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December 19, 2024
File No.: 240148.00971

Via Electronic Filing

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

Attention: Patrick Wruck, Commission Secretary

Dear Sirs/Mesdames:

Re: FortisBC Energy Inc. – Application for a Certificate of Public Convenience and Necessity for the Okanagan Capacity Mitigation Project

We enclose for filing in the above-noted proceeding the Reply Submission of FortisBC Energy Inc., dated December 19, 2024.

Yours truly,

FASKEN MARTINEAU DuMOULIN LLP

[Original signed by]

Tariq Ahmed

Encl.

cc (email only): Registered Interveners

British Columbia Utilities Commission

FortisBC Energy Inc.

Application for a Certificate of Public Convenience and Necessity for the Okanagan Capacity Mitigation Project

Reply Submission of FortisBC Energy Inc.

December 19, 2024

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PART ONE: INTRODUCTION

1. FEI's Reply Submission is quite focused.[1] British Columbia Old Age Pensioners' Organization *et al.* (BCOAPO) and the Residential Consumer Intervener Association (RCIA) support the OCMP.[2] The Commercial Energy Consumers Association of British Columbia (CEC) agrees "that there is little question that there is a need for a capacity shortfall mitigation project at this time",[3] although it prefers a different alternative to meet that need.

2. As such, these submissions are primarily directed to replying to B.C. Sustainable Energy Association (BCSEA) and First Things First Okanagan (FTFO) on Project need, and explaining the shortcomings of CEC's alternatives analysis.

3. BCSEA and FTFO, in essence, urge the BCUC to deny customers access to gas, and prevent new connections. They do so in furtherance of a non-existent policy and in reaction to demand uncertainty well beyond the time when FEI will experience the capacity shortfall that the OCMP is intended to address. FEI submits that the BCUC should dismiss this harmful and potentially dangerous approach to utility planning and service. The BCUC has already confirmed the imminent need for mitigation. The BCUC's determination was based on well-established planning standards designed to ensure that customers who require dependable firm service are not routinely deprived of gas when their need for heat is the greatest. Under the *Utilities Commission Act* (UCA), denial of service is an exceptional step that must be justified on public interest grounds, which are absent in this case.

4. In the short timeframe contemplated by the OCU Decision, FEI identified and evaluated six options to address the imminent potential for customers to lose service in cold winter periods. Only three of these alternatives could be constructed in time to prevent outages under design day conditions. The other speculative ideas suggested by BCSEA and FTFO are not solutions to

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1 FEI has focused on the main issues raised in the intervener submissions rather than a line-by-line response. As such, FEI's silence on a matter should not be construed as agreement. Abbreviations used in FEI's Final Submission dated November 21, 2024 are also used in this Reply Submission.

2 BCOAPO Final Submission, p. 10: BCOAPO indicates on behalf of its vulnerable constituents that it "cannot reasonably take a position that leaves so many people in the cold…literally"; RCIA Final Submission, p. 4.

3 CEC Final Submission, para. 9.

the BCUC-confirmed need. And despite CEC's contention, FEI's assessment of the feasible alternatives was robust and balanced. The preferred alternative is the best available option to address the confirmed need for the reasons set out in FEI's Final Submission and below.

5. FEI respectfully submits that the proposed OCMP is in the public interest and the BCUC should approve the Project as sought.

6. This Reply Submission is organized around the following points:

- **Part Two: FTFO'S Submissions Are Introducing New Evidence** – The BCUC should disregard the materials in FTFO's submissions that are not on the record and the submissions based upon them.

- **Part Three**: **Reply to BCSEA and FTFO on OCMP Need** – Acceding to the position of the BCSEA or FTFO on project need would disregard the BCUC's previous findings, harm customers and represent a legal error.

- **Part Four**: **Reply to BCSEA, FTFO and CEC on Alternatives** – The additional ideas put forward by BCSEA (peak demand reduction), FTFO (dual-fuel heating and electrification) and CEC (thermal batteries) are not viable solutions to an imminent capacity shortfall. CEC's reimagined alternatives analysis that favours Alternative 5 is unsound and results-driven.

- **Part Five: Reply to CEC on Cost Estimate** – FEI's use of a Class 4 cost estimate was appropriate in the circumstances. The estimate provides a sound basis for determining how best to address a previously confirmed need.

- **Part Six: Other Matters** – The requested accounting treatment for costs related to the OCMP is consistent with prior BCUC approvals and promotes intergenerational equity. An interim or contingent CPCN is unwarranted and risks delaying the OCMP, which is required imminently. There is no basis for a time-limited CPCN, and such an approach would harm customers. FTFO's assertions

regarding the obligations of professional engineers are wrong, irrelevant, unsubstantiated by evidence, and have no nexus with the BCUC's jurisdiction.

PART TWO: FTFO'S SUBMISSIONS ARE INTRODUCING NEW EVIDENCE

7. Before addressing the substance of the intervener submissions, FEI wishes to make a process point in respect of FTFO's submissions.

8. FTFO refers extensively to materials that that are not on the evidentiary record in this proceeding, for example on the claimed merits of solar and wind power,[4] battery storage,[5] indoor air quality,[6] Puget Sound Energy's electrification projects,[7] and BC Hydro's rooftop solar rebates and power call.[8] The new information is so pervasive that only 10 of the 47 footnotes in FTFO's submissions reference filed evidence or legislation. FEI respectfully submits that the BCUC should disregard the evidence that is not on the record and the submissions based upon it.

9. While FEI appreciates that FTFO is a volunteer organization, FTFO should be aware of the rule that submissions must be based on filed evidence. In the original OCU CPCN proceeding, FTFO had taken the same approach of introducing new information in final argument, and FEI had drawn the procedural impropriety to FTFO's attention.[9] FTFO had an opportunity to make information requests in this proceeding. It could also have sought to file evidence. Instead, FTFO avoided having its information tested by the parties and the BCUC by waiting until after the evidentiary record was closed. FEI respectfully submits that maintaining fair, effective and efficient BCUC processes necessitates some procedural consequence for parties who continue to engage in this practice, including that FTFO's submissions be given little, if any, weight. Nonetheless, to assist the BCUC, we have addressed some of FTFO's comments in this Reply Submission.

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4 Page 7.

5 Page 7.

6 Page 4.

7 Pages 3 and 4.

8 Pages 7 and 8.

9 Original OCU CPCN Project proceeding, FEI Reply Submission, September 26, 2023, p. 18.

PART THREE: REPLY TO BCSEA AND FTFO ON OCMP NEED

10. As BCOAPO, RCIA and CEC accept the need for the OCMP,[10] this Part focuses on BCSEA and FTFO.

11. BCSEA and FTFO do not dispute that there is an imminent capacity shortfall, but gloss over the implications of customers losing service in the coldest part of the winter. They appear to see the capacity shortfall as an opportunity to take a stand against natural gas use in British Columbia. BCSEA explicitly embraces curtailments of existing firm customers[11] and wants the BCUC to prevent new requests for gas service, contrary to FEI's approved tariff. BCSEA wants the BCUC "to 'tap the brakes' on the endless cycle of growing natural gas distribution capacity."[12] It states that "…just because other legislation allows FEI to continue to connect new customers in the Project area does not mean that it is in the public interest under the UCA for FEI to do so."[13] Similarly, FTFO makes clear that its concern about all of the alternatives considered by FEI for the OCMP is that "all were based on the continued and exclusive use of fossil gas".[14]

12. FEI submits that the BCUC should reject BCSEA's and FTFO's approach for several reasons:

- First, their approach is inconsistent with the BCUC's directive to FEI, which was based on well-established utility planning standards.
- Second, forced curtailments would, without question, be inconsistent with customer expectations and have the effect of placing customers in a harmful and potentially dangerous situation.
- Third, the BCUC would err in law by rejecting the OCMP and invoking section 28(3) of the UCA to preclude new attachments in furtherance of "tapping the brakes"

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10 BCOAPO Final Submission, p. 3; RCIA Final Submission, p. 9; CEC Final Submission, paras. 9 and 23.

11 BCSEA Final Submission, para. 41.

12 BCSEA Final Submission, para. 9.

13 BCSEA Final Submission, para. 12.

14 FTFO Final Submission, p. 1.

on growing natural gas distribution capacity or phasing out natural gas use. There is no policy, legislation or regulation restricting access to the gas system.

- Fourth, BCSEA's approach would be unduly discriminatory in singling out certain firm customers in one part of FEI's service area to receive a substantially lower quality of service.

- Fifth, BCSEA's argument gives excessive weight to long-term demand uncertainty.[15] Stranding risk is just one of many factors that FEI must consider in operating the utility, and the nature and configuration of the OCMP significantly mitigates that risk.

A. BCSEA'S AND FTFO'S APPROACH IS INCONSISTENT WITH THE BCUC'S DIRECTIVE

13. Forcing curtailments on customers that rely on firm service as part of normal operations is inconsistent with the BCUC's OCU Decision directive to FEI, which was based on well-established utility planning standards.

14. The BCUC's OCU Decision, including its directive to FEI to prepare a mitigation plan, was explicitly premised on the well-established planning standard[16] that contemplates FEI being able to serve firm load in a 1 in 20-year cold weather event:[17]

> Regardless of the approach taken, it is clear there is a need for FEI to address the ITS' projected capacity shortfall in a timely manner. Accordingly, the Panel directs FEI to examine additional potential short term mitigation solutions and develop a plan <u>which will allow the ITS to provide sufficient peak demand capacity in the event of a 1 in 20-year cold weather event occurring in the winter of 2026/2027</u>

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15 BCSEA Final Submission, para. 31.

16 A similar standard is in place for FortisBC Inc. (FBC). For instance, a "1-in-20" year method for forecasting peak load was accepted by the BCUC in the FBC Application for a CPCN for the Kelowna Bulk Transformer Addition Project, Decision and Order C-4-20 dated November 20, 2020. In FBC's Application for a CPCN for the A.S. Mawdsley Terminal Station Project, Decision and Order C-6-23 dated December 6, 2023, the BCUC held that "FBC's '1-in-20' year method for forecasting peak load, which has been used by FBC since at least 2011, has been examined by the BCUC on multiple occasions".

17 OCU Decision, p. 25.

> or the period following. This mitigation plan is to be filed with the BCUC for review no later than July 31, 2024. [Emphasis added]

15. The OCMP complies with the BCUC's directive. BCSEA's and FTFO's approach would not comply, and this is a full answer to their position. It would be inconsistent with the BCUC's OCU Decision to deviate now in the absence of any evidence that the need has subsided. The evidence in the OCMP proceeding has reinforced the factual basis for the BCUC's mitigation directive.

B. USING ROUTINE CURTAILMENTS TO ADDRESS PEAK LOAD GROWTH WOULD BE CONTRARY TO CUSTOMER EXPECTATIONS AND POTENTIALLY HARMFUL

16. The planning standards underlying the BCUC's mitigation directive exist for a reason. Energy consumers generally expect service to be reliable and dependable in normal operations, and their economic and physical well-being can depend on it. Sometimes interruptions are unavoidable in light of (e.g.) unplanned events or repairs; however, using routine forced gas curtailments to address expected peak load growth in the Okanagan would be inappropriate.

17. The BCUC has previously highlighted consumer expectation of dependable service in the 2020 Indigenous Utilities Regulation Inquiry Final Report:[18]

> British Columbians expect their electricity, gas and supply of thermal energy to be safe and reliable. People expect, for example, minimal service interruptions and outages, that capacity will be sufficient to meet peak demand, and that the energy they purchase will be of an acceptable quality. They also expect that the utility equipment and infrastructure is maintained so that it is safe.

18. Customers rely on gas for heat and commercial and industrial applications. The Okanagan experiences very cold winter weather, such that losing heat during the coldest times of the winter would be dangerous for vulnerable populations. Houses and businesses could be damaged due to freezing pipes and equipment. Businesses without heat or gas for commercial and industrial applications will face interruption or closure, which in turn affects employees. This would be a significant amount of harm to customers and communities. As the BCUC noted in the OCU

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[18] BCUC Indigenous Utilities Regulation Inquiry Final Report dated April 30, 2020, p. 59.

Decision, the communities at greatest risk of a shortfall are West Kelowna, Lumby and Lavington, which comprise 18,300 customers.[19]

19. The effect of accepting BCSEA's and FTFO's arguments would be to leave customers without service at the time of peak winter demand. It is also reasonable to expect that forced curtailments of businesses will harm the customers and communities, since FEI already has financial incentives embedded in its rate design (demand charges) and service offerings (interruptible service) to encourage a reduction or avoidance of peak use. Commercial and industrial customers who remain on firm service despite the option to take lower cost interruptible service are likely doing so because they need consistent gas service.

20. In the OCU Decision, the BCUC pointed to FEI's evidence as to how the customer profile in the area would amplify the impacts of a capacity shortfall:[20]

> FEI states its customer profile has changed over time and it has fewer large interruptible industrial customers who can be quickly curtailed in an emergency. To make a meaningful difference in load curtailment volumes will be required from a larger pool of firm customers. Consequently, capacity shortfalls would predominantly impact residential, commercial and institutional customers. These customers could be forced to operate without gas heat, hot water and cooking for many days or weeks which could create significant health and safety issues.

21. It is evident that the ratepayer groups supporting the OCMP share the expectations articulated by the BCUC and/or have concerns about harm to customers who are curtailed:

- CEC states that it "is firmly of the view that it would be inappropriate and inconsistent with the obligations and regulatory foundation of FEI's business model for the Utility to not serve customers when requested to do so". CEC "recommends that the Commission find this concept to be incompatible with the regulatory compact between the Utility and its existing and future customers";[21]

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[19] OCU Decision, p. 17.

[20] OCU Decision, p. 17.

[21] CEC Final Submission, paras. 20-21.

- BCOAPO submits that "it is incumbent upon all parties to ensure the Utility is able to continue serving its new and existing customers in a reliable and affordable way".[22] It also notes that opposition to the OCMP "fail[s] to consider the substantial cost of electrification, the lead time necessary to build new infrastructure to serve a mass migration to electric heat, the financial importance of leveraging existing natural gas infrastructure, the expeditious need to meet capacity shortfalls by 2026/27 under design day conditions, and that FEI has a duty to serve both existing and new customers in a manner that is safe, reliable and fair";[23] and

- RCIA states that many "factors speak to the need for the OCMP, which in RCIA's view FEI has amply demonstrated",[24] and that "[i]t is not in the public interest to deprive residents and businesses of energy especially during the coldest winter periods".[25] RCIA adds that "[c]onsidering the residents and businesses of the Okanagan continue to subscribe to gas service, FEI must be able to provide service, for which it requires the OCMP".[26]

22. In short, there is a strong public interest rationale in continuing to design the system and energy supply portfolios to be able to serve firm customers in normal operations. Avoiding the OCMP would only shift economic and social costs to the subset of FEI customers who would be curtailed and the surrounding community.

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[22] BCOAPO Final Submission, pp. 4-5.

[23] BCOAPO Final Submission, p. 10.

[24] RCIA Final Submission, p. 9.

[25] RCIA Final Submission, p. 21.

[26] RCIA Final Submission, pp. 21-22.

C. "TAPPING THE BRAKES" ON NEW CONNECTIONS WOULD BE AN ERROR IN LAW

23. BCSEA also urges the BCUC to reject the CPCN in favour of relieving FEI from its duty to serve under section 28(3) of the UCA.[27] The BCUC would err in law in doing so. The duty to serve is a fundamental regulatory principle, and relieving a utility from the duty to serve is clearly intended to be reserved for exceptional circumstances. There is no statute, regulation or provincial policy that would support "tapping the brakes" on growing natural gas distribution capacity and new connections, or phasing out natural gas use. BCSEA and FTFO are, in effect, asking the BCUC to make new policy, which the BCUC has no jurisdiction to do.

(a) Relief from the Duty to Serve Is Clearly Intended to Be an Exceptional Remedy

24. The courts have confirmed that broadly worded public interest powers in the UCA, which would include this power and the CPCN power (section 45), must still be interpreted in light of the purpose of the provision, statutory context and BCUC's overall mandate.[28]

25. The express requirement in section 28(3) for both a hearing and "proper cause" make it clear that this is intended to be an exceptional remedy.

26. Moreover, the obligation to provide service to all persons that request it, and to do so without undue discrimination or undue delay is part and parcel of the regulatory compact that is fundamental to utility regulation.[29] BCSEA's attempt[30] to distinguish *ATCO* and *Princeton* (two cases articulating the regulatory compact) based on the fact that these cases did not involve connecting new customers misses the mark. Section 28 of the UCA refers to requests for service and section 39 of the UCA refers to the provision of service to "all persons who apply for service". It is clear that the duty to serve provisions are intended to apply to both existing and potential customers.

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[27] Section 28(3) provides: "After a hearing and for proper cause, the commission may relieve a public utility from the obligation to supply service under this Act on terms the commission considers proper and in the public interest."

[28] *Coquitlam (City) v. British Columbia (Utilities Commission)*, 2021 BCCA 336, paras. 73-75.

[29] FEI Final Submission, paras. 32-34.

[30] BCSEA Final Submission, para. 20.

(b) BCSEA and FTFO Are Effectively Asking the BCUC to Make New Policy, Which the BCUC Has No Jurisdiction to Do

27. An objective of "tapping the brakes" on growing natural gas distribution capacity or phasing out natural gas cannot be "proper cause" under section 28(3) of the UCA or a valid public interest basis for denying a CPCN.

28. The British Columbia Court of Appeal's decision in *British Columbia Hydro and Power Authority vs. British Columbia (Utilities Commission)* (1996), 20 B.C.L.R. (3d) 106 confirmed (at paragraph 52) that the BCUC is not charged with a policy-making function:

> I have already described the reason for the existence of the tribunal. The expertise or skills of its members vary. Experience has demonstrated skills associated with accounting, economics, finance and engineering have been frequently utilized. Unlike labour relations tribunals where past experience in the field of labour relations is a virtual prerequisite, past experience in the regulatory field is not necessary. A similar observation may be made with respect to securities commissions. Both labour relations tribunals and securities commissions are expressly conferred with policy making powers. None such are conferred on the Commission. [Emphasis added]

29. In BC Hydro's 2015 Rate Design proceeding, the BCUC similarly recognized that there was no evidence of legislative intent to provide the BCUC with jurisdiction to set low-income rates.[31] The Court of Appeal denied leave to appeal in that case.[32]

30. There is no statute, regulation or provincial policy that would support BCSEA's and FTFO's position that the BCUC should be "tapping the brakes" on growing natural gas distribution capacity, adding new customers or phasing out natural gas. To the contrary, FEI submits that the UCA evinces a clear legislative intent to allow British Columbians to continue receiving, and choose to take, gas service. For instance:

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[31] BC Hydro 2015 Rate Design Application, Decision and Order G-5-17 dated January 20, 2017, p. 67. On June 2, 2017, by way of Order G-87-17 the BCUC denied the reconsideration request finding the errors claimed had not been substantiated on a *prima facie* basis.

[32] *British Columbia Old Age Pensioners' Organization v. British Columbia Utilities Commission*, 2017 BCCA 400.

- The UCA continues to refer throughout to the production, generation, storage, transmission, sale, delivery or provision of natural gas;[33] and

- The Legislature has not provided any signal that natural gas service should cease, including in amendments to the *British Columbia's Energy Objectives Regulation* earlier this year. This stands in stark contrast to the prohibition of nuclear energy set out in BC energy objective (o) "to achieve British Columbia's energy objectives without the use of nuclear power".[34]

31. Existing enactments envision additional gas connections in the coming years. Customers can request gas connections under the Zero Carbon Step Code until 2030, which is beyond the horizon the OCMP is designed to address. And even after 2030, not all end uses for gas are precluded (e.g., cooking, restaurants and industrial uses).[35] The Zero Carbon Step Code does not bar new gas connections, or suggest that reliable service for existing customers should be compromised.

32. BCSEA and FTFO's position would be disruptive to customers, and runs contrary to the transition timeline established by the Zero Carbon Step Code. The provincial government clearly contemplated the need for an orderly transition in the Zero Carbon Step Code. It turned its mind to the duration of the transition to implement restrictions on gas connections and selected 2030. It is not within the BCUC's mandate, or its jurisdiction, to accelerate that timeline.

33. Further, the recent BC Clean Energy Strategy explicitly recognizes the role of the gas system for BC's energy system, particularly in meeting peak demand and in colder climates like the Okanagan:[36]

> Not all energy needs can be met through electricity and utility-scale batteries. Liquid and gas fuels will remain essential for the foreseeable future, especially in areas like longhaul transportation, certain industrial processes, and in remote

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[33] For example, sections 1, 61(4), 65, 66, 67 and 121 of the UCA.

[34] *Clean Energy Act*, S.B.C. 2010, c. 22, s. 2.

[35] Exhibit B-3, BCUC IR1 2.2.

[36] https://www2.gov.bc.ca/gov/content/industry/electricity-alternative-energy/powering-our-future.

communities not connected to the electricity grid. BC's gas system will also continue to play an important role for many years to come in order to maintain system resiliency, meet peak energy demand, and provide home heating in colder climates. And when it comes to transportation fuel, we are still largely dependent on imports from other jurisdictions, with the exception of Burnaby's Parkland Refinery and Prince George's Tidewater Renewable facility, both of which are leaders in producing renewable and low-carbon fuels.

….

Planning for a resilient future

Part of what makes BC's energy system resilient is the diversity of its energy sources. For example, a record-breaking cold snap in January 2024 drove BC's hourly peak demand to new highs. BC Hydro was able not only to meet that peak demand at home in BC, but also to export much-needed power to our neighbours in Alberta. Natural gas was also critical in meeting peak demand, delivering about twice as much energy for home heating as the electricity system during this time – highlighting the importance of BC's existing gas system.

…

Electricity and gas can be complementary energy sources, for example where the gas system's role in heating acts as a back-up for clean electricity, but currently their futures are planned independently through separate resource planning processes. …

…

A key focus of BC's net zero pathway assessment will be the impacts of electrification of home heating on electricity and natural gas planning and identifying the role of a decarbonized gas system – with increasing amounts of renewable natural gas and hydrogen – in BC's future energy system. For example, in colder climates, dual fuel systems may make the most sense where low-carbon gases serve as back-up during colder temperatures where electric heat pumps are less efficient and the electricity system is unable to meet peak demand annually.

[Emphasis added.]

34. As such, capacity investments in the gas system are critical to BC's energy landscape. BCSEA and FTFO are advocating for a vision that is at odds with the stated policy of the provincial

government. The BCUC would err in interpreting its public interest powers to give effect to BCSEA's and FTFO's non-existent policy objectives.

D. BCSEA'S APPROACH WOULD BE UNDULY DISCRIMINATORY

35. Although BCSEA argues that denying or limiting new gas connections would be non-discriminatory,[37] this is clearly incorrect. It would involve treating potential new customers in one portion of FEI's service territory differently from those everywhere else. FEI's General Terms & Conditions are drafted to be universally applicable so as to avoid undue discrimination.

E. BCSEA GIVES EXCESSIVE WEIGHT TO LONG-TERM LOAD UNCERTAINTY

36. BCSEA relies on future load uncertainty as a basis to deny the OCMP.[38] FEI submits that BCSEA's argument gives excessive weight to long-term load uncertainty in the circumstances.

(a) Stranding Risk Is Just One Among Many Factors that Must Be Balanced

37. Stranding risk is just one of many factors that FEI must consider as a utility operator, including safety, reliability, resiliency, affordability and sustainability. Placing too much emphasis on any one factor can be detrimental to customers in other respects. FEI submits that overemphasizing stranded asset risks, as BCSEA does,[39] has negative impacts in these circumstances. Failure to add system infrastructure in the face of a clear and imminent need jeopardizes the reliability of service to customers. As noted in Section B above, forced curtailments during the coldest periods of winter would have serious implications for the affected customers and communities.

(b) The Solution to Future Load Decline Would Be to Repurpose the Assets, Not Denying Service Now

38. On the facts of this case, there is no need to allow curtailments and deny new connections simply to manage stranding risk. As FEI described in its Final Submission, FEI does not foresee a scenario where the additional LNG storage capacity would be underutilized. Moreover, FEI's

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[37] BCSEA Final Submission, para. 20.

[38] BCSEA Final Submission, para. 31.

[39] BCSEA Final Submission, para. 30.

evidence is that if at some hypothetical future time the capacity provided by the mitigation measures were to be considered underutilized in the planned location, then the assets associated with the expanded LNG storage facility would still be utilized elsewhere.[40]

(c) The BCUC Decisions that BCSEA Cites Did Not Preclude Attachments or Investment to Serve Clear Demand

39. None of the BCUC decisions cited by BCSEA in support of its position[41] (a) endorsed a policy of planning the system based on needing to curtail firm customers in normal operations, or (b) contemplated denying gas service or otherwise determining that energy consumers should no longer have the option of adopting gas.

40. To the contrary, the BCUC's decision on the Revised Renewable Gas Comprehensive Review expressly acknowledged that "fuel choices are ultimately for customers to make, but it is important for measures to be taken to support and assist effective decision making for customers."[42] [Emphasis added.]

41. The BCUC's Decision and Order G-78-24 on FEI's Long Term Gas Resource Plan (LTGRP) indicates that, while there are challenges facing FEI, a diversified energy future in which the gas system continues to play an important role remains reasonable and plausible:

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40 FEI Final Submission, para. 90.

41 BCSEA Final Submission, paras. 15-19. BCSEA references what it describes as "a series of decisions in which the Commission has begun to grapple with the uncertain future role of the gas distribution system in BC in the context of the clean energy transition".

42 FEI Biomethane Energy Recovery Charge Rate Methodology and Comprehensive Review of a Revised Renewable Gas Program, BCUC Decision and Order G-77-24 dated March 20, 2024, page 59 referencing page 49 of the BCUC Inquiry into the Acquisition of Renewable Natural Gas by Public Utilities in British Columbia Phase 2 Report dated June 13, 2023.

- The Panel endorsed FEI's demand forecast methodology[43] and found that the Diversified Energy (Planning) forecast itself was reasonable.[44] Ultimately, the BCUC found that carrying out the 2022 LTGRP is in the public interest, finding "that the LTGRP is an aspirational pathway forward that results in a reasonable likelihood that FEI will meet its prescribed GHG reduction requirements and serves the public interest."[45]

- Further, the Panel found at page 21 "at this time, that a deep electrification pathway is unlikely to be reasonably achieved in the short term, for instance by 2030." While the Panel determined it was premature to find that deep electrification was not plausible over the long term, the feasibility and timing of a deep electrification scenario remains uncertain.

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[43] At page 20: "The Panel finds that the end-use methodology used by FEI in the preparation of its demand forecasts is reasonable, appropriate and is consistent with past practice. Additionally, the Panel finds that the demand forecast for residential, commercial and industrial customers, before new demand-side measures, that is included in the Diversified Energy Planning demand scenario, is reasonable and meets the requirements of section 44.1 (2)(a) of the UCA."

[44] At page 21: "Overall, the Panel finds that the Diversified Energy Planning demand scenario is a reasonable basis for illustrating FEI's total demand forecast in the 2022 LTGRP, and meets the requirements of section 44.1 (2)(a) of the UCA."

[45] Page 57.

PART FOUR: REPLY TO BCSEA, FTFO AND CEC REGARDING ALTERNATIVES

42. RCIA and BCOAPO endorse FEI's preferred alternative, with RCIA referring to the preferred alternative as "innovative".[46] This Part therefore focuses on the arguments of BCSEA, FTFO and CEC. It provides further support for a BCUC finding that FEI appropriately identified and evaluated alternatives capable of meeting the project need. It is organized around the following points:

- First, the additional ideas put forward by BCSEA (peak demand reduction), FTFO (dual-fuel heating) and CEC (thermal batteries) are not viable solutions to the imminent capacity shortfall.

- Second, CEC's reimagined alternatives analysis is unsound. It does not provide a basis to displace Alternative 6 as the preferred alternative for the OCMP.

A. FEI CONSIDERED APPROPRIATE ALTERNATIVES

43. FEI examined a wide variety of options to address the impending capacity shortfall, including all of the options identified in the OCU Decision. The additional ideas put forward by BCSEA (demand reduction), FTFO (dual-fuel heating and electrification) and CEC (thermal batteries) are not viable solutions to an imminent capacity shortfall, for the reasons stated below.

(a) Reply to BCSEA: Peak Demand Reduction Is Not a Viable Project Alternative

44. BCSEA states that FEI has not appropriately analyzed the project alternatives because "FEI excluded peak reduction options from consideration".[47]

45. The OCMP has been designed to meet the imminent need acknowledged by the BCUC in the OCU Decision.[48] BCSEA's argument assumes a ready supply of firm customers willing to voluntarily accept curtailments as soon as next year. As noted above, FEI's commercial and industrial rate structures already include demand charges to incent customers to reduce peak

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[46] RCIA Final Submission, p. 23.

[47] BCSEA Final Submission, para. 28.

[48] Page 25: "it is clear there is a need for FEI to address the ITS' projected capacity shortfall in a timely manner."

consumption. FEI also offers interruptible rates that provide customers that choose this service with a financial incentive to accept curtailment in peak demand periods. It is reasonable to assume that businesses capable of switching to a backup fuel (generally diesel), or otherwise accepting the consequences of an interruption in natural gas supply, would be taking this service already. In other words, the customer likely would need to install equipment to allow it to use some form of back-up fuel such as diesel.

46. Further changes in rate structures (price) could conceivably have a conservation impact in the long run; however, a change in rate structure would have little to no impact on peak demand in the short-term, given the low price elasticity of natural gas.[49]

47. BCSEA is not acknowledging the practical barriers to voluntary curtailment as a means of significantly reducing the peak demand in the Okanagan. These barriers would include the number of customers that would have to voluntarily participate to sufficiently reduce demand, given the modest amount of large industrial load in the area. Enforcement would be a challenge if people had second thoughts about going cold in deepest winter. Using AMI to enforce a curtailment is an all or nothing affair – gas is either on or off – meaning that pilot lights would extinguish, thus prolonging the customer outage. Non-residential customers (i.e., those customers with the larger loads) do not have AMI, meaning that there would be a delay while an FEI employee wielding a wrench visits the customer premises. In short, BCSEA's approach is not a dependable solution.

(b) Reply to FTFO: Dual-Fuel Heating and Electrification Are Not Viable Project Alternatives

48. FTFO focuses much of its submissions on the use of electrification and dual-fuel heat pumps to avoid the need for the OCMP. FTFO states, for instance, that "FEI did not consider the option of joining forces with their electrical counterpart, FortisBC Inc (FBC), to cover the

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[49] Exhibit B-3, BCUC IR1 2.4.

anticipated gas shortfall by promoting the use of electricity in the Kelowna area."[50] FEI addressed in its Final Submission why this is not an alternative to, or mitigative of the need for, the OCMP.[51]

49. First, the OCMP is addressing an imminent need that the BCUC has already confirmed. Programs such as dual-fuel heating system rebates or alternative rate structures are not near-term solutions.[52]

50. Second, even over a longer term, while an electric heating rebate program has the potential to reduce *annual* gas demand, there is presently too much uncertainty regarding potential uptake to be the basis for infrastructure planning to serve *peak* demand.[53] Relying on assumed demand reductions when planning system capacity is, in light of the present uncertainty, a recipe for service interruptions for firm customers.

51. Third, dual-fuel heating systems will reduce annual gas demand but are unlikely to have a material impact on peak demand, which drives the system capacity requirements.[54] Currently, dual-fuel systems are designed so that below a certain temperature (switch-over temperature) the entire heating load is provided by the gas furnace with none of the heating load provided by the heat pump. As a result, the gas peak load could only be affected by the difference in efficiency between a customer's existing furnace and the furnace that would be acquired with a dual-fuel system.[55]

52. Fourth, while FEI can offer an electric heating or dual-fuel heating rebate, a customer must choose to participate. A customer's decision to participate can be influenced by access to capital and personal preferences, among other things, and FEI cannot predict how many customers will participate or the timing.[56]

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50 FTFO Final Submission, p. 3.

51 FEI Final Submission, paras. 24-29.

52 Exhibit B-3, BCUC IR1 2.1.

53 Exhibit B-3, BCUC IR1 2.1.

54 Exhibit B-3, BCUC IR1 2.4.

55 Exhibit B-3, BCUC IR1 2.4. See also Exhibit B-7, FTFO IR1 2.2.

56 Exhibit B-3, BCUC IR1 2.1 and 2.4.

(c) Reply to CEC: Thermal Batteries Are Not a Viable Project Alternative

53. CEC states that it "generally finds the selection of the feasible alternatives, to be an acceptable starting point for the purpose of assessing the information on the record in this proceeding."[57] CEC has nevertheless recommended that the BCUC "direct FEI to make a more thorough evaluation of thermal battery potentials, preferably in collaboration with the CEC".[58]

54. FEI submits that it has adequately explained in its response to CEC IR1 16.4[59] why thermal batteries are not feasible alternatives to the OCMP. CEC has not offered any convincing evidence that FEI's assessment is incorrect – indeed CEC has acknowledged the technical requirements that make this approach impractical (i.e., requiring a medium such as water and a distribution system or changes to a customer's equipment at the premise). While FEI agrees that thermal batteries are an innovative technology for thermal energy storage, there is no benefit in requiring additional investigation in this instance when the necessary complementary infrastructure is absent. In fact, further delays would be ill-advised in the face of the imminent capacity shortfall.

B. FEI'S EVALUATION OF ALTERNATIVES WAS BALANCED AND REASONABLE

55. CEC generally agrees with the feasible alternatives[60] and the cost estimates but believes Alternative 5 is superior to Alternative 6 based on its own reimagined alternatives analysis. FEI submits that the evidence supports FEI's selection of Alternative 6 as the preferred option. As discussed below, FEI's methodology (including the evaluation criteria, criteria weightings and scoring) was reasonable and balanced. CEC's critique of FEI's process is unjustified and CEC's own competing analysis is unsound. The implementation of a mitigation project should not be delayed for further investigation of Alternative 5 as CEC suggests.

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57 CEC Final Submission, para. 30.

58 CEC Final Submission, paras. 26-29.

59 Exhibit B-6.

60 CEC Final Submission, para. 30.

(a) A Sound Rationale Underlies FEI's Evaluation Criteria and Weightings

56. CEC highlights that FEI's evaluation criteria are not standardized with pre-determined weightings across projects.[61] FEI submits that it stands to reason that weightings and evaluation criteria will vary among projects.

57. The intention of an alternatives analysis is to determine the best solution to meet a project's objectives. It is stating the obvious that project objectives will not be uniform in every CPCN application. In order for the alternatives process to be effective at selecting the best option to meet a specific project's drivers and objectives, evaluation criteria and weightings have to reflect the project drivers and objectives.[62]

58. In setting up the analysis framework, FEI considers the key project issues while also evaluating how each alternative may affect the project.[63] While expert judgment is always required, CEC's pejorative characterization that this is backwards or introduces bias misses the mark.[64] FEI's approach ensures that the process yields useful and accurate results that are specific to the project details and objectives, and avoids over- or under-representing the impact of a component of an alternative. It allows for the combination of scores and weightings to effectively represent the overall impact and significance of the issues on each alternative.[65] Moreover, FEI's methodology is fully transparent.

(b) CEC Has Overweighted FEI's Financial Criterion and Its Scoring Misrepresents the Rate Impact Differential

59. The primary factors contributing to CEC's identification of Alternative 5 as superior to Alternative 6 are that CEC's re-imagined analysis (a) overweights the Financial criterion in light of the reliability and capacity driver of the OCMP, and (b) misrepresents the difference between the rate impacts of the two alternatives. CEC overweighted the Financial criterion at the expense of

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61 CEC Final Submission, Appendix A, para. 4.

62 Exhibit B-6, CEC IR1 7.1

63 Exhibit B-6, CEC IR1 7.2.

64 CEC Final Submission, Appendix A, para. 10.

65 Exhibit B-6, CEC IR1 7.2.

other critical areas that impact the project objective to a greater degree, and its revised Financial scoring is illogical.

FEI's Financial Weighting of 10 Percent Is Appropriate in Light of the Project Driver and Small Rate Impact Differential

60. While CEC's favoured outcome was the result of a number of selective revisions to both weightings and scoring, CEC's revision to the Financial criterion was by far the most influential of the revisions. CEC tripled the weighting of this criterion in its assessment (from 10 percent to 30 percent), and also revised the scoring for the criterion downward from FEI's assessment.[66] This led to a 50-point swing in CEC's alternate assessment toward Alternative 5.[67] Without that 50-point swing there would be little difference between the scoring of Alternatives 5 and 6, even with the numerous other adjustments that were made by CEC. The end result of CEC's approach is to give significant weight to an immaterial rate impact differential of 0.09 percent (in absolute terms) between the two alternatives.[68] There are two problems with CEC's approach to the Financial criterion.

61. First, CEC's revisions do not accord with the nature of the OCMP, a project which is required to meet imminent peak demand in the winter of 2026/2027. While the cost and rate impact of the alternatives are an important consideration, the Project is about mitigating risk to customers based on well-established planning standards. The implication of CEC overweighting the Financial criterion was that CEC underweighted other critical areas which impact the OCMP objective to a greater degree. In doing so, CEC fundamentally misunderstands the challenges of reliable peak winter deliveries, including the consequences.

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66 CEC Final Submission, para. 47.

67 CEC Final Submission, paras. 47 and 48. In FEI's analysis, Alternative 5 has a weighted score of 10 points higher than Alternative 6 (40 points versus 30 points). In CEC's analysis, Alternative 5 is 60 points higher (120 points versus 60 points).

68 There is only a 5-point difference in the scoring between Alternatives 5 and 6 without the Financial criterion under CEC's approach (i.e., score of 235 for Alternative 5 and score of 230 for Alternative 6), but the Financial criterion weighting of CEC's approach would increase the difference between the two alternatives by 60 points (i.e., score of 120 for Alternative 5 and score of 60 for Alternative 6, which is a 100 percent point swing) for a rate impact differential of 0.09 percent (i.e., difference between 0.23 percent and 0.36 percent).

62. Second, the rate impacts of all the feasible alternatives are reasonably comparable. The levelized rate impacts of the feasible alternatives ranged between 0.23 percent and 0.36 percent.[69] Had one of the alternatives been one or more orders of magnitude higher, it may have been appropriate to apply a higher weighting to the Financial criterion.[70] However, the relatively modest variation in the rate impact (i.e., the impact for all alternatives was the same order of magnitude) suggests that the Financial criterion should have less of an influence on the results compared to other categories such as Asset Management, Technical, and Community, Stakeholders & Rightsholders.[71]

CEC's Revised Financial Scoring Is Inconsistent with the Small Rate Impact Differential

63. CEC's reassessment of the financial scoring is also flawed. FEI rated Alternative 5 as 4 (which CEC accepts) given that it had the lowest levelized rate impact over 34 years at 0.23 percent.[72] FEI rated Alternative 6 as 3 based on a levelized rate impact over 34 years of 0.32 percent.[73] (Alternative 4 was rated as 2 as it had the highest levelized rate impact over 34 years at 0.36 percent.[74])

64. CEC's alternate assessment reduced the score of Alternative 6, from 3 to 2. Such an adjustment does not make sense in light of the modest difference in rate impacts between the two alternatives (0.23 percent versus 0.32 percent). The difference between the rate impacts is 39 percent which corresponds closely with the difference between a score of 4 and 3 (approximately 33 percent). While CEC at times emphasizes the importance of quantification,[75] its scoring would fail to live up to its own standards as it would imply that the rate impacts of

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69 Exhibit B-3, BCUC IR1 1.3.

70 Exhibit B-6, CEC IR1 7.2. See also Exhibit B-8, RCIA IR1 6.2.

71 Exhibit B-3, BCUC IR1 1.3.

72 Exhibit B-1, Application, p. 39.

73 Exhibit B-1, Application, p. 39.

74 Exhibit B-1, Application, p. 39.

75 CEC Final Submission, para. 75 and Appendix A, para. 45.

Alternative 6 are twice those of Alternative 5 – a 100 percent difference – with a rating of 4 versus a rating of 2.

65. For an immaterial difference of 0.09 percent in rate impact (in absolute terms), CEC's approach would give Alternative 5 a score that is 100 percent higher (i.e., score of 4 versus 2) than Alternative 6, and also results in a 100 percent point swing (i.e., 120 points versus 60 points for the Financial criterion) towards Alternative 5. FEI submits that this result would be incongruous, whereas FEI's approach is intuitive.

(c) CEC's Other Weighting Adjustments Are Counterintuitive and Outcome-Driven

66. CEC's other recommended adjustments to weightings and scorings, discussed below, similarly run contrary to the evidence in this proceeding. It is noteworthy that they all have the effect of shifting scoring to Alternative 5, despite internal logical inconsistencies and incompatibility with the evidence. Rather than undertaking a holistic analysis, it appears that CEC has instead attempted to find places to "put its thumb on the scale" for Alternative 5.

Community, Stakeholders, and Rightsholders Category

67. FEI weighted the Community, Stakeholders, and Rightsholders category at 25 percent to reflect the importance of incorporating the needs of the community in FEI's solution, striving to minimize negative impacts.[76] CEC concedes that a combined 25 percent weighting for this category was acceptable.[77] However, CEC has unjustifiably changed the relative weighting of the criteria within this category in a manner that favours Alternative 5.

68. In FEI's analysis, the Indigenous Relations and Socio-Economic criteria within this category were weighted equally (and higher than Health and Safety), as these two criteria would have a higher likelihood of variability in impact amongst the feasible alternatives.[78] CEC has increased the weight of the Indigenous Relations criterion from 10 percent to 15 percent[79], and

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[76] Exhibit B-3, BCUC IR1 3.1.

[77] CEC Final Submission, Appendix A, para. 24.

[78] Exhibit B-3, BCUC IR1 3.1.

[79] CEC Final Submission, Appendix A, para. 20.

correspondingly reduced the Health and Safety criterion from 10 percent to 5 percent.[80] FEI's scoring of the former criterion was higher for Alternative 5 than Alternative 6, while the opposite was true for the latter criterion. As such, CEC's adjustments shift the scoring to favour Alternative 5 relative to FEI's analysis in both places.

69. Indigenous Relations in this context considers the impact during construction to known culturally sensitive areas at the Project site, the complexity and timeline risk regarding Indigenous community engagement, and the impacts to Indigenous community relationships during construction and during the life of the Project.[81] CEC's stated basis for this adjustment is that Indigenous Relations "were an important and influential element of the OCU proceeding"[82] [Emphasis added]. However, the OCMP is not the same type of project as the original OCU project. While FEI acknowledges the importance of Indigenous relations, it is evident that the nature of Indigenous relations for a small-scale LNG facility located on an FEI-owned urban site would differ from a project that included an approximately 30 kilometre pipeline that crossed Crown land. The relative importance of this criterion for the OCMP and the original OCU project is also apparent from the markedly lower level of participation by Indigenous groups in this proceeding.

70. Similarly, adjusting the weighting of the Socio-economic criterion down from 10 percent to 5 percent[83] is illogical in the context of this Project. The Socio-economic criterion considers the impact of the Project to the human environment during construction and during the life of the Project. The criterion includes noise, local emissions, aesthetics, nuisance factors, and the short- and long-term effects that may be observed by visitors, businesses, and community infrastructure (e.g., schools, hospitals, recreation facilities, etc.). It also considers the direct and indirect effects of the Project on traffic and commercial/residential access during construction

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80 CEC Final Submission, Appendix A, para. 21.

81 Exhibit B-1, Application, p. 32.

82 CEC Final Submission, Appendix A, paras. 18 and 19.

83 CEC Final Submission, Appendix A, para. 21.

and during the life of the Project, as well as impacts to roadways, intersections, and commercial and residential accesses.[84]

71. CEC fails to articulate a valid reason for decreasing the weighting for this criterion, and the change is incompatible with the fact that the OCMP site is located in an urban setting.[85] Concern about local impacts has also been expressed in a number of letters of comment.[86]

Environmental Category

72. CEC recommends that the BCUC keep the weightings for Ecology and Cultural Heritage as provided by FEI.[87] However, CEC also notes that "these criteria are likely incorporated in indigenous considerations as well".[88] FEI submits this suggestion is without merit. But the key point is that, assuming there was double counting, CEC's recommended changes were the exact opposite of what should occur to rectify it. As described above, CEC has recommended an *increase* in the weighting of the Indigenous Relations criterion (a criterion for which the scoring favours Alternative 5), rather than reducing it to address any potential double counting. FEI submits that this is illustrative of the selectivity with which CEC has recommended adjustments to FEI's alternatives analysis.

Asset Management Category

73. FEI gave the most weight to the Asset Management category (30 percent) for good reason. It reflects the importance of meeting the Project's main objective of implementing a solution that maintains safe and reliable gas service to customers in the Okanagan region.[89] Within that category, FEI weighted the System Reliability & Capacity criterion higher than the Operation criterion (20 percent versus 10 percent).[90] CEC has decreased the weight of both of

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84 Exhibit B-1, Application, p. 32.

85 Exhibit B-1, Application, p. 82. Exhibit B-3, BCUC IR1 9.4.

86 E.g., Exhibits D-1, D-11, D-12, D-13, D-14, D-17 and D-18.

87 CEC Final Submission, Appendix A, paras. 25 and 26.

88 CEC Final Submission, Appendix A, para. 26.

89 Exhibit B-3, BCUC IR1 3.1.

90 Exhibit B-3, BCUC IR1 3.1.

these criteria by 5 percentage points.[91] Since FEI's scoring of both of these criteria was higher for Alternative 6 than Alternative 5, these are among the many adjustments suggested by CEC that shift the scoring towards Alternative 5. FEI submits that FEI's weightings in the alternatives analysis for this category were appropriate and that the CEC's suggested re-weighting are unjustified.

74. The Operation criterion considers long-term impacts including those to employees and contractors to maintain the Project integrity and complete maintenance and repairs. It also considers impacts to adjacent development and third-party land ownership, and lifecycle impacts (e.g., management of encroachments, annual rent payments).[92] CEC asserts that the Operation criterion should be given less weight on the basis of "the ability for FEI to mitigate the issue".[93] CEC has not established that the consideration of this criterion is on a pre-mitigation basis. CEC does not provide any other support for why FEI has incorrectly weighted long-term impacts to maintain and repair the OCMP and other impacts to adjacent properties and lifecycle impacts.

75. CEC's suggested reduction to the System Reliability & Capacity criterion weighting is also ill-considered, particularly in light of the OCMP need. The System Reliability & Capacity criterion considers the ability to maintain gas supply during unplanned disruptions within acceptable parameters. It also considers longevity of gas supply beyond the design lifetime of the Project.[94] This is the essence of the Project need, as recognized by the OCU Decision.

76. CEC's stated reason for the proposed reduction is "FEI's ability to mitigate the issue, and the requirements only occurring during a 1-in-20-year event".[95] CEC's recommendation fails to take into consideration that:

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91 CEC Final Submission, Appendix A, paras. 32 and 34.

92 Exhibit B-1, Application, p. 32.

93 CEC Final Submission, Appendix A, para. 32.

94 Exhibit B-1, Application, p. 32.

95 CEC Final Submission, Appendix A, paras. 34 and 36.

- The OCMP is required because mitigation measures are no longer sufficient to serve peak demand;[96]

- The BCUC's mitigation directive was explicitly based on FEI's well-established 1 in 20-year planning standard (as described in Part 3, Section A above); and

- System reliability and capacity would be of paramount importance during a 1 in 20-year event.

Technical Category

77. FEI weighted the Technical category at 25 percent to reflect the importance of implementing a solution that not only maintains safe and reliable gas service, but that also has a high execution certainty to ensure the Project can be completed by winter 2026/2027.[97] Within this Technical category, the importance of completing the Project before the winter of 2026/2027 therefore also warranted weighting the Execution Certainty criterion more heavily than the Constructability criterion (15 percent versus 10 percent).[98] CEC has decreased the weight of both of these criteria by 5 percentage points.[99] Since FEI's scoring of both of these criteria was higher for Alternative 6 than Alternative 5, CEC's proposed changes are among the many adjustments suggested by CEC that shift the scoring towards Alternative 5. FEI submits that its weightings in the alternatives analysis for this category were appropriate and that CEC's suggested re-weighting is unjustified.

78. The Constructability criterion considers the existing above and below ground constraints in terms of construction activities, pipe-laying, productivity, requirement for non-standard higher risk construction techniques, construction footprint, fabrication, and procurement. It also

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96 Exhibit B-1, Application, pp. 11-12.

97 Exhibit B-3, BCUC IR1 3.1.

98 Exhibit B-3, BCUC IR1 3.1.

99 CEC Final Submission, Appendix A, paras. 39-41.

considers the ability and complexity to construct within the existing land perimeter and footprint. This includes challenges regarding permits, setbacks, and required additional infrastructure.[100]

79. CEC contends that the Constructability criterion is overweighted on the basis of FEI's familiarity with the potential approvals.[101] Regardless of FEI's familiarity with the permitting requirements, they vary among the alternatives (e.g., required setbacks, electrical supply, the potential requirement to find an alternate site and BCER permits).[102] Constructability of a project is a highly relevant criterion, as it considers whether the alternative can be built at all. It was reasonable for FEI to weight this criterion at 10 percent.

80. CEC's recommendation regarding the weighting for the Execution Certainty criterion is similarly divorced from the fundamentals of the OCMP. The Execution Certainty criterion considers the impact of compounding risks associated with each of the criteria listed in the other various categories and criteria, and how they can combine to delay the Project such that it is unable to meet customer needs. For example, an alternative may satisfy many of the criteria noted above, but the compounding risk associated with the negotiation and consultation timelines may deem the alternative to be unreasonable and would therefore have a low execution certainty that the Project would be complete by winter of 2026/2027.[103]

81. CEC recommends a reduction in weighting for the Execution Certainty criterion to 10 percent (and states that it would not object to a 5 percent weight).[104] CEC's rationale for the downward adjustment is "the generally small scale of the Project, the use of trucking and small-scale storage with which FEI is reasonably experienced, and the objective of delivering peak shaving several years in the future".[105] FEI observes that it is axiomatic that a project intended to address peak demand is of limited value if it is not executed in advance of the arrival of the peak. CEC's recommended weighting of 10 percent (or less) is entirely incompatible with the

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100 Exhibit B-1, Application, p. 33.

101 CEC Final Submission, Appendix A, para. 39.

102 Exhibit B-1, Application, p. 39.

103 Exhibit B-1, Application, p. 33.

104 CEC Final Submission, Appendix A, para. 40.

105 CEC Final Submission, Appendix A, para. 40.

importance of having the OCMP in service by the winter of 2026/2027 – a need that both the BCUC and CEC[106] have already acknowledged.

(d) CEC's Scoring Changes Are Similarly Outcome-Driven

82. As with CEC's recommended changes to the weightings, its recommended changes to scoring as shown in the table provided in paragraph 47 of CEC's Final Submission also all go in one direction: all five of its recommended increases to scoring are for Alternative 5, and all three of its recommended decreases to scoring are in relation to Alternative 6.[107]

83. This Reply Submission does not address CEC's recommended scoring adjustments *seriatim*. Many of CEC's scoring adjustments relate to trucking, and overlook the potential implications associated with heavy reliance on trucking energy through mountain passes during peak cold weather events. While FEI has acknowledged that LNG trucking is safe, CEC fails to give due consideration to the fact that Alternative 5 would require travelling during the same cold weather events that would lead to peak demand.

84. For example, in relation to the Health and Safety criterion, FEI explained that the reason that Alternative 6 scores better than both Alternative 4 and Alternative 5 for this criterion is that it is the best alternative from a safety perspective. Alternative 6 provides FEI with the ability to proactively schedule and control the transportation of the LNG transport trailers in the fall shoulder season when road conditions are favourable. In contrast, Alternatives 4 and 5 require just-in-time deliveries across mountain highways during peak cold weather winter conditions.[108]

85. Alternative 5 requires nine trailer loads per day during peak cold weather events.[109] Trucks would be required to travel through the Coquihalla Highway passes. Trucking does continue through this region in the winter, but delays and road closures are frequent during the

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106 CEC Final Submission, paras. 9 and 12.

107 Based on the table provided in paragraph 47 of CEC's Final Submission. Appendix A to CEC's Final Submission appears to have somewhat differing scoring.

108 Exhibit B-8, RCIA IR1 7.3

109 Exhibit B-6, CEC IR1 10.2.

winter.[110] In the case of the OCMP, these LNG deliveries would be needed to keep the system online. Any delay could result in insufficient energy for customers and/or a pressure collapse of the distribution system. The proposed OCMP, unlike Alternative 5, reduces this reliability risk, as well as the winter driving safety risk, by staging the LNG safely in Kelowna prior to the challenging road conditions.[111] To the extent that CEC is suggesting that trailers should be staged well in advance of design day conditions (i.e., delivered to site and left to sit pending a cold weather event), CEC is in effect supporting the virtues of an on-site LNG storage solution like Alternative 6 but with added complexity in trying to predict cold weather and re-injection.

86. Notwithstanding this intuitive and obvious risk, CEC suggests that the risk scoring for this criterion should favour Alternative 5.[112]

87. FEI acknowledges that there is an element of judgment involved in setting weightings and scores for alternatives analyses. However, that judgment should still be rooted in logic, the characteristics of the project, the reality of FEI's operating environment and the serious consequences of a just-in-time delivery failure. CEC's recommended adjustments do not meet that standard.

(e) Implementation of a Mitigation Project Should Not Be Delayed for Further Investigation

88. CEC suggests that perhaps Alternative 5 could be deferred and that further investigations of the cost attributes of Alternative 5 should occur.[113] FEI submits that further delay is ill-advised when FEI is already reliant on short-term mitigation measures to meet peak demand. FEI has also clearly demonstrated that, even with mitigation in place, a shortfall is imminent. CEC's suggestion is inconsistent with its acknowledgment that there is a need for a capacity shortfall

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110 Exhibit B-6, CEC IR1 11.6.

111 Exhibit B-6, CEC IR1 11.6.

112 CEC Final Submission, Appendix A, para. 97.

113 CEC Final Submission, paras. 53-56.

mitigation project at this time[114] and that the "Peak Demand Forecast is definitive in demonstrating a need for capacity mitigation measures by 2026/2027 at the latest".[115]

[114] CEC Final Submission, para. 9.

[115] CEC Final Submission, p. 12.

PART FIVE: REPLY TO CEC ON PROJECT COST ESTIMATE

89. CEC expresses dissatisfaction with FEI's use of an AACE Class 4 estimate for the OCMP,[116] but is the only intervener to do so. FEI submits that its use of a Class 4 estimate was appropriate in the circumstances.

90. First, the CPCN Guidelines acknowledge there can be exceptions from the Class 3 estimate requirement.[117] The BCUC's directive in the OCU Decision to file a short-term mitigation plan was not prescriptive regarding the form and content of the application.[118]

91. Second, it takes a significant amount of time to prepare a Class 3 estimate (approximately six additional months[119]), and the OCMP schedule could not accommodate it. There was limited time between the issuance of the OCU Decision in December 2023 and the deadline to file a short-term mitigation plan. The OCMP needs to be in-service by the winter of 2026/2027.[120] In light of the risk of gas shortages in less than two years from now, FEI was concerned about any further delays to the OCMP in-service date.

92. Third, there is also ample evidence on which the BCUC can base its public interest determination. The BCUC has found in the OCU Decision that there is a need for mitigation.[121] Thus, the focus of this Application was selecting the most appropriate Project alternative to meet an acknowledged need. FEI has undertaken Class 4 cost estimates for all feasible alternatives, and compared the capital costs, constructability, and feasibility of the OCMP being in service in time.[122]

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116 CEC Final Submission, paras. 96-97.

117 Page 1: "[The Guidelines] provide[] general guidance regarding the Commission's expectations of the information that should be included in CPCN applications while providing the flexibility for an application to reflect the specific circumstances of the applicant, the size and nature of the project, and the issues raised by the application. An applicant is expected to apply the guidelines in a flexible and reasonable manner that reflects the spirit and intent of the guidelines."

118 Exhibit B-1, Application, p. 44.

119 Exhibit B-1, Application, p. 44.

120 Exhibit B-1, Application, pp. 43-44.

121 Exhibit B-1, Application, p. 44.

122 Exhibit B-1, Application, p. 44.

PART SIX: REPLY ON OTHER MATTERS

93. In this Part, FEI replies to certain interveners on three other issues: project cost recovery; the BCUC's questions; and FTFO's arguments regarding the obligations of professional engineers.

A. REPLY TO BCSEA AND BCOAPO ON RECOVERY OF PROJECT COSTS

(a) BCSEA's Position on Cost Recovery Is Based on General Opposition to Gas Projects Rather than Prudence

94. BCSEA is the only intervener that took the position that the requested cost recovery should not be approved.[123] BCOAPO, CEC and RCIA all agree that the costs should be recovered.[124] FTFO did not address the issue in its submissions. FEI submits that the requested cost recovery should be allowed.

95. FEI explained in Part 5, Section C of its Final Submission why all the pre-construction development costs related to the OCMP have been necessary and prudently incurred. FEI developed the original OCU project to address the capacity shortfall on the ITS, which continues to exist. While the BCUC ultimately did not approve the original OCU project as proposed by FEI, it did confirm the need to address the capacity shortfall.

96. It is evident that BCSEA's position is based on its general opposition to *any* project to address customer peak demand growth on the ITS, rather than any careful consideration of (a) the circumstances that prompted FEI to pursue the original OCU project, (b) the nature of the costs themselves, or (c) the extent to which the previous work has informed FEI's assessment of the alternatives to address the imminent capacity shortfall with the OCMP. FEI addressed in Part 3 of this Reply Submission why BCSEA's general opposition to gas infrastructure would be an unreasonable basis to reject the OCMP, and the same rationale applies to the original OCU project cost recovery.

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[123] BCSEA Final Submission, paras. 32-33.

[124] BCOAPO Final Submission, p. 9; RCIA Final Submission, p. 17; CEC Final Submission, paras. 101-105. FTFO did not comment.

(b) Four-Year Amortization Promotes Intergenerational Equity

97. BCSEA and BCOAPO take conflicting positions on the amortization period of the Application and Preliminary Stage Development costs, with BCSEA arguing for one year (should costs be recovered) and BCOAPO suggesting a 30-year recovery period based on the useful life of the Project assets.

98. BCSEA's position is based on the incorrect premise that customers receiving service in the future will receive no benefit.[125] In fact, if the OCMP is constructed, newly added customers receiving service in four years will benefit. Recovering the costs over one year will mean that there will be new customers added who are benefitting but who have not contributed to the costs. A four-year amortization of cost recovery is appropriate, as described below.

99. FEI submits that BCOAPO's proposed[126] 30-year amortization period would be excessive. In FEI's submission, even a five-year amortization period is unnecessarily long considering the size of the deferral account balance and the difference in the delivery rate impact between a four- and five-year amortization period.[127]

100. FEI's evidence is that a four-year amortization period provides the best balance between minimizing the immediate delivery rate impact in 2025 when amortization begins with some degree of rate smoothing and consideration of intergenerational equity. A four-year amortization period also aligns well with the timing of when all assets related to the OCMP are expected to enter FEI's rate base in 2028.[128]

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[125] BCSEA Final Submission, paras. 32-33.

[126] BCOAPO Final Submission, pp. 9-10.

[127] Exhibit B-1, Application, p. 79.

[128] Exhibit B-1, Application, p. 79.

B. REPLY ON PANEL QUESTIONS

(a) A Conditional CPCN Is Unnecessary

101. The interveners that addressed this issue are essentially aligned with FEI that it would be unnecessary and ill-advised to make a CPCN conditional upon other permits being issued.[129]

102. RCIA does, however, state that it "does not oppose the BCUC providing conditional approval at this time for FEI to pivot to an LNG virtual pipeline, similar to Alternative 5, if a facilities permit for LNG storage is not forthcoming." [130] The approval RCIA is envisioning differs from the approval contemplated by the BCUC's question. RCIA is proposing a contingent term that avoids FEI having to reapply to the BCUC for approval of another alternative if other permits are not issued as planned. This is intended to make the process more efficient, whereas the type of approval contemplated in the BCUC's question would have the opposite effect. As such, FEI does not oppose RCIA's proposed term in the circumstances, if the BCUC believes it is worthwhile.

103. CEC submits that a possible option would be to commence with Alternative 5, and then add storage as it becomes necessary.[131] As FEI explained in its Final Submission, it is unlikely that Alternative 5 could act as a foundation for a future project because of the volume of trucks required and space constraints at the proposed site as the capacity shortfall grows.[132]

(b) There Is No Basis for a Time-Limited CPCN

104. Among the interveners, only CEC suggests a time-limited CPCN (for Alternative 5, which CEC favours).[133] However, CEC has not explained why standard regulatory practice, outlined in FEI's Final Submission, is inadequate. Nor has CEC sought to address the issues inherent in a time-limited CPCN as discussed in FEI's Final Submission. The other interveners, by contrast, recognize these issues. BCOAPO "expresses grave concern" regarding the suggestion of a time-

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[129] BCOAPO Final Submission, p. 6; BCSEA Final Submission, para. 37; CEC Final Submission, para. 121; RCIA Final Submission, p. 26.

[130] RCIA Final Submission, p. 26.

[131] CEC Final Submission, para. 124.

[132] FEI Final Submission, para. 193.

[133] CEC Final Submission, para. 131.

limited CPCN for the OCMP.[134] In RCIA's view, the existing regulatory processes of the BCUC and standard regulatory practice can address any situations where the OCMP assets are no longer used and useful, and a time-limited approval of the CPCN is not needed.[135] BCSEA cites the adverse rate impacts that would flow from a time limited CPCN, by virtue of the need to fully depreciate the asset over the term so as to comply with the Fair Return Standard.[136]

C. FTFO'S SUBMISSIONS REGARDING PROFESSIONAL ENGINEERS ARE WRONG AND IRRELEVANT

105. FTFO's submissions made a number of erroneous arguments about the obligations of professional engineers and Engineers and Geoscientists BC ("EGBC") materials.[137]

106. The BCUC should disregard these arguments because (a) FTFO made no attempt to file evidence on these matters, and (b) had FTFO attempted to do so, FEI would have objected on the basis that it has no bearing on this proceeding. The BCUC has no jurisdiction to deal with the conduct of professional engineers.

107. Notwithstanding that these items are outside the purview of the BCUC, FEI feels obliged to note that its professional engineers conduct themselves in accordance with the EGBC Code of Ethics. FTFO's position essentially suggests that it would be a contravention of the Code of Ethics for professional engineers to be involved with the construction of gas infrastructure. FTFO's position is patently absurd.

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[134] BCOAPO Final Submission, p. 8.

[135] RCIA Final Submission, p. 28.

[136] BCSEA Final Submission, para. 38.

[137] FTFO Final Submission, pp. 10-12.

PART SEVEN: CONCLUSION

108. The evidence demonstrates that the OCMP is in the public interest. The submissions of BCSEA and FTFO on Project need disregard the BCUC's prior determination that there is an imminent need. These interveners would leave people at near-term risk of losing access to gas for heat and commercial processes in furtherance of a non-existent policy objective and due to uncertainty in long-term demand. The BCUC should dismiss this novel, and highly detrimental, approach to utility planning and service.

109. The preferred alternative Small Scale LNG Storage Facility (Alternative 6) is, despite the various arguments of BCSEA, FTFO and CEC, the best alternative to address the immediate need for peaking supply.

110. FEI submits that the BCUC should grant a CPCN and the associated approvals on the terms set out in the Application.

ALL OF WHICH IS RESPECTFULLY SUBMITTED.

Dated:

December 19, 2024

[original signed by Tariq Ahmed]

Tariq Ahmed
Counsel for FortisBC Energy Inc.

Dated:

December 19, 2024

[original signed by Matthew Ghikas]

Matthew Ghikas
Counsel for FortisBC Energy Inc.