.

63. FBC has and will continue to seek input from neighbouring residents on the Project, including elements such as aesthetics, greening, and visual screening. FBC is committed to continuing consultation with stakeholders and will continue to work with stakeholders and affected parties to ensure that they are informed and engaged as the Project progresses.⁷⁸

64. FBC identified 11 Indigenous communities as having asserted interests in the Project area. In September 2023, FBC initiated Project notification and began consultation with these Indigenous communities. At the time of filing the Application, the consulted Indigenous communities have not raised substantive concerns regarding the Project. One Indigenous community has requested to participate in future archaeological and environmental work. FBC will maintain transparency and open channels of communication with these communities throughout the Project.⁷⁹

65. In the following subsections, FBC highlights three topics canvassed in the IRs related to its consultation and engagement activities.

A. Public Identified Potential Locations for the New FRU Substation

66. As a key aspect of the Project was the location of the New FRU Substation, FBC sought feedback from the general public on possible Project locations. The public was able to provide suggested locations directly to FBC's Community and Indigenous Relations Manager, during the public open house hosted by FBC on December 1, 2021, during the Design Workshop hosted by FBC on April 6, 2022, by email to getinvolved@fortisbc.com (a Project inbox provided to the public during media interviews about the Project), or by contacting FBC through its social media, website, or Contact Centres. FBC was successful in garnering input from the public, as 11 of the 18 new properties evaluated by FBC were proposed by the public.⁸⁰

⁷⁸ Exhibit B-1, Application, p. 70.

⁷⁹ Exhibit B-1, Application, p. 70.

⁸⁰ Exhibit B-3, BCUC IR1 13.5.

B. FBC Has Responded to Issues and Concerns Raised Through Consultation

67. FBC has responded to questions from stakeholders by email, phone, and through in-person conversations. Stakeholders raised common interests that FBC expects would be brought forward regarding any location chosen for the Project, such as station aesthetics, location, noise, electromagnetic fields (EMF), zoning, visual, and property values. The most common areas of interest regarding the Grieve Location specifically were location, site selection, zoning, visual impact, wildlife values, and loss of agricultural land. Other interests included the loss of trees, EMF, lighting, proximity to residential area, and property values. Table 8-3 of the Application summarizes FBC's response to the concerns raised in the public consultation process as of the time of filing the Application.⁸¹

68. FBC has also responded to the concerns expressed in the letters of comment filed in this proceeding.⁸² For example:

- FBC has confirmed that the stand of mature timber on the Grieve Location does not include any Old Growth forest.⁸³
- While wildlife is common in the area, there are no special designations related to species or habitat conservation on the Grieve Location.⁸⁴
- FBC has confirmed with Regional District of Kootenay Boundary (RDKB) staff that the Grieve Location is zoned for utility use. Section 302.1.e) of the Electoral Area 'A' Zoning Bylaw permits utility uses in all zones of Electoral Area 'A'. Specifically, section 302.1.e) of the bylaw states that, except as otherwise stated in the bylaw, a number of uses are permitted in all zones, including "utility uses and structures and their accessory buildings, excluding offices, maintenance garages and storage". FBC has also confirmed with RDKB staff that section 402 does not exclude utility uses in Rural Residential 1 Zone where it states that "only" the listed principal and secondary uses are permitted. Such an interpretation would not be reasonable as almost all of the listed uses under section 302.1 are not specifically listed in any zone. Therefore, if only specifically listed uses were allowed in each zone, the uses meant to be allowed in all zones per section 302.1 would not be allowed in any zone. This narrow interpretation would be inconsistent with the

⁸¹ Exhibit B-1, Application, pp. 76 to 81.

⁸² Exhibit B-4, BCOAPO IR1 13.3.

⁸³ Exhibit B-4, BCOAPO IR1 13.3.

⁸⁴ Exhibit B-4, BCOAPO IR1 13.3.

Electoral Area A Official Community Plan, which provides clear direction to allow such uses under all land use designations.⁸⁵

- The estimated reduction in property values provided in the letters of comment are speculative and should be given little weight by the BCUC Panel. FBC is not aware of any credible evidence of material impacts on property values due to its substations. The property zoning allows for utility use and the property is in close proximity to Highway 3B, a railway, and a sawmill. In FBC's view, if the substation were to have an impact on property values, it is likely to be minor and short term, and would vary depending on the individual properties, as well as subjective opinions of buyers in the market.⁸⁶

69. FBC has also addressed the topic of EMF. The EMF produced by equipment within the substation is typically indistinguishable from background levels, while the power lines entering and leaving the substation are the strongest source of EMF outside of the substation. FBC has modeled five scenarios to show that the EMF levels for the New FRU Substation power lines, even at the highest power levels for the lines, are well below the exposure guidelines developed by the International Commission on Non-Ionizing Radiation Protection (ICNIRP), ICNIRP is endorsed by the World Health Organization and is a formally recognized, international non-profit organization made up of independent scientific experts that are responsible for providing guidance and advice on non-ionizing radiation protection for people and the environment.⁸⁷ Specifically, under normal operation, the EMF strength directly under the new section of the transmission line will be more than 250 times lower than the ICNIRP recommended exposure limit for residential areas. Even under the higher short-term emergency loading scenarios, the EMF strength will be more than 60 times lower than the ICNIRP recommended exposure limits.⁸⁸ While FBC will not be implementing any EMF mitigation strategies, FBC will work with residents individually to address specific concerns regarding EMF exposure from the New FRU Substation, such as by providing information on the modelling of EMF levels for the New FRU Substation power lines.⁸⁹

⁸⁵ Exhibit B-4, BCOAPO IR1 13.3.

⁸⁶ Exhibit B-4, BCOAPO IR1 13.3.

⁸⁷ Exhibit B-8, Lenardon IR1 29.

⁸⁸ Exhibit B-8, Lenardon IR1 29.

⁸⁹ Exhibit B-7, RCIA IR1 7.3.

70. FBC submits that it reasonably and adequately responded to the interests raised during the consultation process. As discussed in the subsection below, FBC will continue to work directly with stakeholders to address outstanding concerns.

C. FBC Will Continue to Consult and Work Directly with Impacted Stakeholders

71. FBC will maintain open communication with residents, landowners, businesses, and other stakeholders through the remaining phases of the Project and is committed to continuing consultation with stakeholders to ensure they are informed as the Project progresses.⁹⁰

72. Specifically, FBC is working to address the remaining interests of stakeholders through direct engagement with the adjacent landowners, either by email, phone, or in-person, as well as by responding to questions posed by stakeholders. The key remaining interests that FBC is committed to addressing include, but are not limited to, the following:

- **Safety:** Safety is a top priority at FortisBC. Any Project safety concerns brought forward will be addressed and actioned in a timely manner.⁹¹
- **Station Aesthetics:** FBC will continue to conduct in-person consultation with neighbouring property owners to discuss feedback on greening, screening, and station aesthetics,⁹² including by receiving feedback and using it to inform decision-making, sharing examples from similar projects, conducting site visits and discussing vegetation options on a case-by-case basis.⁹³ FBC has allocated appropriate funds for this purpose and will work in collaboration with the adjacent property owners to incorporate their input into appropriate aesthetic improvements to the extent possible.⁹⁴ While the electrical infrastructure will be visible, measures such as station fencing, vegetation or shrubs planted outside the fence line, vegetation on adjacent property, and other suitable options brought forward by the surrounding property owners will mitigate the impacts.⁹⁵
- **Noise:** FBC has purchased low decibel rated transformers. FBC has conducted a noise measurement study for the Grieve Location to achieve baseline noise levels and to model the impact of the station. FBC will implement the recommendations

⁹⁰ Exhibit B-1, Application, p. 81.

⁹¹ Exhibit B-3, BCUC IR1 15.4.

⁹² Exhibit B-3, BCUC IR1 13.6.

⁹³ Exhibit B-3, BCUC IR1 14.2, 14.3, and 14.4.

⁹⁴ Exhibit B-3, BCUC IR1 14.2.

⁹⁵ Exhibit B-3, BCUC IR1 14.2.

of the study to mitigate noise, including a minimum 2.7 meter high concrete fence around the station.⁹⁶

- **Siting and Trees:** FBC will work to preserve as many trees as safely possible when developing the substation footprint and setbacks while also balancing the rate impact of Project costs.⁹⁷ Construction at the Highway 3B option will allow the majority of the treed area to be left undisturbed.⁹⁸
- **Wildlife:** FBC conducted a desktop review and on-site assessment of the Grieve Location which concluded the risk of environmental impacts associated with the Project are Low at the Highway 3B option. To ensure appropriate controls are in place to manage the environmental risks of the Project, a comprehensive Environmental Management Plan (EMP) will be prepared with site specific environmental mitigations.
- **Construction:** FBC will work with the surrounding property owners to mitigate issues related to construction.⁹⁹

73. Overall, in FBC's view, its consultation and engagement activities to date have been sufficient, appropriate and reasonable, and meet the requirements of the CPCN Guidelines. FBC has worked to find a location that meets the Project objectives while also considering feedback received from stakeholders and rights holders as well as the rate impact to FBC customers. FBC will continue to consider feedback from stakeholders and rights holders and will seek to mitigate localized development concerns while balancing the need to deliver safe, reliable and cost-effective energy to all customers. FBC will continue to maintain open lines of communication with stakeholders and Indigenous communities, addressing interests or concerns brought forward throughout the duration of the Project, including planning, construction, and site restoration.

⁹⁶ Exhibit B-7, RCIA IR1 8.2.

⁹⁷ Exhibit B-1, Application, p. 78.

⁹⁸ Exhibit B-3, BCUC IR1 14.1.

⁹⁹ Exhibit B-3, BCUC IR1 13.6.

PART FIVE: CONCLUSION

74. FBC submits that the evidence in this proceeding demonstrates that the Project is in the public interest. The need for the Project is clear and compelling, showing that FBC now needs to proceed to address the age and condition of the existing FRU and HER substations and the reliability of electric supply to the Village of Fruitvale and the surrounding area. FBC has thoroughly investigated and analyzed the alternatives to the Project and the siting options for the New FRU Substation. FBC submits that its choice of the Grieve Location, and the Highway 3B option at that location, is reasonable and appropriately considered relevant factors, including cost and community impacts. FBC will continue to work directly with impacted stakeholders to mitigate the impacts of the New FRU Substation. Therefore, FBC respectfully submits that the BCUC should grant a CPCN for the Project and permission to decommission the existing HER and FRU substations.

ALL OF WHICH IS RESPECTFULLY SUBMITTED

Dated: June 27, 2024



Christopher Bystrom
Counsel for FortisBC Inc.