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ORDER NUMBER
C-2-25

IN THE MATTER OF
the *Utilities Commission Act*, RSBC 1996, Chapter 473

and

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

BEFORE:
M. Jaccard, Panel Chair
T. A. Loski, Commissioner
W. E. Royle, Commissioner

on March 3, 2025

ORDER

WHEREAS:

A. On December 22, 2023, the British Columbia Utilities Commission (BCUC) issued its Decision and Order G-361-23 denying FortisBC Energy Inc.'s (FEI's) application for a Certificate of Public Convenience and Necessity (CPCN) for the Okanagan Capacity Upgrade (OCU) Project in respect of its Interior Transmission System (ITS), and directed FEI to develop and file for BCUC review and approval a mitigation plan to address FEI's projected capacity shortfall on its ITS, and a compliance filing setting out FEI's proposed accounting treatment for the pre-construction development costs;

B. On July 30, 2024, FEI submitted an application to the BCUC for a CPCN pursuant to sections 45 and 46 of the *Utilities Commission Act* (UCA) for the Okanagan Capacity Mitigation Project (OCMP) (Application);

C. The OCMP is a new liquefied natural gas (LNG) storage and vaporization facility involving bulk LNG transport from FEI's Tilbury LNG facility. The scope of the OCMP includes:

    1. Modifications and additions to FEI's facilities and ITS-connected distribution system for LNG storage, vaporization, odorization, and injection at its Kelowna Gate Station; and
    2. Truck transport of LNG from Tilbury to the Kelowna Gate Station.

D. FEI also seeks BCUC approval, pursuant to sections 59 to 61 of the UCA, of the following:

    1. A depreciation rate of 3.33 percent and a net salvage rate of 0.5 percent applicable to the LNG storage tanks and vaporization equipment as well as the LNG transport trailers related to the OCMP;

2. Renaming of the existing non-rate base OCU Preliminary Stage Development Costs deferral account, which attracts an after-tax weighted average cost of capital return, to the OCMP Application and Preliminary Stage Development Costs deferral account;

3. Recording of the Application costs and preliminary stage development costs for the OCMP in the existing (renamed) OCMP Application and Preliminary Stage Development Costs deferral account; and

4. Transfer of the balance in the OCMP Application and Preliminary Stage Development Costs deferral account (which includes the pre-construction development costs for the original OCU CPCN project from the period of 2018 to 2023) to rate base on January 1 of the year following the BCUC's decision on the OCMP Application and amortization of the balance over four years;

E. By Order G-227-24 dated August 21, 2024, the BCUC established a written hearing process and a regulatory timetable;

F. British Columbia Sustainable Energy Association; British Columbia Old Age Pensioners' Organization et al; Commercial Energy Consumers Association of British Columbia; Residential Consumer Intervener Association; and First Things First Okanagan Climate Action registered as interveners in the proceeding; and

G. The BCUC has considered the Application, evidence and submissions in this proceeding and finds that the following determinations are warranted.

NOW THEREFORE pursuant to sections 45, 46 and 59 to 61 of the UCA, for the reasons outlined in the decision accompanying this order, the BCUC orders as follows:

1. FEI is granted a CPCN to construct and operate the OCMP.

2. FEI is approved to use a depreciation rate of 3.33 percent and a net salvage rate of 0.5 percent for the LNG storage tanks and vaporization equipment as well as the LNG transport trailers related to the Project.

3. FEI is approved to:

    a. Rename the existing non-rate base OCU Preliminary Stage Development Costs deferral account to the OCMP Application and Preliminary Stage Development Costs deferral account;

    b. Record the Application costs and preliminary stage development costs for the OCMP in the OCMP Application and Preliminary Stage Development Costs deferral account; and

    c. Transfer the balance in the OCMP Application and Preliminary Stage Development Costs deferral account (which includes the pre-construction development costs for the original OCU CPCN project from the period of 2018 to 2023) to rate base as described in the Application and amortize the balance over four years.

4. FEI is directed to comply with all other directives in the accompanying decision.

5. The BCUC will continue to hold confidential Appendices A, B-1, B-3, F-1, F-2, G, H, I, and J filed in this proceeding unless determined otherwise by the BCUC.

DATED at the City of Vancouver, in the Province of British Columbia, this 3rd day of March 2025.

BY ORDER

Electronically signed by Mark Jaccard

M. Jaccard
Commissioner

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

DECISION

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Executive Summary

On December 22, 2023, the British Columbia Utilities Commission (BCUC) issued Order G-361-23 denying FortisBC Energy Inc.'s (FEI's) application for a Certificate of Public Convenience and Necessity (CPCN) for the $327.4 million Okanagan Capacity Upgrade (OCU) Project due to a lack of certainty that the proposed scope of the OCU was fully required. The BCUC directed FEI to develop and file for BCUC review and approval a mitigation plan to address the projected capacity shortfall on its Interior Transmission System (ITS), and a compliance filing setting out FEI's proposed accounting treatment for the pre-construction development costs associated with the OCU Project.

On July 30, 2024, FEI submitted an application to the BCUC for a CPCN pursuant to sections 45 and 46 of the *Utilities Commission Act* (UCA) for the Okanagan Capacity Mitigation Project (OCMP or Project) (Application).

The OCMP is a new liquefied natural gas (LNG) storage and vaporization facility involving bulk LNG transport from FEI's Tilbury LNG facility. The expected cost for the OCMP is $50.389 million and the in-service date is anticipated to be June 2027. The scope of the OCMP includes:

- Modifications and additions to FEI's facilities and ITS-connected distribution system for LNG storage, vaporization, odorization, and injection at the Kelowna Gate Station; and
- Truck transport of LNG from Tilbury to the Kelowna Gate Station.

The BCUC established a regulatory timetable for review of the Application, which included public notification, and one round of information requests. Five interveners registered in the proceeding.

The Panel finds that FEI has established the need to address the capacity shortfall in the Okanagan region. The Panel also finds the proposed scope of the OCMP reasonable, as it effectively bridges the capacity gap until future capacity needs are better defined while balancing the reduction of reliance on short-term mitigation measures with the practical necessity of completing the project by winter 2026/2027.

The Panel finds that FEI's analysis of Project alternatives including the selection of the preferred option is reasonable. The Panel also finds that FEI's site assessment process for the preferred alternative was reasonable and comprehensive, having considered multiple locations before selecting the Kelowna Gate Station as the preferred site. The Panel recognizes the potential risk of delays or denials in obtaining the necessary permits from the BC Energy Regulator due to the site's location. However, the Panel is satisfied that the regulatory process allows FEI to address any permitting challenges that may arise.

The Panel is also satisfied with FEI's total Project cost estimate, FEI's Indigenous and public consultation to date, and that the OCMP aligns with the applicable of British Columbia's energy objectives and FEI's 2022 Long Term Gas Resource Plan.

For these reasons, the Panel accepts the OCMP as being in the public interest, and grants FEI a CPCN for the OCMP. The Panel directs FEI to provide Project progress reports, material change reports and a final report as detailed in Section 9.0 of this decision.

Having determined the OCMP is necessary to meet customer demand in the short-term, the Panel is of the view that there is merit in further evaluation of potential measures that could mitigate peak demand in the Okanagan in the longer term, undertaken well in advance of the potential need for any additional capacity projects that may be advanced by FEI in future. Accordingly, the Panel directs FEI to submit a plan within six months of this decision assessing alternatives and possible actions to mitigate peak demand growth or reduce peak demand in the Okanagan in the long term.

1.0 Introduction

1.1 Background on the Okanagan Capacity Mitigation Project

On December 22, 2023, the British Columbia Utilities Commission (BCUC) issued Order G-361-23, (OCU Decision) denying FortisBC Energy Inc. (FEI) a Certificate of Public Convenience and Necessity (CPCN) for the $327.4 million Okanagan Capacity Upgrade (OCU) Project, due to a lack of certainty that the proposed scope of the OCU is fully required. Despite rejecting the application, the BCUC recognized the forecast capacity shortfall on FEI's Interior Transmission System (ITS) and emphasized the need for timely mitigation.[1] As a result, the OCU Decision directed FEI to explore additional short-term mitigation options and develop a plan to ensure the ITS can meet peak demand requirements in the event of a 1-in-20 year cold weather event by the winter of 2026/2027.[2] FEI was required to file this mitigation plan with the BCUC by July 31, 2024. Additionally, the OCU Decision mandated that FEI submit a compliance filing within six months, detailing the proposed accounting treatment for pre-construction development costs associated with the OCU Project, for BCUC review and approval.[3] In response, on July 30, 2024, FEI submitted an application to the BCUC seeking approval for a CPCN pursuant to sections 45 and 46 of the *Utilities Commission Act* (UCA) for the Okanagan Capacity Mitigation Project (OCMP or the Project) (Application).

1.2 Overview of FEI's Application and Project Objectives

FEI proposes constructing a liquefied natural gas (LNG) storage and vaporization facility in Kelowna, BC. LNG will be produced at FEI's Tilbury LNG Plant in Delta, transported by bulk tankers to the Kelowna facility, and stored in tanks for use during peak winter heating seasons.[4] The scope of the OCMP includes: [5]

- Modifications and additions to FEI's facilities and ITS-connected distribution system for LNG storage, vaporization, odorization, and injection at its Kelowna Gate Station; and
- Procurement of bulk LNG transport trailers.

The Project has an expected cost estimate of $50.389 million.[6]

FEI states that the OCMP aims to address the Okanagan region's growing capacity needs by the winter of 2026/2027 and provide coverage through winter 2028/2029, giving FEI time to plan additional solutions for peak reliability on the ITS.[7] FEI states that current short-term measures, including non-firm pressure increases by Enbridge, temporary load shifting, and station modifications involve significant risks and operational challenges. FEI asserts that the OCMP is necessary to reduce reliance on these temporary solutions and ensure reliable service.[8]

[1] Decision and Order G-361-23, p. 23.
[2] Ibid, p. 25.
[3] Ibid, p. 26. By letter dated May 22, 2024, the BCUC extended the filing date of the compliance filing from June 24, 2024 to July 31, 2024 as part of the mitigation plan filing.
[4] Exhibit B-1, p. 3.
[5] Ibid., p. 3.
[6] Ibid., p. 3.
[7] Ibid., p. 1.
[8] Ibid., p. 2.

In the Application, FEI also seeks the following approvals:[9]

- Approval under sections 59 to 61 of the UCA for a depreciation rate of 3.33 percent and a net salvage rate of 0.5 percent for the LNG storage tanks, vaporization equipment and the bulk LNG transport trailers related to the project.
- Approval under sections 59 to 61 of the UCA to record application and preliminary stage development costs in the existing non-rate base deferral account, renamed as the "OCMP Application and Preliminary Stage Development Costs" deferral account and transfer the deferral account balance to the rate base on January 1 of the year following the BCUC's decision and amortize the balance over four-years.
- Recovery of pre-construction development costs incurred for the original OCU Project (2018-2023) through amortization of the renamed deferral account over the same four-year period.

1.3 Regulatory Process

On August 21, 2024, by Order G-227-24, the BCUC established a regulatory timetable for the review of the Application, which consisted of public notice, intervener registration, one round of information requests (IRs) to FEI, letters of comment, and final and reply arguments.

On November 8, 2024, the BCUC issued a letter providing guidance on issues to be addressed in argument submissions and requesting FEI to file an update detailing its consultation and communications activities.

The following intervener groups participated in the review of the Application:

- BC Sustainable Energy Association (BCSEA);
- Residential Consumer Intervener Association (RCIA);
- British Columbia Old Age Pensioners' Organization et al. (BCOAPO);
- Commercial Energy Consumers Association of British Columbia (the CEC); and
- First Things First Okanagan Climate Action (FTFO).

The BCUC received 80 letters of comment.

1.4 Legal and Regulatory Framework

Sections 45 and 46 of the UCA set out the legislative framework for the BCUC review of CPCN applications. Section 45(1) of the UCA states that except as otherwise provided, after September 11, 1980, a person must not begin the construction or operation of a public utility plant or system, or an extension of either, without first obtaining from the BCUC a certificate that public convenience and necessity require, or will require, the construction or operation of the plant or system.[10]

Section 46(3) states that the BCUC may issue or refuse to issue a CPCN or may issue a CPCN for the construction or operation of only a part of the proposed facility, line, plant, system or extension, and may attach terms and conditions to the CPCN.

[9] Exhibit B-1, p. 5.
[10] *Utilities Commission Act*, RSBC 1996, c. 473, Section 45(1).

Section 46(3.1) of the UCA requires that the BCUC consider the following in determining whether to issue a CPCN:

a) the applicable of British Columbia's energy objectives,[11]

b) the most recent long-term resource plan filed by the public utility under section 44.1, if any, and

c) the extent to which the application for the CPCN is consistent with the applicable requirements under sections 6 and 19 of the *Clean Energy Act* (CEA).[12]

The BCUC has jurisdiction to approve the establishment of deferral accounts and set rates, pursuant to sections 59 to 61 of the UCA.

The BCUC's CPCN Guidelines provide general guidance regarding the information that should be included in a CPCN application and 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.[13]

1.5 Decision Framework

The Panel reviews the Application in the remainder of this decision, as follows:

- Section 2 addresses the need and justification for the Project and examines FEI's forecasted peak demand and potential short-term mitigation measures;
- Section 3 explores the Project alternatives;
- Section 4 provides a detailed description of the Project;
- Section 5 focuses on the cost of the Project and rate impact, and includes the Panel's determinations on the additional approvals sought by FEI;
- Section 6 highlights First Nations consultation and public engagement for the Project;
- Section 7 covers the Project's alignment with British Columbia's energy objectives and FEI's long-term resource plan;
- Section 8 sets out the Panel's overall CPCN determination on the Project; and
- Section 9 details the Project reporting requirements.

Relevant evidence and submissions from FEI and interveners are summarized in each section.

2.0 Project Need

2.1 Does FEI's 2023 Peak Demand Forecast confirm capacity shortfall and the need for the OCMP?

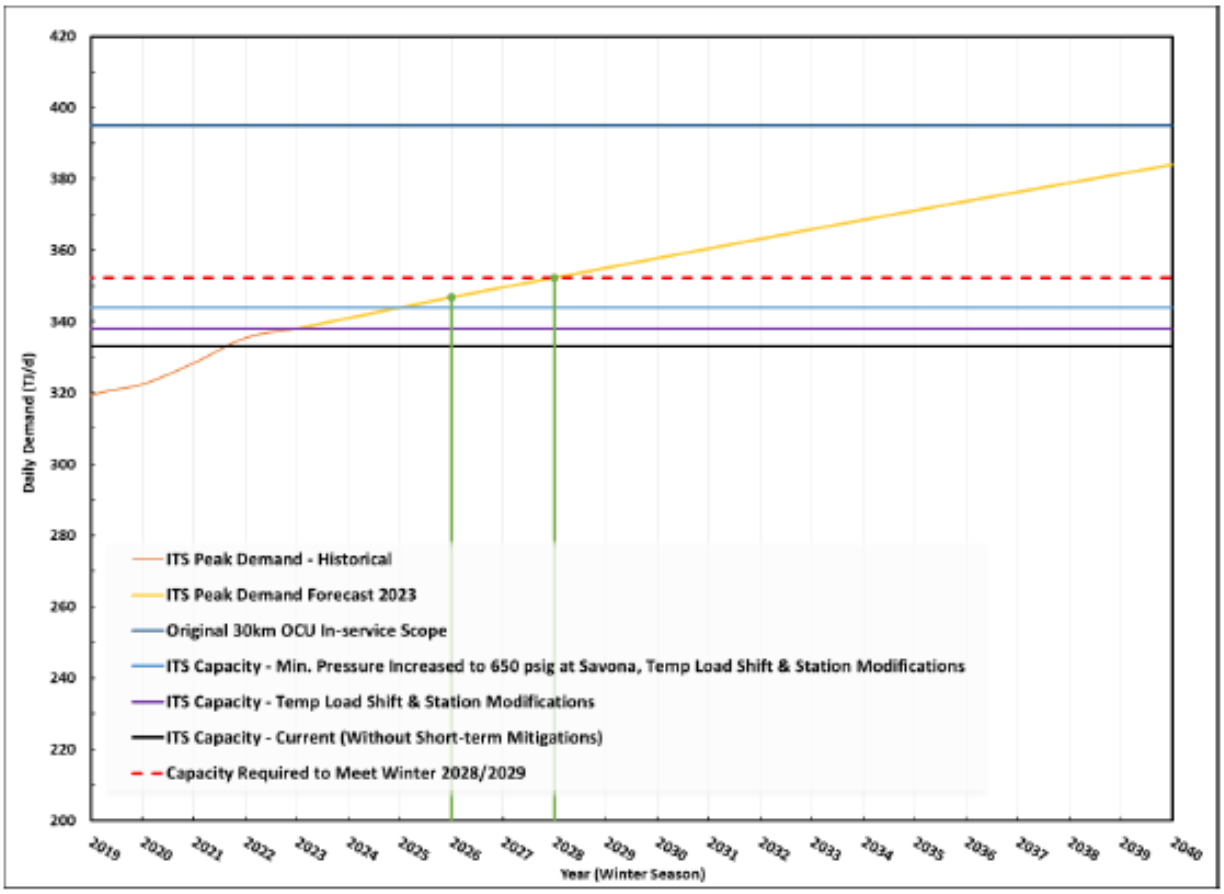
As mentioned in section 1.1, the BCUC, in the OCU Decision, agreed that FEI had identified a potential capacity shortfall on its Interior Transmission System (ITS)[14] and noted that existing short-term mitigation measures

[11] BC's energy objectives are defined in section 2 of the *Clean Energy Act*.
[12] Sections 6 and 19 of the CEA apply to electric utilities and are therefore not applicable to the Panel's review of the Application.
[13] Order G-20-15, 2015 Certificate of Public Convenience and Necessity Application Guidelines.
[14] Order G-361-23, p. 23.

would only provide short-term relief through winter 2026/2027.[15] Accordingly, the BCUC directed FEI to explore additional mitigation solutions that will sufficiently meet peak demand in the event of a 1 in 20-year cold weather event occurring in winter 2026/2027 or the period following.[16] To comply with this directive, FEI developed the OCMP to increase ITS capacity. FEI states that the OCMP aims to implement a solution by winter 2026/2027 while also serving capacity needs through winter 2028/2029, allowing time for FEI to assess longer-term ITS capacity requirements.[17]

In the OCU proceeding, FEI's need for the OCU was based on its 2022 Peak Demand Forecast. For this Application, FEI uses an updated 2023 Peak Demand Forecast, which is based on the forecast of customer growth for 2023, and 2022 year-end customer attachment and load data (2022 year-end data).[18] FEI states that the 2023 Peak Demand Forecast, shown in Figure 1 below, confirms the potential capacity shortfall on the ITS by winter 2026/2027 that cannot be addressed with short-term mitigation measures (discussed in the following subsection) already implemented. FEI states that, since the OCMP addresses near-term needs (through winter 2028/2029), it considers the 2023 Peak Demand Forecast reasonable for defining the scope of the OCMP.[19]

Figure 1: 2023 Peak Demand Forecast[20]



[15] Order G-361-23, p. 23.
[16] Order G-361-23, p. 25.
[17] Exhibit B-1, p. 10.
[18] Ibid., p. 12.
[19] Ibid., p. 11.
[20] Ibid., p. 11.

FEI emphasizes the 2023 Peak Demand Forecast (represented by the solid yellow line) indicates peak demand is projected to exceed the ITS capacity that includes all short-term mitigation measures (represented by the light blue line) after winter 2025/2026.[21] Therefore FEI submits that even with the short-term mitigation measures, an alternate near-term mitigation project will be required.[22]

Regarding the impact on its 2023 Peak Demand Forecast of policies in the CleanBC Roadmap that include initiatives such as the BC Energy Step Code and the Zero Carbon Step Code aimed at achieving provincial greenhouse gas reduction targets in new buildings, FEI submits that while these initiatives will impact natural gas usage in the longer term, the ITS is projected to experience a capacity shortfall during a 1-in-20-year cold weather event before these changes take effect.[23] FEI submits that municipalities in the Interior have not yet implemented advanced BC Energy Step Code measures compared to the Lower Mainland, and the adoption of Zero Carbon Step Code in Okanagan remains low.[24]

Furthermore, FEI states that the denial of the renewable natural gas (RNG) connections service in the Revised Renewable Gas Comprehensive Review (RRGCR) Decision is not expected to impact the near-term peak demand forecast or the scope of the OCMP.[25] However, FEI states that it is too soon to assess the impact on the longer-term peak demand forecast beyond winter 2028/2029.[26] Therefore, FEI maintains that a longer-term capacity solution is still required in the Okanagan region.[27]

FEI acknowledges the BCUC's comments in the OCU decision that a longer-term capacity solution should be supported by a revised peak demand forecast that addresses the BCUC's concerns.[28] FEI submits that it has considered the time required to develop and test a revised forecasting methodology, as well as the time needed to plan, seek regulatory approval for, and execute a longer-term capacity solution. FEI concludes that it is highly unlikely to complete a longer-term project before winter 2028/2029. In the interim, FEI expects capacity shortfalls to persist over the coming years and it is not reasonable to continue to rely on short-term mitigation measures.[29] Accordingly, FEI notes that it scoped the OCMP to meet peak capacity needs in the Okanagan region for winters 2026/2027 through 2028/2029 (as discussed further in section 2.3). FEI states that it plans a follow-up project to address demand beyond 2028/2029 that will incorporate a revised peak demand forecasting approach, and any policy changes enacted since this Application.[30]

2.2 Can FEI continue to rely on short term mitigation measures until the need for a longer-term project is established?

FEI states that its reliance on current short-term temporary capacity mitigation measures creates reliability risk and uncertainty. FEI described three short-term temporary mitigation measures in the Application that it has started to implement or has considered implementing to address peak capacity demand for a 1-in-20-year cold weather event:[31]

[21] Exhibit B-1, p. 12.
[22] Ibid., p. 12.
[23] Ibid., pp. 17-18.
[24] Exhibit B-3, BCUC IR 1.3.
[25] Ibid.
[26] Ibid.
[27] Exhibit B-1, p. 15.
[28] Ibid., p. 15.
[29] Ibid., pp. 15-16.
[30] Ibid., pp. 16.
[31] Ibid., pp. 13-14.

1. Minimum Pressure Increase: In 2020, FEI arranged with Enbridge to maintain 650 pounds per square inch gauge (psig) at the Savona transfer point. However, FEI states that this is a non-binding agreement and provides no guarantee of a minimum 650 psig pressure availability.

2. Temporary Load Shifting:
    - Polson Gate Station:[32] Shifting the load from Polson Gate Station to the surrounding gate stations. FEI implemented this measure in both winter 2022/2023 and 2023/2024 and intends to continue to implement this measure until the OCMP is in service.
    - Kelowna #1 Gate Station:[33] Similar adjustments were considered but are no longer viable due to load growth in the area.
    - Coldham Road Gate Station:[34] Plans to modify the supply route to reduce pressure on the West Kelowna system are in progress, with capacity benefits expected by winter 2025/2026.

3. Station Modifications:
    - Kelowna #1 and Polson Gate Stations: Transmission Pressure to Intermediate Pressure (TPIP) bypasses have been constructed, allowing manual flow control to minimize pressure drops. These measures are available for use starting winter 2024/2025.

FEI submits that these short-term capacity mitigation measures have been critical for maintaining service but compromise system reliability. FEI expects to rely on them until permanent infrastructure is installed.[35]

2.3 Scope of the OCMP

As part of scoping the OCMP, FEI evaluated the potential to continue relying on short-term temporary mitigation measures until a longer-term project is completed. While reliance on these measures could reduce the scope and costs of the OCMP, as well as accelerate its in-service timeline, FEI states that it also introduces risks to reliably meeting customers' needs.[36]

Table 1 provides the details of capacity available from each mitigation measure.

Table 1: Approximate Capacity Provided by Mitigation Measures[37]

Description	Capacity
FEI Controlled Measures (temporary load shifting and station modifications)	5 TJ/d
Non-FEI Controlled Measure (minimum pressure increase at Savona tap)	6 TJ/d
All Currently Implemented Short-term Mitigation Measures	**11 TJ/d**

Table 2 outlines the capacity requirements for addressing shortfalls through winter 2028/2029. It quantifies the additional capacity the OCMP would need to provide depending on whether all, some, or none of the short-term mitigation measures remain available.

[32] Polson Gate Station is located in Vernon. See Application for Approval of a CPCN for the OCU Project, p. 34.
[33] The Kelowna #1 Gate station serves the West Kelowna intermediate pressure system. See FEI Application for Approval of a CPCN for the OCU Project, p. 34.
[34] Coldham Gate station is located on the West Kelowna intermediate pressure system. See FEI Application for Approval of a CPCN for the OCU Project, p. 34.
[35] Exhibit B-1, p. 14.
[36] Ibid., p. 16.
[37] Ibid., p. 16.

Table 2: Approximate 2028/2029 Capacity Shortfall With and Without Short-term Mitigation Measures[38]

Description	Capacity
Capacity Shortfall Without Any Short-term Mitigation Measures	19 TJ/d
Capacity Shortfall With Only FEI Controlled Mitigation Measures (i.e., excluding Savona)	14 TJ/d
Capacity Shortfall With All Short-term Mitigation Measures	8 TJ/d

As outlined above, the current short-term mitigation measures provide approximately 11 terajoules (TJ)/day of additional capacity. FEI expects that by winter 2028/2029, the OCMP would need to address an 8 TJ/day capacity shortfall if all these temporary measures remain in place. However, FEI notes that if none of the short-term measures are relied upon, the shortfall would increase to 19 TJ/day.[39]

FEI states it aims to balance the need for reliability with the requirement to have the OCMP operational by winter 2026/2027. FEI notes that larger Project scopes could delay execution due to challenges such as land constraints and permitting. FEI views the risk of relying on all short-term mitigation measures through 2028/2029 as too high, citing factors such as the non-firm nature of the Savona tap pressure increase, which is beyond FEI's control, and the operational challenges during extreme cold weather events. To mitigate these risks, FEI believes it is necessary to reduce reliance on these temporary measures wherever possible.[40]

After evaluating the trade-offs between Project scope and execution timelines, FEI proposes that the OCMP be designed to provide approximately 14 TJ/day of additional capacity. FEI believes that this approach strikes a balance between reducing reliability risks associated with the temporary measures and ensuring the Project can be completed on schedule. FEI also considers this scope an appropriate compromise to address both immediate and near-term capacity needs.[41]

2.4 Alternative Measures to Mitigate Peak Demand Growth

Over the course of the proceeding, parties also explored the potential for other measures that FEI may be able to implement to limit growth in peak demand and defer the need for the OCMP.

FEI submits it has no plans to prioritize electric over gas connections for new buildings, as this is not required by current laws and would conflict with its tariffs and public utility obligations. Gas connections will remain available under the Zero Carbon Step Code, including beyond 2030, for uses such as cooking, restaurants, and industry. Further, FEI states that programs favoring electric connections would divert customers to other utilities, reduce consumer choice, raise rates for existing customers, and offer unclear benefits to the utility. While aware of electric utilities promoting fuel switching, FEI notes gas utilities do not offer such incentives.[42]

FEI offers a dual-fuel rebate program for customers installing both air source heat pumps and high-efficiency gas furnaces.[43] However, FEI believes these systems, while lowering annual gas demand, will not significantly affect peak demand.[44] FEI notes Quebec is the only Canadian jurisdiction with an approved rate design for dual-fuel heating systems, where Hydro-Québec compensates Énergir for natural gas volumes converted to electricity under a dual-heating system agreement.[45]

[38] Exhibit B-1, p. 16.
[39] Ibid., p. 17.
[40] Ibid.
[41] Ibid.
[42] Exhibit B-3, BCUC IR 2.2.
[43] Ibid., BCUC IR 2.1.
[44] Ibid., BCUC IR 2.4.
[45] Ibid., BCUC IR 2.3.

Furthermore, FEI states it is unaware of jurisdictions using rate design to limit gas demand growth, but notes that inclining block rates can reduce gas consumption. FEI points to DSM programs as a method to limit demand growth.[46] FEI also explains that although rate structures may promote energy conservation in the long run, they have minimal short-term impact on peak demand due to low price elasticity of natural gas.[47]

Positions of the Parties

BCOAPO supports that there is a need for the Project,[48] accepting FEI's forecast and the Project's scope as reasonable despite uncertainties.[49]

RCIA agrees with the need to address the ITS capacity shortfall before winter 2026/27,[50] supports increasing OCMP capacity to 14 TJ/day,[51] and concludes FEI has justified the Project.[52] RCIA also states that increased electrification of heating can be encouraged by FEI through incentives, but it ultimately depends on customers taking action, which is beyond FEI's control.[53]

The CEC supports FEI's peak demand forecast as reasonable, emphasizes the need to address the capacity shortfall with the Project, and opposes adjusting forecasts for uncertain long-term impacts.[54] The CEC recommends the BCUC find FEI's Project justification appropriate.[55] The CEC also submits that that short-term demand will not be significantly affected by long-term programs and technologies such as the BC Building Code and dual-fuel heating technologies.[56]

BCSEA opposes the Project, arguing it is not in the public interest. BCSEA states that the BCUC should invite FEI to explore targeted peak-demand reduction measures in the Project area, including demand response contracts with large customers, limits on new connections with BCUC approval under section 28(3) of the UCA, and a detailed plan for prioritized service reductions to minimize inconvenience and harm during capacity shortfalls.[57] With regard to FEI's statement that there is an obligation for FEI to provide service to new customers that request it, BCSEA states that while legislation permits FEI to connect new customers to the gas system, this does not mean it is in the public interest under the UCA.[58] BCSEA submits that denying or limiting a new gas connection in the project area because the existing gas distribution system in the Project area is at maximum capacity in the short term would be reasonable discrimination if it was discriminatory at all.[59] BCSEA also notes that FEI has consistently refused to seek BCUC approval to curtail new gas load commitments or even to consider articulating a practical service curtailment prioritization plan for the Project area.[60]

[46] Exhibit B-3, BCUC IR 2.3.
[47] Ibid., BCUC IR 2.4.
[48] BCSEA Final Argument, p. 3.
[49] BCOAPO Final Argument, p. 4.
[50] RCIA Final Argument, p. 5.
[51] Ibid., p. 8.
[52] Ibid., p. 9.
[53] Ibid., p. 9.
[54] CEC Final Argument, p. 4.
[55] Ibid., p. 5.
[56] Ibid., p. 4.
[57] BCSEA Final Argument, p. 1.
[58] Ibid., p. 3.
[59] Ibid., p. 6.
[60] Ibid., p. 10.

FTFO also opposes the Project[61] and notes that FEI's forecast is based on continued and exclusive use of fossil gas.[62] FTFO suggests electrification and focused gas-consumption reduction could mitigate peak demand, making the Project unnecessary.[63] FTFO criticizes FEI for not considering the option of joining forces with FBC to cover the anticipated gas shortfall by promoting the use of electricity in the Kelowna area.[64]

In its reply, FEI states that accepting BCSEA and FTFO's arguments in favour of using forced curtailments would be inconsistent with the BCUC's directive in the OCU Decision[65] and would be inappropriate.[66] FEI highlights the dangers of losing heat during cold Okanagan winters, particularly for vulnerable populations[67] and the harm of forced curtailments to communities.[68] FEI states that it 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. FEI adds that commercial and industrial firm-service customers require reliable gas and cannot switch to interruptible service.[69]

In response to BCSEA's requests for the BCUC to reject the CPCN and relieve FEI from its duty to serve, FEI asserts that this duty is a fundamental regulatory principle and should only be waived in exceptional cases. FEI argues that there is no legal or policy basis for limiting natural gas distribution or new connections.[70]

Furthermore, FEI rejects BCSEA's claim that limiting new gas connections is non-discriminatory, arguing it would involve treating potential new customers in one portion of FEI's service territory differently from those everywhere else. FEI emphasizes that its General Terms & Conditions ensure equal treatment for all customers.[71]

Panel Determination

The Panel finds that FEI has established the need to address the capacity shortfall in the Okanagan region. The Panel did not identify any evidence or arguments that would counter the BCUC's previous finding in the OCU Decision: that there is a potential capacity shortfall in the ITS which must be addressed. The Panel also finds the proposed scope of the OCMP is reasonable, as it balances reducing reliance on short-term mitigation measures with the practical need to deliver the Project by winter 2026/2027. Fully eliminating reliance on these measures would require a larger Project scope, which could increase costs. By scoping the OCMP to provide approximately 14 TJ/day of additional capacity, FEI would be able to mitigate key risks associated with the short-term mitigation measures while maintaining a feasible project timeline. Additionally, as the Project is scoped to serve capacity needs through winter 2028/2029, FEI can effectively bridge the capacity gap until future capacity needs are better defined.

The Panel acknowledges FEI's rationale that alternative measures—such as dual-fuel heating systems and alternative rate structures—are unlikely to significantly impact near-term peak demand or defer the need for the OCMP. While these measures could contribute to reducing peak demand over the long term, the Panel determines that they are insufficient to address the immediate capacity shortfall identified in the OCMP, which requires a reliable short-term solution.

[61] FTFO Final Argument, p. 12.
[62] Ibid., p. 3.
[63] FTFO Final Argument, p. 12.
[64] Ibid., p. 3.
[65] FEI Reply Argument, p. 6.
[66] Ibid., p. 7.
[67] Ibid., p. 7.
[68] Ibid., pp. 8.
[69] Ibid., pp. 7-8.
[70] Ibid., p. 10.
[71] Ibid., p. 14.

Similarly, the Panel does not see that the measures proposed by BCSEA and FTFO are viable options for deferring the need for the Project in the near term. However, the Panel acknowledges the recommendation from the BCSEA that FEI should explore measures to reduce peak demand as part of its long-term strategy. Similarly, the Panel takes note of comments from FTFO suggesting that electrification and energy efficiency could serve as tools to mitigate peak demand. While the OCMP addresses the immediate and near-term capacity shortfall, the Panel expects FEI to balance its supply-side solutions with efforts to explore demand-side options, such as energy efficiency and peak demand reduction programs, and electrification initiatives. Incorporating these measures into longer-term plans could potentially reduce the need for future capacity expansion, which FEI states will be necessary after the OCMP is implemented.

Regarding BCSEA's comment on relieving FEI from its duty to serve, the Panel acknowledges that FEI has the option to apply for relief from this obligation. This could include, for example, seeking an exemption from serving new customers in areas where its service territory overlaps with FortisBC Inc. (FBC). Such a measure could serve as a potential strategy for mitigating growth in natural gas demand by limiting new connections in regions where alternative energy sources or electrification may be viable.

Based on the foregoing, the Panel believes there is merit in a further evaluation of potential measures that could mitigate peak demand in the Okanagan, undertaken well in advance of the potential need for any additional capacity projects that may be advanced by FEI in future. Accordingly, **the Panel directs FEI to submit a plan to outline actions to mitigate peak demand growth or reduce peak demand in the Okanagan in the long term.** This plan should serve as an interim measure to identify ways to mitigate the need for new infrastructure projects to address future peak demand in the Okanagan where feasible. The Panel observes that several potential mechanisms that FEI could consider have arisen in this proceeding and other recent proceedings - which should be addressed in the plan for the Okanagan - including but not limited to:

- Explore the use of gas demand response, incorporating digital technologies such as smart thermostats.[72] These technologies can help manage peak energy use, thus reducing system capacity constraints.
- Develop an Okanagan-specific non-pipe solutions (NPS) framework. The Panel notes in the 2022 Long-term Gas Resource Plan (LTGRP) decision,[73] the BCUC directed FEI to include details of efforts and findings regarding the development of a BC-specific NPS framework.
- Leverage insights from the Advanced Metering Infrastructure (AMI) project. The BCUC has approved FEI's AMI Certificate of Public Convenience and Necessity (CPCN) for the installation of advanced gas meters. With deployment of this infrastructure planned from 2024 to 2026, the Panel notes that, starting in 2027, FEI should be able to gain insights into Okanagan customers' gas usage under peak conditions, the impact of its Demand-Side Management (DSM) measures on peak demand, and other potential findings from the implementation of AMI.
- Explore the feasibility of adopting a rate structure similar to FBC's New Large Commercial Interruptible Rate (LCIR)[74]. While FEI already has interruptible rate schedules for industrial gas customers, the feasibility of extending this to commercial customers could further support FEI in managing peak supply. There may also be other rate structures that FEI could implement to incent customers to reduce demand on peak days.
- Consider a joint electrification plan between FEI and FBC in the Okanagan region. Given their shared territory in the Okanagan, FEI and FBC could collaborate on an electrification strategy to address peak supply needs and better understand system interdependencies, and identify areas where it may be more cost-effective to prioritize electrification over expansions to the gas network.

[72] FEI has outlined its intent to pilot such measures in its 2024 – 2027 DSM Expenditure Schedule, Appendix A, p. 36.
[73] 2022 Long-Term Gas Resource Plan Decision and Order G-78-24, p. 25.
[74] As approved by Order G-170-23.

The Panel directs FEI to file this plan within six months of this decision. In its submission, FEI should include a summary of its current or planned initiatives to mitigate peak demand growth, timelines required to implement any additional initiatives (including but not limited to those outlined above), an estimate of the potential impact these initiatives could have on peak demand in the medium to long-term, and an outline of key uncertainties or limitations associated with the initiatives.

3.0 Evaluation of Project Alternatives

FEI identified six alternatives for the Project.[75]

1) Pipeline Extension;
2) Compressed Natural Gas (CNG) Storage Facility;
3) LNG Production and Storage Facility;
4) CNG Trucking;
5) LNG Trucking; and
6) Small Scale LNG Storage Facility (LNG Storage Facility).

FEI initially considered all of these alternatives. However, for the reasons discussed below, it subsequently screened out the Pipeline Extension, CNG Storage Facility and LNG Production and Storage Facility alternatives in the conceptual stage of the assessment of project alternatives.[76]

3.1 Description of Alternatives

Pipeline Extension

FEI explored constructing a 6.4 kilometres segment of the OLI-PEN 406 pipeline along the original OCU project alignment but determined it could not be completed by winter 2026/2027, as FEI submits it would require consent from Indigenous groups, and include timing constraints. However, FEI states that it remains open to pursuing this alternative for longer-term demand.[77]

CNG Storage Facility

FEI examined building a bulk CNG storage facility at the Kelowna Gate Station with storage vessels, compressors, and pressure reduction units to store and re-inject gas during peak demand periods. However, FEI considered this alternative to be infeasible for winter 2026/2027 due to the need for land acquisition to accommodate the large number of vessels required, and a lengthy 2-3 year project timeline.[78]

LNG Production and Storage Facility

FEI considered constructing an LNG production and storage facility at Kelowna Gate Station with liquefaction units, storage tanks and vaporization equipment to meet peak demand. This alternative was determined to be infeasible for winter 2026/2027 due to the need for land acquisition, extensive infrastructure, and a lengthy 4-5 year project timeline.[79]

[75] Exhibit B-1, p. 21.
[76] Ibid., pp. 22-24.
[77] Ibid., p. 22.
[78] Ibid., p. 23-24.
[79] Ibid., p. 24.

CNG Trucking

This alternative involves filling high-pressure CNG bulk transport trailers at FEI's Princeton station using a mobile compressor, then trucking the gas to the Kelowna Gate Station for depressurization and injection into the distribution system. To meet peak demand through winter 2028/2029, at least 16 trailer loads would need to be filled, transported, and injected daily, requiring 10 bulk transport trailers, two compressors and two pressure reduction units. The project targets completion and service prior to winter 2026/2027, though FEI cautions it may encounter potential delays due to land acquisition and permitting at Princeton.[80]

LNG Trucking

This alternative involves transporting LNG from FEI's Tilbury LNG plant in Delta to the Kelowna Gate Station, where it would be vaporized and injected into the distribution system. LNG transported as a dense cryogenic liquid at low pressure, allows more gas to be delivered per trailer load compared to CNG. Meeting peak demand through winter 2028/2029 would require nine trailer loads per day during winter road conditions,[81] using ten bulk transport trailers, two mobile day tanks, and two gas-fired vaporizers. The project targets completion and service prior to the winter of 2026/2027. However, FEI warns potential delays could arise from trailer procurement and the need to obtain a British Columbia Energy Regulator (BCER) amendment.[82]

LNG Storage Facility

This alternative involves transporting LNG from FEI's Tilbury LNG plant to the Kelowna Gate Station, where fixed equipment for LNG offloading, storage and vaporization would be installed. FEI plans to fill the LNG storage vessels during the shoulder season when driving conditions are safer and vaporize and inject the stored LNG into the distribution system during peak winter demand. The project requires three LNG bulk transport trailers, fixed LNG storage tanks, one mobile day tank, and two skidded gas-fired vaporizers. Due to long lead times for the fixed storage tanks, FEI would initially use a mobile day tank and trailers for storage until permanent tanks arrive. The project, executed in two phases, targets mechanical completion and service by October 2026, with final completion expected by July 2027. However, FEI states that this alternative may face timeline risks due to the fixed storage tank procurement process and the need for a BCER facility permit.[83]

3.2 Analysis of Feasible Alternatives

Following concept screening, FEI identified CNG Trucking, LNG Trucking and LNG Storage Facility as feasible alternatives for the Project (Feasible Alternatives). FEI subsequently conducted an alternative analysis of the Feasible Alternatives using technical and financial information from engineering studies and cost estimates prepared by external consultants Jenmar Concepts (Jenmar).[84] Based on the results of its evaluation, FEI selected the LNG Storage Facility Alternative as its preferred alternative to meet the Project needs (Preferred Alternative).[85]

Table 3 provides a summary of the total incremental capital and annual operating cost for each Feasible Alternative, as well as the present value (PV) of incremental revenue requirement and the levelized delivery rate impact over a 34 year period (30 years post-project and four years prior to in-service). The capital cost estimate, based on an Association for the Advancement of Cost Engineering (AACE) Class 4 level, includes engineering, procurement, and construction costs. [86]

[80] Exhibit B-1, pp. 25-26.
[81] Ibid., p. 37.
[82] Ibid., pp. 27-28.
[83] Ibid., pp. 28-29.
[84] Ibid., p. 42.
[85] Ibid., p. 25.
[86] Ibid., p. 29.

Table 3: Summary Table of Feasible Alternatives[87]

	Alternative 4: CNG Trucking	Alternative 5: LNG Trucking	Alternative 6: Small Scale LNG Storage Facility
Project Costs, As-spent ($ millions)	40.870	24.950	37.492
Annual O&M Costs ($ millions)	0.438	0.723	0.673
PV of Incremental Revenue Requirement ($ millions)	57.402	36.040	50.969
Levelized Delivery Rate Impact (%) over 34 years	0.36%	0.23%	0.32%

3.3 Selection of Preferred Alternative for the Project

FEI used a weighted-scoring methodology to evaluate the Feasible Alternatives. FEI states that it determined evaluation criteria and weightings through collaboration with subject matter experts, using judgement based on each alternative's scope, alignment with project objectives, and impact on ongoing operations in the community. Asset Management was weighted highest at 30 percent to prioritize safe, reliable gas service. Community, Stakeholders & Rightsholders and Technical were each weighted at 25 percent, reflecting community considerations and the need for high execution certainty by winter 2026/2027. Environmental and Financial were weighted at 10 percent each due to minimal variation in ecological impacts and similar rate impacts across alternatives.[88]

FEI submits that the criteria outlined above were used by a team of internal FEI subject matter experts to compare and score each alternative on a scale from one to four. A score of four indicates low impact and risk, making it the best choice, while a score of one represents very high negative impact and risk, making it the worst choice. Scores of three and two reflect moderate and high negative impact and risk, representing good and poor choices, respectively. [89] FEI provides the results of its alternatives analysis in Table 4 below. The table shows the LNG Storage Facility alternative to be the Preferred Alternative with the highest total weighted score at 3.50 out of 4 points.

[87] Exhibit B-1, p. 31, Table 4-4.
[88] Exhibit B-3, BCUC IR 3.1.
[89] Exhibit B-1, p. 35, Table 4-6.

Table 4: Alternatives Analysis Results

Criteria		Weighting	CNG Trucking	LNG Trucking	Small Scale LNG Storage Facility
Community, Stakeholder & Rightsholder (25%)	Indigenous Relations	10%	3	4	3
	Socio-Economic	10%	1	2	3
	Health and Safety	5%	2	1	3
Environmental (10%)	Ecology	5%	2	3	4
	Cultural Heritage	5%	3	4	3
Asset Management (30%)	Operation	10%	1	2	3
	System Reliability & Capacity	20%	1	2	4
Technical (25%)	Constructability	10%	2	3	4
	Execution Certainty	15%	3	3	4
Financial (10%)	Cost	10%	2	4	3
Final Score with Weighting		**100%**	**1.90**	**2.75**	**3.50**

FEI explains that the Feasible Alternatives were scored based on a project scope designed to meet the forecast capacity shortfall on the ITS through winter 2028/2029. However, after completing the scoring process, FEI determined the OCMP should also aim to reduce reliance on existing short-term temporary mitigation measures (as discussed at section 2.3 of this decision). FEI states that the additional scope needed to reduce FEI's reliance on short-term mitigation measures would not affect the selection of the Preferred Alternative or overall scoring of the feasible alternatives.[90]

Positions of the Parties

RCIA supports FEI's selection of the LNG Storage Facility alternative but recommends increasing the weighting of the financial criterion, arguing that while differences in rate impacts are minimal across options, a higher weighting would better reflect ratepayer importance. RCIA also suggests using non-integer scoring to prevent small differences between alternatives from being amplified, as seen with both financial and constructability criteria. Despite these critiques, RCIA maintains its support as the proposed changes would not affect the ranking but would improve transparency.[91]

The CEC recommends that the BCUC reject FEI's Preferred Alternative, LNG Storage Facility, and instead direct FEI to re-examine the LNG Trucking alternative.[92] The CEC disputes FEI's alternatives weighting analysis and scoring, arguing it exaggerates risks of the LNG Trucking alternative while downplaying negatives of the LNG Storage Facility alternative. The CEC cautions the BCUC to avoid unduly exaggerating the risk of LNG trucking during cold weather. The CEC asserts the LNG Trucking alternative is a better choice, being $14 million less expensive and capable of providing adequate mitigation through 2026-2028 with potential for additional mobile storage if needed. The CEC criticizes FEI's low weighting of financial criteria (10%) and finds FEI's qualitative judgement-based scoring is insufficiently justified.[93] The CEC believes the evidence supports different scoring that would favour the LNG Trucking alternative and provides a detailed review of its concerns and proposed scoring adjustments in its final argument.[94]

FEI challenges the CEC's scoring adjustments, claiming that the CEC overstated the financial impact difference and ignored the risk associated with the LNG Trucking alternative, with its "just-in-time" LNG trucking. FEI asserts that the CEC's revised scoring does not accord with the nature of the OCMP, which is required to meet imminent peak demand increases and mitigating risk to customers. FEI argues that the implication of the CEC

[90] Exhibit B-1, p. 40.
[91] RCIA Final Argument, pp. 11-13.
[92] CEC Final Argument, p.1.
[93] Ibid., pp. 6-13.
[94] Ibid., Appendix A.

overweighting the financial criterion was that the CEC underweighted other critical areas which impact the OCMP objective to a greater degree. FEI states that the CEC fails to give due consideration to the fact that the LNG Trucking alternative would require travelling during the same cold weather events that would lead to peak demand, on highways prone to frequent delays and road closures. FEI argues that the LNG Storage Facility alternative, with its on-site storage, offers a safer and more reliable solution than the LNG Trucking alternative. FEI opposes the CEC's suggestion to delay the mitigation project for further investigation of the LNG Trucking alternative, emphasizing the urgency of addressing the capacity shortfall.[95]

BCSEA submits that FEI has not appropriately analyzed the Project alternatives because FEI excluded peak reduction options from consideration.[96]

Panel Discussion

The Panel finds that FEI's analysis of project alternatives including the selection of the preferred option is reasonable. The Panel supports FEI's selection of the LNG Storage Facility as the Preferred Alternative for the OCMP. While acknowledging the inherent reliability risks associated with LNG transportation from Tilbury to the Okanagan service area, the Panel notes that these risks are somewhat mitigated under the Preferred Alternative as the LNG would be transported and stored prior to winter, therefore minimizing travel during inclement weather. The Panel also recognizes that the differences in rate impact among the three feasible alternatives are minor. Despite the LNG Storage Facility not having the lowest levelized delivery rate impact, it remains the superior choice based on the scoring results, which demonstrate its overall safety and reliability advantages compared to the CNG Trucking and LNG Trucking alternatives.

The Panel has reviewed the arguments presented by the CEC and FEI regarding the evaluation method for Project alternatives. The Panel finds that the CEC's revised scoring is subjective and is misaligned with the primary objective of ensuring peak demand reliability. The Panel agrees with FEI that the CEC's increased weighting of the financial criterion is overstated given the minimal rate impact differences, and that the CEC understates the safety and reliability risks associated with LNG Trucking on peak demand days. The Panel is not persuaded that the CEC's proposed scoring adjustments warrant selecting an alternative other than the LNG Storage Facility. Furthermore, the Panel does not find sufficient justification for delaying the mitigation Project for further investigation of the LNG Trucking alternative.

4.0 Detailed Project Description

4.1 Description of Project

The Project involves transporting LNG from FEI's Tilbury LNG plant in Delta to the Kelowna Gate Station, where fixed equipment for LNG offloading, storage and vaporization would be installed. FEI plans to fill the LNG storage vessels at the Kelowna facility during the shoulder season when driving conditions are safer and vaporize and inject the stored LNG into the distribution system during peak winter demand.[97] The Project scope includes the design, construction and commissioning of the following:[98]

- LNG storage, vaporization, odorization and injection to the distribution system at the Kelowna Gate Station; and
- LNG transport capability between FEI's Tilbury LNG facility and the Kelowna Gate Station.

[95] FEI Reply Argument, pp. 20-31.
[96] BCSEA Final Argument, p. 7.
[97] Exhibit B-1, p. 44.
[98] Ibid., p. 45.

FEI initially screened 21 potential sites for the OCMP based on land availability and proximity to natural gas infrastructure, narrowing the options to three after considering tie-in complexity, costs and regulatory requirements.[99] FEI states that following a detailed evaluation, the Kelowna Gate Station site was selected as the optimal site due to its highest technical score, cost-effectiveness, and ability to meet the Project timeline.[100]

The Kelowna Gate Station, located at 1569 Spall Road in Kelowna, is an FEI-owned property adjacent to a FortisBC Inc. electric substation. The site location is shown in red in Figure 2 below. The site, currently used for storage of pipeline materials, is situated along a trucking route and is close to residential, commercial and retail businesses.[101]

Figure 2: Kelowna Gate Station[102]

The site will be developed to accommodate the project including civil, mechanical, and electrical work to prepare for equipment installation. In addition, a new 600 Volts Alternating Current, 3-phase, 150 kilovolt amperes electrical service will be required from FBC. A buried ground grid will be installed at the facility and all fixed equipment will be permanently bonded and grounded.[103]

[99] Exhibit B-1, pp. 45–49.
[100] Ibid., p. 49.
[101] Ibid., p. 47.
[102] Ibid., p. 48, Figure 5-1.
[103] Ibid., pp. 53-54.

The Project schedule is divided into Phase 1 and Phase 2 as shown in Table 5. FEI's preliminary project execution schedule targets a Phase 1 in-service date in summer 2026.

Table 5: Project Schedule[104]

Activity	Date
Engineering Consultant and Contract Negotiation	Jul 2024 – Sep 2024
Phase 1	
FEED – Front End Engineering Development	Oct 2024 – Mar 2025
Engineering Detailed Design	Feb 2025 – Nov 2025
Procure Long Lead Items - LNG Trailers/Mobile Day Tanks / Vaporizers (Phase 1)	Feb 2025 – Feb 2026
Procure Long Lead Items - LNG Storage Tanks (Phase 2)	Feb 2025 – Feb 2027
Contractor Tendering and Contract Negotiation	Aug 2025 – Jan 2026
Permitting	May 2025 – Oct 2025
Municipal, Indigenous & Stakeholder Engagement	June 2024 – Jun 2027
Site Preparation	Feb 2026 – Mar 2026
Construction	Mar 2026 – Jun 2026
Filling Tanks/Start-Up/Commissioning	Jun 2026 – Jul 2026
Phase 2	
Contractor Tendering and Contract Negotiation	July 2026 – Dec 2026
Construction	Feb 2027 – Apr 2027
Filling Tanks/Start-Up/Commissioning	May 2027 – Jun 2027

FEI states that the estimated two-year lead time for procuring permanent LNG storage tanks makes it infeasible to have them in service before winter 2026/2027. However, since full storage capacity is not required for winter 2026/2027, the Project has been divided into two phases. Phase 1 includes system modifications at the Kelowna Gate Station and procurement of equipment, with a mobile day tank and three bulk LNG transport trailers being used to transport LNG from the Tilbury facility for injection into the distribution system.[105] Phase 2 consists of installation of the permanent LNG storage tanks before winter 2027/2028, with bulk LNG transport trailers continuing to be used to fill the permanent storage tanks annually and the mobile day tank integrated into FEI's LNG fleet.[106]

4.2 Long-Term Plans for the LNG Storage Facility

FEI states that although the OCMP is only able to address the capacity shortfall through the winter of 2028/2029, it is a permanent solution, and any future project to address the expected capacity issues on the ITS will be designed with the 14 TJ/day of capacity available from the OCMP in mind.[107]

FEI states that in the event that the 14 TJ/day of capacity provided by the OCMP to the Okanagan region is not required at some point in the future, FEI would still be able to repurpose the equipment and redeploy it to support other LNG virtual pipeline operations for activities such as emergency response, planned maintenance

[104] Exhibit B-1, p. 55, Table 5-5.
[105] Ibid., p. 56.
[106] Ibid., p. 56.
[107] Exhibit B-3, BCUC IR 8.1.

or capital outages, short-term capacity shortfall/peak shaving, inline inspection operations, and drying and purging activities. Further, FEI states that the potential redeployment of equipment was considered in the Project design.[108] As such, FEI asserts that the OCMP assets will remain used and useful over their expected life (30 years) and does not foresee a situation in which they become stranded.[109] A summary of the redeployment potential of OCMP equipment, as well as any design inclusions to accommodate redeployment is shown in Table 6.

Table 6: Equipment Redeployment Opportunities[110]

Equipment	Redeployment Potential?	Design Inclusion?
LNG Storage Tanks	Yes, would require new foundations and supports	Yes, manufactured off-site and transported for installation to site; manufacturer's standard offering
LNG Offload System	Yes, would require new foundation	Yes, manufactured off-site and skid mounted for transportation and installation at site; manufacturer's standard offering
Vaporizers	Yes, would require new foundation	Yes, manufactured off-site and skid mounted for transportation and installation at site; manufacturer's standard offering
Odorization Equipment	Yes	Standard FEI equipment, can be re-used for various applications
Pressure Control Equipment	Yes	Standard FEI equipment, can be re-used for various applications
LNG Impoundment	No	Unable to modify
E-house	Yes, would require new foundation	Yes, manufactured off-site and transported for installation to site; manufacturer's standard offering
Bulk LNG Transport Trailers	Yes	Mobile by design; manufacturer's standard offering
LNG mobile storage and regasification tank	Yes	Mobile by design; manufacturer's standard offering

4.3 BC Energy Regulator Facility Permit

FEI states that a BCER facility permit is required for Phase 2 of the Project, which includes the permanent LNG storage tanks, but not for Phase 1 construction. FEI explains that since Phase 1 does not involve permanent storage tanks, it does not anticipate any BCER permit-related risks to the October 2026 in-service date.[111]

FEI states that given the location of the Kelowna Gate Station within the City of Kelowna, there are several unique regulatory challenges that could impact the BCER's decision to approve the facility permit application for Phase 2 of the Project. FEI explains that the most challenging aspect of the facility permit application is the 1,300 metre notification radius and the 1,000 metre consultation radius. Prior to the facility permit application submission, all landowners within those radii are notified of the upcoming permit application submission and are invited to consult with the BCER and FEI about the Project. All stakeholder questions require a response from the applicant (FEI) and could lead the BCER to impose certain operating restrictions to the facility, or may result in potential design modifications, causing schedule delays obtaining approval of the facility permit.[112] While the BCER facility permit application does have certain triggers that would require the need for consultation with Indigenous groups, FEI does not anticipate that to be necessary for the OCMP because the site

[108] Exhibit B-3, BCUC IR 8.2.
[109] Ibid., BCUC IR 8.1.
[110] Ibid., BCUC IR 8.2, Table 1.
[111] Ibid., BCUC IR 4.5.
[112] Ibid., BCUC IR 9.4.

is not known to be culturally significant to any of the local First Nations and there are limited to no significant resources on the site, and no archaeological sites present.[113]

FEI states that the planned in-service date for Phase 2 is July 2027, allowing for a buffer before the winter 2027/2028 season. FEI elaborates that if delays in obtaining the BCER Facility permit prevent the permanent tanks from being operational in time, FEI would continue using the mobile storage and regasification tank and would consider winter LNG transport trips from the Tilbury LNG facility to the Kelowna Gate Station to address the shortfall in on-sight storage capacity.[114]

FEI intends to procure the LNG storage tanks required for Phase 2 prior to receiving the facility permit from the BCER. FEI states that this approach is required to ensure that the permanent OCMP equipment is installed and commissioned prior to the capacity shortfall forecasted for the winter peak of 2027/2028.[115]

FEI considers the risk of Project schedule delay due to the BCER facility permit, as well as the financial risk of procuring equipment prior to receipt of the permit to be low.[116] FEI states that it has been engaging with the BCER to discuss the Project, system constraints, schedule constraints, and to solicit early feedback. FEI states that the BCER's responses to date have not indicated that the OCMP is not permittable, and FEI intends to continue to engage with the BCER.[117]

Positions of the Parties

RCIA supports the selection of the Kelowna Gate Station as the location for the LNG storage facility, and did not identify any concerns with the method used by FEI to evaluate the sites.[118]

Also, RCIA suggests that the BCUC may want to consider granting conditional approval for FEI to procure additional LNG trailers if the BCER facility permit for the Project is denied. RCIA argues that this approach would allow FEI to pivot without delay to a virtual LNG pipeline, similar to the LNG Trucking alternative, to prevent a 2028/2029 capacity shortfall.[119]

FEI states that it is not opposed to RCIA's proposal regarding granting conditional approval if the BCUC deems it beneficial.[120]

The CEC finds that the Project is appropriately planned and agrees with FEI's design inclusions to allow for the redeployment of assets if needed.[121] The CEC accepts FEI's position that the risk of stranded assets resulting from the Project is low, but submits that the permanent storage solution may not be beneficial as a foundation for a future project to address incremental capacity issues, as starting fresh with a new project may provide more flexibility.[122] The CEC is persuaded by the evidence provided by FEI to support its assertion that it does not foresee an issue with the BCER facility permit application.[123]

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[113] Exhibit B-1, BCUC IR 9.1.
[114] Exhibit B-3, BCUC IR 4.5.
[115] Exhibit B-1, BCUC 9.5.
[116] Exhibit B-3, BCUC IR 9.5.1.
[117] Ibid., BCUC IR 9.4, 9.5.1.
[118] RCIA Final Argument, p. 15.
[119] Ibid., pp. 26-27.
[120] Ibid., p. 36.
[121] CEC Final Argument, p. 13.
[122] Ibid., p. 10.
[123] Ibid., p. 18.

BCOAPO submits that FEI's proposal for a short-term solution cost effectively addresses the capacity gap until future capacity requirements are better understood.[124]

BCOAPO and RCIA agree that the risk of underutilization or stranded assets to the ratepayers posed by the Project is low.[125]

BCOAPO notes that the BCER's consultation requirements for the facility permit application represents a risk, as do the impacts of any delays, but acknowledges FEI's assertion that it does not expect any scheduling delays.[126]

Panel Discussion

The Panel finds that FEI's site assessment process was reasonable and comprehensive, having considered multiple locations before selecting the Kelowna Gate Station as the preferred site. The Panel acknowledges that, while there is some uncertainty regarding the future utilization of the Project, the ability to redeploy most of its components provides important flexibility and value, mitigating potential risks associated with long-term demand projections.

The Panel also recognizes the potential risk of delays or denials in obtaining the necessary BCER permits due to the site's location. However, the Panel is satisfied that the regulatory process allows FEI to address any permitting challenges that may arise. FEI's progress on permitting will be reported as part of the ongoing reporting requirements set out in Section 9, ensuring appropriate oversight throughout the Project's development.

5.0 Financial and Economic Analysis

5.1 Project Cost and Rate Impact

The total cost estimate for the OCMP is $50.389 million in as-spent dollars which includes construction, LNG trailers and storage tanks, Project management, regulatory costs, contingencies, and financing with the key components outlined as follows in 2024 dollars:[127]

- A base capital cost estimate of $33.328 million.
- A contingency estimate of $10.665 million (32 percent of the base capital cost), resulting in a total capital budget at a P70 confidence level.[128]
- A P50 escalation value of $1.848 million for the period from 2024 to 2027, applied to both the base capital cost and contingency.
- An additional $0.250 million for the preparation and regulatory review of the Application.
- Pre-construction development costs totaling $0.154 million and deferred preliminary stage development costs of $0.815 million.

FEI's cost estimate for the Project is based on an AACE Class 4 level of definition. FEI states it has not prepared a Class 3 estimate as contemplated in the BCUC's CPCN Guidelines because a Class 3 estimate requires additional

[124] BCOAPO Final Argument, p. 3.
[125] BCOAPO Final Argument, p. 4; RCIA Final Argument, p. 10.
[126] BCOAPO Final Argument, pp. 5-6.
[127] Exhibit B-1, Section 6.2, pp. 67-68.
[128] 70 percent probability the contingency falls within the estimated range.

time that the Project schedule cannot accommodate, as the Project needs to be in-service to meet the potential capacity shortfall in the Okanagan region by as soon as winter 2026/2027.[129]

FEI conducted a financial analysis of the OCMP Project over a 34-year period, which includes a 4-year construction phase and a 30-year post-Project period starting in 2028. The present value of the incremental revenue requirement is approximately $98.050 million, with a levelized rate impact of 0.61% over the 34 years. This total encompasses the $50.389 million Project cost, as well as the recovery of prior OCU development costs incurred from 2018 to 2023.[130]

A summary of the financial analysis of the Project is presented in Table 7:[131]

Table 7: Summary of Project Financial Analysis

Line	Particular	TOTAL
1	Total Charged to Gas Plant in Service ($ millions)	49.627
2	Total Deferral Costs, Net of Tax	0.761
3	***Total Project Costs ($ millions)***	***50.389***
4	Prior CPCN Development Costs (2018-2023)	22.153
5	***Total Project Cost - incl. Prior Development Costs ($ millions)***	***72.541***
6		
7	Incremental Rate Base in 2028 ($ millions)	51.786
8	Incremental Revenue Requirement in 2028 ($ millions)	15.392
9	***PV of Incremental Revenue Requirement 34 years ($ millions)***	***98.050***
10	Net Cash Flow NPV 34 years ($ millions)	(1.610)
11		
12	Delivery Rate Impact in 2028 (%)	1.35%
13	***Levelized Delivery Rate Impact 34 years (%)***	***0.61%***
14	Levelized Delivery Rate Impact 34 years ($/GJ)	0.035

FEI states the OCMP is projected to have an incremental revenue requirement of $15.392 million and will result in a delivery rate impact of about 1.35% in 2028, once all new assets are in service and included in FEI's rate base. This assumes the new assets are operational by 2027 and added to the rate base on January 1, 2028. The delivery rate impact also includes the amortization of pre-construction and development costs over four years. In terms of financial impact, the rate increase equates to roughly $0.077 per GJ.[132] For an average FEI residential customer using 90 GJ per year, this would result in an approximate bill increase of $6.93 annually in 2028.[133]

The remaining amount of $22.153 million related to prior CPCN development cost is discussed in Section 5.2.

Position of Parties

BCSEA submits the $50-million cost and the 1.35% incremental rate impact of the OCMP is excessive. The OCMP would meet the forecasted capacity shortfall for only two years before additional supply-side investments would be required to meet even higher future peak demand levels enabled and encouraged by the OCMP itself. BCSEA is concerned that approval of the OCMP would push the issues further into the future. [134]

[129] Exhibit B-1, Section 5.2, p. 43.
[130] Exhibit B-1, Section 6.3, p. 69.
[131] Ibid., Section 6.3, p. 70.
[132] Ibid., Section 6.5, pp. 79-80.
[133] Ibid., Section 6.6, p. 80.
[134] BCSEA Final Argument, p. 3.

In reply, FEI argues that BCSEA recommendations give excessive weight to long-term demand uncertainty. 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.[135]

BCOAPO asks this Panel to approve FEI's Application as filed, subject to the modification to the amortization period applied to the Project development costs.[136]

RCIA would prefer there to be zero delivery rate increase, however considering the urgent need of the Project, RCIA recognizes that there will be some rate impact, including the need to recover the costs of the OCU development.[137]

Panel Discussion

The Panel accepts FEI's total Project cost estimate of $50.039 million in as-spent dollars, including contingency, escalation and allowance for funds used during construction (AFUDC). The Panel is satisfied with FEI's approach to cost estimation through the quality assurance, verification, and estimates performed by FEI's independent experts. Further, the proposed accounting treatment for the capital costs of the Project is consistent with its past practice as previously approved by the BCUC for projects of this nature.

The Panel is satisfied with FEI's calculation of the rate impact of the OCMP Project, and that the indicative rate impacts are reasonable for the purposes of this Application. The Panel also finds FEI's use of a 34-year period for the financial analysis to be reasonable. As noted in Section 4, the Panel is persuaded that the potential for redeployment of assets mitigates the potential risk of stranded or underutilized assets over the Project's lifetime.

5.2 Cost Recovery Mechanisms and Amortization Period for Application and Preliminary Stage Development Costs

FEI incurred a total of $19.841 million in pre-tax costs ($22.153 million net of tax and including AFUDC) for the pre-construction development of the original OCU Project between 2018 and 2023. FEI provided a breakdown of these costs, replicated in Table 8 below:

Table 8: Summary of Deferred Costs ($000s)[138]

		OCMP		2018-2023 OCU	
Line	Particular	Application	Preliminary Stage Development	CPCN Development Costs	Total
1	Pre-tax Costs (Forecast to Dec 31, 2024)	250	969	19,841	21,059
2	Income Tax Recovery	(68)	(262)	(1,681)	(2,010)
3	Financing, WACC Return	3	22	3,993	4,018
4	**Subtotal ($000s)**	**185**	**730**	**22,153**	**23,068**
5	Less: Capitalized Pre-Construction Costs	-	(154)	-	(154)
6	**Total Deferral Costs ($000s)**	**185**	**576**	**22,153**	**22,914**

FEI explains these costs were required to prepare the original OCU CPCN application as well as to support the execution of the project in time to address the imminent capacity shortfall on the ITS and prevent service

[135] FEI Reply Argument, p. 6.
[136] BCOAPO Final Arguments, p. 12.
[137] RCIA Final Argument, p. 13.
[138] Exhibit B-1, Section 6.4.3, Table 6-3

interruption to customers in the Okanagan region. Although the BCUC did not approve the original OCU Project, the BCUC acknowledged the ongoing capacity shortfall and the need for a solution. FEI argues that the pre-construction costs were necessary and prudently incurred to address this shortfall. The work completed, including engagement with Indigenous groups, has informed the current Application and alternatives considered to address the capacity issue.[139]

FEI proposes to rename the existing non-rate base OCU Preliminary Stage Development Costs deferral account to the OCMP Application and Preliminary Stage Development Costs deferral account.[140]

FEI is seeking approval from the BCUC for deferral treatment of the Application and preliminary stage development costs related to the Project. FEI proposes to record these costs in the existing non-rate base OCU Preliminary Stage Development Costs deferral account, which would attract a weighted average cost of capital (WACC) return. This account currently holds the pre-construction development costs from 2018 to 2023 related to the original OCU Project.[141]

In addition, FEI proposes to transfer the balance of the deferral account, estimated at approximately $22.914 million to rate base on January 1, 2025, and to begin amortization over a four-year period.[142] FEI recommends a four-year amortization period because it effectively addresses key considerations, including alignment with the project's expected in-service date, the size of the deferral account balance, and the impact on delivery rates and total bills.[143]

Positions of the Parties

BCSEA submits that FEI's Application and Preliminary Stage Development costs related to the OCMP were imprudent and should not be recovered from customers. BCSEA asserts that FEI failed to explore and present any peak-reduction options to address the short-term capacity shortfall in the Project area. However, if the BCUC approves the OCMP, BCSEA states that it would not oppose FEI's proposal to recover these costs over a four-year period.[144]

In reply, FEI argues that BCSEA's position is rooted in its general opposition to projects addressing customer peak demand growth, rather than a careful review of the circumstances, costs, or alternatives for addressing the capacity shortfall. FEI argues that BCSEA's opposition to gas infrastructure is an unreasonable basis for rejecting the OCMP or the cost recovery for the original OCU Project.[145]

BCOAPO agrees that all prudently incurred costs are recoverable through rates, including the costs associated with the development of the OCU and this Application. However, BCOAPO submits that a more reasonable accounting treatment is to consolidate the development costs and amortize the costs over the useful life of the assets, 30 years.[146]

In reply, FEI argues that BCOAPO's proposed 30-year amortization period is excessive. FEI submits 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

[139] Exhibit B-1, Section 6.5.3.2, p. 75.
[141] Exhibit B-1, Section 6.4.3, p. 73.
[141] Exhibit B-1, Section 6.4.3, p. 73.
[142] Ibid.
[143] Exhibit B-3, BCUC IR 10.1.
[144] BCSEA Final Argument, pp. 8-9.
[145] FEI Reply Argument, p. 34.
[146] BCOAPO Final Argument, p. 9.

equity. FEI submits 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.[147]

The CEC also accepts the proposed treatment of the Application and Preliminary Stage Development costs related to the OCMP and submits that the OCU development costs were prudently incurred and acceptably calculated.[148]

RCIA supports the deferral of these costs and the recovery from ratepayers as these were incurred to address the expected capacity shortfall and the proposed 4-year amortization period beginning January 1, 2025.[149]

Panel Determination

FEI is approved to rename the existing non-rate base OCU Preliminary Stage Development Costs deferral account to the OCMP Application and Preliminary Stage Development Costs deferral account.

FEI is approved to recover $22.153 million net of tax, including AFUDC in pre-construction development costs incurred between 2018 and 2023 for the original OCU project. The Panel finds that these costs were necessary and prudently incurred, as FEI provided sufficient evidence demonstrating that the expenses were directly related to the development of the project. The Panel is satisfied that FEI exercised due diligence in managing these costs and that the expenses were reasonable and directly attributable to the project's development. As such, the recovery of these costs is appropriate.

FEI is approved to record the Application costs and preliminary stage development costs for the OCMP in the existing (renamed) OCMP Application and Preliminary Stage Development Costs deferral account. The Panel finds that FEI has adequately justified the costs incurred, which were essential for advancing the Project and ensuring its timely progress. These costs encompass regulatory expenses associated with the Application review, as well as preliminary stage development activities such as feasibility evaluations, third-party consultations, and engineering assessments. The Panel acknowledges that these costs were prudently incurred to support the development of the Project, and FEI has demonstrated that they were necessary to maintain the continued reliability of natural gas service in the Okanagan region.

FEI is approved to transfer the balance in the OCMP Application and Preliminary Stage Development Costs deferral account to rate base on January 1, 2025 and to amortize the balance over four years. The Panel finds this approach to be reasonable and in line with regulatory precedents, ensuring a fair and transparent recovery of costs. The proposed four-year amortization period effectively balances the need for timely cost recovery with minimizing the impact on ratepayers. It also provides a mechanism to properly account for the costs in alignment with the timeline for the OCMP's execution and operation.

5.3 Cost Recovery Mechanisms and Amortization Period for LNG Assets

FEI is seeking BCUC approval for a depreciation rate of 3.33 percent and a net salvage rate of 0.5 percent applicable to the LNG storage tanks and vaporization equipment as well as LNG transport trailers related to the Project.

FEI states it does not have existing asset classes that are of a similar enough nature or category as the small-scale LNG assets proposed as part of this Project. FEI explains the proposed depreciation and net salvage rates are aligned with the expected average service life of the assets based on FEI's consultation with Jenmar, which

[147] FEI Reply Argument, p. 35.
[148] CEC Final Argument, p. 16.
[149] RCIA Final Argument, p.17.

recommended an average service life for the fixed LNG equipment of 30 years before a full overhaul or replacement is required. FEI explains that this recommendation is consistent with the manufacturers' specifications and Jenmar's experience with LNG facilities of similar size to this Project.[150] FEI notes the proposed depreciation and net salvage rates are only for the LNG storage tanks, vaporization equipment and LNG transport trailers. [151]

Positions of the Parties

The CEC accepts the proposed depreciation rate of 3.33 percent and a net salvage rate of 0.5 percent applicable to the LNG storage tanks and vaporization equipment as well as the LNG transport trailers related to the OCMP.[152]

BCOAPO asks the Panel to approve FEI's Application as filed, subject to its suggested modification to the amortization period applied to the project development costs as discussed in the previous section.[153]

Panel Determination

The Panel finds FEI's proposed depreciation rate and net salvage rate to be reasonable and approves FEI's request for a depreciation rate of 3.33 percent and a net salvage rate of 0.5 percent applicable to the LNG storage tanks and vaporization equipment as well as LNG transport trailers related to the Project.

6.0 Indigenous and Public Considerations

Section 3 of the BCUC's CPCN Guidelines outlines the information expected from an applicant regarding consultation with First Nations and the public, which includes: a description of consultation activities; issues and concerns raised; the applicant's assessment of the sufficiency of the consultation process; and a statement of planned future consultation.

FEI created a Consultation and Engagement Plan and targeted engagement activities towards Indigenous groups, municipalities and those stakeholders who live and work near the Project, as the Project work will be confined within an existing FEI facility.[154]

FEI initiated engagement with local Indigenous groups, including *snpink'tn*[155] and Westbank First Nation, and has not received significant concerns from other Indigenous communities to date. FEI states that based on ongoing discussions and FEI's commitments to provide further information, it does not anticipate concerns from local communities.[156]

FEI initiated public engagement and consultation by meeting with City of Kelowna's senior staff, followed by mailing notification letters in August 2024 to residents and businesses that may be affected by the Project and emails sent to local governments.[157] FEI states that it has received few responses from residents to the August notification letter and none from local government staff or provincial and federal offices.[158]

[150] Exhibit B-1, pp. 71-72.
[151] Exhibit B-1, p. 72.
[152] CEC Final Argument, p. 16.
[153] BCOAPO Final Argument, p. 12.
[154] Exhibit B-1, p.89.
[155] Exhibit B-4, BCSEA IR 5.1.
[156] Exhibit B-6, CEC IR 28.1.
[157] Exhibit B-1, p. 89.
[158] Exhibit B-8, RCIA IR 10.2 .

After filing the Application, FEI provided further information on its engagement and consultation efforts, including a public information session held in November 2024.[159]

FEI states that its consultation and engagement plan for the OCMP includes ongoing consultation with local stakeholders and Indigenous groups to address concerns and provide updates throughout the Project lifecycle after the CPCN issuance.[160]

6.1 Letters of Comment Regarding the OCMP

Eighty letters of comment were submitted to the BCUC opposing the OCMP,[161] with most citing environmental concerns and conflicts with climate goals. Many letters also highlighted safety risks associated with transporting and storing LNG near residential and commercial areas. Additionally, some commenters raised concerns about Project costs, ratepayer impacts, and the accuracy of FEI's demand forecasts given trends in electrification and energy efficiency.

Positions of the Parties

FEI asserts that its consultation and engagement with stakeholders and Indigenous groups have been appropriate and reasonable, considering the OCMP's development stage and timeline. [162] FEI also emphasizes its commitment to ongoing engagement with potentially affected stakeholders, including nearby landowners and rightsholders as part of the BCER permitting process.[163]

FEI acknowledges the letters of comment received, claiming that most were submitted by individuals not directly affected by the capacity shortfall on the ITS. FEI argues that opposing the Project could lead to inequitable treatment by exposing customers to heating risks, emphasizing the importance of maintaining reliable service for all customers.[164]

BCSEA contends that FEI's consultation and engagement efforts with stakeholders and Indigenous groups are inadequate, as they focus solely on a supply-side approach without considering peak-reduction options. BCSEA also suggests that the letters of comment primarily express concerns about the Project's potential impact to climate change due to increased GHG emissions, rather than advocating for exposing customers to heating risks, as FEI claims.[165]

BCOAPO acknowledges concerns raised in the letters of comment about GHG emissions but believes it would be unreasonable to deny the Project and leave customers without heat in the absence of cleaner energy infrastructure. BCOAPO also notes that many opposing comments come from individuals outside the affected area and suggest this should be considered by the Panel.[166]

The CEC is generally satisfied with FEI's stakeholder engagement but believes it falls short in engaging ratepayer groups who will bear the burden of the "higher-than-necessary costs".[167]

[159] Exhibit B-9.
[160] Exhibit B-1, pp. 92-93.
[161] Exhibits D-1 to D-80.
[162] FEI Final Argument, p. 53.
[163] Ibid., p. 55.
[164] Ibid., pp. 54-55.
[165] BCSEA Final Argument, p. 9.
[166] BCOAPO Final Argument, p. 10.
[167] CEC Final Argument, p, 17.

RCIA considers FEI's consultation and communication efforts to date sufficient, based on the December 2, 2024 update, and expects ongoing engagement throughout the development and construction of the OCMP.[168] RCIA also asserts that the OCMP is necessary to address an imminent capacity shortfall, as halting new gas connections to avoid the project would conflict with FEI's obligation to serve customers.[169]

FTFO believes the commenters do not advocate for customers losing heat, but rather view electrification as a viable and preferable alternative to the OCMP. FTFO also suggests that of the letters, about 25 percent were submitted by Kelowna residents directly impacted by the Project, while the remainder reflects widespread opposition across the province to FEI's LNG proposal.[170]

Panel Discussion

The Panel finds FEI's consultation with Indigenous groups, the public, and other stakeholders to date to be adequate. The Panel notes that FEI may not have conducted the same extent of consultation that would typically be observed at the time of a CPCN application. However, in this case we recognize FEI was limited by the timing constraints associated with developing the OCMP in short order following the OCU decision. Additionally, the Panel is satisfied that FEI has demonstrated a reasonable plan for further consultation and engagement and will be required to engage further with local residents and businesses as part of the BCER permitting process.

7.0 Alignment with Government Policy and Regulatory Objectives

As stated earlier, section 46(3.1) of the UCA requires the BCUC to consider "the applicable of British Columbia's energy objectives," the most recent long-term resource plan filed by the utility and the extent to which the Application is consistent with the requirements of the CEA.[171]

Based on that assessment, FEI submits that the Project supports the following BC energy objectives found in sections 2(d) and 2(k) of the CEA:

> To use and foster the development in British Columbia of innovative technologies that support energy conservation and efficiency and the use of clean or renewable resources; and
>
> To encourage economic development and the creation and retention of jobs.

FEI states that the Project aligns with British Columbia's energy objective (d) by providing an innovative small-scale LNG solution to address near-term peak demand and objective (k) by stimulating the local economy through job creation and procurement of goods and services from local vendors, while ensuring sufficient capacity to support regional economic growth.[172]

FEI's submits that the OCMP aligns with FEI's 2022 Long-Term Resource Plan, which identified the need for capacity upgrades, and follows the BCUC's directive to explore short-term solutions after rejecting the original OCU Project.[173]

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[168] RCIA Final Argument, pp. 19-20.
[169] Ibid., p. 21.
[170] FTFO Final Argument, p. 10.
[171] Utilities Commission Act, RSBC 1996, c. 473., sections 46(3.1)(a) & (c).
[172] Exhibit B-1, pp. 99-100.
[173] Exhibit B-1, p. 102.

Positions of the Parties

RCIA views the OCMP as an innovative application of LNG technology that supports local economic growth and aligns with provincial energy objectives.[174]

The CEC agrees that the Project supports innovation, economic development, and aligns with FEI's most recent resource plan.[175]

Panel Discussion

The Panel agrees with FEI that the Project is directionally consistent with FEI's forecast need for capacity solutions on the ITS as reflected in its 2022 LTGRP. The Panel also views that the Project aligns with British Columbia's energy objectives by providing an innovative non-pipeline solution to address near-term peak demand, and socio-economic benefits.

8.0 CPCN Determination

FEI is granted a Certificate of Public Convenience and Necessity for the Okanagan Capacity Mitigation Project, pursuant to section 46(3) of the UCA.

The Panel finds that the OCMP is necessary for the public convenience and necessity due to the risk of a short-term capacity shortfall on the ITS, as supported by FEI's most recent peak demand forecast. While the Panel acknowledges there are potential initiatives that FEI may be able to take to mitigate the growth of peak demand in the future, we accept that none of these initiatives can be reasonably or reliably implemented in the short term to defer the need for the OCMP. Further, we agree with FEI that in constructing the OCMP it is reasonable to reduce, but not eliminate, the potential reliance on existing mitigation measures.

Additionally, the Panel finds that FEI has demonstrated that the OCMP is in the public interest. The Application is supported by a robust analysis of alternatives, a reasonable consideration of Project scoping, costs and risks, and the demonstration of adequate consultation to date.

The Panel notes that RCIA and FEI expressed willingness for the BCUC to also provide a conditional approval for FEI to procure additional LNG trailers if the BCER facility permit for the Project is denied. However, the Panel views that FEI has appropriately outlined the permitting risk and that there are opportunities within the BCER permitting process for FEI to address potential concerns. Therefore, we conclude a conditional approval is not necessary. If the BCER permit is not approved, it will be incumbent upon FEI to propose an alternative solution at that time.

9.0 Project Reporting

The Panel directs FEI to file the following reports:

1. Semi-Annual Progress Reports

Each report is required to detail:

- Actual costs incurred to date compared to the CPCN estimate highlighting variances with an explanation and justification of significant variances;

[174] RCIA Final Argument, p. 23.
[175] CEC Final Argument, pp. 17-18.

- Updated forecast of costs, highlighting the reasons for significant changes in Project costs anticipated to be incurred;
- The status of Project permitting, emphasizing any operating restrictions, design modifications, or schedule delays resulting from BCER's facility permit approval process; and
- The status of Project risks, highlighting the status of identified risks, changes in and additions to risks, the options available to address the risks, the actions that FEI is taking to deal with the risks and the likely impact on the Project's schedule and cost.

FEI must file semi-annual progress reports within 30 days of the end of each semi-annual reporting period, with the first report covering the period ending June 30th, 2025.

2. Material Change Reports

A material change is a change in FEI's plan that would reasonably be expected to have a significant effect on the schedule, cost or scope of that particular plan, such that:

- there is a schedule delay of greater than six months compared to the CPCN construction schedule for the Project;
- there is a cost variance of greater than 10 percent of the CPCN capital estimate for the Project; or
- there is a change to the project alternative selected for a given pipeline modification.

In the event of a material change, FEI must file a material change report with the BCUC, explaining the reasons or the material change, FEI's consideration of the Project risk and the options available and actions FEI is taking to address the material change. FEI must file the material change report as soon as practicable and in any event within 30 days of the date on which the material change occurs. If the material change occurs within 30 days of the date for filing a semi-annual progress report, FEI may include the material change information in the progress report.

3. Final Report

The Final Report must include a breakdown of the final costs of the Project compared to the cost estimates included in Table 6-1 in the Exhibit B-1 and provide an explanation and justification of any material cost variances of 10 percent or more. The Final Report must be filed within six months of substantial completion or the in-service date of the Project, whichever is earlier.

DATED at the City of Vancouver, in the Province of British Columbia, this 3rd day of March 2025.

Electronically signed by Mark Jaccard

_____

M. Jaccard
Panel Chair/Commissioner

Electronically signed by Tom Loski

_____

T. A. Loski
Commissioner

Electronically signed by Wendy Royle

_____

W. E. Royle
Commissioner

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

LIST OF ACRONYMS

Acronym	Description
AACE	Association for the Advancement of Cost Engineering
AFUDC	Allowance for Funds used During Construction
Application	FEI's application to the BCUC for a CPCN for the Okanagan Capacity Upgrade
BCER	British Columbia Energy Regulator
BCOAPO	British Columbia Old Age Pensioners' Organization et al.
BCSEA	BC Sustainable Energy Association
BCUC	British Columbia Utilities Commission
CEA	*Clean Energy Act*
CEC	Commercial Energy Consumers Association of British Columbia
CNG	Compressed Natural Gas
CPCN	Certificate of Public Convenience and Necessity
Feasible Alternatives	CNG Trucking, LNG Trucking, and LNG Storage Facility
FEI	FortisBC Energy Inc.
FTFO	First Things First Okanagan
IR	Information Request
ITS	Interior Transmission System
Jenmar	Jenmar Concepts

LNG	Liquified Natural Gas
OCMP	Okanagan Capacity Mitigation Project
OCU	Okanagan Capacity Upgrade
OCU Decision	BCUC Order G-361-23, denying FEI a CPCN for the Okanagan Capacity Upgrade Project
Preferred Alternative	LNG Storage Facility
PV	Present Value
RNG	Renewable Natural Gas
RRGCR	Revised Renewable Gas Comprehensive Review
TPIP	Transmission Pressure to Intermediate Pressure
UCA	*Utilities Commission Act*
WACC	Weighted Average Cost of Capital

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

EXHIBIT LIST

Exhibit No.	Description
COMMISSION DOCUMENTS	
A-1	August 9, 2024 - Panel Appointment
A-2	August 12, 2024 – Panel Amendment
A-3	August 21, 2024 – BCUC Order G-227-24 establishing a regulatory timetable
A-4	September 26, 2024 – BCUC Information Request No. 1 to FEI
A-5	November 8, 2024 – BCUC providing Scope of Final Arguments
APPLICANT DOCUMENTS	
B-1	**PUBLIC** - July 30, 2024 – **FORTISBC ENERGY INC. (FEI)** – Application for Certificate of Public Convenience and Necessity (CPCN) for the Okanagan Capacity Mitigation Project (OCMP)
B-1-1	**CONFIDENTIAL** – July 30, 2024 – FEI CPCN Application for the OCMP – Confidential Appendices
B-2	September 5, 2024 - FEI submitting confirmation of public notice
B-3	October 24, 2024 – FEI submitting responses to BCUC Information Request No. 1
B-4	October 24, 2024 – FEI submitting responses to BCSEA Information Request No. 1
B-5	October 24, 2024 – FEI submitting responses to BCOAPO Information Request No. 1
B-6	**PUBLIC** - October 24, 2024 – FEI submitting responses to CEC Information Request No. 1
B-6-1	**CONFIDENTIAL** - October 24, 2024 – FEI submitting confidential responses to CEC Information Request No. 1
B-7	October 24, 2024 – FEI submitting responses to First Things First Information Request No. 1
B-8	October 24, 2024 – FEI submitting responses to RCIA Information Request No. 1
B-9	December 2, 2024 – FEI submitting updates on consultation and communication activities
B-9-1	December 19, 2024 – FEI submitting amendment to updates on consultation and communication activities

INTERVENER DOCUMENTS

C1-1	September 13, 2024 – **BC SUSTAINABLE ENERGY ASSOCIATION (BCSEA) -** Request to intervene by William Andrews
C1-2	October 3, 2024 – BCSEA Information Request No. 1 to FEI
C2-1	September 17, 2024 – **RESIDENTIAL CONSUMER INTERVENER ASSOCIATION (RCIA) -** Request to intervene by Abdulrahman Abomazid
C2-2	September 17, 2024 – RCIA Confidentiality Declaration and Undertaking forms
C2-3	October 3, 2024 – RCIA Information Request No. 1 to FEI
C3-1	September 18, 2024 – **COMMERCIAL ENERGY CONSUMERS ASSOCIATION OF BRITISH COLUMBIA (CEC) -** Request to intervene by David Craig
C3-2	September 25, 2024 – CEC Confidentiality Declaration and Undertaking forms
C3-3	October 3, 2024 – CEC Information Request No. 1 to FEI
C3-3-1	October 15, 2024 – CEC updated Information Request No. 1 with Appendix A to FEI
C4-1	September 19, 2024 – **BRITISH COLUMBIA OLD AGE PENSIONERS' ORGANIZATION ET AL. (BCOAPO)** – Request for Intervener Status by Irina Mis
C4-2	October 3, 2024 – BCOAPO Information Request No. 1 to FEI
C5-1	September 19, 2024 – **FIRST THINGS FIRST OKANAGAN CLIMATE ACTION (FIRST THINGS FIRST)** – Request for Intervener Status by Sue Kirschmann
C5-2	October 3, 2024 – First Things First Information Request No. 1 to FEI

LETTERS OF COMMENT

D-1	October 22, 2024 – GOLDMAN, L. (GOLDMAN) – Letter of Comment
D-2	October 24, 2024 – LAVEN, B. (LAVEN) – Letter of Comment
D-3	October 25, 2024 – TORRENCE, A. (TORRENCE) – Letter of Comment
D-3-1	October 30, 2024 – TORRENCE – Letter of Comment Addendum
D-4	October 25, 2024 – AXWIK, G. (AXWIK) – Letter of Comment
D-5	October 25, 2024 – GIBSON, C. (GIBSON) – Letter of Comment
D-6	October 25, 2024 – HALLGREN, M. (HALLGREN) – Letter of Comment

D-7 October 25, 2024 – LAYMAN, E. (LAYMAN) – Letter of Comment

D-8 October 25, 2024 – MARGO, T. (MARGO) – Letter of Comment

D-9 October 25, 2024 – HOURIGAN, G. (HOURIGAN) – Letter of Comment

D-10 October 25, 2024 – CROSS, S. (CROSS) – Letter of Comment

D-11 October 26, 2024 – CHVALA, S. (CHVALA) – Letter of Comment

D-12 October 27, 2024 – CORTES, B. (CORTES) – Letter of Comment

D-13 October 26, 2024 – LAWES, K. (LAWES) – Letter of Comment

D-14 October 25, 2024 – WYPER, J. (WYPER) – Letter of Comment

D-15 October 26, 2024 – WELTON, J. (WELTON) – Letter of Comment

D-16 October 26, 2024 – WALP, S. (WALP) – Letter of Comment

D-17 October 27, 2024 – VALLENTYNE, S. (VALLENTYNE) – Letter of Comment

D-18 October 26, 2024 –R, N. (RN) – Letter of Comment

D-19 October 26, 2024 – PIVNICK, E. (PIVNICK) – Letter of Comment

D-20 October 25, 2024 – MEWHORT, K. (MEWHORT) – Letter of Comment

D-21 October 27, 2024 – DYCK, T. (DYCK) – Letter of Comment

D-22 October 26, 2024 – DORAT, J-N. (DORAT) – Letter of Comment

D-23 October 25, 2024 – BEARMAN, A. (BEARMAN) – Letter of Comment

D-24 October 26, 2024 – BERSEA, D. (BERSEA) – Letter of Comment

D-25 October 25, 2024 – BURGESS, S. (BURGESS) – Letter of Comment

D-26 October 28, 2024 – DAVENPORT, S. (DAVENPORT) – Letter of Comment

D-27 October 28, 2024 – DUNN, P. (DUNN) – Letter of Comment

D-28 October 28, 2024 – FAIREY, J. (FAIREY) – Letter of Comment

D-29 October 28, 2024 – FRIESEN, P. (FRIESEN) – Letter of Comment

D-30 October 27, 2024 – GINGRAS, J. (GINGRAS) – Letter of Comment

D-31 October 26, 2024 – GLENN, L. (GLENN) – Letter of Comment

D-32 October 26, 2024 – HODGINS, B. (HODGINS) – Letter of Comment

D-33 October 25, 2024 – Kj, S. (Kj) – Letter of Comment

D-34 October 25, 2024 – KROUT, K. (KROUT) – Letter of Comment

D-35 October 26, 2024 – LEE, E. (LEE) – Letter of Comment

D-36 October 25, 2024 – MCGREGOR, D. (MCGREGOR) – Letter of Comment

D-37 October 26, 2024 – MICHAUD, D. (MICHAUD) – Letter of Comment

D-38 October 26, 2024 – MILLIGAN, E. (MILLIGAN) – Letter of Comment

D-39 October 25, 2024 – PARKINS, J. (PARKINS) – Letter of Comment

D-40 October 25, 2024 – PARRY, M. (PARRY) – Letter of Comment

D-41 October 25, 2024 – PEARCE, K. (PEARCE) – Letter of Comment

D-42 October 27, 2024 – PETERSON, M. (PETERSON) – Letter of Comment

D-43 October 25, 2024 – PIFER, G. (PIFER) – Letter of Comment

D-44 October 27, 2024 – SHARP, E. (SHARP) – Letter of Comment

D-45 October 28, 2024 – PORTER, K. (PORTER) – Letter of Comment

D-46 October 28, 2024 – DOSTERT, M. (DOSTERT) – Letter of Comment

D-47 October 28, 2024 – DURSTON, C. (DURSTON) – Letter of Comment

D-48 October 28, 2024 – CROSBY, K. (CROSBY) – Letter of Comment

D-49 October 28, 2024 – KRAMER, G. (KRAMER) – Letter of Comment

D-50 October 28, 2024 – KERR, P. (KERR) – Letter of Comment

D-51 October 29, 2024 – BEATTY, J. (BEATTY) – Letter of Comment

D-52 October 29, 2024 – GRUBE, A. (GRUBE) – Letter of Comment

D-53 October 30, 2024 – MACDONALD, J. (MACDONALD) – Letter of Comment

D-54 October 30, 2024 – OXLEY, E. (OXLEY) – Letter of Comment

D-55 October 30, 2024 – SCHONER, M. (SCHONER) – Letter of Comment

D-56 October 30, 2024 – DEVONSHIRE, J. (DEVONSHIRE) – Letter of Comment

D-57 October 30, 2024 – HOLM, M. (HOLM) – Letter of Comment

D-58 October 30, 2024 – MY SEA TO SKY (MS2S) – Letter of Comment

D-59 October 30, 2024 – SACKS, L. (SACKS) – Letter of Comment

D-60 October 30, 2024 – HENDRY, K. (HENDRY) – Letter of Comment

D-61 October 30, 2024 – WOODLAND, K. (WOODLAND) – Letter of Comment

D-62 October 30, 2024 – STEVENSON, P. (STEVENSON) – Letter of Comment

D-63 October 30, 2024 – SIELMANN, H. (SIELMANN) – Letter of Comment

D-64 October 30, 2024 – QUIRK, B. (QUIRK) – Letter of Comment

D-65 October 30, 2024 – PARKINSON, L. (PARKINSON) – Letter of Comment

D-66 October 30, 2024 – DYER, K. (DYER) – Letter of Comment

D-67 October 30, 2024 – DIXON, J. (DIXON) – Letter of Comment

D-68 October 31, 2024 – DIXON, D. (DIXON) – Letter of Comment

D-69 October 30, 2024 – DIXON, C. (DIXON) – Letter of Comment

D-70 October 31, 2024 – SIEMENS, J. (SIEMENS) – Letter of Comment

D-71 October 30, 2024 – DAVIES, K. (DAVIES) – Letter of Comment

D-72 October 31, 2024 – CURRAN, M. (CURRAN) – Letter of Comment

D-73 October 31, 2024 – CROQUET, E. (CROQUET) – Letter of Comment

D-74 October 31, 2024 – CAIRNS, S., City of Kimberley (CAIRNS) – Letter of Comment

D-75 October 30, 2024 – BYLSMA, D. (BYLSMA) – Letter of Comment

D-76 October 31, 2024 – BROOK, J. (BROOK) – Letter of Comment

D-77 October 31, 2024 – HENDERSON, M. (HENDERSON) – Letter of Comment

D-78 October 31, 2024 – SANDER, C. (SANDER) – Letter of Comment

D-79 October 31, 2024 – PARKINSON, G. (PARKINSON) – Letter of Comment

D-80 October 31, 2024 – DAVIS, T. (DAVIS) – Letter of Comment