British Columbia Utilities Commission

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ORDER NUMBER
C-2-16

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

and

FortisBC Inc.
Application for a Certificate of Public Convenience and Necessity
for Construction of the Kootenay Operations Centre

BEFORE:
C. A. Brown, Panel Chair/Commissioner
I. F. MacPhail, Commissioner
R. D. Revel, Commissioner

on March 4, 2016

CERTIFICATE OF PUBLIC CONVENIENCE AND NECESSITY

WHEREAS:

A. On July 9, 2015, FortisBC Inc. (FBC) applied to the British Columbia Utilities Commission (the Commission), pursuant to sections 45 and 46 of the *Utilities Commission Act* (UCA), for a Certificate of Public Convenience and Necessity (the Application) for the construction of a new operations centre located in the Castlegar area (the Kootenay Operations Centre or KOC) (the Project);

B. FBC submits that the Project will:

- Provide new facilities for the Generation Administration Office and the Warehouse currently located at the South Slocan Generation Site;
- Provide a centralized and dedicated Emergency Operations Centre for the Kootenay region;
- Address functional and security concerns related to the System Control Centre (SCC) and Back-Up Control Centre (BCC);
- Provide new facilities for the Kootenay Station Services group currently located in the Warfield Complex;
- Provide new facilities for the Network Services group currently located in the Castlegar District Office and at the Warfield Complex;
- Provide a fleet wash bay and covered parking for utility vehicles; and
- Provide storage for poles and pole trailers previously housed at the South Slocan Generation Site for Network Operations;

C. FBC filed the Application in two parts: the Primary Application; and the Confidential Application, which contains sensitive project information of a commercial or operational nature;

D. By Order G-124-15 dated July 23, 2015, the Commission granted FBC's request for confidentiality, established a written public hearing process for the review of the Application and issued a preliminary regulatory timetable that included two rounds of information requests;

E. The Commercial Energy Consumers Association of British Columbia, the British Columbia Old Age Pensioners Organization *et al.,* and the Industrial Customers Group registered as interveners and participated in the hearing. The British Columbia Municipal Electric Utilities (BCMEU) also registered as an Intervener;

F. During the second round of information requests, FBC indicated a preference to expand the scope of the Project from what was outlined in the initial Application to allow for the consolidation of a portion of the Kootenay Network Services operations at the proposed KOC location. The proposed consolidation includes all of the Castlegar District Office and six Network Services staff from the Warfield Complex;

G. FBC proposes to start construction of the Project in late spring 2016 and be in-service by the end of 2017;

H. FBC estimates the capital cost of the revised Project in As-Spent dollars to be approximately $22.355 million including an Allowance for Funds Used During Construction (AFUDC) and abandonment/demolition costs which would result in a 2018 rate increase of up to 0.7 percent;

I. FBC withdrew its request for approval pursuant to section 56 of the UCA for a depreciation rate of 1.9 percent that would be applicable to the new facility;

J. FBC's written final submission was filed on October 25, 2015. Intervener final submissions were filed on December 2, 2015, and the written hearing concluded with the filing of FBC's reply submission on December 11, 2015.

K. The Commission considered the evidence and submissions and concludes that approval of the revised Project is in the public interest.

NOW THEREFORE pursuant to sections 45 and 46 of the *Utilities Commission Act* and the Reasons for Decision attached as Appendix A to this order, the British Columbia Utilities Commission orders as follows:

1. A Certificate of Public Convenience and Necessity is granted to FortisBC Inc. for the Kootenay Operations Centre Project as described in the Application, with the additional scope to include the consolidation of the Castlegar District Office and six Network Services staff from the Warfield Complex,

2. The Kootenay Operation Centre Project, as approved by this order, falls outside of the Performance Based Rate formula and is therefore an excluded project.

3. FortisBC Inc. is directed to file additional reports, as follows:

   a. At any time that there is a change from the current use of any of the assets connected with the KOC Project, including the Castlegar District Office, the South Slocan Land and/or the Warfield Land and Buildings, FortisBC Inc. must, within 30 days, file a report to the Commission, as provided in section 4.0 of the Reasons for Decision;

   b. In the event that any of the changes from current use reports for the CDO, the South Slocan Land, and/or the Warfield Land and Buildings have not been filed by January 31, 2018, FBC must file a letter by that date updating the current use status and future plans for the assets and include an expected date by which the change of use reports will be filed.

c. A Contract Award Project Update Report on or before July 1, 2016, which must include the elements as set out in section 5 of the Reasons for Decision;

d. A Material Change Report, which must include the elements as set out in section 5 of the Reasons for Decision. Material changes must be reported to the Commission as soon as practical, but no later than 30 days after identification; and

e. A Final Report, which must include the elements as set out in section 5 of the Reasons for Decision. The Final Report must be filed within six months of the substantial completion, or the in-service date of the KOC project, whichever is earlier.

DATED at the City of Vancouver, in the Province of British Columbia, this *4th* day of March 2016.

BY ORDER

Original signed by:

C. A. Brown
Panel Chair/Commissioner

Attachment

British Columbia Utilities Commission

IN THE MATTER OF

FortisBC Inc.
Application for a Certificate of Public Convenience and Necessity for the Construction of the Kootenay Operations Centre

REASONS FOR DECISION

March 4, 2016

Before:
C. A. Brown, Commissioner/Panel Chair
I. F. MacPhail, Commissioner
R. D. Revel, Commissioner

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EXECUTIVE SUMMARY

This is an application by FortisBC Inc. for a Certificate of Public Convenience and Necessity for the construction of the Kootenay Operations Centre (KOC). The main purpose of the KOC project is to combine offices, a yard compound and a district stores warehouse, as well as addressing the functional limitations of certain critical assets. The new KOC will provide FortisBC Inc. with a cost-effective solution to replace the facilities that are at end-of-life, address health, safety, and code compliance concerns, space limitations, and improve operational efficiency and emergency preparedness within the Kootenay region.

Throughout this process, FortisBC Inc. provided several alternatives to the recommended proposal. The initial application did not consider the immediate replacement of the Castlegar facilities. During the information request process, FBC was motivated to consider an additional alternative that included the inevitable replacement of the Castlegar facilities that are nearing their end-of-life status.

Based on the evidence, the Panel grants a Certificate of Public Convenience and Necessity to FortisBC Inc. for the KOC project. The Panel determines that the public interest is best served by adding the immediate replacement of the Castlegar facilities to the requested alternative approval, referenced in these reasons as Alternative “5A”.

An issue was considered respecting the impact of the FortisBC Inc. Performance-Based Ratemaking Decision and the resulting capital exclusion criteria on this application. Specifically, concerns were raised as to whether the capital costs of the KOC project are eligible for exclusion from the performance based rate formula-driven capital spending rules. Related issues such as whether the KOC project constituted a single project, and whether the initial performance based rate decision anticipated that this particular KOC project would be excluded. The Panel has determined that the KOC project is eligible for exclusion from the performance based rate formula-driven capital spending rules.

The Panel also determines that the KOC project is a single project, exceeding the $20 million threshold, and therefore is eligible for exclusion under the Capital Exclusion Criteria. Notwithstanding this determination, the Panel determines that it would be unreasonable to include the KOC project in the PBR formula, as the KOC project was applied for before the Capital Exclusion Criteria Decision was issued

1.0 INTRODUCTION

On July 9, 2015, FortisBC Inc. (FBC), filed an application to construct a new operations centre in the Kootenay region (the Kootenay Operation Centre, KOC) pursuant to sections 45 and 46 of the *Utilities Commission Ac*t (UCA). The initial application scoped the KOC project as construction of a new centrally located facility to combine offices and a district stores warehouse, as well as a yard compound. The initial capital cost for the KOC project was estimated to be $20.651 million with construction to begin in the second quarter of 2016.[1]

The project scope also includes FBC's System Control Centre (SCC) and Back-up Control Centre (BCC). As such, FBC has filed its application in two parts: Part 1, the KOC Certificate of Public Convenience and Necessity (CPCN) Application, which is the public and non-confidential portion, and Part 2, the confidential portion, which contains information on FBC's SCC and BCC.

1.1 The Applicant

FBC is an investor-owned utility engaged in the business of generation, transmission, distribution, and bulk sale of electricity in the southern interior of British Columbia. It is an integrated utility and serves approximately 163,000 customers.

1.2 Key stakeholders

FBC has identified and engaged a number of stakeholders, including residents, businesses and government entities. During the consultation process, FBC also engaged the City of Castlegar and the City of Trail and has also identified First Nations in the area of the KOC.[2][3]

The following organisations registered as interveners in this proceeding:

- The Commercial Energy Consumers Association of British Columbia (CEC)
- The British Columbia Old Age Pensioners Organization *et al.* (BCOAPO)
- The British Columbia Municipal Electrical Utilities (BCMEU)
- The Industrial Consumers Group (ICG)

Of the registered interveners, CEC and BCOAPO submitted comments on the FBC's confidentiality requests, and CEC, BCOAPO, and ICG submitted information requests (IRs) and provided final submissions.

1.3 Orders sought

The following orders are sought from the Application, revised as applicable during the hearing process:

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[1] Exhibit B-1, p. 1.
[2] Ibid., p. 10.
[3] Ibid.,, Section 9, p. 87.

1. Pursuant to sections 45 and 46 of the *Utilities Commission Act*, a CPCN is requested for the construction of the Kootenay Operations Centre, as applied for in the Application, and amended during the hearing process to consider Alternative 5A.
2. FBC requested a separate depreciation rate of 1.9 percent for this project; however, in its final submission reasoned that since the depreciation rate in the Annual Review is very close to the depreciation rate requested in the Application, it no longer requested approval of a separate depreciation rate for this Project.[4]

1.4 Regulatory process

The Application was reviewed by a written public hearing process, comprised of two rounds of IRs followed by final submissions from the applicant and the interveners and closed with the reply by FBC. Of the registered interveners in the hearing BCOAPO, CEC, and ICG, each filed two information requests.

FBC requested approval from the British Columbia Utilities Commission (Commission) to file confidential information separately from the public portion of the Application, as it contains operationally sensitive information on critical assets and market sensitive information that if released could harm the competitive bidding process for the construction and acquisition of equipment and services. The Panel approved this request.[5]

2.0 PROJECT DESCRIPTION

FBC's Kootenay service territory ranges from the Boundary/Grand Forks area in the west to Kaslo/Crawford Bay in the north and to Creston in the east. FBC has a number of facilities including offices, warehouses, dams, substations and yard storage areas, located throughout the Kootenay region.

FBC indicates that there are four main facilities that support operational requirements for both the Kootenay region of the FBC service area and the company as a whole: the South Slocan Generation Site, which includes the Administration and Warehouse buildings located adjacent to the South Slocan Generating Plant; the Warfield Complex; the Trail Office Building; and the Castlegar District Office (CDO).[6]

The total site area for the location of the proposed new facility is approximately 10 acres. The KOC will consist of two structures: a new combined office and material district stores building totalling 30,091 gross square feet, and a building housing a 1,890 square foot wash bay and covered parking of 8,467 square feet totalling 10,357 gross square feet.[7] Alternative 5A, the incorporation of the CDO added during the course of the hearing, will provide an additional 1,411 square feet of office space, 3,857 square feet of enclosed and heated truck bays, 150 linear feet of foundation and racking for transformers and wire, and 18 parking stalls.[8]

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[4] FBC Final Submission, p. 1.
[5] Exhibit A-2, Order G-124-15.
[6] Exhibit B-1, p. 18, s. 3.2.
[7] Ibid., p. 65.
[8] Exhibit B-8, BCUC IR 2.5.12.1.

2.1 Project justification and need

This section provides a summary of the FBC's justification and need for the KOC project.

2.1.1 Need for repair or replacement of the generation facilities

FBC owns and operates four hydroelectric generating plants with an aggregate capacity of 225 megawatts in the Kootenay region. In addition, under third-party operating agreements, FBC generation personnel operate five hydroelectric facilities totalling approximately 1,300 megawatts for various owners. The primary purpose of FBC's South Slocan Generation Site, located in the Kootenay region of British Columbia between Castlegar and Nelson, is to support Generation Operations for FBC. There are multiple structures on the site, including the Generation Administration Office and the Warehouse building (together the Generation Facilities). The Powerhouse and Generating Plant at the South Slocan Generating Site are not the subject of this Application, save and except that $150,000 is allocated to renovate the existing shop facilities to accommodate the remaining operations crew.[9]

The Generation Administration Office is also currently the designated Emergency Operation Centre for any of the FBC owned or operated generating plants.

The Generation Facilities were built in 1926 and 1930, respectively, prior to modern-day building codes coming into effect. FBC has identified two concerns with these buildings that will require their repair or replacement:

1. The age, critical end-of-life condition and health, safety, and code compliance concerns; and
2. The buildings' locations and proximity to certain hazards, which could limit FBC's timely and efficient response to emergencies.[10]

2.1.2 Other project drivers

In addition to the immediate need to repair or replace the Generation Facilities, FBC has identified other operational requirements in the Kootenay region that require investment in both the short and long term to address concerns related to the condition and practical limitations of facilities currently in use: the SCC, the BCC and the yard at the CDO.[11] A further requirement is that FBC realize potential efficiencies and cost savings where feasible. The KOC project also provides an opportunity to do so for the Kootenay Station Services Group.

Requirement 1: Address SCC and BCC space constraints, functional challenges and hazards

FBC states that there are three main concerns related to the SCC and BCC including space constraints, functional challenges and proximity to certain hazards. Space constraints limit SCC and BCC distribution desk operational capabilities, the SCC operational support function, and control centre training capability. The current BCC is only configured to provide minimal required back-up for the generation and transmission system and there is no

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[9] Exhibit B-8, BCUC IR 2.1.3.2.
[10] Exhibit B-1, p. 6, s. 1.3.2.
[11] Ibid., p. 7, s. 1.3.3.

capability to provide back-up for the distribution system. Functional challenges at the SCC and BCC interfere with providing a productive and healthy working environment for personnel. As well, there are potential building code compliance concerns should any modifications of certain components of the current SCC be undertaken. Local hazards in close proximity to both the SCC and BCC pose a risk that both control centres could be disabled simultaneously. If any single event were to affect both the SCC and BCC, FBC indicates that it would have to manually monitor and control the electric system, which is impractical and unsustainable.[12]

Requirement 2: Provide a centralized and dedicated Emergency Operations Centre for generation and transmission and distribution operations

The Kootenay region does not currently have a centralized and dedicated Emergency Operations Centre (EOC) to manage all transmission, distribution and generation emergency events, and this presents certain challenges associated with emergency response communications and situational awareness. FBC has identified concerns related to the EOC functionality including space constraints, configuration limitations, and risks associated with the location of the currently designated EOC at the Generation Administration Office. FBC seeks to align with best practices and achieve communications and situational awareness benefits through a centralized and dedicated EOC.[13]

Requirement 3: Address yard space limitations for efficiency and cost savings

The CDO building is estimated to be nearing its end-of-life within five years. While FBC recognizes it will need to address this concern over the longer term, it has determined that this building does not require immediate investment, with the exception of some yard storage challenges that need be addressed immediately. Specifically, the yard space is congested, difficult to access, and currently inadequate to stage standardized operational material and equipment such as poles and trailers, as well as the large operations vehicles used by FBC. As a result of these issues, FBC cannot store poles within the yard at the CDO where crews currently are dispatched, and has to instead store them approximately 25 minutes away at the South Slocan Generating Site. FBC seeks to improve efficiency and create cost savings by permanently relocating the pole yard closer to the crew dispatch location.[14] During the hearing process, issues respecting the CDO were addressed, and became part of FBC's recommended alternative, referred to in this decision as Alternative 5A.

Requirement 4: Centralize field operations for efficiency

The Warfield Complex houses FBC's Kootenay Station Services Group, which maintains the distribution and transmission electrical substations in the Boundary and West Kootenay areas. While there are no building concerns within the group's space footprint, FBC seeks to centrally locate this group within their worksite territory. This would improve operating efficiency with resulting cost savings.[15]

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[12] Exhibit B-1, p. 6.
[13] Ibid., p. 7.
[14] Ibid.
[15] Ibid.

2.2 Project purpose

The KOC project involves the construction of a new facility and modifications to existing facilities to address the issues and concerns that have been identified in the Kootenay region of the FBC service territory. The KOC project is designed to:

- replace the existing Generation Facilities at the South Slocan Generation Site, which are at end-of-life;
- provide solutions for concerns related to the space, hazards and functionality of the SCC and BCC as described in the Confidential Application;
- mitigate risks associated with the current location and provide a centrally located and appropriately sized EOC with dedicated resources and equipment to support more timely and effective response to emergencies;
- provide a cost effective and efficient solution with resulting cost savings by central relocation of the Kootenay Station Services Group;
- provide a permanent solution for pole storage; and
- provide an opportunity for FBC to consider the condition of, and potential requirements for, the CDO.[16]

During the course of the hearing FBC was asked to consider an addition to the KOC project that would address the option of incorporating the CDO as part of the project as it had a limited life expectancy and will need to be addressed in the near future. This has been referred to as Alternative 5A.

2.3 Project components

FBC has identified the following six project components to address the needs of the project:

- Replace the Generation facilities, which are at the end-of-life (see section 2.1.1)
- Relocate and dedicate space to the Emergency Operations Centre (see section 2.1.1)
- Eliminate risks associated with the System Control Centre (see section 2.1.1)
- Expand the function of the Backup Control Centre to support safe and reliable operations (see section 2.1.1)
- Centrally locate the Kootenay Station Services Group, currently housed at the Warfield Complex
- Consolidation of the majority of the Network Services Group as well as provide replacement offices for the Castlegar District Office (see section 2.1.2)

These components are addressed in the evaluation of project alternatives.

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[16] Exhibit B-1, p. 8, s. 1.3.4.

2.4 Project alternatives

This section summarises each of the project alternatives examined by FBC, outlines the selection criteria FBC used to evaluate alternatives within the context of resolving the main issues and presents an evaluation of those alternatives. Intervener positions on the alternatives are then considered before reaching a decision of the most appropriate alternative upon which to conduct further evaluation concerning the granting of a CPCN.

2.4.1 Alternatives considered

FBC indicates that it evaluated five alternatives for their ability to address the overall project needs. The alternatives, including capital costs, are discussed in further detail below. Table 5-3 presents a comparison of the ability of each alternative to meet the criteria and is presented in Section 5.3. The five alternatives considered are:

> **Alternative 1** – Do nothing to the existing facilities. This would involve operating the existing facilities in their current form with no renovations, replacements or relocation of space.
>
> **Alternative 2** – Renovate the existing facilities. This alternative includes renovating the Generation Facilities at the South Slocan Generation Site. The Generation Administration Office renovation would include a dedicated and fully functioning EOC.
>
> **Alternative 3** – Replace the existing facilities. This alternative includes replacement of the Generation Facilities buildings with a new combined office and material district stores located at the South Slocan Generation Site. The Generation Administration Office replacement would include a dedicated and fully functioning EOC.
>
> **Alternative 4** – Lease a combined office and material district stores facility in or around the central location of Castlegar.
>
> **Alternative 5** – Construct a new combined office and material district stores at the KOC project site to replace the Generation Facilities. The KOC would include a dedicated and fully functioning EOC, space to accommodate the relocation of the Station Services Group from the Warfield Complex and yard storage for pole, pole trailer and construction project materials.[17]

The SCC and BCC portions of the alternatives are discussed in the Confidential Application.

> **Alternative 5A** – During the first round of information requests, the Commission asked about the economics of constructing the KOC inclusive of the CDO staff and functions (and immediately relocating the same) as compared to operating the CDO to end-of-life.

[17] Ibid., p. 48, s. 5.2.

FBC has completed and filed on a confidential basis, a detailed cost estimate and financial model for Alternative 5A, which includes the addition of the relocation of the CDO, Network Services Group plus six Warfield Network Services Capital Construction personnel[18]

2.4.2 Selection criteria for evaluation of alternatives

FBC states that it has taken a strategic approach to developing the KOC project by pursuing a single, integrated solution to resolving the issues at all of the various facilities identified in the Application. The need to address multiple facilities at different locations provides FBC with an opportunity to resolve both the near term and longer term challenges that FBC will be facing within the Kootenay region, while allowing FBC to achieve efficiencies through centralization of functions and personnel that are currently spread out in the region and through avoidance of duplication in building design and space.

In determining the alternatives for the KOC project, FBC considered the ability of each alternative to meet the following criteria:

1. Address the immediate space and functional limitations of facilities, which play an integral part of FBC's operational requirements. Key considerations include how each alternative will:

    - address the end-of-life and condition issues at the Generation Facilities, which pose future health, safety and compliance concerns if not resolved;
    - address the functional challenges at Generation Facilities due to structural constraints and design limitations;
    - relocate the EOC away from risks associated with its current location in an appropriately sized and central space with dedicated equipment to improve the timely and effective response to emergencies;
    - centrally locate the Kootenay Station Services Group to achieve operational efficiencies and cost savings;
    - provide permanent storage for the pole, construction project materials and pole trailers in close proximity to the Network Operations dispatch location in Castlegar; and
    - provide an opportunity to consider the condition and requirements of the Castlegar District Office when it reaches its end-of-life.

2. Resolve space issues consistent with FBC's long term space strategy that seeks to achieve the following:

    - ensure a safe and efficient working environment and meet building code requirements;
    - provide building capacity to meet current and future requirements;
    - provide facilities within the service area and in a suitable location;
    - provide for energy efficient facilities, which allow for cost effective operations; and
    - ensure full utilization of the building assets.

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[18] Exhibit B-8, BCUC IR 2.5.12.1.

3. Provide a cost effective solution in consideration of both short-term and long-term rate impacts to customers.[19]

The SCC and BCC selection criteria are outlined in the Confidential Application. For each alternative discussed below, FBC considered the advantages and disadvantages of the alternative in light of the selection criteria discussed above. Alternatives that did not sufficiently meet the key objectives were not considered feasible.[20]

As noted earlier, FBC's preferred Alternative 5A, which provides amendments to the KOC project as originally applied for, include the following changes:

(a) the addition of 1,411 square feet of office;

(b) the addition of 3,857 square feet of enclosed and heated truck bays;

(c) 150 linear feet of foundation and racking for transformers and wire; and

(d) 18 parking stalls.[21]

2.4.3 Evaluation of alternatives

Alternative 1

FBC indicates that this alternative does not address the issues and concerns identified in Section 4 of the Application nor does it meet any of the selection criteria outlined in Section 5.1. Given the immediate risks to FBC's operations and the safety of its employees, the alternative of "doing nothing", i.e. maintaining the status quo, is not considered a feasible option.[22]

Alternative 2

FBC has concluded that the alternative of renovating the Generation Facilities including the EOC, the SCC and the BCC at a total incremental capital cost of $24.628 million, including $1.504 million of Allowance for Funds Used During Construction (AFUDC), and demolition and removal costs of $0.139 million, is not sufficient as it does not address all the issues identified in Section 4.

In analyzing this alternative, FBC indicates that this alternative is not a cost effective solution and does not address the selection criteria requirements outlined in Section 5.1. Based on the risks and issues identified above, FBC does not consider the renovation alternative to be a feasible option.[23]

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[19] Ibid., pp 46-47
[20] Ibid., pp. 46-47, s. 5.1.
[21] Exhibit B-8, BCUC IR 2.5.12.1.
[22] Exhibit B-1, p. 49.
[23] Ibid., p. 51.

Alternative 3

FBC has concluded that the alternative of replacing the Generation Facilities and replacement of the "SCC at its current location and renovation of the BCC at its current location [which] is provided in the Confidential Application"[24] at a total incremental as-spent capital cost of $30.019 million, including AFUDC of $2.074 million, and demolition and removal costs of $0.572 million is not sufficient, as it does not address all the issues identified in Section 4.

This alternative is not a cost effective solution and does not address the selection criteria requirements outlined in Section 5.1. Based on the risks and issues identified above, FBC does not consider replacing the Generation Facilities to be a feasible option.[25]

Alternative 4

FBC has concluded that the alternative of leasing an operations centre is not feasible due to the lack of appropriately sized and zoned property in the market area. For this reason, FBC has not conducted any further evaluation of this alternative.[26]

Alternative 5

As discussed above, FBC submits that this alternative would resolve all the issues that have been identified in Section 4, including:

- The end-of-life and condition issues with the Generation Facilities, as well as the functional challenges with these buildings;
- The lack of a dedicated and fully functioning EOC in a centralized location away from identified hazards;
- The locational inefficiencies of the Kootenay Station Services Group; and
- The lack of permanent storage for poles, construction project materials, and pole trailers in proximity to the Network Operations Group dispatched out of the CDO.

The alternative would also meet the FBC's long term facilities strategy, including continuing to provide a healthy working environment for employees and provides an opportunity to consider the condition and requirements of the CDO when it reaches its end of-life. Information related to the SCC and BCC is provided in the Confidential Application.

The total as-spent capital cost for Alternative 5 is $20.651 million and it is the only alternative in the initial Application that addresses all of the non-financial considerations.[27]

FBC provided the following summaries to support the evaluation of alternatives:

[24] Exhibit B-1, p. 52.
[25] Ibid., p. 54.
[26] Ibid., p. 54.
[27] Ibid., p. 58.

Table 5-3: Summary of Selection Criteria Analysis of Alternatives and the Proposed Project

	Alternative 1 Do Nothing	**Alternative 2** Renovate Existing Buildings	**Alternative 3** Replace Existing Building on Existing Sites	**Alternative 4** Lease a Facility	**Preferred Option 5** Kootenay Operations Centre at Central Location
Addresses Immediate Problems – Generation Facilities End-of-Life	✗	✓	✓	Not applicable	✓
Addresses Immediate Problems – Generation Facilities Functional Challenges	✗	✗	✓	Not applicable	✓
Addresses Immediate Problems – Central and Dedicated EOC	✗	✗	Partial[17]	Not applicable	✓
Addresses Immediate Problems – Castlegar Yard Storage	✗	✗	✗	Not applicable	✓
Improve Kootenay Station Services Operational Efficiency	✗	✗	✗	Not applicable	✓
Considers the Long Term Requirements for the Aging Castlegar Facility	✗	✗	✗	Not applicable	✓
Safe and Efficient Working Environment	✗	✓	✓	Not applicable	✓
Provide Building Capacity for Current and Future Requirements	✗	✓	✓	Not applicable	✓
Provides a Building in the Service Territory in a Suitable Area	✗	✗	✗	Not applicable	✓
Provides Energy Efficiency Which Allows for Cost Effective Operations	✗	✗	✓	Not applicable	✓
Full Life Cycle of Asset	✗	✓	✗	Not applicable	✓

Table 5-5: Summary of Capital Costs of Alternatives ($ millions)

	Alternative 2	**Alternative 3**	**Alternative 5**
2015$[19]	$22.210	$26.483	$18.896
As-Spent	$22.985	$27.373	$19.077
AFUDC	1.504	2.074	1.128
Demolition / Removal[20]	0.139	0.572	0.446
Total	$24.628	$30.019	$20.651

Table 5-6: Summary of Financial Analysis of Alternatives ($ millions unless otherwise stated)

	Alternative 2	Alternative 3	Alternative 5
As-Spent Capital Costs	$24.628	$30.019	$20.651
2018 / 2019 Rate Base	2019: $23.764	2019: $29.660	2018: $20.459
Incremental Property Taxes – 2015$	$0.290	$0.310	$0.419
Gross Incremental O&M Expense - 2015$	$0.151	$0.137	$(0.025)
PV of Incremental Revenue Requirement	$39.366	$45.930	$33.912
DCF – NPV	$(0.681)	(0.570)	$(0.060)
2018 / 2019 Rate Increase (%)	0.9%	0.9%	0.7%

Alternative 5A

During the first round of information requests, the Commission asked about the economics of constructing the KOC inclusive of the CDO (and immediately relocating the same) as compared to operating the CDO to end-of-life.

FBC's response showed that the present value of the incremental revenue requirement would be slightly less if the move was incorporated now. However, FBC expressed concerns about a risk of delay in the current schedule if the scope of the KOC project was increased beyond its then preferred alternative.

During the second round of information requests, FBC indicated that it had subsequently done the following:

(a) Evaluated the Kootenay Network Services operation needs and concluded that the proposed KOC location to be the only feasible and cost effective solution that would accommodate the relocation of the CDO Network Services Group and the six Warfield Complex Capital Construction Power Line Technicians (PLTs). Furthermore, there were immediate opportunities to achieve customer and operational benefits through relocation and consolidation of the Network Services Group at the KOC. [28]

(b) Completed the building design and the AACE International, Inc. (AACE)[29] Class 3 estimate for the incremental cost of adding these requirements to the KOC project.

(c) Updated the financial analysis for the revised Alternative 5, which included the relocation of the Network Services Group (Alternative 5A). [30]

Furthermore, FBC notes that Alternative 5A resolves issues that would eventually arise under Alternative 5 regarding the end-of-life of the CDO.

FBC has concluded that the proposed KOC location is the only feasible and cost effective solution that will accommodate the relocation of the KOC Network Services Group. As described above, there are immediate

[28] Exhibit B-8, BCUC IR 2.5.4.
[29] AACE International, Inc., formerly referred to as the Association for the Advancement of Cost Engineering International.
[30] Ibid., BCUC IR 2.5.12.1.

opportunities to achieve customer and operational benefits through the consolidation of the KOC Network Services Group at the Kootenay Operations Centre.

FBC's preference is to include the consolidation of the KOC Network Services Group as part of the KOC project as long as the in-service date for the KOC project remains in 2017. FBC believes this timeline is achievable as long as a Commission decision is received by March 4, 2016, and FBC continues to develop the construction drawings for this modification to the KOC project in advance of CPCN approval.

The incremental capital cost of expanding the project scope to include the relocation of the CDO Network Services Group plus the six Warfield Network Services Capital Construction personnel is $1.705 million, which brings the total cost of Alternative 5A to $22.355 million. FBC has completed and filed on a confidential basis a detailed cost estimate and financial model for Alternative 5A.[31] (See section 3.1)

Intervener positions concerning alternatives

BCOAPO submits that from both the financial and non-financial perspectives, Alternative 5 is the most effective solution of those initially considered. Furthermore, FBC's analysis has substantiated the efficiencies that it would achieve in including the relocation of the Station Service Group in the overall project.

After stating its position on the original alternatives, BCOAPO then considers Alternative 5A and concludes that while Alternative 5A does increase the costs, the annual revenue requirement impact is small at roughly $12,000 per year—as such, the overall rate impact (0.7 percent) is the same under both Alternative 5 and Alternative 5A. Furthermore, Alternative 5A resolves issues that would eventually arise under Alternative 5 regarding the end-of-life of the CDO. For these reasons, BCOAPO supports Commission approval of FBC's preferred Alternative 5A.[32]

ICG takes the position that the KOC project has not been justified based on reliability improvements, or growth requirements. Moreover, the KOC project has not been justified based on Operating & Maintenance (O&M) savings. Instead, ICG submits that the primary driver of the KOC project is an apparent need to replace two existing buildings, an office and a warehouse, in South Slocan. Nevertheless, ICG does not object to any of the alternatives to the KOC project as long as FBC "is required to fund the project capital from within the capital funding envelope of the PBR plan.[33]

The CEC states that it prefers Alternative 5A.[34]

2.5 Stakeholder consultation

Communications and consultations with the stakeholders with respect to the KOC project have taken place, and are outlined in Section 9.1 of the Application (Public Consultation). FBC submits that it is committed to

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[31] Exhibit B-8, BCUC IR 2.5.12.1.
[32] BCOAPO Final Submission, p. 9.
[33] ICG Final Submission, p. 15, para. 43.
[34] CEC Final Submission, p. 8, para. 42.

continuing consultation with project stakeholders and will continue to ensure that, as the KOC project progresses, stakeholders are kept informed and have ways to provide feedback to FBC.

FBC suggests that the KOC project does not impact aboriginal rights or title since the land is within a municipality, zoned for Public and Institutional use (which includes utility use) and was previously the site of a school. Nevertheless, during the preliminary stage of the KOC project, as further explained in Section 9.2 (First Nations Engagement), FBC informed First Nations about its plan to construct the KOC in Castlegar and conducted additional archeological work, which confirmed no archaeological materials or sites observed.[35]

Commission determination

The Panel considered all of the evidence and arguments, and **determines that there is a need for the project, the project is justified, Alternative 5A is the most desirable of the alternatives presented, excluding financial and other special considerations (which is analyzed in section 3), and this alternative should be the one upon which it will deliberate further to determine whether granting a CPCN is in the public interest.**

The Panel observes that FBC has provided a comprehensive list of alternatives to the KOC project and that in FBC's view only two of the alternatives, Alternative 5 and Alternative 5A, address all of the KOC project needs as defined in the original Application. The Panel agrees that the only two feasible alternatives are 5 and 5A. The Panel further accepts that rectifying the problems, which justify these needs, is necessary given the age and critical end-of-life condition of buildings. The Panel also acknowledges health, safety, and code compliance concerns as well as the buildings' location and proximity to certain hazards, which could limit FBC's timely and efficient response to emergencies. Finally, the Panel accepts that there is a need to address SCC and BCC space constraints, functional challenges and hazards; provide a centralized and dedicated EOC for generation and transmission and distribution operations; address yard space limitations for efficiency and cost savings and centralize field operations for efficiency. FBC estimates an efficiency savings of $144,000.[36]

The Panel agrees with the positions and shares the view of both BCOAPO and CEC that Alternative 5A is the best alternative among those evaluated. The Panel also notes that while ICG does not object to any of the alternatives, it does object to matters relating to the financing of the alternatives as proposed by FBC. Specifically, the Panel recognises ICG's objection to the project financing being excluded from the PBR formula spending envelope and ICG's concerns related to the aggregation of a number of small projects in order to meet the CPCN requirements. The ICG objections will be addressed later in this ruling.

3.0 PROJECT COSTS AND RATE DESIGN

The Panel determined earlier that both Alternative 5 and Alternative 5A meet the project needs and that Alternative 5A, which is Alternative 5, plus the relocation of the CDO Network Services Group plus the six Warfield Network Services Capital Construction personnel, is the most desirable of the alternatives presented, excluding financial and other special considerations. These considerations are addressed in this section.

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[35] Exhibit B-1, Section 9, p. 87
[36] FBC Final Submission, Table, p. 40; Exhibit B-8 – FBC's Response to BCUC IR 2.5.12.1 at p. 38 and Attachment 2.2.4C (Updated Tables). This table is an updated version of Table 5-2 from Exhibit B-1 – FBC's Primary Application at p. 53.

3.1 Capital costs

In the initial Application, FBC requested approval for Alternative 5 with a total cost of $20.651 million in as-spent dollars including AFUDC.[37] FBC indicates the cost estimate submitted is:

- the summation of project components estimates made by FBC staff and external consultants;
- consistent with AACE Class 3 practice as required by the Commission's CPCN Guidelines; and
- based on the construction drawings and building specifications, which have been completed to the 50 percent level.

The detailed cost estimate for the building was prepared by LTA Consultants Inc. and is provided confidentially in Appendix L of the Application.

In its response to Commission information requests, FBC has stated its preferred alternative is now to expand the scope of the KOC project as submitted in the original application to move part of the Network Services Group to the KOC (Alternative 5A).[38]

The total capital cost of Alternative 5A is summarized below in Table 1.

Table 1: Summary of Capital Costs of the 5A Option[39]

	Revised Alternative 5 +Network Services in 2017 (Alternative 5A) $million
2015$	$20.448
As-Spent	$20.682
AFUDC	$1.227
Demolition / Removal	$0.446
Total	**$22.355**

In support of the revised scope, FBC provided an updated building cost estimate consistent with AACE Class 3 practice on a confidential basis.[40]

The KOC's office plan includes an 8 percent growth allowance.[41] FBC has applied a 3 percent per year escalation factor and 5 percent contingency for construction, equipment and relocation. In its description of the cost estimate process, FBC states that the construction of the KOC project will be procured on a fixed stipulated

[37] Exhibit B-1, p. 2.
[38] Exhibit B-8, BCUC IR 2.5.3, p. 22.
[39] Ibid., BCUC IR 2.5.12.1, p. 38, Table 5-5.
[40] Exhibit B-8-1, Attachment 2.4E.
[41] FBC Final Submission, p. 32.

"lump sum" contract basis, from a competitive bidding field of at least six competent general contractors.[42] FBC also indicates that the KOC project has scheduled reviews of the construction drawings and building specifications at the 65, 80, 90 and 100 percent completion intervals and that the reviews will be completed by the KOC Project Manager, consultant team, Facilities Maintenance Manager, Facilities Coordinator Leads and the FBC Legal Counsel.[43]

CEC has reviewed the construction estimates and finds them to be satisfactory and recommends that the Commission accept the capital cost estimates.[44] BCOAPO looks to Commission staff to ensure that the KOC project cost estimates are reasonable.[45] Though opposed to the exclusion of the KOC from PBR formula spending, ICG does not question the reasonableness of the capital cost estimate stating, "ICG does not object to the KOC Project, either Alternative 5 or Alternative 5A."[46]

Commission determination

The Panel finds the $22.355 million capital cost estimate of Alternative 5A of the KOC project to be fair and reasonable for the services the KOC will provide. The Panel notes that the proposed "lump sum" contract basis for the construction component of the KOC project reduces the risk of project cost overruns.

3.2 Operating & maintenance costs

As a result of the KOC project, there will be impacts to O&M costs and savings.

FBC submits that the KOC operating costs are estimated to be $295,000 and there are no one-time operating costs associated with the KOC construction. O&M costs and savings include:

(a) Net Generation recoveries of $150,000, which reflect the expected facility maintenance operating dollars recovered annually based on a distribution of costs by productive labour hours worked at each facility;[47]

(b) Increased Generation travel time costs of $30,000, which reflects an increase in Major Maintenance employees' time associated with increased travel from the KOC site to FBC-owned dams as compared to the travel times from their current base at the South Slocan Generation Site to FBC-owned dams; and[48]

(c) In Alternative 5A, the inclusion of the KOC Network Services Group adds an incremental $15,000 to KOC operating costs, which is offset by avoided CDO costs of $80,000.[49]

These operating costs and savings are set out in the following table from FBC's Final Submission, including separate totals for the KOC project with and without the impact of the CDO included:[50]

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[42] Exhibit B-1, pp. 80-81.
[43] Exhibit B-4, BCUC IR1.5.2.1, p. 29.
[44] CEC Final Submission, paras. 50 and 55.
[45] BCOAPO Final Submission, p. 10.
[46] ICG Final Submission, para. 43.
[47] Exhibit B-5, BCOAPO IR 1.5.1, p. 6; Exhibit B-8-1, Confidential BCUC IR 2.6.5, p. 6.
[48] Exhibit B-6, CEC IR 1.14.3, p. 28; Exhibit B-8, BCUC IR 2.2.5, pp. 13-14.
[49] Exhibit B-8, BCUC IR 2.5.12.1.

Item Description	2015 Estimated Annual O&M Cost and Savings $(000's)
KOC Operating Costs	$295
Net Generation Recoveries	(150)
Increased Generation Travel	30
Total Alternative 5	**175**
Additional KOC Operating Costs from CDO	15
Avoided CDO Costs	(80)
Total Preferred Alternative 5A	**$110**

In relation to the Station Services Group, FBC submits that gross O&M savings from the KOC project are forecast to be $144,000. These O&M savings include a corrected O&M savings of $88,000 for net travel time changes due to moving the Station Services Group to the KOC, reflecting both increases and decreases to travel times to and from work locations.[51] In addition, the following O&M savings will be realized:

(a) a premium savings on call-out staff due to integration of standby personnel at the KOC;

(b) an FBC pool vehicle and mileage reduction due to centralization of operations at the KOC resulting in reduction of the number of pool vehicles maintained;

(c) tool crib savings due to consolidation of the purchase and management of tool inventory for Station Services and Generation personnel; and

(d) a reduction in Warfield Complex janitorial O&M costs due to a reduction in space usage at the Warfield Complex.

These gross O&M savings are shown in the following table from FBC's Final Submission:[52]

Item Description	2015 Estimated Annual Savings (000's)
Travel Time C&M	$88
Premium Saving on Call Out Staff	$11
Tool Crib Savings	$10
Fleet Vehicle Savings	$25
Warfield Janitorial Cleaning Reduction	$10
Total	$144

[50] FBC Final Submission, p. 39.
[51] Exhibit B-8, BCUC IR 2.2.4, pp. 12-13.
[52] FBC Final Submission, p. 40.

FBC submits for preferred Alternative 5A, the KOC project with relocation of the KOC Network Services Group, the net incremental O&M savings are estimated to be $34,000 per year, comprised of $110,000 in operating costs less $144,000 in savings. The net incremental O&M represents less than 0.07 percent of the forecast formula O&M expense in 2016 ($53.6 million).[53]

In the FortisBC Inc. Multi-Year Performance Based Ratemaking Plan for 2014 through 2018, Decision (FBC 2014-2018 PBR Decision), it was recommended that if a CPCN project is excluded from the formula, that the CPCN review of the project include an assessment of any potential impact of the project on O&M. If appropriate, an adjustment to the formula based O&M spending envelope should then be made.[54]

FBC is not proposing to change the Base O&M expense used in its O&M PBR formula to include the anticipated O&M savings from the KOC project because of the minimal change to O&M costs as a percentage of the forecast formula O&M costs in 2016.

Intervener submissions

BCOAPO submits that in its view, on the assumption that the capital spending is to be excluded from the PBR formula, the incremental O&M impact should be outside the formula as well.[55]

CEC submits that the effective change in O&M costs is *de minimus,* and recommends that the Commission accept the cost estimates for capital and O&M as appropriately founded for both alternatives and acceptable.[56]

ICG submits that the KOC project has not been justified based on O&M savings. Notwithstanding, ICG submits that it will not object to any of the alternatives if the benefits of the PBR plan will be achieved such that FBC will be required to operate within both O&M and capital budget constraints.[57]

FBC reply

With regard to BCOAPO's submission that the incremental O&M impact should be outside the PBR formula, FBC notes that in both Alternative 5 and preferred Alternative 5A, the estimated net incremental O&M for the KOC project represents less than 0.7 percent of the forecast formula O&M expense in 2016 and is not significant enough to warrant a change to base O&M expense under the PBR Plan. FBC submits that the CEC notes as well that the effective change in O&M costs is *de minimus*.[58]

Commission determination

The Panel has considered all of the evidence and notes that the O&M costs and savings submitted by FBC has minimal impact on rates. The net incremental O&M represents less than 0.07 percent of the forecast formula

[53] FBC Final Submission, p. 43.
[54] FortisBC Inc. Multi-Year Performance Based Ratemaking Plan for 2014 through 2018, Decision, p. 175.
[55] BCOAPO Final Submission, p. 10.
[56] CEC Final Submission, p. 10.
[57] ICG Final Submission, p. 3.
[58] FBC Reply Submission, p. 5.

O&M expense in 2016 ($53.6 million) and is not significant enough to warrant a change to base O&M expense under the PBR plan.[59] CEC agrees with this position while ICG provides qualified support provided that FBC will be required to operate within both O&M and capital budget constraints. BCOAPO agrees that the incremental O&M impact should be outside the PBR formula**.** The Panel has previously determined that there is a need for the KOC project and that the project is justified. **The Panel now determines that estimated annual O&M costs and savings for Alternative 5A be accepted, with no adjustment to the PBR formula based O&M spending envelope.**

The Panel will address project funding under the PBR formula in a separate section of this decision.

3.3 Debt and equity financing

As per the CPCN Guidelines, for applications under sections 45 and 46 of the UCA, an applicant must provide evidence of the financial and technical capacity of the applicant and other persons involved, if any, to undertake and operate the project.[60]

The issue is whether or not FBC has provided adequate evidence of its financial capacity to undertake and operate the KOC project.

FBC submission

FBC submits that the total capital cost of the KOC project, if the preferred Alternative 5A is approved, is estimated to be approximately $22.355 million (including $1.227 million of AFUDC and $0.446 million for demolition/removal).[61]

FBC submits that it is capable of financing the KOC project. FBC has credit ratings for senior unsecured debentures from DBRS and Moody's Investors Service of A (low) and Baa1 respectively. FBC has a rate base of approximately $1.3 billion, including four hydroelectric generating plants with an aggregate capacity of 225 megawatts and approximately 7,200 kilometres of transmission and distribution power lines for the delivery of electricity to major load centres and customers in its service area. FBC employs approximately 500 full-time and part-time people. Further, FBC submits that it will provide the necessary resources to manage the design and construction of the KOC project.[62]

Intervener submissions

No interveners made submissions regarding the debt and equity financing of the KOC project.

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[59] FBC Final Submission, p. 43.
[60] CPCN Guidelines, Order G-20-15, Appendix A, p. 4.
[61] FBC Final Submission, p. 34.
[62] FBC Application, Section 2.2, p. 14-15.

Panel discussion

Based on the evidence, the Panel is satisfied that FBC is financially and technically capable of undertaking the KOC project.

3.4 Rate design/impact

The Panel determined earlier that while Alternative 5 and Alternative 5A meet the criteria for acceptability, Alternative 5A is the most desirable of the alternatives presented, excluding financial and other special considerations. The impact of Alternative 5A on rates will now be examined.

As per the CPCN Guidelines, applications under sections 45 and 46 of the UCA must include a schedule calculating revenue requirements of the project and feasible alternatives, and the resulting impacts on customer rates.[63]

Further, an application should summarize the public consultation process, with both the public who may be directly impacted by the project and the public that may experience impacts on their rates and service.[64] The consultation process will be further discussed elsewhere in this decision (see Section 2.5).

The issue is whether or not FBC has provided an adequate calculation of revenue requirements of the KOC project and feasible alternatives, along with the resulting impacts on customer rates.

FBC submission

Alternative 5A is forecast to cost $22.355 million (including $1.227 million of AFUDC and $0.446 million for demolition/removal).[65] The 2018 increase in rates is 0.7 percent for each alternative. There is an incremental increase to rate base of $20.416 million for Alternative 5 and an incremental increase to rate base of $21.828 million for Alternative 5A in 2018.

The cost estimates for Alternative 5 and preferred Alternative 5A with relocation of the KOC Network Services Group to the KOC in 2017 include capital costs based on AACE Class 3 estimates as revised in FBC's response to BCUC IR 1.5.12.1.[66] The rate impacts include a revised depreciation rate of 2.5 percent for new KOC Masonry Structure with a 40-year financial analysis period and reduced O&M benefit relating to Station Services Group travel time.[67]

FBC submitted the incremental cost of service (revenue requirements) rate impact as a percentage of 2015 Forecast Revenue Requirement, and present value of incremental cost of service,[68] and as per the revised

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[63] CPCN Guidelines, Order G-20-15, Appendix A, p. 4.
[64] Ibid., p. 6.
[65] FBC Final Submission, p. 34; Exhibit B-8, BCUC IR 2.5.12.1, pp. 36-39 and Confidential Attachment 5.12.1(a).
[66] FBC Final Submission, p. 35; Exhibit B-8, BCUC IR 2.5.12.1, pp. 36-39.
[67] FBC Final Submission, p. 35; Exhibit B-1, p. 82.
[68] FBC Final Submission, p. 35; Exhibit B-1, p. 82; Exhibit B-8, BCUC IR 2.5.12.1, p. 37.

financial analysis for the KOC Project.[69] FBC submits its financial analysis attachments confidentially in order to preserve its ability to negotiate with bidding parties.

For further discussion of the KOC Project Costs, see Section 3.0. For further discussion of O&M, see Section 3.2 Operating & Maintenance Costs.

Intervener submissions

BCOAPO submits that it has a strong interest in ensuring that the utility's rates are no higher than they need to be, and that all expenditures included in rates are justified and in the public interest.[70] It also submits that while Alternative 5A does increase the costs, the annual revenue requirement impact is small at roughly $12,000 per year – as such the overall rate impact (0.7 percent) is the same under both Alternative 5 and Alternative 5A; therefore BCOAPO supports Commission approval of FBC's preferred Alternative 5A.[71]

CEC submits that FBC planned to delay the timing of the replacement of the CDO to limit rate impacts and allow time for evaluation of the Network Services Group. However, the building systems are nearing the end-of-life and a plan for replacement is required beyond 2020. Assuming replacement of the office onsite, a 2012 cost estimate for the building alone exceeded $2 million in 2012 dollars. FBC had planned to assess alternatives to accommodate the functions and staff from the CDO at a later date.

The incremental present value of the revenue requirement from including the CDO in the KOC in 2020 versus doing so in 2017 was estimated at $134,000, which has a negligible impact on customers. FBC developed and adopted Alternative 5A as the preferred alternative (which incorporates the relocation of the Network Services Group to the KOC, plus six Warfield Complex Capital Construction Personnel).[72] The additional estimated capital cost is $1.705 million in as-spent dollars, over the original Alternative 5, for a total as-spent capital costs of $22.355 million. The increase in rate base for 2018 over Alternative 5 is $1.412 million and the present value of the incremental revenue requirement is increased by $0.481 million to $34.709 million.

O&M is reduced by $100,000. There is no appreciable increase in rates, which remain at 0.7 percent for both alternatives.[73] CEC reviewed the construction estimates and finds them to be satisfactory.[74] CEC submits that the rate impacts are relatively low and acceptable for the proposed project benefits and recommends that the Commission accept the cost estimates for capital and O&M as appropriately founded for both alternatives and acceptable.[75]

ICG made no submissions regarding the financial schedules.

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[69] FBC Final Submission, Table on p. 35.
[70] BCOAPO Final Submission, p. 1.
[71] Ibid., p. 9.
[72] CEC Final Submission, p. 7.
[73] Ibid., p. 8.
[74] Ibid., p. 9.
[75] Ibid., p.10.

Commission determination

The Panel notes that no intervener objects to the rate impacts as put forth by FBC and finds itself in agreement with the logic of the position put forth by CEC. The Panel is satisfied with FBC's evidence that the 2018/2019 rate impact as a percentage of the 2015 forecast revenue requirement is 0.7 percent for both Alternative 5 and preferred Alternative 5A.

The Panel therefore finds the impact on customer rates as acceptable per the CPCN Guidelines.

3.5 PBR materiality threshold/Capital exclusion criteria

Through Commission and intervener IRs, the issue was raised as to whether the KOC project capital costs should be included or excluded from FBC's formula-driven capital spending. FBC currently operates under a PBR plan, which was approved by Order G-139-14 and the Decision issued concurrently (PBR Decision). As part of the PBR Decision, the Commission approved FBC's proposed PBR Base Capital. As outlined in the PBR Decision, FBC's proposed PBR Base Capital was determined using its 2013 Approved Capital Expenditures as a starting point and then removing from this amount all capital expenditures attributable to "major projects", which included non-recurring projects and CPCNs.[76] Commencing in 2014, which was the first year of FBC's six-year PBR term, the PBR Base Capital is escalated annually according to an established formula and thus FBC's annual capital expenditure amount is determined formulaically.

The KOC project, which at the time of the PBR proceeding was titled the "Kootenay Long Term Facilities Strategy", was identified by FBC as one of eight anticipated CPCNs expected to proceed during the PBR term. The capital cost for the KOC project was, at that time, estimated to be $16.4 million.[77] While the KOC project's estimated capital cost was below FBC's CPCN dollar threshold of $20 million, FBC expected to apply for CPCN approval based on the four non-financial CPCN criteria, which FBC was also required to consider.

In the PBR Decision, the Commission found that the current CPCN criteria were not appropriate for determining whether capital costs should be excluded from the PBR capital spending formula. The Commission therefore invited further submissions from FBC and interveners on the issues of capital exclusion criteria and appropriate thresholds. However, the Commission also stated: "Until such time as any further determination is made concerning capital exclusion, the Panel approves the current CPCN exemption threshold as the threshold for exclusion for both utilities as applied for."[78]

On July 22, 2015, the Commission issued Order G-120-15 and accompanying Reasons for Decision regarding FBC's Capital Exclusion Criteria under PBR. As part of Order G-120-15, and of significance to this application, the Commission established a $20 million materiality threshold for FBC to be used to determine whether capital costs are eligible for exclusion from FBC's formula-driven capital spending under PBR. The Commission further determined that FBC's CPCN dollar threshold would remain at $20 million and eliminated the four non-financial CPCN criteria that were previously used to determine a capital project's eligibility for CPCN filing. However, the

[76] FortisBC Inc. Multi-Year Performance Based Ratemaking Plan for 2014 Through 2018, Decision, p. 210.
[77] Ibid., p. 164.
[78] Ibid., pp. 174-175.

Commission also noted that it may require a CPCN review for projects below this threshold if it finds that it is in the public interest to do so, pursuant to section 45 of the UCA.

The Commission also directed in Order G-120-15 that for any capital projects that exceed the PBR materiality threshold, FBC must demonstrate that the applied for project is not the result of combining smaller projects and that the actual costs fall above the PBR threshold.

The Commission's determinations varied somewhat from FBC's proposals in its Capital Exclusion Criteria application, as FBC had requested that its materiality threshold be set at $5 million.[79] Additionally, the Commission did not comment on the impact that elimination of the non-financial criteria may have on capital projects that were identified by FBC in the PBR proceeding as being less than $20 million but still anticipated to be CPCNs based on the previously existing non-financial criteria.

As a result of the determinations made in the PBR and Capital Exclusion Criteria decisions, the following issues arise:

- Is the KOC project exempt from PBR formula spending, as the original application anticipated, or do the revised capital exclusion criteria apply to the KOC project?
- Alternatively, is the KOC project exempt from PBR formula spending, as the KOC project is greater than $20 million, or should it be considered as a combination of separate smaller projects?

Intervener submissions

BCOAPO states:

> "as the KOC Project meets the current $20 M CPCN and capital exclusion criteria, BCOAPO views this proposed treatment as reasonable. However, BCOAPO notes that the cost of the KOC Project is just over the materiality threshold; as financial details about the Project were deemed confidential, and BCOAPO did not request access to the confidential aspects of the Application BCOAPO would look to Commission staff to ensure that the project cost estimates are reasonable, and that the KOC Project is properly excluded from the PBR formula."[80]

CEC notes:

> "a 10% reduction in the cost of the capital budget would place the project under the capital exclusion threshold under PBR. The CEC submits that the capital exclusion threshold is one area of the PBR, which is awkward to address in that it could theoretically provide an incentive for the utility to increase costs in order to create a project, which exceeded the threshold. However, CEC agrees with FBC's characterization of the project as being appropriately excluded from base capital. The CEC submits that the project is appropriately classified as a CPCN and should be treated as such under PBR."[81]

[79] FEI-FBC Capital Exclusion Criteria under PBR Proceeding, Exhibit B-1, p. 21.
[80] BCOAPO Final Submission, pp. 9-10.
[81] CEC Final Submission, p. 10.

ICG has two main arguments:

- that FBC has not provided sufficient evidence to show that the KOC project is beyond the PBR materiality threshold; and
- that FBC has combined smaller projects, in creating the KOC project, to attempt to support the PBR threshold criteria.

ICG suggests that FBC should be required to justify the KOC project within the PBR capital-funding envelope, forcing FBC to prioritize its project amongst other competing demands for capital. ICG provides argument from the Capital Exclusion Criteria Decision, to suggest that in this context FBC has not provided evidence to show that the project costs exceed the materiality threshold. ICG submits that the Commission should confirm that (i) there are two thresholds; (ii) the CPCN and capital exclusion thresholds are not the same; and (iii) that the PBR materiality threshold determines whether a project is funded by the formula spending envelope. ICG states that FBC has not demonstrated that the actual costs exceed the PBR materiality threshold.

ICG submits that for the purpose of determining whether a project is to be funded under the PBR formula-spending envelope, contingencies and AFUDC are not to be included in the actual project cost and that the actual cost should be in current dollars and not inflation adjusted as-spent dollars. As such, ICG submits that the actual cost of Alternative 5A is lower than the PBR materiality threshold. [82]

ICG also submits that FBC has not established that the KOC project is not a combination of smaller projects. Each of the components of the KOC project could be a smaller project, especially when each component has independent specialized purposes, with unique costs and benefits, and for that reason the KOC project is the "result of combining smaller projects."[83] ICG submits that it does not claim that FBC "combined smaller projects" so as to meet the PBR materiality threshold, and that this is not relevant to the PBR materiality threshold. However, what is important is that FBC must demonstrate that it has not "combined smaller projects" into the KOC project.[84]

FBC reply

In its reply, FBC provides its rationale for funding of the KOC project outside of the PBR formula.[85] FBC has identified the KOC project as a future CPCN consistently in its filings since 2011, including in the PBR application that set the base for the formula capital in the PBR. The project (referred to at the time as the Kootenay Long Term Facilities Project) was not included in the base level of capital expenditures at that time.[86]

FBC also states that when the Application was filed, the KOC project met the CPCN and capital exclusion criteria in place. The Commission's July 22, 2015 Reasons for Decision accompanying Order G-120-15 removed non-

[82] ICG Final Submission, pp. 6-8.
[83] Ibid., p. 11.
[84] Ibid., pp. 11-12.
[85] FBC Final Submissions, pp. 41-43; Exhibit B-4, BCUC IR 1.10.2, pp. 57-58.
[86] FBC Reply Argument, pp. 1-2.

financial criteria from FBC's capital exclusion threshold, which was maintained at the $20 million level. No adjustment was made to FBC's base capital.[87]

In its reply, FBC argues that the KOC project meets the $20 million PBR materiality threshold, but even if it did not, would still be appropriately excluded from formula capital for the following reasons:

(a) The recovery of the costs of the project is not contemplated through FBC's formula capital envelope. FBC would be unable to maintain its existing plant and equipment and meet customer growth if the capital expenditures normally allocated for sustainment and growth capital were to be reduced by the cost of the project.[88]

(b) Projects in the nature of the KOC project were not included in the determination of base capital under the PBR formula. Major and nonrecurring types of capital, specifically including the KOC project and other major buildings and facilities projects, were eliminated from historical expenditures when determining the level of base capital.[89]

FBC states that if the Commission approves the KOC project as a CPCN, FBC is entitled to recover its prudently incurred costs. Should the KOC project not meet the PBR materiality threshold, the only reasonable alternative to funding the project outside of formula capital would be to adjust the PBR formula to include project costs as a result of the changes introduced by the Capital Exclusion Criteria Decision. This would have a significant impact as the KOC project cost is over $20 million, while the 2016 capital formula, for comparison purposes, is only $42.874 million. FBC anticipates that adjusting the PBR formula for project costs would have negative impacts on customers.[90]

FBC notes CEC's position that the KOC project should appropriately be excluded from base capital, and agrees with CEC's submission that the KOC project is appropriately classified as a CPCN and should be treated as such under PBR. In the alternative, if the KOC project does not meet the materiality threshold, FBC requests that the Commission approve funding of the project through an increase to the PBR formula capital.[91]

In response to ICG's argument that FBC has not established that the KOC project is not a combination of smaller projects, FBC submits that the KOC project is for a single facility which realizes efficiencies through the reorganization and relocation of its component groups and facilities such as the EOC, Station Services Group and Network Services Group; and that the total cost of separately addressing a limited number of issues, as illustrated in the analysis of Alternatives 2 and 3, would be higher than that of the KOC project.[92]

Commission determination

The Panel notes the Capital Exclusion Criteria Decision, and determines that:

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[87] FBC Reply Argument, p. 2.
[88] FBC's Final Submission, pp. 41-43; Exhibit B-4, BCUC IR 1.10.2, pp. 57-58.
[89] FBC's Final Submission, pp. 41-43; Exhibit B-4, BCUC IR 1.10.2, pp. 57-58; FortisBC Inc. 2014-2018 PBR Ratemaking Revenue Requirements, Exhibit B-1, Vol. 1, p. 179.
[90] FBC Reply Argument, pp. 3-4.
[91] Ibid., pp. 4-5.
[92] Ibid., p. 4.

1. **The KOC project as applied for, and as modified during the course of hearing the Application, constitutes a single project, and is compliant with the criteria of the Capital Exclusion Criteria Decision.** The Panel agrees with the FBC submission, and finds that the KOC project is for a single integrated facility, even though it is intended to replace multiple facilities that serve multiple purposes.

2. **The KOC project, as approved, Alternative 5A, exceeds the Capital Exclusion criteria of $20 million.** The Panel relies on the evidence filed in the Application, and subsequently by FBC in the IRs in this regard.[93]

3. **Notwithstanding the two previous determinations, it would be unreasonable to include the KOC project in the PBR formula, as the KOC project was applied for before the Capital Exclusion Criteria Decision was issued**. Initially, as a result of the PBR Decision, FBC anticipated that several CPCN applications would be exempt. FBC filed this Application in that context, before the Capital Exclusion Criteria Decision was issued. Notwithstanding the fact that the KOC project exceeds the $20 million threshold, the Panel concludes that it would not be reasonable to consider the KOC project as included in the PBR cost base, because the KOC project was specifically anticipated in the original PBR hearing (with an estimate of approximately $16 million) to be excluded from the PBR formula. As well, the reasons for Capital Exclusion Criteria Decision were not issued until after this current Application was filed by FBC.[94]

The Panel therefore determines that the KOC project falls outside of the PBR formula and is therefore an excluded project.

3.6 CPCN

Commission determination

The Commission finds that the construction of the KOC, as outlined in Alternative 5A, is in the public interest under sections 45 and 46 of the UCA and that the impact of the expenditures will not result in rates under section 59-61 that are unjust, unreasonable, unduly discriminatory or unduly preferential. The Commission therefore grants FBC a CPCN for the construction and operation of Alternative 5A of the Kootenay Operations Centre.

4.0 VACATED PROPERTY

In the context of this CPCN application and the granting of a CPCN for Alternative 5A by the Commission, certain assets may no longer be considered used and useful, and some assets may be sold. There are two issues that stem from this: the removal of certain assets from rate base and the allocation of proceeds of any sold assets.

On November 16, 2015, the Panel requested participants in this proceeding to address the following matters in their final arguments:[95]

[93] Exhibit B-8, Response to BCUC 2.5.12.1, p. 38, Table 5-5.
[94] The Application was filed July 17, 2015 and the Capital Exclusion Decision reasons were issued July 22 2015.
[95] Exhibit A-8.

- What, if any, is the Commission's jurisdiction, authority and obligation to determine the allocation of proceeds from actual sale or deemed disposition of assets, including land where the function/service of such assets or land may be replaced by the KOC project?
- The applicability of the principles outlined in paragraph 77 of the *Stores Block*[96] and paragraph 35 of the *Harvest Hills*[97] decision to these proceedings.

FBC submits that it is beyond the Commission's jurisdiction to make a decision on the issue of sale proceeds and associated conditions, as the question does not arise in this CPCN application. The KOC project is not yet approved, has not been constructed, and all other assets that may be replaced by the KOC project are still used and useful in this moment. Specifically, FBC submits that the Commission's jurisdiction exists in the context of section 52 of the UCA; an application to sell assets has not been filed at this time and it would be premature to deal with this issue in this moment.

Notwithstanding this point, FBC submits the following:

- All of the assets, except the CDO, will remain in utility service at present;
- The South Slocan Generation Site remains used and useful for other purposes[98] and cannot be subdivided without road access, which it does not have at this time; and
- Confirms, on a without prejudice basis, that its position on the future application for sale of proceeds of the CDO, once it is no longer used and useful and FBC applies for an approval to sell, is that such sale proceeds would be for the benefit of the ratepayer.

Both CEC and BCOAPO, in their final submissions, support FBC's interpretation of the law, in terms of the Commission's jurisdiction, and its approach, in terms of applying for approval of the sale of the CDO, once a sale is anticipated.[99]

FBC supports a condition by the Commission that a deferral account be established to record the net book value of the CDO land and buildings, once a change of current use occurs. Any future proceeds of disposition of the property would be recorded in the deferral account, which would aid a future panel in any future application under section 52 of the UCA.

ICG raised concerns with the FBC approach. In its final submissions, ICG stated that FBC has proposed a two-stage approach:

1. To set up a deferral account, as part of the CPCN Application, whereby the net book value of the CDO land and buildings be recorded at the point in time where the CDO assets are no longer used and useful, and ought to be taken out of rate base; and
2. A future application for approval of the disposition of the property, wherein the Commission would determine how the sale proceeds will be disposed of.

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[96] ATCO GAS and Pipelines Ltd. v. Alberta (Energy and Utilities Board), [2006] SCC 4.
[97] ATCO Gas and Pipelines Ltd. v. Alberta (Energy and Utilities Board), [2009] ABCA 171.
[98] FBC Final Submission, p. 50.
[99] CEC Final Submission, p. 12; BCOAPO Final Submissions, pp. 11-12.

Commission determination

The Panel finds that the Commission's jurisdiction to place conditions on the sale of an asset or conditions on the flow of the proceeds of sale of an asset, is derived from a utility making an application for approval of such filed under section 52 of the UCA. Therefore, the Panel defers this matter to a future application.

Notwithstanding, while the Panel notes that during construction, assets for the South Slocan Land, Warfield Land and Buildings and the CDO will continue to be used and useful, there will be a point in time where the Commission is obligated to consider the nature and extent of how those assets should be removed from rate base. For example, it would seem that all of the CDO assets will be removed from rate base, and it would seem that there might be issues around the nature and extent of the inclusion of the Warfield Land and Buildings and the South Slocan Land in rate base. The Panel sees a connection between the possible sale of these assets and the construction of the KOC project.

In this regard, the Panel relies on the Harvest Hills Decision[100] and the Salt Caverns Decision[101] as support for the Commission's jurisdiction in this regard. While the Panel notes that ICG' is not opposed to setting up a deferral account to record net book value of assets as the status of "used and useful" changes, the Panel prefers that FBC report material changes to the Commission.

Therefore, the Panel requires **at any time that there is a change from the current use of any of the assets connected with this including the Castlegar District Office, the South Slocan Land and/or the Warfield Land and Buildings, FBC must, within 30 days from the day that a change from the current use of any of the assets has occurred, file a report to the Commission, with the following information:**

a. **The date that the change from the current use occurred;**
b. **a description of the impact of the change; and**
c. **FBC's proposed accounting and regulatory treatment of the assets in rate base;**

Once the Commission receives this report, further process will be determined.

In the event that any of the changes from current use reports for the CDO, the South Slocan Land, and/or the Warfield Land and Buildings have not been filed by January 31, 2018, FBC must file a letter by that date updating the current use status and future plans for the assets and include an expected date by which the change of use reports will be filed.

The Panel notes ICG's comments that FBC could have filed its application for approval of sale of the CDO with the CPCN application. The Panel does not see the practicality of this; the CDO assets are still used and useful and FBC would not have been clear on which alternative the Panel would have supported.

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[100] ATCO Gas and Pipelines Ltd. v. Alberta (Energy and Utilities Board), 2009 ABCA 171.
[101] ATCO Gas and Pipelines Ltd. v. Alberta (Utilities Commission), 2009 ABCA 246.

5.0 REPORTING REQUIREMENTS

5.1 Summary of reporting requirement submissions

FBC's draft order attached to the Application proposes that FBC provide the Commission an updated project cost estimate when the construction contract is awarded. The draft order also proposes that FBC file a Final Report within six months of project completion that provides "a complete breakdown of the final costs of the KOC project, compares these costs to the cost estimate in the Application, and provides an explanation and justification of material cost variances."[102]

In the Application and its responses to information requests, FBC made or makes the following statements that are relevant to reporting:

- The construction of the KOC project will be procured on a fixed stipulated "lump sum" contract basis through a competitive bidding field of at least six competent General Contractors;[103]
- The KOC project has scheduled reviews of construction drawings and building specifications at 65, 80, 90 and 100 percent completion. Review of the construction drawings and building specifications will be completed by the KOC Project Manager, consultant team, Facilities Maintenance Manager, Facilities Coordinator Leads and FBC Legal Counsel.[104]
- The construction of the KOC is expected to commence in May 2016 and to finish in October 2017, with project completion expected by the end of 2017;[105]
- A project cost breakdown is provided in the confidential Appendix G-1 of the Application;[106] however, Option 5A, which expands the scope to include consolidating a component of Network Services at the KOC increases the project cost.

Commission determination

The Panel notes that construction services for the KOC project will be procured on a fixed stipulated "lump sum" contract basis, which will reduce the risk of cost overruns. However, project delays could increase operating costs and potentially adversely affect ratepayers. The Panel accepts FBC's proposal to report on the construction contract award and final report. With the addition of Material Change Reporting, the Panel finds this to be an appropriate balance between the Commission's oversight of the execution of the KOC project and FBC's responsibility for the ongoing management of the KOC project.

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[102] Exhibit B-1, Appendix O-2, Draft Final Order.
[103] Exhibit B-1, Section 7.3.1.
[104] Exhibit B-4, BCUC IR 1.5.2.1.
[105] Exhibit B-1, Section 6.5.
[106] Exhibit B-1-1, Appendix G-1 Confidential, p. 3.

Therefore, the Panel directs FBC to file the following information in the manner described below. If FBC is unable to comply with these reporting requirements, FBC must file a letter to the Commission with an explanation.

1) **Contract Award Project Update Report**

   The Contract Award Project Update Report should be submitted to the Commission on or before July 1, 2016, and must include:

   a) **A summary of the 100 percent completion review of the construction drawings and building specifications;**

   b) **A bidding process summary (qualified bidders list, bid amounts, bid evaluation summary, selected bid, justification if selected contractor is not lowest price bidder, and other information to allow the Commission to assess the fairness and competitiveness of the contracting process);**

   c) **A summary of the construction contract provisions concerning project schedule and treatments of delays;**

   d) **An updated capital cost baseline with the same breakdown provided on page 3 of Appendix G-1 of the Application and explanation and justification of any cost variances of 10 percent or greater from the approved CPCN capital cost total; and**

   e) **A summary description of any significant project risks that were not identified in the Application, including an assessment of the impact of each risk, the proposed risk mitigation strategy, and to the extent known, the financial and schedule impacts if the risk is realized.**

2) **Material Change Report**

   The report should identify and detail any significant delays (i.e. greater than 3 months), material cost variances (i.e. greater than 10 percent of the capital cost baseline total as updated in the Contract Award Project Update Report) or material changes in scope. Material changes must be reported to the Commission as soon as practical, but no later than 30 days after identification. The Material Change Report must highlight the reasons for the delay, cost variance or change in scope, FBC's consideration of the options available and actions FBC is taking to address the issue.

3) **A Final Report**

   The Final Report must include a breakdown of the final costs of the KOC project compared to the cost baseline provided in the Contract Award Project Update Report and provide explanation and justification of any cost variances of 10 percent or more for each line item. The Final Report must be filed within six months of the substantial completion, or the in-service date of the KOC project, whichever is earlier.