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November 6, 2015

# <u>Via Email</u> Original via Mail

British Columbia Utilities Commission Sixth Floor 900 Howe Street Vancouver, B.C. V6Z 2N3

Attention: Ms. Erica M. Hamilton, Commission Secretary

Dear Ms. Hamilton:

Re: FortisBC Inc. (FBC)

Application for a Certificate of Public Convenience and Necessity (CPCN) for the Kootenay Operations Centre (the Application)

Response to the British Columbia Utilities Commission (BCUC or the Commission) Information Request (IR) No. 2

On July 9, 2015, FBC filed the Application referenced above. In accordance with Commission Order G-124-15 setting out the Regulatory Timetable for the review of the Application, FBC respectfully submits the attached response to BCUC IR No. 2. There are two items of note.

- 1) FBC has provided a revision to the O&M savings resulting from moving Station Services to the KOC in the response to BCUC IR 2.2.4; and
- 2) FBC has conducted an evaluation of the consolidation of the Network Services group in the Kootenay area. These details are provided in the responses to BCUC IRs 2.5.3 and 2.5.4. Further, the response to BCUC IR 2.5.12.1 provides an updated Site Plan, an AACE Class 3 building construction cost estimate, and live spreadsheets summarizing the capital costs and financial analysis for Alternative 5 plus the changes for the Network Services group.

November 6, 2015 British Columbia Utilities Commission FBC Kootenay Operations Centre CPCN Application Response to BCUC IR No. 2 Page 2



If further information is required, please contact the undersigned.

Sincerely,

FORTISBC INC.

Original signed by: Ilva Bevacqua

For: Diane Roy

Attachments

cc (email only): Registered Parties



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FortisBC Inc. (FBC or the Company)  Application for a Certificate of Public Convenience and Necessity (CPCN) for the Kootenay Operations Centre (the Application)	Submission Date: November 6, 2015
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#### 1 A. PROJECT DESCRIPTION

# 2 1.0 Reference: OVERVIEW OF PROJECT FACILITIES AND OPERATIONAL FUNCTIONALITY Exhibit B-4, BCUC IR 1.1.1; Exhibit B-4-2, BCUC IR 1.1.2 Summary of Existing and Proposed Facilities

In its response to BCUC IR 1.1.2, FortisBC Inc. (FBC) confidentially provided Table 3: Proposed Breakdown of Space by Site which shows the site spaces after the implementation of the Kootenay Operations Centre (KOC). In addition, in response to BCUC IR 1.1.1, FBC provided the following table:

Table 1: Existing Breakdown of Space by Site

	Gross	Ware-		Other	Outside Storage & Other Useable	of Ve Par	nber ehicle king aces	Number of Service Vehicles				
Facility Location	Office (ft <sup>2</sup> )	house (ft <sup>2</sup> )	Shop (ft <sup>2</sup> )	Buildin g (ft²)	Area (ft <sup>2</sup> )	Std	Lrg	Std	Lrg	Trailers	Eqpt	Unused Area
Trail Office	52,269*	n/a	n/a	n/a	n/a	57	0	12	0	n/a	n/a	0
Trail Office Rental	9,363**	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	4,410**
South Slocan Generation Facilities including Plant	14,500	11,300	23,973	24,201	568,765	95	0	35	15	4	11	0

	Gross	Ware-		Other	Outside Storage & Other Useable	of Ve Parl	nber hicle king ices	Number of Service Vehicles				
Facility Location	Office (ft <sup>2</sup> )	house (ft <sup>2</sup> )	Shop (ft <sup>2</sup> )	Buildin g (ft²)	Area (ft <sup>2</sup> )	Std	Lrg	Std	Lrg	Trailers	Eqpt	Unused Area
Warfield Total	10,051	14,593	13,998	10,808	150,000	90	16	15	19	15	10	0
Warfield Stations Services ***	1,363	1,920	1,051	n/a	20,000	10	15	10	6	4	7	0
Castlegar District Office	2,100	756	3,775	n/a	n/a	n/a	3	0	3	0	0	0
Castlegar Yard	n/a	n/a	n/a	1,950	15,000	20	1	3	1	1	3	0
SCC	5,386	n/a	n/a	108	n/a	20	n/a	0	0	0	0	0
BCC	175	n/a	n/a	n/a	n/a	n/a	n/a	0	0	0	0	0

<sup>\*</sup> including rental space

<sup>\*\*</sup> useable square footage



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1.1 Please confirm that the implementation of the KOC project as planned results in a net increase of 7,179 ft2 of office space, 10,357 ft2 other building space, 165,836 ft2 usable outside space, 149 standard parking spaces and 16 large vehicle parking spaces and a decrease of 4,504 ft2 of warehouse space.

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#### Response:

- The implementation of the KOC project:
  - Increases office space by 5,816 sq. ft. FBC did not correctly reflect the reassignment of the Warfield Station Services Group office space to Warehousing space. This change reduces the office space at the Warfield Complex by 1,363 sq. ft. (BCUC IR 1.1.2 Table 3, which shows the projected operations after the proposed KOC Project is completed, has been revised and provided below to show the post-KOC office space reduced for the Warfield Complex from 10,051 to 8,688 sq. ft.). The Warehouse sq. ft. was correspondingly shown as having increased by 1,363 sq. ft. from 14,593 sq. ft. to 15,956 sq. ft.
  - Increases other building space by 10,357 sq. ft. which is a result of providing covered parking that protects the vehicles, trailers and equipment from damage from snow loading.
    - Increases outside space by 165,836 sq. ft. as a result of a new property;
    - Increases parking by 166 parking stalls; and
    - Decreases Warehouse space by 3,140 sq. ft. as a result of amalgamation of the District Stores function.

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- The implementation of the preferred KOC Project Alternative provides efficiently planned buildings and addresses all the requirements outlined in Section 1.3 of the Primary Application. Additionally, as described in the responses to BCUC IRs 2.5.3 and 2.5.4, FBC considers the proposed KOC location to be the only feasible and cost effective solution that will accommodate the relocation of the CDO Network Services group and 6 Warfield Complex Capital Construction PLTs. . Please also refer to the response
- 28 to BCUC IR 2.5.12.1.
- 29 FBC provides the corrected square footage for the Warfield Complex office space and the Warehouse in
- 30 Table 3 revised below.



#### FortisBC Inc. (FBC or the Company)

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# Table 3 Revised: Projected Operations after the KOC is Completed - Proposed Breakdown of Space by Site

Facility	Gross Office	Ware-	Shop	Other Buildin	Outside Storage & Other Useable			Number of Service Vehicles			Unused	
Location	(ft <sup>2</sup> )	(ft <sup>2</sup> )	(ft <sup>2</sup> )	g (ft <sup>2</sup> )	Area(ft <sup>2</sup> )	Std	Lrg	Std	Lrg	Trailers	Eqpt	Area
Trail Office	52,269*	n/a	n/a	n/a	n/a	57	0	12	0	n/a	n/a	0
Trail Office Rental	9,363**	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	4,410**
South Slocan Generating Plant	n/a	n/a	23,973	24, 201	577,465	95	0	17	13	4	9	0
Warfield Total	8,688	15,956	13,998	10,808	150,000	90	16	4	13	11	3	0
Castlegar District Office	2,100	756	3,775	n/a	n/a	n/a	3	0	3	0	0	0
Castlegar Yard	n/a	n/a	n/a	1,950	15,000	20	1	3	1	1	3	0
KOC Generation Facilities	14,273	4,950	n/a	1,890	92,136	n/a	n/a	18	2	0	1	0
KOC Station Services	2,283	1,743	n/a	8,467	20,000	n/a	n/a	10	6	4	7	0
KOC Power Line	n/a	n/a	n/a	n/a	20,000	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Material Receiving & Staging	n/a	103	n/a	n/a	25,000	n/a	1	n/a	0	n/a	1	0
KOC Total	16,556	6,796	n/a	10,357	157,136	124	16	28	9	4	8	0
SCC	6,738	n/a	n/a	108	n/a	25	n/a	1	0	0	0	0
BCC	3,946	n/a	n/a	n/a	n/a	n/a	n/a	0	0	0	0	0

<sup>\*</sup> including rental space

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1.1.1 Please confirm or otherwise explain that the extra space is not required for additional employees or changes in operational responsibilities.

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<sup>\*\*</sup> useable square footage



Application for a Certificate of Public Convenience and Necessity (CPCN) for the Kootenay Operations Centre (the Application)

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# 1 Response:

- 2 Confirmed. As described in the response to BCUC IR 2.1.1, the increases in office space by 5,816 sq. ft.,
- 3 other building space by 10,357 sq. ft., outside space by 165,836 sq. ft., parking stalls of 166 and the
- 4 decrease in warehouse space by 3,140 sq. ft. are not "extra space" and are necessary for the space
- 5 requirements of the Project and to meet the Project requirements outlined in Section 1.3 of the Primary
- 6 Application.

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1.2 Please confirm that the Station Services trucks do not occupy any covered parking at Warfield.

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# Response:

The Station Services trucks do not occupy any covered parking at the Warfield Complex.

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19 20 21 1.2.1 In Table 3 filed confidentially in the response to BCUC IR 1.1.2, how much space under Other Buildings is allocated to Station Services at the KOC facility and what is this space for? Please explain why there is no apparent corresponding building space being vacated at Warfield and explain the need for the new space.

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#### Response:

The Kootenay Station Services Group has been allocated approximately 8,400 sq. ft. of covered parking. The covered parking is for numerous large trailers and equipment that currently take up parking stalls at Warfield Complex but, as noted in the response to BCUC IR 2.1.2, are not currently under cover. Some of these units have sustained damage due to snow loads and locating them under covered parking will prevent future damage of this nature to the units and the tools they house. Please also refer to the responses to CEC IRs 1.12.2 and 1.12.2.1.

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In its response to BCUC IR 1.1.1, FBC provided Table 2:



FortisBC Inc. (FBC or the Company)  Application for a Certificate of Public Convenience and Necessity (CPCN) for the Kootenay Operations Centre (the Application)	Submission Date: November 6, 2015
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Table 2: Existing Breakdown of Employees by Site

		Number of Full 1	Time Employees		
Facility Location	Management & Exempt (M&E)	IBEW (International Brotherhood of Electrical Workers)	COPE (Canadian Office & Professional Employees Union)	COPE Customer Services	Temporary Employees (Total All affiliations)
Trail Office	34	n/a	43	29	14
Trail Office Rental	n/a	n/a	n/a	n/a	n/a
South Slocan Generation Facilities	18	33	7	n/a	0-10
South Slocan Generating Plant	n/a	n/a	n/a	n/a	n/a
Warfield Total*	10	40	7	n/a	2
Warfield Stations Services	1	16	n/a	n/a	n/a
Castlegar District Office	1	8	2	n/a	1
Castlegar Yard	n/a	n/a	n/a	n/a	n/a
SCC	6	19**	4	n/a	n/a
BCC	n/a	n/a	n/a	n/a	n/a

<sup>\*</sup> includes Warfield Station Services in Total

In its response to BCUC IR 1.1.2, FBC provided Table 4:

Table 4: Proposed Breakdown of Staff by Site

		Number of Full 1	Γime Employees		
Facility Location	Management & Exempt (M & E)	IBEW (International Brotherhood of Electrical Workers)	COPE (Canadian Office & Professional Employees Union)	COPE Customer Services	Temporary Employees (Total All affiliations)
Trail Office	32	n/a	42	29	14
Trail Office Rental	n/a	n/a	n/a	n/a	n/a
South Slocan Generating Plant	1	15	n/a	n/a	n/a
Warfield Total	9	24	7	n/a	2
Castlegar District Office	1	8	2	n/a	1
Castlegar Yard	n/a	n/a	n/a	n/a	n/a
KOC Generation Facilities	15	18	7	n/a	0-10
KOC Station Services	1	16	n/a	n/a	n/a
KOC Line Patrol	n/a	n/a	n/a	n/a	n/a
KOC Total	16	34	7	n/a	0-10
SCC	10	19**	5	n/a	n/a
BCC	n/a	n/a	n/a	n/a	n/a

<sup>\*\*</sup> shift workers covering the system power dispatcher role

<sup>\*\*</sup> shift workers covering the system power dispatcher role



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1.3 Please describe the current and proposed layout and use of the South Slocan Generating Plant.

# Response:

The South Slocan Generating Plant referenced in Table 2 in the response to BCUC IR 1.1.1 and Table 4 in the response to BCUC IR 1.2.1 was meant to pertain to the shop trades work area that will have a room converted to office space. The actual Generating Plant (Dam and Powerhouse) will not be altered as a result of this Project.

There are currently two buildings at the South Slocan Generation Site that are utilized for shop trades work. One of the buildings contains the machinist, carpenter and welding equipment and the other building contains a crane, paint and sand blasting shops and wash bay. Both shop areas have a break room, washroom and change room areas. FBC would like to note the changes to the IBEW employee count at both the South Slocan Generating Plant (shop trades work area) and the KOC Generation Facilities. The South Slocan crew of 12 (a change from the 15 noted in Table 4) IBEW and 1 Supervisor will remain on site and be provided with crew touch down space and an office for the Supervisor which will be created within one of the shop buildings by reutilizing a break room. The Major Maintenance Crew comprised of 21 (a change from 18) IBEW employees will be relocated to KOC. This change of 3 crew employees from South Slocan to KOC has minimal impact on the KOC space program.

#### Response:

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Generating Plant.

The South Slocan Generating Plant referenced in the tables provided in the responses to BCUC IRs 1.1.1 and 1.1.2 was meant to pertain to the shop trades work area that will have a room converted to office space to support the remaining South Slocan crew and Supervisor. There are no employees headquartered directly from the actual Generating Plant (Dam and Powerhouse).

1.3.2 Are any costs expected to result from moving the 16 employees into the South Slocan Generating Plant? If yes, please detail and explain how they are accounted for in the application.

Please confirm there are no employees currently stationed at the South Slocan



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Response:
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- 3 Yes, there is \$150 thousand allocated to renovate the existing shop facilities at the South Slocan
- 4 Generation Site to accommodate the remaining operations crew impacted by the disposal of the
- 5 Generation Administration Office Building. The cost has been included in the KOC CPCN confidential
- 6 financial schedules, tab "RB", Change in Electric Plant in Service - Line 7 (Row 31 on the Excel file 7 sheet).
- 8 This cost does not change as a result of the update from the 16 to the 13 employees remaining at the
- 9 South Slocan shop trades work area as described in the response to BCUC IR 2.1.3.

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1.3.3 Are there any expected changes to O&M costs as a result of moving the 16

employees into the South Slocan Generating Plant? If yes, please detail and

explain how they are accounted for in the application.

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#### Response:

- 18 For clarity, there are no employees relocating to the South Slocan Generating Plant. The employees 19 remaining at the South Slocan Generation Site will continue to reside in their current location in the trades
- 20 building. There are no direct O&M costs as a result of the employees remaining at South Slocan.
- 21 After the KOC is in operation there will still be approximately \$30 thousand of facility costs at the South
- 22 Slocan Generation Site for maintaining access, infrastructure and maintenance of lands. Because the
- 23 Major Maintenance and Operations Support groups which conduct third party work are relocating to the
- 24 KOC, none of the \$30 thousand will be included in the generation cost pool for determining recoveries
- 25 from third parties.
- 26 Please also refer to the responses to BCUC IR 2.1.3.1 and BCOAPO IR 2.9.1.

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30 1.3.4 How many more employees, beyond the 16 indicated in Table 4, is the South 31 Slocan Generating Plant capable of holding?



# FortisBC Inc. (FBC or the Company) Application for a Certificate of Public Convenience and Necessity (CPCN) for the Kootenay Operations Centre (the Application) Response to British Columbia Utilities Commission (BCUC or the Commission) Information Request (IR) No. 2 Submission Date: November 6, 2015

# Response:

- 2 The South Slocan Generating Plant referenced in Table 2 in the response to BCUC IR 1.1.1 and Table 4
- 3 in the response to BCUC IR 1.2.1 referred to the shop trades work area that will be converted to office
- 4 space. The actual Generating Plant (Dam and Powerhouse) will not be altered as a result of this Project.
- 5 The space available within the shop trades work area after the modifications due to the KOC project are
- 6 implemented will contain large, permanently mounted shop trade equipment such as: Boring Machines,
- 7 Lathes, Drill Presses, Welding Tables, Table Saws, Blast and Paint Booths, etc. This shop trade
- 8 equipment is required for the ongoing operation and maintenance of the Generation Plant.
- Adding more employees at the shop trades work area beyond the 16 spaces (originally noted in Table 4 of the response to BCUC IR 1.1.2) would be possible as there is sufficient land available, but doing so
- 11 would require expanding the existing facilities or building new facilities. This option is outlined as
- 12 Alternative 3 within Section 5 of the Application, and was not considered further due to its higher costs
- and because it does not meet all of the selection criteria outlined in Table 5-3.

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1.4 Please confirm and complete Table A below:

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Table A: Summary of Useable and Unused Space

Site	Total Lot Size (ft <sup>2</sup> )	Total Usable Space (ft <sup>2</sup> )	Useable but Unused Space before KOC (ft <sup>2</sup> )	Useable but Unused Space after KOC (ft²)
South Slocan Generation		642,739		
Castlegar District Office & Yard		23,581		
Warfield		199,450		
KOC		190,845		

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#### Response:

#### South Slocan Generation Site

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• The South Slocan Generation Site property consists of multiple lots which provide road access to the Generation Site from the Highway, and accommodate the Generating Plant and Powerhouse and support infrastructure. The useable space referenced in the table below includes only the space used for the operations of the Generation Facilities and the shop facilities. Please refer to the response to BCUC IR 2.1.5 for land parcel details.



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• The building footprint of the Generation Administration Office and Warehouse totals 8,700 sq. ft. As described in the response to BCUC IR 2.7.3, this land will be used to provide additional storage space for Generation Plant project material and equipment and will continue to support FBC's sewage and water treatment plants as well as sewer, water and power lines.

#### Castlegar District Office

There are no current proposed changes to the CDO before or after the KOC as currently proposed in the Application. Should the Network Service group as described in the response to BCUC IR 2.5.4 be included within the scope of the Project, FBC would submit an Application to the Commission for disposition of the CDO property upon the relocation of the Castlegar District Office to the KOC. Please refer to the responses to BCUC IRs 2.9.1 and 2.9.4.

#### Warfield Complex

- The Warfield Complex houses the Modsley substation within the lot parcel. The Modsley substation footprint has been removed from the useable space calculations.
- The space vacated by the Kootenay Station Services Group will be assumed by the Warehousing group. Please refer to the response to BCUC IR 2.8.2.

#### *KOC*

The KOC project will fully utilize the site.

Site	Total Lot Size (ft²)	Total Usable Space (ft²)	Useable but Unused Space before KOC (ft²)	Useable but Unused Space after KOC (ft <sup>2</sup> )
South Slocan Generation	2,357,685 (54 acres)*	636,939	0	0
Castlegar District Office & Yard	42,732 (.981 acre)	23,581	0	0
Warfield	684,937 (15.7 acres)**	204,836	0	0
кос	435,948 (10 acres)	190,845	n/a	0

<sup>\*</sup>Parcel includes all land including Powerhouse and Generating Plant.

NOTE: Parking stalls are not counted in total useable space for all sites.

<sup>\*\*</sup>Parcel includes the Modsley Substation.



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1.5 Please provide a diagram of the South Slocan Site showing the lot boundaries and building outlines.

# Response:

The South Slocan Generation Site has been owned by FBC predecessors since circa 1920 and consists of two lots totaling 54 acres. The lots are land locked in that they are accessed from Highway 3A through a Teck Cominco and CPR Easement. FBC's road access meanders down a hillside to the flat area located by the river. Attachment 1.5 contains the South Slocan Site plan showing the legal lot boundaries and building outlines.



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both.

#### FortisBC Inc. (FBC or the Company)

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#### B. JUSTIFICATION FOR KOOTENAY STATIONS SERVICES MOVE

Ī	В.	30311	IICAIN	ON FOR ROOTENAT STATIONS SERVICES MOVE		
2	2.0	Refere	ence:	KOOTENAY STATIONS SERVICES		
3				Exhibit B-1, Application, pp. 56–58; Appendix F		
4				Exhibit B-4, BCUC IR 1.7.1,		
5				Travel time savings and costs		
6 7 8 9	FBC states in the application that KOC will provide \$144,000 per year of O&M savings due to reduced Kootenay Station Services travel and will result in an additional \$30,000 per year of Generation travel cost. The response to BCUC IR 1.7.1 stated that FBC assumes one hour per day of technician travel time for Kootenay Station Services.					
10 11				n the Application indicates that KOC will reduce average driving time to es by 10.5 minutes, relative to Warfield.		
12 13 14 15		2.1	visited	he table provided in Appendix F contain all the locations that are regularly or serviced by the Generation and Station Services Groups? If not please the table to include all the locations.		
16	Respo	nse:				
17 18 19 20	to refle	ect addi s and w	tional si /hich we	revised and included in Attachment 2.2 to the response to BCUC IR 2.2.2 ites that are regularly visited by both the Station Services and Generation ere not included in the original Appendix F. The following sites that are tly and not included within Appendix F are:		
21	•	eight r	epeater	sites spread throughout the Kootenay Region; and		
22 23	•			etering sites at various commercial, industrial, and residential facilities e Kootenay Region.		
24 25						
26 27 28 29 30		2.2	first co or visit second	e provide two additional columns to the table provided in Appendix F. In the blumn, please indicate whether the station or location is regularly serviced ted by the Generation Group, Station Services Group or both. In the discolumn please indicate whether the station or location is regularly and or visited as a part of regulated business, non-regulated business or		



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2 Please refer to Attachment 2.2.

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2.3 Please confirm that the one hour per day of travel time in BCUC IR 1.7.1 refers to the estimated <u>reduction</u> in travel time with KOC or explain otherwise.

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# Response:

10 Confirmed.

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2.4 Please reconcile the one hour per day of travel time with the estimated time savings of 10.5 minutes in Appendix F.

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#### Response:

FBC notes an oversight in its original calculation of travel time because it had not accounted for the increased travel time that would occur for a smaller percentage of work occurring in the Southern Castlegar area. Based on the revised Appendix F provided as Attachment 2.2 to BCUC IR 2.2.2, FBC has recalculated the O&M savings as a result of moving Station Services to the KOC by taking into account both the increases and decreases in travel time to locations where Station Services conducts work. The estimated O&M saving has decreased from approximately \$144 thousand to \$88 thousand. Please see Attachment 2.4A for the revised O&M savings calculations. Additional detail regarding the travel time calculated for each work site serviced by Station Services is included as Attachment 2.4B.

- 27 Attachment 2.4C contains updated versions of the following tables from Volume 1 of the
- Application: Tables 1-1, 5-2, 5-6 and 7-4. The values in Table 5-6 for Alternatives 2 and 3 have
- 29 been restated assuming a 40 year recovery period for the Project Capital costs as provided in
- 30 the response to BCOAPO IR 2.7.4. Alternative 5 has been revised for the change in the
- 31 depreciation rate to 2.5% for a 40 year financial analysis and the reduction in Station Services
- 32 benefits for Travel Time from \$144 thousand to \$88 thousand (refer to the response to BCUC IR
- 33 2.5.12.1).
- 34 Confidential Attachment 2.4D (1) contains the revised pages for Confidential Appendix G-2-3
- 35 which includes the details for Revised Alternative 5. Confidential Attachment 2.4D (2) contains



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- 1 the pages for Revised Alternative 5 + Network Services Group in-service in 2017 (in Rate Base
- 2 2018). The live electronic Excel files are filed confidentially in Confidential Attachment 5.12.1.
- 3 Confidential Attachment 2.4E contains the revision to Confidential Appendix G-3 O&M Savings
- 4 for Station Services Travel Time (Travel Time C&M).
- 5 Attachment 2.4F contains the revised responses to BCUC IR 1.1.3 and 1.10.8 to update for the
- 6 change in the O&M savings explained above.

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2.4.1 If one assumed that the average time savings will be 21 minutes per trip rather than one hour, please confirm that the O&M savings due to reduced travel time would be reduced to approximately \$50,000 per year, or provide the correct number.

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#### Response:

Please refer to the response to BCUC IR 2.2.4.

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20 2.5 Please provide the calculation of the additional \$30,000 for Generation travel time cost, and confirm that the calculation methodology is consistent with the calculation of Kootenay Station Services travel savings.

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# Response:

- 25 The Generation travel costs were calculated by determining how the major maintenance work
- force will be dispatched to perform work at FBC owned plants while headquartered at the KOC.
- 27 There are two options available: change the crew headquarters to the desired site and pay a
- premium to the employee, or dispatch the crews from the KOC and pay the travel costs. The
- 29 type and duration of project determines which method of dispatching is appropriate.
- 30 The \$30 thousand increase to O&M is the result of combining the 'premium' required to
- 31 headquarter the crews at the various plants for 70% of the time plus the travel costs associated
- with travelling from the KOC to the plants for the remaining 30% of the time.
- 33 The Station Services Group does not have the luxury of headquartering directly at most of the
- 34 sites they work in and FBC has therefore used a different approach to calculate the group's



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driving time costs as outlined in the response to BCUC IR 1.7.1. Please also refer to the response to BCUC IR 2.2.4 where FBC provides a correction to the amount of O&M savings attributable to the reduced travel time for the Kootenay Station Services Group.

2.5.1 Please identify the portion of the additional Generation travel time cost that will be borne by utility ratepayers and the portion that will be recovered from third parties to whom FBC provides Generation services.

# Response:

- The \$30 thousand is the incremental Generation O&M cost associated with employees traveling from the KOC, instead of the South Slocan Generation Site, to FBC owned generating stations.
- 15 Costs associated with employees travelling to NRB plants from the KOC will continue to be paid 16 for by the NRB.



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1 3.0 Reference: KOOTENAY STATIONS SERVICES

2 Exhibit B-1, pp. 56–58; Appendix F

Exhibit B-4, BCUC IR 1.7.1

Fleet vehicle savings

FBC identifies cost savings of \$25 thousand per year from combining Generation and Station Serves vehicle fleets at the KOC.<sup>1</sup>

FBC filed its response to BCUC IR 1.1.2 confidentially. Part of Table 3 in that response contained the number of service vehicles proposed to be stationed at South Slocan, Warfield and the KOC after construction of the KOC.

3.1 If the number of service vehicles is not confidential, please fill out the Table B below.

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Table B: Service Vehicle Fleet Size and Location

	Vehicles at	South Slocan	Vehicles a	t Warfield	Vehicles	at KOC
	Std	Lrg	Std	Lrg	Std	Lrg
Current <sup>2</sup>	35	15	15	19	0	0
After KOC						
Net Change						

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#### Response:

	Vehicles at	South Slocan	Vehicles a	at Warfield	Vehicles	at KOC
	Std	Lrg	Std	Lrg	Std	Lrg
Current <sup>3</sup>	35	15	15	19	0	0
After KOC	17	13	4	13	27	8
Net Change	-18	-2	-11	-6	27	8

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20 21 3.2 How many and what type of vehicles would be removed from the fleet with the implementation of the KOC? If the fleet size is not reduced, what is the source of the \$25 thousand per year savings?

<sup>&</sup>lt;sup>1</sup> Exhibit B-1, Table 5-2; Exhibit B-4, BCUC IR 1.7.1.

<sup>&</sup>lt;sup>2</sup> Exhibit B-4, BCUC IR 1.1.1, Table 1.

<sup>&</sup>lt;sup>3</sup> Exhibit B-4, BCUC IR 1.1.1, Table 1.



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1 2 Response:

With the implementation of the KOC, there is an opportunity to reduce the fleet by two pool vehicle units. Please also refer to the response to BCUC IR 2.3.1.

3.3 Please explain why it is more cost effective to maintain the service fleet at three locations rather than two and why there would not be any additional costs associated with the reduced fleet size at South Slocan and Warfield.

# Response:

Combining Generation and Station Services at the KOC will allow for an overall cost savings resulting from a reduction in the size of the fleet by 2 pool units.



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1	4.0	Refere	ence: KOOTENAY STATIONS SERVICES
2			Exhibit B-1, Table 7-1, p. 79; Exhibit B-4, BCUC IR 1.1.3, 1.7.0 and 1.8.7
4			Business case for moving Kootenay Station Services to KOC
5 6			stated in response to BCUC IR 1.1.3 that \$35,000 of the forecast \$295,000 in KOC costs are allocated to the Station Services Group.
7 8 9 10		FBC in	7-1 in the Application indicates that a total of 84 employees will relocate to KOC. Indicated in in response to BCUC IR 1.1.3 in Table 2 that there currently are 17 yees in the Kootenay Station Services group at Warfield and 12 employees in the egar District Office.
11 12 13 14 15		of the does rethe as	ndicated in Table 5-6 in response to BCUC IR 1.7.5 that the as-spent capital cost project would decrease by \$1.714 million if the Kootenay Station Services group not relocate to KOC. FBC indicated in Table 5-6 in response to BCUC IR 1.8.7 that s-spent capital cost of the KOC project would increase by \$2.180 million if the egar District Office moves to KOC in 2017.
16 17 18 19	Respo	4.1 onse:	Please explain the basis of the allocation of KOC O&M costs to the Station Services Group.
20 21 22	allocat	ion was	n of the KOC O&M costs for the Station Services group is 12 percent. The percent is based on the Station Services Group space requirements and derived by taking f capital building costs for this group.
23 24			
25 26 27 28 29 30 31 32		4.2	Please explain how the impacts on the estimated capital cost of KOC of relocating Kootenay Station Services and the Castlegar District Office were determined, considering the number of employees involved, the amount of office and other space required, and any other factors. If necessary, please provide the detailed discussion as a confidential filing and include a non-confidential summary as well.
33	Respo	nse:	

Response:

34 35 The estimate prepared for the Kootenay Stations Service Group was based on their dedicated office space and yard space requirements. As the Kootenay Stations Service Group



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- 1 requirements are very well defined and measureable on drawings, the space for their office and
- 2 yard area was calculated based on the cost estimate prepared in Confidential Appendix L KOC
- 3 Project Cost Estimate prepared by LTA Consultants.
- 4 The estimate prepared for the Castlegar District Office in the response to BCUC IR 1.8.7
- 5 calculated the required dedicated office space, three fleet bay additions, parking stall additions
- 6 and foundation slab for linear racking in the yard. As these requirements were not incorporated
- 7 into drawings and measurable, cost per square footage was assigned with design allowances.
- 8 This estimate did not meet the AACE Class 3 definition.
- 9 As the Commission and Interveners have expressed an interest in the Castlegar District Office
- 10 which was not included within the scope of the KOC Application, FBC felt it would provide value
- 11 to complete an AACE Class 3 estimate for inclusion of the incremental space requirements for
- 12 the CDO Network Services and 6 Warfield Complex Capital Construction PLTs into the KOC
- project. As such, FBC has completed this estimate and has included it with the specific details
- in the response to BCUC IR 2.5.12.1.

basis.

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4.3 Please clarify whether the estimate for relocating Kootenay Station Services was based on a general allocation of the capital cost of the KOC facility or as the incremental cost of adding to a facility being built for Generation, and justify the

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#### Response:

- 24 The allocation of capital costs for the Kootenay Station Services Group was based on the
- incremental cost of adding Generation space requirements to the facility. FBC believes this is the most realistic and fair approach because the base and common building space would still be
- the most realistic and fair approach because the base and common building space would still required if the Kootenay Station Service Group was not located at the facility.
- 28 The estimate prepared for the Kootenay Station Services Group was based on the group's
- 29 dedicated office space and yard space requirements and was calculated based on the cost
- 30 estimate in Confidential Appendix L KOC Project Cost Estimate prepared by LTA Consultants.

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4.4 What would be the as-spent capital cost for relocating Kootenay Station Services if the KOC cost allocation is based on office and other space requirements, as



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well as any specific group requirements, of the groups at KOC? Please explain how this cost allocation was calculated.

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# Response:

- 5 Please refer to response to BCUC IR 2.4.3.
- The Kootenay Station Services KOC cost allocation is already based on office and other space requirements in addition to the requirements of Generation.

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4.5 Using any updated O&M costs, updated cost savings and the capital cost for Kootenay Station Services from the response to the previous question, please repeat the cost comparison in the response to BCUC IR 1.7.5.

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# Response:

There are no updated O&M costs or updated cost savings, and there are no revisions to the capital cost allocation. Therefore, there is no change to the response to BCUC IR 1.7.5.



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# 1 C. JUSTIFICATION FOR NOT INCLUDING CASTLEGAR DISTRICT OFFICE

2	5.0	Refere	ence:	CASTLEGAR I	DISTRICT OF	FICE				
3				Exhibit B-4, B0	CUC IR 1.8.0					
4				Business case	e for not relo	cating the	Castlegar	District C	Office	
5 6 7 8 9 10		Office of KOO the Ca in 202 Netwo	to KOC C now. astlegar 11. How ork Servi	BCUC IR 1.8.7 beyond 2020 is The present valu District Office in vever, a delay alices group, while e of KOC will be	s slightly higher the of the increst to the KOC is the slows time to proceeding v	er than incomental rev s \$34.987 i evaluate with the mo	orporating frenue requimillion in 20 opportunition in 20 opportunition in 20 ove would in	the move i rement for 017 and \$ es for con	into the sco incorporati 35.121 milli solidating t	pe ing ion the
12 13				to a Network ices group from (	•	•	_	to the co	nsolidation	of
14 15 16 17		increm	nental co tunities	"has delayed th ost of service as for consolidating	sociated with	the Projec	ct and to al	low time to	o evaluate t	the
18 19 20	Respo	5.1 onse:	What	does "replaceme	nt" encompas	ss in the ab	ove contex	d?		
21 22	-			Castlegar Distric				to the pro	ovision for t	the
23 24										
25 26 27 28 29 30	Doon	5.2		assumptions we property in the f		-			-	
	Respo									
31	For th	e financ	cial mod	deling completed	d for the resp	onse to Bo	CUC IR 1.8	3.7, FBC a	addressed t	:he

retirement of the CDO based on the current gross book value of \$868 thousand, but did not

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<sup>5</sup> Exhibit B-4, BCUC IR 1.8.1. Emphasis added.

Exhibit B-5, BCOAPO IR 1.2.1-2.



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include any forecasts for net proceeds from a potential disposition. By including the retirement in the financial model, there is a resulting reduction in depreciation expense for the time period between when the asset was retired (2017 (Alternative 5 + CDO in 2017) and 2020 (Alternative 5 + CDO in 2021)) and when the CDO would have been fully depreciated, which would have been in 2023.

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5.3 Please confirm that not incorporating the Castlegar District Office into the KOC in 2017 will likely cost ratepayers an additional \$0.134 million or explain otherwise.

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# Response:

- 13 Confirmed as further clarified below.
- 14 The difference in the Present Value of the Incremental Revenue Requirement as shown in the
- response to BCUC IR 1.8.7 is \$0.134 million. This is the sum of present values for a 50 year
- 16 financial analysis period which equates to a simple average of \$2.7 thousand per year and
- 17 results in no change to the approximate rate increase of 0.7% for the KOC Project. In other
- 18 words, whether the Castlegar District Office (CDO) replacement is added in 2017/2018 or 2021
- 19 there is a negligible impact on customers' rates. However, this result, as explained in the
- 20 Assumptions for this analysis, is derived from a class estimate that does not meet the AACE
- 21 Class 3 cost definition.
- 22 As noted in the preamble, and described in the responses to BCOAPO IRs 1.1.2.1 and 1.1.2.2
- and to BCUC IRs 1.8.1 and 1.8.7, FBC described that it had planned to delay the timing of the
- 24 Castlegar District Office replacement to limit the incremental cost of service and rate impacts
- associated with the Project in the near term and to allow time to evaluate the opportunities for
- 26 consolidating the Network Services group. Further, due to the end-of-life conditions of the
- 27 Generation Facilities, FBC has a relatively urgent need to meet the in-service date for the KOC
- 28 Project (as currently defined).
- 29 However, FBC has now completed an evaluation of the Kootenay Network Services operational
- 30 requirements. FBC's evaluation, provided in the response to BCUC IR 2.5.4, concludes that the
- 31 KOC, with some adjustment to what is proposed in the Application, provides the only feasible
- 32 alternative for the consolidation of the Kootenay Network Services group including relocation of
- 33 the CDO Network Services group, and for the accommodation for 6 Warfield Complex Network
- 34 Services Capital Construction PLTs and their required equipment.
- 35 To complete the evaluation and to respond to questions about the costs associated with
- 36 adjusting the building space requirements to accommodate the requirements for the Network



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- 1 Services group/Castlegar District Office, FBC has provided the information requested and
- 2 included it within the response to BCUC IR 2.5.12.1. FBC has included a revised KOC Site
- 3 Plan, for the KOC to accommodate Network Services as described in the response to BCUC IR
- 4 2.5.4 and the associated AACE Class 3 cost estimates (incremental to the Project as defined in
- 5 the Application) for the revised design.
- 6 Please also refer to the response to BCUC IR 2.9.4 regarding future disposition of the Castlegar
- 7 District Office property.
- 8 FBC considers the proposed KOC location to be the only feasible and cost effective solution
- 9 that will accommodate the relocation of the CDO Network Services group and 6 Warfield
- 10 Complex Capital Construction PLTs. As described in the response to BCUC IR 2.5.4, there are
- immediate opportunities to achieve customer and operational benefits through the consolidation
- 12 of the Kootenay Network Services group at the KOC at the same time as the KOC is
- 13 constructed. Further, as described in the responses to BCUC IR 2.5.10 and 2.5.12.1, there is
- no change to the approximate rate increase of 0.7% as a result of including the CDO and the 6
- 15 Warfield Complex Capital Construction PLTs as part of the KOC Project. Inclusion of this
- additional scope will have a negligible incremental impact on customers' rates.
- 17 For these reasons, it is FBC's preference to include the consolidation of the Network Services
- group as described in the response to BCUC IR 2.5.4 as part of the KOC Project as long as the
- 19 in-service date for the KOC Project remains in 2017. FBC reiterates that the key drivers for the
- 20 Project as outlined in the Application have not changed, and because of the end-of-life condition
- 21 and the risks associated with the Generation Facilities as described in the Application, FBC
- 22 believes it is important to meet the 2017 in-service date for the KOC Project. FBC believes this
- 23 timeline is achievable as long as a decision can be received from the Commission by March
- 24 2016 and FBC continues to develop the construction drawings for the KOC alternative including
- 25 the Networks Services in advance of CPCN approval.
- 26 If the Commission considers that relocation of the Network Services group/CDO as part of the
- 27 Project as described in the response to BCUC IRs 2.5.4 and 2.5.12.1 is in the public interest,
- 28 FBC is supportive of this approach.

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5.4 Please describe the role and function of the Network Services group, and identify the locations of other groups and offices in the Kootenay Region that Network Services provides services to and/or interacts with on a regular basis.



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### 1 Response:

- 2 This response addresses BCUC IRs 2.5.4, 2.5.5, 2.5.7, 2.5.8.1 and 2.5.8.2.
- 3 Role and Function of the Network Services Group:
- 4 The Network Services group has responsibility for the construction, operation, maintenance,
- 5 and emergency response for FBC's Transmission and Distribution (T&D) facilities, and is
- 6 comprised of the following work/sub-groups:
- Field Operations (Line Operations and Capital Construction);
  - Office Support (Dispatch and Customer Design); and
- System Operations (SCC).
- 10 <u>Field Operations:</u>

- 11 The majority of employees in the Network Services group are Power Line Technicians (PLTs),
- 12 who are the first responders to any trouble calls. In addition to emergency response, the PLTs
- 13 also perform activities to ensure the safety and reliability of the T&D system. The PLT
- 14 workgroup supports both Line Operations and Capital Construction services, and FBC PLTs are
- 15 rotated between these groups to ensure skills are maintained in both areas of work.
- 16 Typical Line Operations work includes annual line patrols, preventative and corrective
- 17 maintenance of the lines, meter installations, customer disconnect/reconnects and non-
- 18 emergency customer premises calls such as power quality or service installation concerns.
- 19 Typical Capital Construction work includes two areas. The first is customer related work for new
- 20 connections, which typically includes secondary drop services or primary line extensions to
- 21 connect new customers. The second area is T&D capital projects related to growth or the
- 22 safety and reliability of the system, which are generally larger projects than a typical customer
- 23 project. Larger projects can be selected to provide an opportunity for the PLT group to maintain
- their core skills, experience and use of specialized equipment that is required at FBC to provide
- 25 system safety and reliability. This group also supports on call duties and emergency response.
- 26 To be more efficient for smaller customer related projects, FBC manages this work from the
- 27 Line Operations groups that are spread throughout the service area. However, for the larger
- 28 capital projects (customer or T&D capital projects) or during periods of high customer work
- 29 volumes, the projects are assigned to FBC's Capital Construction PLT crews or to contractors to
- 30 ensure these projects do not impact day to day operational needs. The Capital Construction
- 31 PLTs, similar to contractors, would be scheduled to work on the required projects and would be
- sent to the work location for the duration of the jobs.



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# 1 Office Support:

- 2 The Customer Design group's primary responsibility is to support and facilitate customer
- 3 requests for electric service. This group is also responsible for coordinating and managing
- 4 quality control for delivery of these projects. Key activities include providing cost effective
- 5 designs for small distribution projects including transmission crossings, joint use facilities,
- 6 railway crossings, subdivisions, and voltage conversions.
- 7 The Dispatch group works closely with the Line Operations, SCC and Customer Design groups
- 8 in managing, handling and tracking all daily work activities including emergencies.

# 9 Operations Facility Locations:

- 10 FBC strives to optimize the balance between minimizing the number of its facilities while also
- 11 maintaining sufficient locations to provide efficient and timely response for both routine and
- 12 emergency response operations. From a Network Services perspective, facility locations are
- driven by the requirement for efficient delivery of Line Operations, Capital Construction and to
- maintain an adequate emergency response footprint.
- All of the Network Services groups discussed above, other than the SCC which is centralized,
- 16 are in facilities located throughout the FBC service area with main operations offices in
- 17 Kelowna, Oliver, Warfield and Castlegar. While the Network Services group is spread
- 18 throughout the Kootenay region, due to space constraints, the Castlegar District Office (CDO)
- 19 does not currently house Capital Construction PLTs.
- 20 Kootenay Network Services (other than SCC) facilities, staff breakdown and workgroup
- 21 locations are provided in the following table. Attachment 5.4 contains a copy of the service area
- 22 map.

Location	Employees	Normal Area of Operations Coverage (See map for details)	Workgroups
Warfield	11 PLT (IBEW) 1 Customer Designer (COPE) 2 Network Services Support (COPE) 4 Ops Management	Trail Salmo	Line Operations Capital Construction Customer Design
Castlegar	6 PLT (IBEW) 1 Customer Designer 1 Cust Serv Person (IBEW) 2 Dispatcher (COPE) 1 Ops Management	Castlegar Slocan Kaslo	Line Operations Dispatch Customer Design



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Creston	4 PLT (IBEW)	Creston Crawford Bay	Line Operations
Grand Forks	3 PLT (IBEW)	Grand Forks Greenwood (East of Kettle Valley Station)	Line Operations

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FBC has evaluated the Kootenay Network Services operational needs associated with efficient execution of capital projects and emergency response. The Company has determined that the relocation of the CDO to the KOC and 6 Capital Construction PLTs and associated equipment from Warfield to the KOC would provide customer and operational benefits as further discussed below:

7 8 9 1. Line Operations PLT resources are required in all of the locations listed in the table above to continue to meet day to day operational needs and to maintain the FBC's emergency response footprint.

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2. Capital Construction PLT resources are currently located only at the Warfield Complex due to limited availability of space centralized in the Castlegar area. As noted above, Capital Construction PLTs will be dispatched to their work location for the duration of the job. The proposed KOC location is currently the only alternative better situated to headquarter two Capital Construction crews (6 capital PLTs) for capital project work in the area due to Castlegar's more central location in the Kootenay region and hence expectations for reduced travel.

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3. Relocation of the CDO Network Services group to the KOC would have immediate advantages, including:

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a. Improved communications and coordination benefits. Further details on this point are being filed confidentially as they contain information related to FBC's assets, including Critical Assets. The Company believes that there is reasonable expectation that the release of such information could potentially jeopardize the safety and security of the Company's system.

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b. Location, space availability and access for egress in and out of the KOC is superior to the CDO. The current CDO is located off the main travel route through the City of Castlegar and the small property constrains the movement of large vehicles in and out of the yard.

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c. Enclosed storage space for RBD trucks would be provided.

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4. Accommodation for relocation of the Capital Construction PLTs and their associated equipment from Warfield to the KOC has the following advantages:

31 32  Capital Construction PLT related travel as discussed in item 2 above would be reduced due to the more central location within the Kootenay region. Ideally, the



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KOC should have space to accommodate two Capital Construction crews (6 PLTs) from Warfield to provide a central project headquarters for capital Projects occurring in Castlegar and the surrounding area.

 Accommodation for the relocation of these 6 Capital Construction PLTs from Warfield to the KOC would allow for improved communication, coordination and workforce flexibility.

For these reasons, FBC considers the proposed KOC location to be the only feasible and cost effective solution that will accommodate the relocation of the CDO Network Services group and 6 Warfield Complex Capital Construction PLTs. As noted above, there are immediate opportunities to achieve customer and operational benefits through the relocation and consolidation of the Kootenay Network Services group at the KOC. FBC will further continue to evaluate efficiencies related to gas and electric facilities in the Kootenay area.

5.5 Please provide a summary of the number of Network Services staff currently at each of Warfield, Castlegar District Office and any other Kootenay Region locations across the FBC system.

#### Response:

Please refer to the response to BCUC IR 2.5.4.

5.6 Please provide a summary of the office space and any other facility space currently used by Network Services at each of Warfield, Castlegar District Office and other Kootenay Region locations.

### Response:

Please refer to the response to BCUC IR 2.5.4 for a breakdown of the Network Services facilities in the Kootenay area. The only additional facility not included in the table provided is in Kaslo, which currently does not have any full time staff.



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5.7 Please provide a map separately showing each of the Kootenay Region Network Services facilities locations and its serviced areas or serviced infrastructure.

# Response:

Please refer to the response to BCUC IR 2.5.4.

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FBC states the KOC project will provide a permanent solution for pole storage and will provide an opportunity to consider the condition and requirements of the Castlegar District Office in the future.<sup>6</sup>

FBC states "The yard at the Castlegar District Office has immediate constraints that should be resolved... The current RBD model only partially fits in the Quonset hut, and the replacement RBD truck planned for deployment at the Castlegar District Office in 2015 will also extend out of the cover due to its length."

5.8 Please confirm that FBC anticipates that any consolidation of the Network Services Group will occur at KOC or explain otherwise. If not confirmed, please answer the following questions.

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# Response:

22 Please refer to response to BCUC IR 2.5.4.

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5.8.1 Please confirm that any consolidation of the Network Services group will not occur at the location of the Castlegar District Office or explain otherwise.

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#### Response:

As discussed in the Primary Application in Section 4.6, the Castlegar District Office yard is congested, difficult to access and inadequate. For these reasons, FBC would not consider the

Exhibit B-1, Section 3.1, p. 18.

<sup>&</sup>lt;sup>7</sup> Exhibit B-1, Section 4.6.1, p. 42.



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site appropriate for consolidation for the Network Service group as the site could not fit the assigned fleet, additional RBD trucks bays and material storage required to support the consolidated group. Additionally, any building replacement on site would require an increased footprint which would further exacerbate the challenges associated with the lot size. Please also refer to the response to BCUC IR 2.5.4.

5.8.2 What locations have been or are under consideration for the consolidation of the Network Services Group?

# Response:

13 Please refer to the response to BCUC IR 2.5.4.

5.8.3 How much space at the completed KOC facility is planned for the permanent Network Services pole storage?

#### Response:

The permanent pole storage at the proposed KOC site is planned to be 7,012 sq. ft. excluding a circulation aisle.

26 5.8.4 Please describe how the KOC impacts the storage of the two large trucks, one to be purchased in 2015, used by the Castlegar Network Service Group.

#### Response:

The KOC Project as currently proposed does not include fleet bays or covered parking for the Castlegar District Office fleet. In its response to BCUC IR 2.5.12.1, FBC has provided a revised building design for the KOC to accommodate the CDO Network Services and Warfield Capital construction PLTs as described in the response to BCUC IR 2.5.4 and associated AACE Class 3 cost estimates for the revised design incremental to the Project cost.



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 5.8.4.1 How much covered parking space at the completed KOC facility is allocated for Network Service Trucks and if greater than zero, what is the approximate incremental cost of providing this space?

# Response:

Under the Project as proposed in the Application, there is currently no covered parking space allocated for the Network Service Trucks at the KOC. Please also refer to response to BCUC IR 2.5.8.4.

5.9 Recognizing the efficiency that is often expected from the consolidation of offices and the current availability of space at Warfield, please discuss why FBC believes there may be benefits in consolidating Network Services at KOC or another location identified in the response to the previous question, rather than consolidating all members of the Network Services group at Warfield.

#### Response:

Please refer to the response to BCUC IR 2.5.4.

5.9.1 Is the space being vacated by the Station Services group at Warfield suitable for the Castlegar Network Group? If not please describe the relevant issues and, if the issues can be resolved, provide a cost estimate for doing so. If consolidating the Network group at Warfield has been considered in a previous study please include a copy of the study.

#### Response:

With the necessary addition of three enclosed and heated truck bays to support the RBD trucks, the type of space vacated by the Station Services Group at the Warfield Complex can be



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2.5.4.

#### FortisBC Inc. (FBC or the Company)

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adjusted to be suitable for the Castlegar District Office Network Services group, from a space perspective only.

- 3 However, relocation of the Castlegar District Office group to the Warfield Complex location is 4 not suitable from an operational perspective and as such FBC has not previously considered 5 Network Services consolidation at Warfield and no study has been conducted. Relocating the 6 Network Services Line Operation PLTs to a less central location would have a significant 7 negative impact on emergency response and operational needs. Further, FBC estimates that 8 moving to the Warfield Complex would add approximately an additional 1 hour drive time per 9 day for the crews as their work location is generally in Castlegar or north of Castlegar, which 10 would increase O&M and customer capital costs. Please also refer to the response to BCUC IR
- For a summary of the estimated costs please refer to the response to BCUC IR 2.5.11, Tables 1 through 4, Scenario 2.

17 5.9.2 Please provide a copy of any studies that support the concept of consolidating the Network Services group at the KOC.

#### Response:

FBC has not previously conducted a study examining the consolidation of the Network Service group at the KOC. However, as described in the response to BCUC IR 2.5.4, FBC has evaluated the Kootenay Network Services operational needs related to efficiencies, capital projects and emergency response requirements. As a result of this evaluation, FBC concludes that the proposed KOC location is a feasible and cost effective solution that will accommodate the relocation of the CDO Network Services group and 6 Warfield Complex Capital Construction Network Services PLTs. There are immediate opportunities to achieve customer and operational benefits through the consolidation of the Kootenay Network Services group at the KOC.

Please also refer to the responses to BCUC IRs 2.5.3, 2.5.10, and 2.9.4.

5.9.3 Is the space allocated to Station Services at the KOC suitable for the Castlegar Network Group? If not please describe the relevant issues.



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Response:	. INCOPOLICO.
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2 Please refer to the response to BCUC IR 2.5.9.1.

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5.10 Please confirm that FBC believes the consolidation of the Network Group offices and facilities is generally favourable to ratepayers and discuss the cost and other benefits that are expected to result, or explain otherwise.

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# Response:

- 11 FBC believes the consolidation of the Network Services group as described in the response to
- 12 BCUC IR 2.5.4 to be favourable to ratepayers as it will provide customer and operational
- 13 benefits.
- 14 As described in the response to BCUC IR 1.8.7, by relocating the Network Services group from
- the CDO to the KOC, a net savings of \$54 thousand of O&M benefits is expected to occur. The
- offsetting incremental property tax is expected to be \$23 thousand. Overall, there is no change
- 17 to the approximate rate increase of 0.7% for the KOC Project. In other words, whether the CDO
- 18 Network Services group consolidation occurs or not, it will have a negligible impact on
- 19 customers' rates. The incremental percentage rate increase is forecasted to remain at 0.7%, a
- 20 marginal impact on the revenue requirements.

5.10.1

In the response to BCUC IR 2.5.12.1, FBC has provided an AACE Class 3 estimate relating to the consolidation of Network Services as described in the response to BCUC IR 2.5.4.

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28 29 30 in the elimination of offices and the disposal of property that have been vacated, or explain otherwise and provide reasons for FBC's views.

Please confirm that consolidation of offices and facilities usually results

Response:

31 Please refer to the response to BCUC IR 2.9.4.

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5.11 Please provide a detailed scenario analysis for the two cases where 1) the Station Services group remains at Warfield and the Castlegar Network Group moves to the KOC and 2) the Castlegar Network Group moves to Warfield occupying the space vacated by Station Services. In the scenarios, please assume that the Castlegar District lot is sold. List the main assumptions that differ from previous scenarios and provide confidential copies of the live worksheets.

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# Response:

- 11 Scenario 1 Station Service Group remains at Warfield and the Castlegar District Office moves
- 12 to KOC.
- 13 For the reasons outlined in the responses to BCUC IRs 1.7.1 and 1.7.5, FBC believes it to be
- 14 beneficial to relocate the Station Services Group to the KOC and does not consider it to be
- 15 reasonable to have the Station Services group remain at Warfield. Further, FBC emphasizes
- 16 the importance of locating Station Services with the Generation group at the KOC to enable the
- 17 cross-training of the work groups such that they are able to support maintenance programs and
- 18 emergency call out for both Station and Generation work. It is important to develop some
- 19 redundancy of these skillsets for operational flexibility. The assumptions for scenario 1 are as
- 20 follows:

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- The CDO Network Services group is assigned the Stations Services crew room with no changes;
  - The Station Services group test bench area is changed to drying room for the CDO Network Services group garments;
- The Station Services covered parking is removed from the budget;
- 3 enclosed and heated truck bays are added for CDO Network Services RBD trucks;
- Addition of a linear foundation slab for racking;
- BCUC decision is received in February to enable time for additional design changes as noted above:
- Retirement of Castlegar District Office building;
- Avoided property tax at Castlegar District Office of \$23 thousand (2015\$);
- Benefits savings removed for travel time, on call, tools and fleet; and
- Benefits savings added for O&M for avoided O&M at the CDO site.



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Scenario 2 – Castlegar District Office moves to Warfield occupying the space vacated by
 Station Services

- 4 The Company would not consider relocating the Castlegar District Office crews to Warfield as
- 5 this group provides first response to the Castlegar area. Relocation to the Warfield Complex
- 6 would increase travel time for each crew member by 1 hour per day. This group needs to be
- 7 located within the Castlelgar area. Please refer to the response to BCUC IR 2.5.4. However, to
- 8 be responsive, FBC has completed a detailed scenario based on the following assumptions:
- Pole storage to remain at the KOC as the Network Services group territory is the
   Castlegar region;
- The CDO Network Services group is assigned the Stations Services crew room with no changes;
- The current drying area for the Warfield Complex Network Services can accommodate the CDO crews;
- 3 enclosed and heated truck bays are added for the CDO Network Services RBD trucks;
- The District Office Material Storage is not replaced and inventory is pulled directly from Warehousing;
- Travel time inefficiency added for CDO crew;
- Station Services Travel Time for C&M benefit has been reduced from \$144 thousand to \$88 thousand (please refer to the response to BCUC IR 2.2.4); and
  - No increase to Warfield property taxes due to improvement, and as in Scenario 1 there
    is a reduction in property taxes of \$23 thousand (2015\$) related to retirement of
    Castlegar District Office.

The following tables summarize the financial analyses for the two scenarios using the same format as in Tables 5-1, 5-2, 5-5 and 5-6 of the Application. The KOC building is depreciated at 2.5% and the financial analysis period is for 40 years. These results do not include proceeds for a potential disposal of the Castlegar District Office property (see the response to BCLIC IR

a potential disposal of the Castlegar District Office property (see the response to BCUC IR

29 2.9.1).

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# FortisBC Inc. (FBC or the Company) Application for a Certificate of Public Convenience and Necessity (CPCN) for the Kootenay Operations Centre (the Application) Response to British Columbia Utilities Commission (BCUC or the Commission) Information Request (IR) No. 2 Submission Date: November 6, 2015

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Table 1: KOC Operating Costs (\$000's)

	Scenario 1	Scenario 2
KOC Operating Costs	\$295	\$300
Net Generation Recoveries	(150)	(150)
Increased Generation Travel	30	30
Total	\$70	\$180

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Table 2: Castlegar Network Group / Station Services Gross O&M Savings (\$000's)

	Scenario 1	Scenario 2
Travel Time C&M	\$	\$88
Premium Saving on Call Out Staff		11
Tool Crib Savings		10
Fleet Vehicle Savings		25
Castlegar Building O&M Reduction	52	2019 & thereafter: 52
Travel Time CDO crew		2019 & thereafter: (180)
Warfield Janitorial Cleaning Reduction	4	4
Total	\$56	\$10

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Table 3: Summary of Capital Costs of Scenarios (\$ millions)

	Scenario 1	Scenario 2
2015\$ <sup>8</sup>	\$19.650	\$20.288
As Spent	\$19.989	\$20.587
AFUDC	0.905	1.166
Demolition / Removal <sup>9</sup>	0.449	0.446
Total	\$21.343	\$22.198

<sup>&</sup>lt;sup>8</sup> Includes costs charged to Electric Plant in Service and Demolition / Removal costs without escalation.

Demolition / removal costs are charged to Accumulated Depreciation; As Spent plus AFUDC are charged to Electric Plant in Service.



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#### Table 4: Summary of Financial Analysis of Scenarios (\$ millions unless otherwise stated)

	Scenario 1	Scenario 2
As Spent Capital Costs	\$21.343	\$22.198
2018 / 2019 Rate Base	2018: \$20.841	2018: \$20.153 2019: \$20.944
Incremental Property Taxes 2015\$	\$0.396	\$0.396
Gross Incremental O&M Expense 2015\$	\$0.119	\$0.170
PV of Incremental Revenue Requirement	\$35.590	\$37.653
DCF - NPV	\$(0.087)	\$(0.236)
2018 / 2019 Rate Increase %	0.7%	0.7%

Further to the response to BCUC IR 1.8.2 stating that FBC does not expect that

the future requirements for Castlegar District Office will meet the scope or

threshold requirements for a CPCN, does FBC believe the capital expenditure for

a relocation and consolidation of the Network Services group to KOC will be

included within PBR Formula capital for the current or future PBR plans?

#### Response:

5.12

As described in the responses to BCUC IRs 1.8.1 and 1.8.2, FBC expects the life of the CDO will extend beyond 2020 and therefore beyond the term of the current PBR period. FBC cannot comment on future PBR plans. However, as provided in the response to BCUC IR 2.5.12.1, the AACE Class 3 cost estimates have been completed for the consolidation of the Network Services group, including the relocation of the CDO and 6 Warfield Complex Network Services Capital Construction PLTs to the KOC. The additional estimated capital cost for including the Network Services Group is \$1.705 million. This additional cost, if considered separately from the current KOC Project, would not meet the current threshold requirements for a CPCN.

As discussed in the response to BCUC IR 2.5.3, if the Commission considers that including the relocation of the Network Services group/CDO as part of the Project as described in the response to BCUC IRs 2.5.4 and 2.5.12.1 is in the public interest, FBC is supportive of this approach. The incremental costs for the CDO would not be included within the PBR formula, but instead would be part of the CPCN. The construction of the KOC is a single project which will exceed the \$20 million threshold with or without expansion to include the relocation of Network



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1 Services group/CDO as described in the response to BCUC IR 2.5.4.10 (Please also refer to the 2 response to BCUC IR 1.10.2).

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5.12.1 What does FBC estimate the cost to be of relocating and consolidating the Network Services group to the KOC?

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#### Response:

- 10 The incremental capital cost of including the relocation of the CDO Network Services group plus
- 11 six Warfield Complex Network Services Capital Construction PLTs (as described in the
- 12 response to BCUC IR 2.5.4) within the KOC Project scope is \$1.553 million in 2015\$, and
- 13 \$1.705 million in As-Spent dollars (including AFUDC of \$0.100 million).
- 14 For the reasons discussed in the response to BCUC IR 2.5.4, FBC concludes the proposed
- 15 KOC location, it is the only feasible and cost effective solution that will accommodate the
- 16 relocation of the CDO Network Services group and 6 Warfield Complex Capital Construction
- 17 PLTs and their required equipment. As described in the response to BCUC IR 2.5.4, there are
- 18 immediate opportunities to achieve customer and operational benefits through the consolidation
- 19 of the Kootenay Network Services group at the KOC.
- 20 FBC has completed the building design and the AACE Class 3 estimate for the incremental cost
- 21 of adding these requirements to the KOC Project which include:
- 22 Addition of 1,411 sq. ft. of office;
- 23 Addition of 3,857 sq. ft. of enclosed and heated truck bays;
- 24 150 linear feet of foundation and racking for transformers and wire; and
- 25 18 parking stalls.

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27 Attachment 5.12.1 contains the Revised KOC Site Plan including CDO Addition and a Revised

- 28 AACE Class 3 Building Construction Estimate including incremental CDO Addition being filed
- 29 confidentially as it contains capital cost estimates for the Project that must be kept confidential
- 30 in order to preserve FBC's ability to negotiate with bidding parties.

BCUC Order G-120-15, page 2. Item 1 sets the materiality threshold for FBC at \$20 million, for project's costs to be excluded from the formula driven capital. Item 3 provides further direction regarding the project being the result of combining smaller projects.



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1 The following 4 tables in the format of Tables 5-1, 5-2, 5-5 and 5-6 have been updated with:

- the revised Preferred Alternative 5 which includes the updated depreciation rate of 2.5% for new KOC Masonry Structure with a 40 year financial analysis period, and updated reduced O&M benefit related to Station Services travel time from \$144 thousand to \$88 thousand (described in the response to BCUC IR 2.2.4); and
- the scenario of the revised Alternative 5 expanded to include the relocation of the Network Services group to the KOC in 2017 as described in the response to BCUC IR 2.5.4.

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The tables provide a summary of the O&M, Total Capital Costs, PV of Incremental Revenue Requirements and rate impact on customers. While including the Network Services group does increase the costs, the change is sufficiently small that the percent rate impact remains unchanged at 0.7% and the annual revenue requirement impact would be approximately \$12 thousand ((\$34.709 - \$34.228) / 40).

15 In the response to BCUC IR 2.5.14, a comparison was provided to demonstrate the difference in 16 costs associated with a 1 year delay for just Alternative 5 plus the CDO. The comparison that 17 was provided was based on an AACE Class 4 estimate; however, FBC expects the impact of a 18 one year delay would be similar to what has been shown that response. FBC would like to 19 stress that while it is FBC's preference to include the consolidation of the Network Services 20 group as described in the response to BCUC IR 2.5.4 as part of the KOC Project because of the 21 immediate benefits it provides, the key drivers for the Project as outlined in the Application have 22 not changed, and because of the end-of-life condition and the risks associated with the 23 Generation Facilities as described in the Application, FBC believes it is important to achieve the

24 2017 in-service date.

- Attachment 5.12.1 also contains two live spreadsheets, based on the AACE Class 3 definition, which are being filed confidentially on the basis that they contain capital cost estimates for the Project that must be kept confidential in order to preserve FBC's ability to negotiate with bidding parties. Confidential Attachment 5.12.1(a) contains the revised Alternative 5 Summary of Capital Costs + Change for Network Services Group. Confidential Attachment 5.12.1(b) contains the revised Alternative 5 Summary of Financial Analysis + Changes for Network
- 31 Services Group.



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## Table 5-1: Proposed Project – Alternative 5 – KOC Operating Costs plus Changes for Network Services Group

Item Description	2015 Estimated Annual O&M Cost and Savings \$(000's)
KOC Operating Costs	\$295
Net Generation Recoveries	(150)
Inreased Generation Travel	30
Total Revised Alternative 5	175
Additional KOC Operating Costs from CDO	15
Avoided CDO Costs	(80)
Total with Castlegar District Office Impact	\$110

Table 5-2: Proposed Project – Alternative 5 Revised – Kootenay Station Services Gross O&M Savings

Item Description	Revised 2015 Estimated Annual Savings \$(000's)
Revised 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

Table 5-5: Revised Summary of Capital Costs of Alternative 5 + Change for Network Services Group (\$millions)

	Revised Alternative 5	Revised Alternative 5 +Network Services in 2017
2015\$	\$18.896	\$20.448
As-Spent	\$19.077	\$20.682
AFUDC	1.128	1.227
Demolition / Removal	0.446	0.446
Total	\$20.651	\$22.355



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#### FortisBC Inc. (FBC or the Company)

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#### Table 5-6: Revised Summary of Financial Analysis of Preferred Alternative 5 + Change for **Network Services Group (\$millions unless otherwise stated)**

	Revised Alternative 5	Revised Alternative 5 + Network Services in 2017
As-Spent Capital Costs	\$20.651	\$22.355
2018 Rate Base	\$20.416	\$21.828
Incremental Property Taxes – 2015\$	\$0.419	\$0.443
Gross Incremental O&M Expense – 2015\$	\$0.031	\$(0.034)
PV of Incremental Revenue Requirement	\$34.228	\$34.709
DCF – NPV	\$(0.287)	\$(0.223)
2018 Rate Increase	0.7%	0.7%

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#### Response:

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This response is being filed confidentially under separate cover as it contains capital cost estimates for the KOC that must be kept confidential in order to preserve FBC's ability to negotiate with bidding parties.

For the scenario where the Castlegar District Office relocates to KOC in 2017, Table 5-6

Please show how each of the KOC Rate Base numbers of \$22.291 million in

shows a KOC Rate Base of \$22.291 million in 2018 and \$20.808 million in 2019.11

2018 and \$20.808 million in 2019 was derived.

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5.14 If the in-service date of KOC was to be delayed from 2017 to 2018, what would the impact be on FBC and its ratepayers?

<sup>&</sup>lt;sup>11</sup> Exhibit B-4, BCUC IR 1.8.7, Table 5-6.



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#### Response:

Because of the risks associated with the Generation Facilities as described in the Application and as noted in the response to BCUC IR 2.5.3, FBC believes that an in-service date for the KOC Project should remain in 2017. For the KOC Project (including the Castlegar District Office), the impact of delaying the in-service date to 2018 (2019 Rate Base inclusion) from 2017 (2018 Rate Base inclusion) is to increase the capital costs by approximately \$700 thousand and to increase the PV of Incremental Revenue Requirements by \$1.544 million (approximately \$31 thousand increment to annual revenue requirement). This impact is calculated based on the information provided in the response to BCUC IR 1.8.7. Notwithstanding the incremental increase in the PV Incremental Revenue Requirement, it is still insufficient to change the percentage rate increase of 0.7% which would be delayed by one year from 2018 to 2019.

Table 5-6 Summary of Financial Analysis of Alternative 5 + Change for CDO in 2017 and 2018 (\$million unless otherwise stated).

	Alternative 5 + CDO in 2017	Alternative 5 + CDO in 2018	Change
As-Spent Capital Costs	\$22.831	\$23.549	\$0.718
2018 / 2019 Rate Base	2018: \$22.291 2019: \$20.808	2019: \$22.770	\$0.479 <sup>12</sup>
Incremental Property Taxes - 2015\$	\$0.443	\$0.443	\$
Gross Incremental O&M Expense – 2015\$	\$(0.080)	\$(0.080)	\$
PV of Incremental Revenue Requirement	\$34.987	\$36.531	\$1.544
DCF - NPV	\$(0.074)	\$0.116	\$0.190
2018 / 2019 Rate Increase	2018: 0.7% 2019: 0.7%	2019: 0.7%	%

In the response to BCUC IR 2.5.12.1 and as a result of FBC's evaluation of the consolidation of Network Services in the Kootenay area, FBC has prepared AACE Class 3 cost estimates of the KOC Project that includes the Network Services Group from the Castlegar District Office and 6 capital Network Services PLTs from the Warfield Complex. Although the cost has changed from that provided in the table above, the impact of a one year delay would be similar to what has been shown.

<sup>&</sup>lt;sup>12</sup> (\$22.770 - \$22.291 = \$0.479; the comparative values are the 1<sup>st</sup> year in Rate Base for the respective alternatives.



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#### 1 D. NON-REGULATED BUSINESS

6.0	Poforonco:	DESCRIPTION OF GENERATION DEPARTMENT

Exhibit B-4, BCUC IR 1.12.0-1.13.0

#### **Generation department and Non-Regulated Business activity**

FBC stated in response to BCUC IR 1.13.1 that for 2014, the following portion of time was charged directly to Non-Regulated Business (NRBs) for the employees relocating to the KOC:

• Generation: 13.8%

• SCC: 0.4%

Station Services: 3.1%

#### FBC states that it:

...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, the FBC Generation department personnel located at the South Slocan Generation site operate five hydroelectric facilities totaling approximately 1300 megawatts for various owners...Major Maintenance, within the Generation department, is responsible for all work other than routine maintenance, performing work on planned capital projects, non-routine projects and overhauls.<sup>13</sup>

For the referenced hydro facilities, does the amount of time required to maintain and operate them roughly correspond to their capacity? If not please explain.

#### Response:

The amount of time required to operate and maintain a generating unit generally increases with its capacity but there is not a linear correlation. It is generally a stepped relationship. For example, it generally takes the same amount of time to maintain units ranging in size from 20-100 MW but units larger than this range tend to take longer. Other operating factors such as unit age, runner design, de-watering procedures, access ports and control system types can also have a significant impact on the time required to operate and maintain a generating unit.

<sup>13</sup> Exhibit B-1, Section 3.2.1.3, p. 23.



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6.2 What is the total number of full-time equivalent FBC employees that are part of the Generation Group or who provide the equivalent functional service as the Generation Group in the Kootenay Region?

#### Response:

- 6 The Generation Group consists of the following full time employees including the Director level:
  - IBEW: 33 at the South Slocan Generation Site (a total of 49 in the Kootenay Region), and FBC notes that there are also between 0-10 temporary employees;
    - COPE: 7 at the South Slocan Generation Site (a total of 8 in the Kootenay Region); and

Please provide a breakdown of where these employees will be

stationed after the completion of the KOC and the approximate

M&E: 16 at the South Slocan Generation Site (a total of 20 in the Kootenay Region).

#### Response:

6.2.1

The following table outlines where the full time Generation group will be headquartered after completion of the KOC and the percentage (2015\$) directly charged to NRBs.

proportion of time charged directly to NRBs for each site.

Headquarter	M&E	IBEW	COPE	% Charged to NRB
SLC	1	12	0	0
кос	15	21	7	18
ALH/BRX	1	6	0	100
Trail	0	0	1	50
WAX	1	4	0	100
WAN	1	6	0	0

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6.3 How many employees are in the Major Maintenance group and where are they proposed to be stationed after the KOC is completed?



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#### 1 Response:

The Major Maintenance department consists of 21 full time unionized employees and 2 M&E employees. Upon completion of the KOC, the Major Maintenance department will be stationed at the KOC.

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FBC projects that NRB revenue attributable to employees relocating to KOC will be \$139,000 in 2018.<sup>14</sup>

6.4 Please confirm that the \$150,000 Net Generation Recoveries does not include charges related to the capital cost of KOC such as return on rate base and depreciation, or explain otherwise and provide the related cost numbers.

12 13 14

#### Response:

15 Confirmed.

To further clarify, it is neither appropriate nor necessary to adjust third party recoveries for

17 charges related to the capital carrying cost of KOC, such as return on rate base or depreciation,

18 for the reasons explained below.

19 First, the primary work that is performed by FBC employees for the regulated third party or the

20 NRB third party is not undertaken from the KOC location. The third party work, both regulated

21 and NRB, is performed by FBC employees at the hydroelectric facilities of the third parties,

22 rather than at the KOC location. This was explained in the response to BCUC IR 1.13.1.1 which

23 stated "There are no incremental capital costs for the KOC facility caused by NRB activity. The

NRBs provide, at their cost, facilities and the necessary infrastructure to support the permanent

25 operations crews, including washrooms, lunchrooms and specialty tools". Since the primary

work performed for the regulated and NRB third parties is at the location of the third parties and

27 not the KOC location, it is not appropriate for the KOC capital carrying costs to be directly

28 charged out to the regulated or NRB third parties.

29 In addition to the employees doing work at the third party locations, there will be FBC

30 management and administrative staff who will partially use the KOC location to support the

31 regulated and NRB third party contracts. The costs associated with this effort are recovered

32 through Generation Recoveries which are recognized as recoveries for regulated electric

33 customers. Additionally, and in accordance with the Revised Code of Conduct and Transfer

34 Pricing Policy (TPP) dated March 31, 2009 and approved pursuant to Order G-5-10A, FBC

<sup>&</sup>lt;sup>14</sup> Exhibit B-4, BCUC IR 1.12.3.1.



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charges NRBs a 5.5% fee, related to general and administration (G&A) overhead, which is recognized as a recovery for regulated electric customers. While this G&A overhead charge does not explicitly refer to the recovery of specific facilities, Schedule 2 of the TPP states that the 5.5% G&A overhead charge is representative of "buildings and related building services", as well as various administrative functions. Additionally, there are other G&A recoveries as well as capital charges invoiced to regulated third party customers, which are also recognized as recoveries for regulated electric customers.

Since the primary third party work is performed at the hydroelectric facilities of the third parties and any partial use of the KOC by management and administrative staff will be recovered through Generation Recoveries and G&A charges, as approved pursuant to the TPP or by way of the regulated third party contracts in place, it is not appropriate to further recover charges related to the capital cost of KOC, such as return on rate base and depreciation.

Finally, the KOC does not materially change the way in which FBC carries out its NRB work and therefore no material costs or efficiencies will affect the NRB contracts. In other words, the KOC application is requesting approval to construct a facility that is required regardless of whether the NRB third party service contracts continue to exist. The FBC employees being relocated to the KOC (Major Maintenance Crews and technical support staff) are required to meet the operating, maintenance and sustaining capital requirements for the regulated assets owned and operated by the Company.

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6.5 What is the Gross Generation O&M savings from which the Net \$150,000 number is calculated? Please explain the difference between the two numbers.

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#### Response:

- Please refer to the responses to BCUC IR 1.1.3 and BCOAPO IR 1.5.1.
- The remainder of this response is being filed confidentially as it contains information related to FBC's assets, including Critical Assets. The Company believes that there is reasonable expectation that the release of such information could potentially jeopardize the safety and security of the Company's system.

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35 6.6 What percent of NRB revenue is considered facility O&M?



## FortisBC Inc. (FBC or the Company) Application for a Certificate of Public Convenience and Necessity (CPCN) for the Kootenay Operations Centre (the Application) Submission Date: November 6, 2015

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#### 1 Response:

Please refer to the response to BCUC IR 2.6.5. The \$139 thousand figure is the transfer pricing profit margin recorded in Other Income that is associated with the cost of work forecasted in 2018 in accordance with the Transfer Pricing Policy. None of the \$139 thousand is used to offset facility O&M costs, although the profit margin does reduce the overall revenue

6 requirement.



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#### E. TREATMENT OF VACATED PROPERTY

2	7.0 Re	rence: EXISTING ASSETS	
3		Section 5; Exhibit B-4, BCUC IR 1.14.0	
4		South Slocan Generation site	
5 6		stated that after demolition, the South Slocan Generation Admir be incorporated into its surroundings in a manner similar to the ad	
7 8 9		s 2007 application to the Commission, Terasen Gas proposed to proceeds of the sale of the vacant Lochburn land to its ratepayer w:	•
10 11 12 13 14 15		As expedited approval is required in order to preserve the Agreement with the potential purchaser of the land, Terasen treat a portion of the capital gain on the sale of the 7.67 acr determination of earnings sharing under the 2004-2007 Performance ("PBR") settlement agreement that is currently used for the rates of TGI	Gas is prepared to es as income in the rmance Based Rate
16 17 18 19		Further, strictly without prejudice and without waiving an Company will include \$5 million of the remaining portion of the calculation of earnings to be shared under PBR, resulting customers of \$2.5 million. <sup>16</sup>	e net proceeds in its
20 21 22	7.	What portion of land at each of the South Slocan, Castlega Warfield is in rate base and what is the land cost in rate base	
23	Respons		

#### Response:

The cost of the land at South Slocan and included in rate base is \$15 thousand. 24

25 FBC does not currently have a breakdown of the land value at the time acquisitions were made 26 for the Castlegar District Office and for the Warfield property. However, FBC notes that:

- The Castlegar District Office was acquired in 1975, and the acquisition cost for the land and buildings was \$150 thousand.
- The Warfield property was acquired in 1978, and the cost for the land and buildings was \$62 thousand.

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Exhibit B-4, BCUC IR 1.14.1.

<sup>&</sup>lt;sup>16</sup> Terasen Gas Inc., Application for Approval of the Sale of Vacant Land at 3700 2nd Ave, Burnaby, BC, 2007, p. 14.



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7.1.1 Does FBC intend to make any adjustments to the land held in rate base after the completion of the KOC?

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#### **Response:**

- Please refer to the response to BCUC IR 2.7.6. After the completion of the KOC and demolition of the two Generation Facilities buildings at the South Slocan Generation Site, FBC will not be disposing of, i.e. selling, any of the land due to the physical layout and constraints of the South Slocan Generation Site and the continuing power generation and generation operations at the property.
- Regarding the Warfield site, FBC will not be making any adjustment to the Land account as the buildings and the land will remain in use by the utility for its ongoing operations at this site.
- Should the Commission approve the relocation of staff and transfer of operations from the Castlegar District Office to KOC, FBC would apply for the necessary review for the disposition of the CDO. Upon disposal of the property, the land account will be credited to remove the cost from Rate Base.

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7.2 What is the assessed value and the best available estimate of the market value of the land at the South Slocan Generation site?

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#### Response:

- The 2015 assessed value of the land at the South Slocan Generation Site where the Generation Administration Office is located was \$115 thousand.
- There have been no recent appraisals of the South Slocan Generation Site. However, BC Assessment is legislated to value properties based on their "actual value", which is defined as "the market value of the fee simple interest in land and improvements" (*Assessment Act*, R.S.B.C. 1996, c. 20, s. 19(1)). The 2016 assessment roll will not be available until January 1, 2016, but FBC does not anticipate any significant changes.

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#### FortisBC Inc. (FBC or the Company) Submission Date: Application for a Certificate of Public Convenience and Necessity (CPCN) for the November 6, 2015 Kootenay Operations Centre (the Application) Response to British Columbia Utilities Commission (BCUC or the Commission) Page 48

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1 7.2.1 What are the annual property taxes on the land portion of the South 2 Slocan Generation site?

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#### **Response:**

In 2015, the property taxes on the land portion of the South Slocan Generation Administration Office area were \$2,248.

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7.3 After the completion of the KOC, what future potential would the unused portions of land at the South Slocan Generation site offer for the generation, transmission and distribution of electricity for FBC's ratepayers?

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#### **Response:**

The land the Warehouse is currently situated on will be converted into additional storage space and parking as noted in the response to BCUC IR 1.14.1. The land where the Generation Administration Office is currently located will be transformed into space similar to the existing adjacent surroundings, and the spaces together will continue to accommodate septic, water and electrical lines for the sewage treatment plant. The sewage treatment plant services all the facilities located at the South Slocan Generation Site.

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7.4 What is the probability that the unused portions of land at the South Slocan Generation site would be used for the generation, transmission and distribution of electricity for FBC's ratepayers?

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#### Response:

29 Please refer to the response to BCUC IR 2.7.3 for the use of the land at the South Slocan 30 Generation site.

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7.5 Please describe what would be required to sell the unused portions of land at the South Slocan Generation site and discuss the benefits and drawbacks to ratepayers.

#### Response:

- Due to the physical layout of the property and the continuing power generation and generation operations at the South Slocan Generation Site, FBC does not foresee the possibility at this time that it would dispose of any portion of the property. FBC and its predecessor have owned the South Slocan property since the 1920s. FBC believes the benefit of disposition would be very low based on the limited potential value of the land or any portion thereof and the significant and potentially costly challenges that would be encountered in disposing of the land as explained below. Please also refer to the responses to BCUC IRs 2.7.1 and 2.7.2.
  - Firstly, in order to get approval to subdivide a property, the site must have road access.
     FBC is not able to provide this as it does not own the land that accesses the highway.
     The current access to the land is through an easement granted by Teck Cominco and CPR.
  - Secondly, the infrastructure that supports the buildings, water and sewer plants is located at the far ends of the property and the water and sewer services run underground to the buildings. This infrastructure, along with the water and sewer facilities, is still required for utility service. Please refer to the site plan included in the response to BCUC IR 2.1.5 for the location of this infrastructure. If the property were to be subdivided and disposed of, then the water and sewer plants would need to be relocated to support the remaining buildings. As noted in the Primary Application under Section 5.2.2, changes to the sewer and water plant would trigger a review of the license and would potentially require the replacement of different infrastructure, which results in associated costs.
  - Lastly, the land use is limited. The majority of the land is zoned RZ Reserve Zone (within Nelson boundaries)<sup>17</sup> which has a minimum lot size of 2 hectares (just under 5 acres in size) and as such is limited to a very small number of relatively specific and specialized uses such as Boat Launch, Public, Campground, Dock, Public, Nursery, Off-Street Parking, Natural Resources Development, Participant Recreation Services, and Outdoor uses.

<sup>17</sup> City of Nelson, Zoning Bylaw No. 3199, online: City of Nelson https://nelson.civicweb.net/Documents/DocumentList.aspx?ID=31803.



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7.6 In a future scenario where a portion of the South Slocan Generation site is determined to no longer be used and useful and FBC plans to dispose of the unused portion of the property, would FBC propose to credit a portion of the net proceeds to income in the determination of earnings sharing under the FBC 2014-2019 PBR?

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#### Response:

Due to the physical layout of the South Slocan Generation Site and the continuing power generation and generation operations at the property. FBC does not foresee the possibility at this time to dispose of any portion of the property during the term of the 2014-2019 PBR Plan.

If FBC were to dispose of the South Slocan property or some portion of it as the future circumstances require, it would propose a treatment of the proceeds at that time and would comply with the requirement of law, including Commission approval under section 52 of the UCA and also then applicable legal principles with respect to allocation of net proceeds based on the circumstances of the sale. It is difficult for FBC to conjecture at this time on the allocation of net proceeds without knowing the context and details of the sale.

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21 7.6.1 22 23

If FBC intends to credit a portion of the net proceeds to income for earnings sharing under the PBR, please explain how FBC would propose to allocate the proceeds and what basis would FBC use for determining the allocation.

If FBC does not intend to credit a portion of the net proceeds to income

for sharing, please explain the basis for that position.

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#### Response:

Please refer to the response to BCUC IR 2.7.6.

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34 Response:

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35 Please refer to the response to BCUC IR 2.7.6.

7.6.2



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1	8.0	Refere	ence: E	EXISTING ASSETS
2			9	Section 5; Exhibit B-4, BCUC IR 1.14.0
3			V	<b>Varfield</b>
4 5				at the Station Services group occupies 1,363 ft2 of office, 1,920 ft2 of 1,051 ft2 of shop space at Warfield. 18
6		FBC s	tated that	the space vacated at Warfield will be reassigned to Warehousing. 19
7 8		8.1	How mu	ch outside useable area, including parking, is being vacated at Warfield?
9	Respo	onse:		
10 11		-	•	Services Group will be vacating 20,000 sq. ft. of outside useable area alls at the Warfield Complex.
12 13				
4  5  6  7  8	Respo	8.2 onse:	at Warfie	arehousing have an immediate or near-term need for the vacated space eld? Please give a detailed explanation for the need of each of the office use, shop and outside spaces.
20 21 22 23 24	Confir approxid provid provid wareh	med. We with the same of the s	v 2,400 so vailable a a Quonso pace, whi	ing has a near-term need for the vacated space at Warfield, including the q. ft. of office and shop space noted above. This additional space would and cost effective means to replace existing enclosed storage space et Hut that is nearing end-of-life. FBC confirms the 1,920 sq. ft. or ch includes a transformer and regulator pit, will remain assigned to ances Meter Technicians. Please refer to the response to BCUC IR 1.7.3.
26 27				
28 29 30 31			8.2.1	Please discuss the alternatives for meeting Warehousing's need fo additional space.

<sup>18</sup> Exhibit B-4, BCUC IR 1.1.1, Table 1. <sup>19</sup> Exhibit B-4, BCUC IR 1.14.1.



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When it reaches end of life, FBC will need to replace the existing Quonset Hut to meet the current Warehousing needs.

8.2.2 What is the building net book value of the space vacated at Warfield and the land cost of the overall Warfield site?

#### Response:

The net book value of the building for the space vacated by Station Services at Warfield as at December 31, 2014 is \$1.478 million, which has been calculated based on an allocation of the vacated space as a percentage of the total building space. Please refer to the response to BCUC IR 2.7.1 for a discussion of the land cost for the Warfield site. There will not be a retirement of the building space vacated by Station Services as it will repurposed to provide additional storage for the central warehouse. Please refer to the response to BCUC IR 2.8.2.

8.2.3 What is the building property tax attributable to the space vacated at Warfield and the property tax on the land of the overall Warfield site?

#### Response:

The 2015 property tax attributable to the space vacated at Warfield was \$12,229. The 2015 property tax on the land of the overall Warfield site was \$6,840.



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1	9.0	Refer	ence:	EXISTING ASSETS
2				Section 5; Exhibit B-4, BCUC IR 1.8.0, BCUC IR 1.14.0
3				Castlegar District Office
4		FBC s	states:	
5 6 7 8 9			The s 2,100 The constr	Castlegar District Office is owned by FBC and is located in Castlegar, BC. ite consists of 42,750 square feet (0.98 acres) of land [and] contains square feet of office and 3,775 square feet of shop/warehouse/storage. single level combined office and warehouse facility was originally ructed in 1962 and was purchased by FBC's Predecessor in 1989 and ated for use as a district office. <sup>20</sup>
11 12 13 14	Resp	9.1 <b>onse:</b>		is the current assessed value and the best estimate available of the market of the Castlegar District Office property?
15 16 17	Asses	ssment a	assesse	e of the Castlegar District Office property in 2015 was \$525,100. BC es the value of properties based on their "actual value", which means "the ee simple interest in land and improvements".
18 19 20 21 22 23	respo / CD0 releva prope	onse to E O should ant infori arty and	BCUC IF d be so mation seeks	at appraisals of the Castlegar District Office; however, as noted in the R 2.5.3, should the Commission determine that the Network Services group coped in as part of the KOC Project, FBC would include the necessary, in the appropriate application when FBC determines to dispose of the CDO the necessary Commission approval for the disposition and appropriate of proceeds.
24 25				
26 27 28 29 30	Resp	9.2 <b>onse:</b>		is the net book value of the depreciable property at the Castlegar District site and the land cost?
31 32	The	net boo		e of the Castlegar District Office structures (excluding the land) as at is \$0.451 million. Please refer to the response to BCUC IR 2.7.1 regarding

<sup>20</sup> Exhibit B-1, Section 3.2.4.



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1 2	the cost of the	e land.
3 4 5 6	9.3 Response:	What are the property taxes for the Castlegar District Office site?
7	The property	tax paid in 2015 for the Castlegar District Office site was \$23,024.
8 9		
10 11 12 13 14	9.4	If FBC were to dispose of the Castlegar District Office property, how would FBC propose to allocate the net proceeds and what basis would FBC use for determining the allocation.
15	Response:	
16 17 18 19 20 21 22 23	useful. However Network Server BCUC IR 2.5 disposition of principles with propose approprinciples with	plan in place at this time to dispose of the Castlegar District Office as it is used and over, if the Commission determines that it has sufficient information to approve the vices group / CDO as part of the KOC Project as described in the response to 4, FBC supports this approach, and would apply for the necessary review for the fithe CDO. In such an application, FBC would comply with applicable legal in respect to allocation of net proceeds based on the circumstances of the sale and opriate treatment of net proceeds. It is difficult for FBC at this time to conjecture ion of net proceeds without knowing the full context and details of the sale.
24 25		
26 27 28 29 30 31	9.5	In the alternate scenarios were the Network Services at the Castlegar District Office were moved to the KOC or Warfield as <u>part of the KOC CPCN</u> how would FBC propose to allocate the net proceeds of the sale of the Castlegar District Office property?
32	Response:	

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Please refer to the response to BCUC IR 2.9.4.

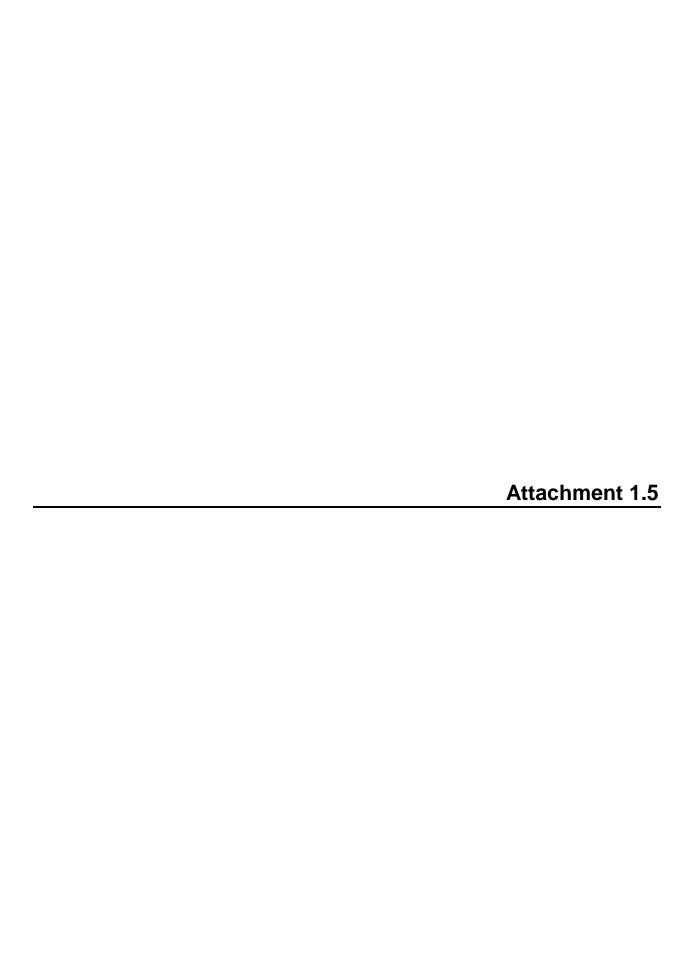


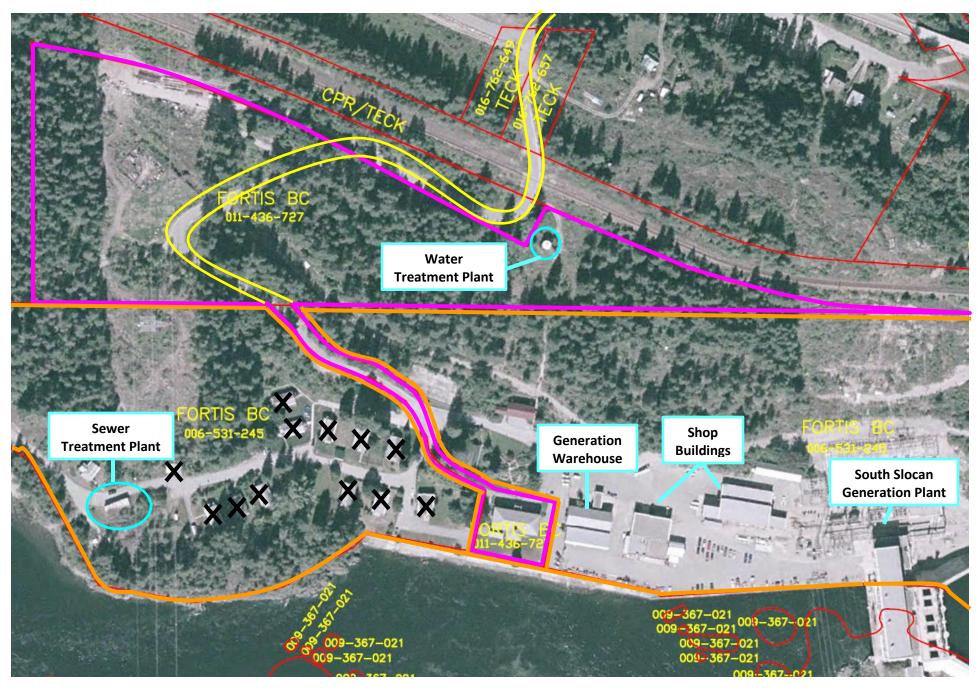
# FortisBC Inc. (FBC or the Company) Application for a Certificate of Public Convenience and Necessity (CPCN) for the Kootenay Operations Centre (the Application) Response to British Columbia Utilities Commission (BCUC or the Commission) Information Request (IR) No. 2 Submission Date: November 6, 2015

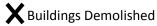
9.5.1 If FBC proposes to treat the potential net proceeds of sale differently, please explain FBC's considerations for proposing the different treatment? If the considerations have quantitative thresholds, such as the passage of time, what are the relevant thresholds?

#### Response:

Please refer to the response to BCUC IR 2.9.4. As explained in the response to BCUC IR 2.9.1, when FBC decides to dispose of the property and applies for the necessary approval, all the relevant information will be provided in the application.



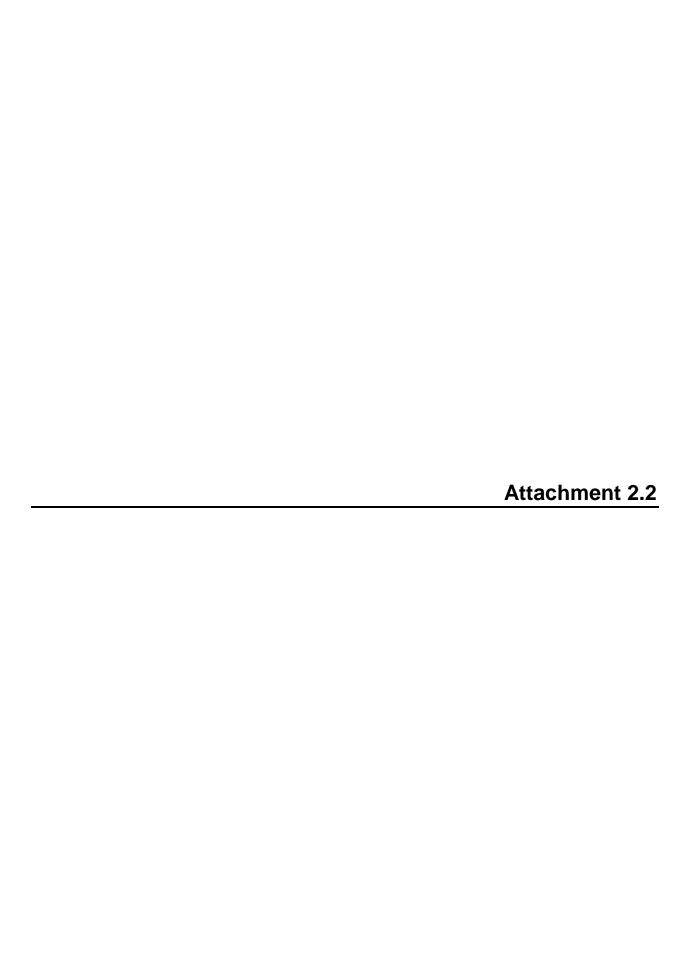






 FortisBC Access Road (easement on neighbouring property)





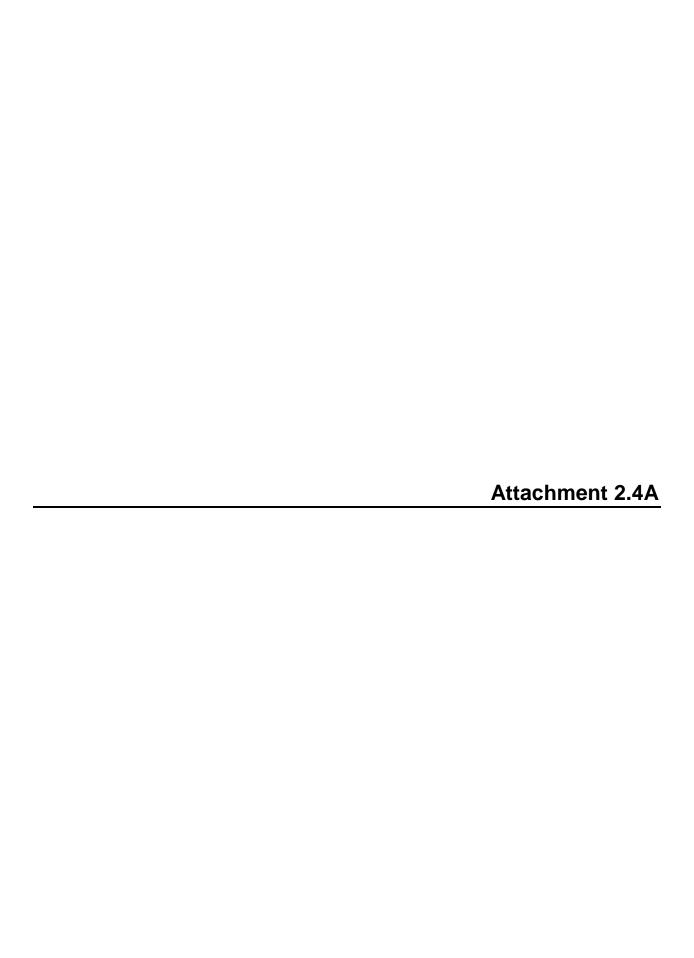
	Warfield C	omplex	New Proposed Facilit		Generation Office			
	Driving Distance (km)	Driving Time (minutes)	Driving Distance (km)	<b>Driving Time (minutes)</b>	Driving Distance (km)	Driving Time (minutes)	Serviced or Visited	Regulated or Non Reg.
Arrow Lakes Hydro Generating Station	40.6	54	17	28	30.2	42	Generation	Non Regulated
Beaver Park Substation	12.6	19	39.3	45	58.8	66	Stations	Regulated
Blueberry Substation	21.9	25	9.4	14	28.9	35	Stations	Regulated
Brilliant Dam	34.6	39	7.4	9	18.2	22	Both	Regulated
Brilliant Expansion Generating Station	34.7	40	7.6	10	18.3	22	Stations	Non Regulated
Brilliant Switching Station	34.4	39	7.2	9	18	22	Stations	Regulated
Brilliant Terminal Station	36.3	45	5.1	10	24.2	32	Stations	Regulated
Cascade Substation	8.0	13	40.1	46	59.5	67	Stations	Regulated
Castlegar Office	29.2	34	5.4	7	24.8	28	n/a	Regulated
Castlegar Substation	28.8	33	5.1	7	24.5	28	Stations	Regulated
Christina Lake Substation	83.0	82	77.1	85	96.6	105	Stations	Regulated
Coffee Creek Substation	115.0	114	87.6	84	65.3	62	Stations	Regulated
Corra Linn Dam	55.2	60	28	30	5.8	8	Both	Regulated
Cottonwood Substation	73.3	74	53.5	50	31.3	28	Stations	Regulated
Emerald Switching Station	1.4	3	31.3	34	50.7	55	Stations	Regulated
Fruitvale Substation	19.9	29	40.1	38	62.6	61	Stations	Regulated
Generation Office	51.0	56	23.8	26	N/A	N/A	n/a	Regulated
Glenmerry Substation	6.3	13	33	39	52.4	60	Stations	Regulated
Hearns Substation	28.1	35	31	29	53.4	52	Stations	Regulated
Kaslo Office	138.0	136	111	106	88.6	84	Stations	Regulated
Kaslo Substation	139.0	138	112	108	89.4	86	Stations	Regulated
Kraft (Celgar) Substation	35.8	42	119	16	27.2	34	Stations	n/a
Lower Bonnington Dam	52.3	57	25.2	28	20	4	Both	Regulated
Mawdsley Terminal	0.0	0	31.2	36	50.7	56	Stations	Regulated
New Proposed Facility	30.9	36	N/A	N/A	24	28	n/a	n/a
Ootischenia Substation	30.9	36	0	0	22.2	28	Stations	Regulated
Passmore Substation	63.8	66	36.6	36	17.6	18	Stations	Regulated
Playmor Substation	49.3	53	22.1	23	1.7	3	Stations	Regulated
Rosemont Substation	70.1	73	42.9	43	20.7	21	Stations	Regulated
Salmo Substation	44.7	52	36.7	38	60.3	53	Stations	Regulated
SCC	0.0	0	31.2	36	50.7	56	n/a	Regulated
South Slocan Dam	51.2	56	24	27	0	0.5	Generation	Regulated
South Slocan Switching Station	51.2	56	24	27	0	0.5	Stations	Regulated
Stoney Creek Substation	4.0	10	28.2	30	47.7	51	Stations	Regulated
Tarrys Substation	43.8	48	16.6	18	8.4	13	Stations	Regulated
Trail Office	3.7	7	30.4	34	49.8	54	n/a	Regulated
Upper Bonnington Dam	53.7	58	26.5	28	4.3	6	Generation	Regulated
Upper Bonnington Switching Station	53.7	58	26.6	29	4.3	6	Stations	Regulated
Valhalla Substation	94.5	94	67.3	64	48.4	47	Stations	Regulated
Waneta Dam	21.4	31	48	57	67.5	78	Both	Regulated
Waneta Hydro Station	21.7	32	48.4	58	67.8	79	Stations	Regulated
Warfield Complex	N/A	N/A	30.9	36	50.7	56	Stations	Regulated
Warfield Terminal Station	1.4	3	29.8	33	49.3	53	Stations	Regulated
Ymir Substation	57.3	62	49.3	48	47.2	40	Stations	Regulated
Average	42	46.8	36	36.3	38	41		
Maximum	139	138	119	108	96.6	105		

## Average Distance Difference (kilometers closer)

Warfield Complex to New Proposed Facility	6.04
Generation Office to New Proposed Facility	1.75

## Average Drive Time Difference (minutes saved)

_	
Warfield Complex to New Proposed Facility	10.5
Generation Office to New Proposed Facility	4.4



#### Attachment 2.4A: O&M Savings – Station Services Travel Time

#### **Previously Calculated Station Services Travel Time**

C&M crew time work on Substation per year 16,000 hours

Approximately 72% in North Castlegar Area 72%

Hours in North Castlegar Area 11,520 hours
Hours per substation event per day 7.5 hours
Number of roundtrips 1,536
Return Trip time (Hr.) 1

Cost per hour of trip savings \$94 hour Station Services Travel Time Savings \$144,000

#### **Station Services Travel Time Revised**

C&M crew time work on Substation per year 16,000 hours

Approximately 72% in North Castlegar Area 72%

Hours in North Castlegar Area 11,520 hours
Hours per substation event per day 7.5 hours
Number of roundtrips 1,536

Return Trip time (Hr.) .87 (52 minutes calculated average decreased

time)

Cost per hour of trip savings \$94 hour Station Services Travel Time Savings \$125,614

#### Minus

C&M crew time work on Substation per year 16,000 hours

Approximately 28% in South of Castlegar Area 28%

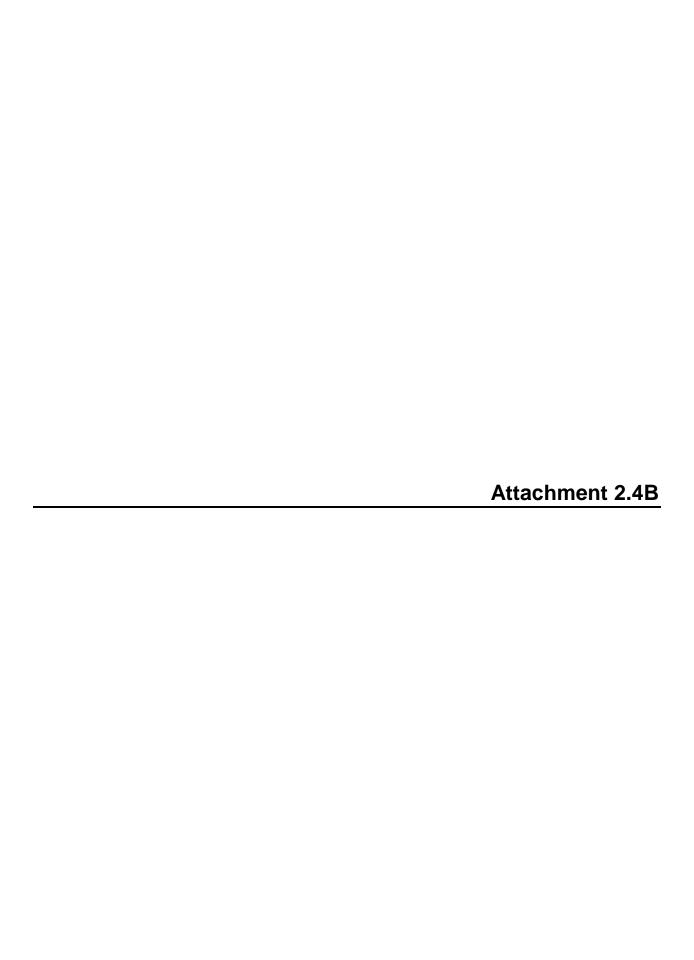
Hours in North Castlegar Area 4,480 hours
Hours per substation event per day 7.5 hours
Number of roundtrips 597

Return Trip time (Hr.) .67 (40 minutes calculated by average of

increased time sites)

Cost per hour of trip savings \$94 hour Station Services Travel Time Increases \$37,599

Equals \$125,614-\$37,599 = **\$88,015** Travel Time Savings



	Warfield	Complex	New Proposed	KOC Facility	Station Services Travel Time Change Proposed KOC Location
Southern Castlegar	Driving Distance (km)	Driving Time (minutes)	Driving Distance (km)	Driving Time (minutes)	Increase/Decrease Time (minutes)
Arrow Lakes Hydro Generating Station	40.6	54	17	28	-26
Blueberry Substation	21.9	25	9.4	14	-11
Brilliant Dam	34.6	39	7.4	9	-30
Brilliant Expansion Generating Station	34.7	40	7.6	10	-30
Brilliant Switching Station	34.4	39	7.2	9	-30
Brilliant Terminal Station	36.3	45	5.1	10	-35
Castlegar Substation	28.8	33	5.1	7	-26
Coffee Creek Substation	115.0	114	87.6	84	-30
Corra Linn Dam	55.2	60	28	30	-30
Corra Linn Switching Station	55.2	60	28	30	-30
Cottonwood Substation	73.3	74	53.5	50	-24
Hearns Substation	28.1	35	31	29	-6
Kaslo Office	138.0	136	111	106	-30
Kaslo Substation	139.0	138	112	108	-30
Kraft (Celgar) Substation	35.8	42	119	16	-26
Lower Bonnington Dam	52.3	57	25.2	28	-29
Lower Bonnington Switching Station	52.3	57	25.2	28	-29
Ootischenia Substation	30.9	36	0	0	-36
Passmore Substation	63.8	66	36.6	36	-30
Playmor Substation	49.3	53	22.1	23	-30
Rosemont Substation	70.1	73	42.9	43	-30
Salmo Substation	44.7	52	36.7	38	-14
South Slocan Dam	51.2	56	24	27	-29
South Slocan Switching Station	51.2	56	24	27	-29
Tarrys Substation	43.8	48	16.6	18	-30
Upper Bonnington Dam	53.7	58	26.5	28	-30
Upper Bonnington Switching Station	53.7	58	26.6	29	-29
Valhalla Substation	94.5	94	67.3	64	-30
Ymir Substation	57.3	62	49.3	48	-14
Crawford Bay Terminal Substation	132.0	149	88.8	114	-35
Creston Substation	129.0	97	120	85	-12
Lambert Terminal	132.0	99	124	87	-12
Total One Way  Average One Way	2032.7 64	2105 66	1384.7 43	1263 39	-842 -26

Northern Castlegar	Driving Distance (km)	Driving Time (minutes)	Driving Distance (km)2	Driving Time (minutes)3	Increase/Decrease Time (minutes)
Beaver Park Substation	12.6	19	39.3	45	26
Cascade Substation	8.0	13	40.1	46	33
Christina Lake Substation	83.0	82	77.1	85	3
Emerald Switching Station	1.4	3	31.3	34	31
Fruitvale Substation	19.9	29	40.1	38	9
Glenmerry Substation	6.3	13	33	39	26
Mawdsley Terminal	0.0	0	31.2	36	36
Stoney Creek Substation	4.0	10	28.2	30	20
Trail Office	3.7	7	30.4	34	27
Waneta Dam	21.4	31	48	57	26
Waneta Hydro Station	21.7	32	48.4	58	26
Waneta Expansion Station	21.7	32	48.4	58	26
Warfield Complex	0.0	0	30.9	36	36
Warfield Terminal Station	1.4	3	29.8	33	30
Grand Forks Terminal	105.5	95	102.3	101	6
Greenwood Stepdown	145.0	123	140	128	5
Kettle Valley Substation	175.0	142	171	147	5
Midway Stepdown	159.0	132	154	138	6
Ruckles Substation	103.0	94	99	99	5
Total Time One Way	892.6	860	1222.5	1242	382
Average Time One Way	47	45	64	65	20

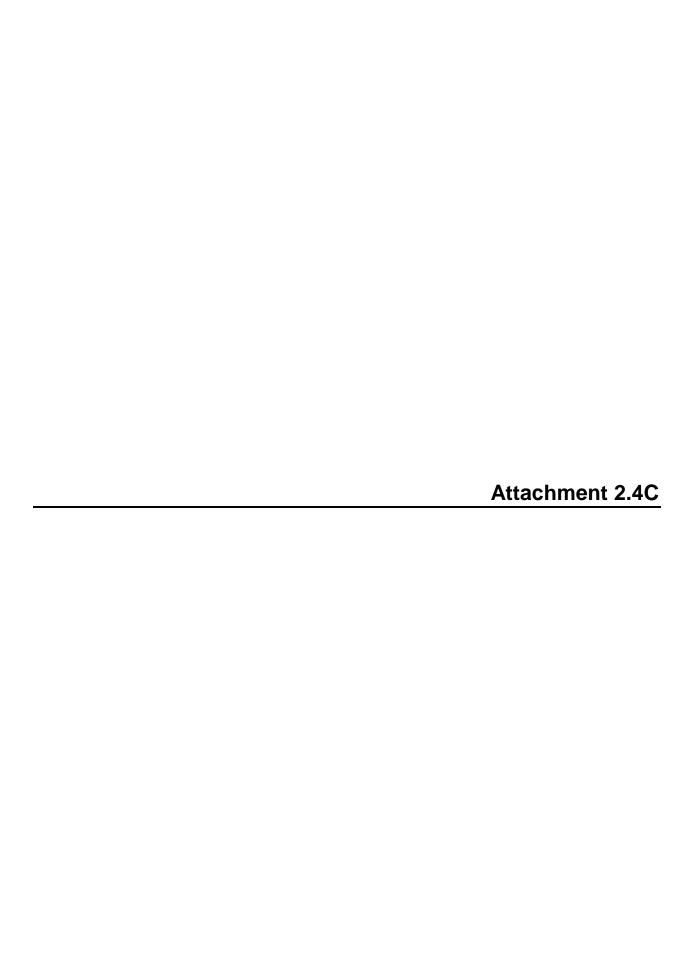


Table 1-1: Revised Summary of Forecast Capital Costs & Other Financial Measures (\$millions)

Particular	2015\$	As- Spent	AFUDC	Total
Total Capital Cost	18.896	19.523	1.128	20.651
2018 Incremental Rate Base	20.416			
New KOC Building Composite Depreciation Rate	2.5%			
Present Value of Incremental Revenue Requirement	34.228			
2018 Rate Increase %	0.7%			

Table 5-2: Proposed Project – Alternative 5 – Revised Kootenay Station Services Gross O&M Savings

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		

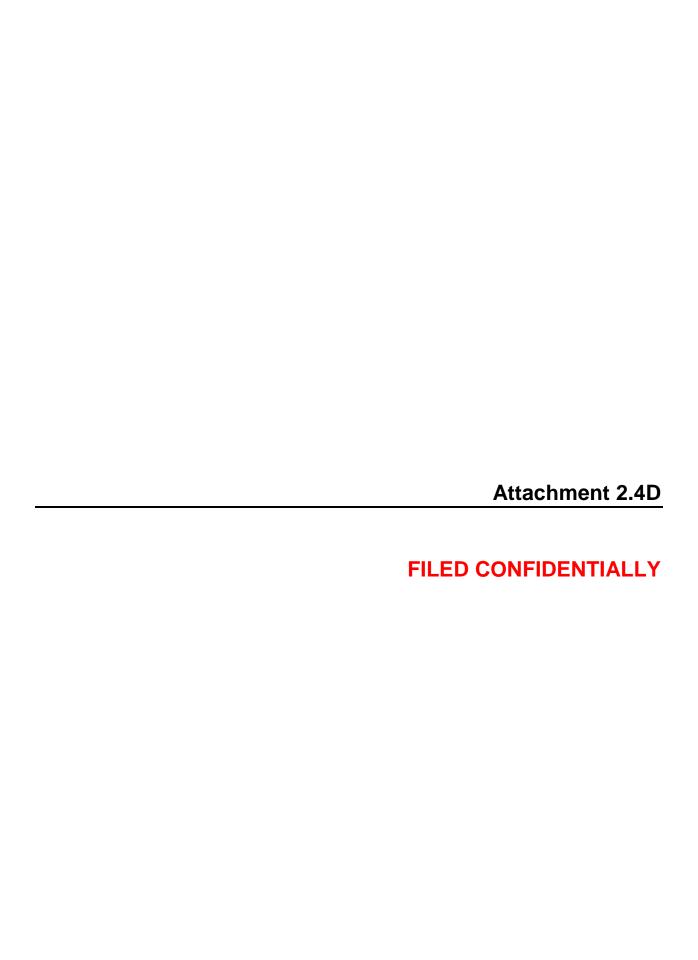
Table 5-6: Revised Summary of Financial Analysis of Alternatives (\$millions unless otherwise stated)

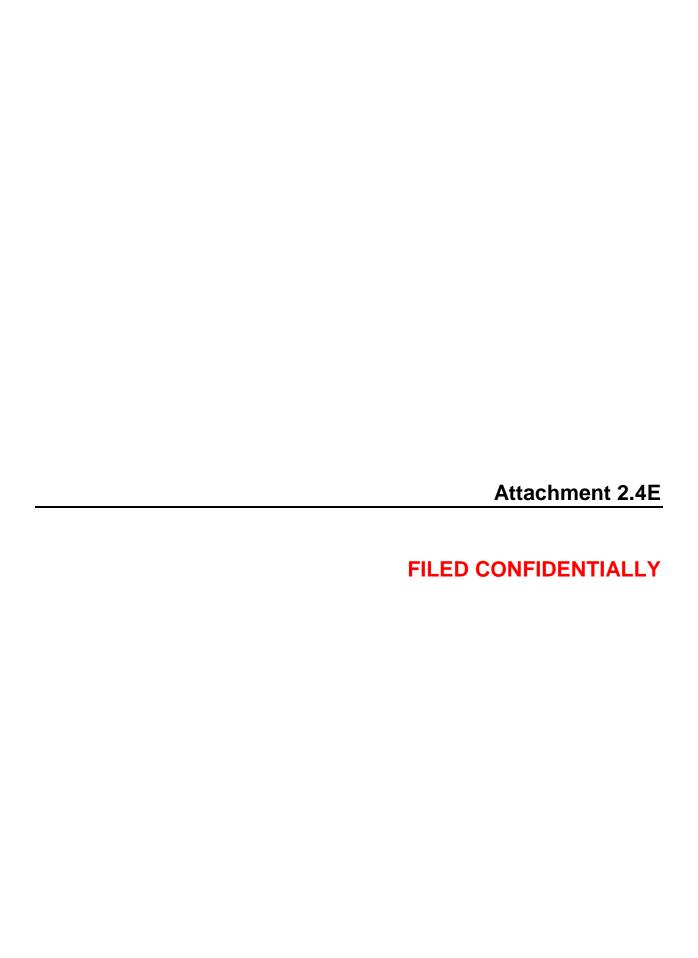
	Alternative 2 BCOAPO IR 2.7.4	Alternative 3 BCOAPO IR 2.7.4	Alternative 5 BCUC IR 2.5.12.1	Alternative 5 + Network Services in 2017 BCUC IR 2.5.12.1
As-Spent Capital Costs	\$24.628	\$30.019	\$20.651	\$22.355
2018 / 2019 Rate Base	2019: \$23.899	2019: \$29.645	2018: \$20.416	2018: \$21.828
Incremental Property Taxes – 2015\$	\$0.290	\$0.310	\$0.419	\$0.443
Gross Incremental O&M Expense - 2015\$	\$0.151	\$0.137	\$0.031	\$(0.034)
PV of Incremental Revenue Requirement	\$40.098	\$45.594	\$34.228	\$34.709
DCF – NPV	\$(0.473)	(0.672)	\$(0.287)	\$(0.223)
2018 / 2019 Rate Increase (%)	0.9%	0.9%	0.7%	0.7%

Table 7-4: Revised Financial Analysis of KOC CPCN Project

AACE Class 3	Alternative 5: KOC at Central Location BCUC IR 2.5.12.1	Alternative 5 + Network Services in 2017 BCUC IR 2.5.12.1
Costs Charged to Electric Plant in Service (\$ millions)	\$20.205	\$21.909
Domolition / Romoval Costs (\$ millions)	0.446	0.446
Demolition / Removal Costs (\$ millions)		
Total Capital Costs (\$ millions)	\$20.651	\$22.355
2018 % Increase on Rate	0.7%	0.7%
PV of Incremental Revenue Requirement (\$ millions)	\$34.228	\$34.709
Discounted Cash Flow NPV (\$ millions)	\$(0.287)	\$(0.223)
2018 Incremental Rate Base (\$ millions)	\$20.416	\$21.828

<sup>&</sup>lt;sup>1</sup> BCUC IR 2.5.12.1, Table 5-5, Sum of As-Spent plus AFUDC.







#### A. PROJECT DESCRIPTION

## 1.0 Reference: OVERVIEW OF PROJECT FACILITIES AND OPERATIONAL FUNCTIONALITY

Exhibit B-1, Section 3.2, pp. 18-28

#### **Summary of Existing and Proposed Facilities**

To aid in accessing the merits of the individual components of the single solution proposed, it would be helpful to understand the costs of each component individually.

1.3 Please provide a detailed breakdown showing separately the O&M costs by each site location, as well as showing for each site location the labour and non-labour costs separately, each before and after the implementation of the proposed project. For the breakdown after implementation please show the KOC O&M costs broken down into the original functional groups.

#### Response:

FBC is unable to provide O&M details by site location as O&M costs are not forecast or tracked by site location. In the following table, FBC provides the forecast incremental impact of this Project on O&M by function and Labour and Non-Labour components.

#### Revised Forecast O&M Costs and Savings (\$000s)

	G	ener	ration		SC	 		n S	Services	To	tal
	_		Non-			Non-			Non-		Non-
Particular	Lab	our	Labour	Lab	our	Labour	Labou	ır	Labour	Labour	Labour
KOC Operating Costs	\$	-	\$ 190	\$	-	\$ 70	\$	-	\$ 35	\$ -	\$ 295
Net Generation Recoveries		-	(150)		-	-		-	-	-	(150)
Increased Generation Travel		-	30		-	-		-	-	-	30
Forecast Costs (Table 5-1)			70			70		_	35		175
Revised Travel Time C&M		-	-		-	-	(8	8)	-	(88)	-
Premium Saving on Call Out Staff		-	-		-	-	(1	1)	-	(11)	-
Tool Crib Savings									(10)	-	(10)
Fleet Vehicle Savings		-	-		-	-		-	(25)	-	(25)
Warfield Janitorial Cleaning Reduction		-	-		-	(4)		-	(6)	-	(10)
Forecast Savings (Table 5-2)		_			_	(4)	(9	9)	(41)	(99)	(45)
Net O&M Change	\$		\$ 70	\$		\$ 66	\$ (9	<u>9</u> )	<u>\$ (6)</u>	<u>\$ (99)</u>	<u>\$ 130</u>

#### H. ACCOUNTING UNDER PBR

10.0 Reference: APPROVAL SOUGHT AND EXECUTIVE SUMMARY

Exhibit B-1, Section 1.3.1, p. 9; Section 1.4, p. 11

FBC Application for Approval of a PBR Plan for 2014-2018, Exhibit

B-1, p. 230

FBC PBR Decision, Table 2.27, p. 164

Treatment of KOC Capital Expenditure and Capital Cost Savings Under PBR

On page 121 of the FBC PBR Application, FBC states:

The Generation department at FBC manages, operates and maintains the Company's four generating stations along the Kootenay River...The department employs approximately 100 employees annually comprised of approximately 65 full time and 30-35 temporary employees...the full time employees in the Generation department include management, engineering, planning , project management and safety and environment staff.

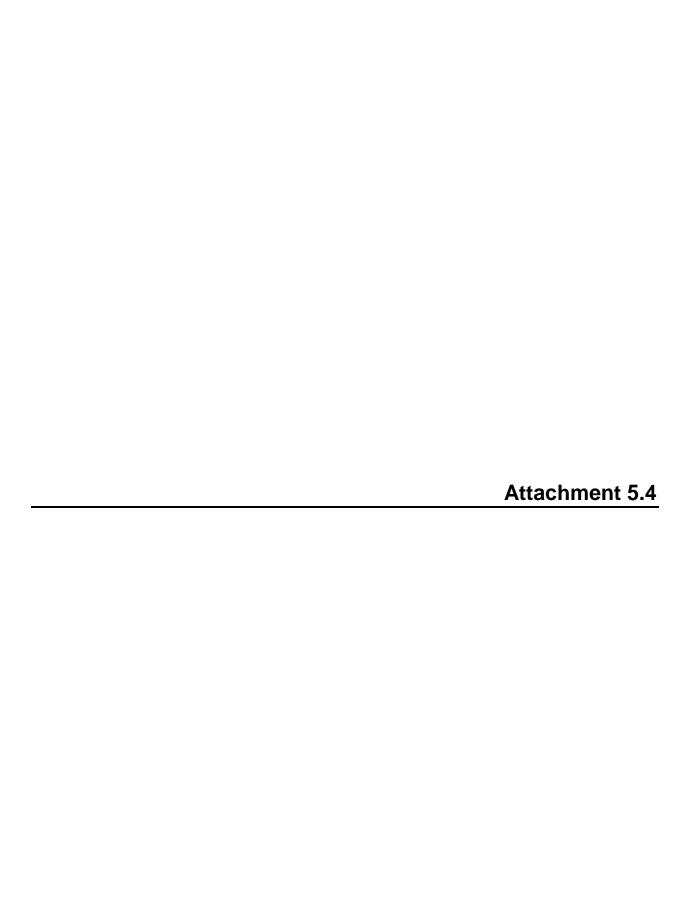
Table C4-2 on page 113 of the FBC PBR Application shows Base O&M amounts for Generation of \$2,556 thousand.

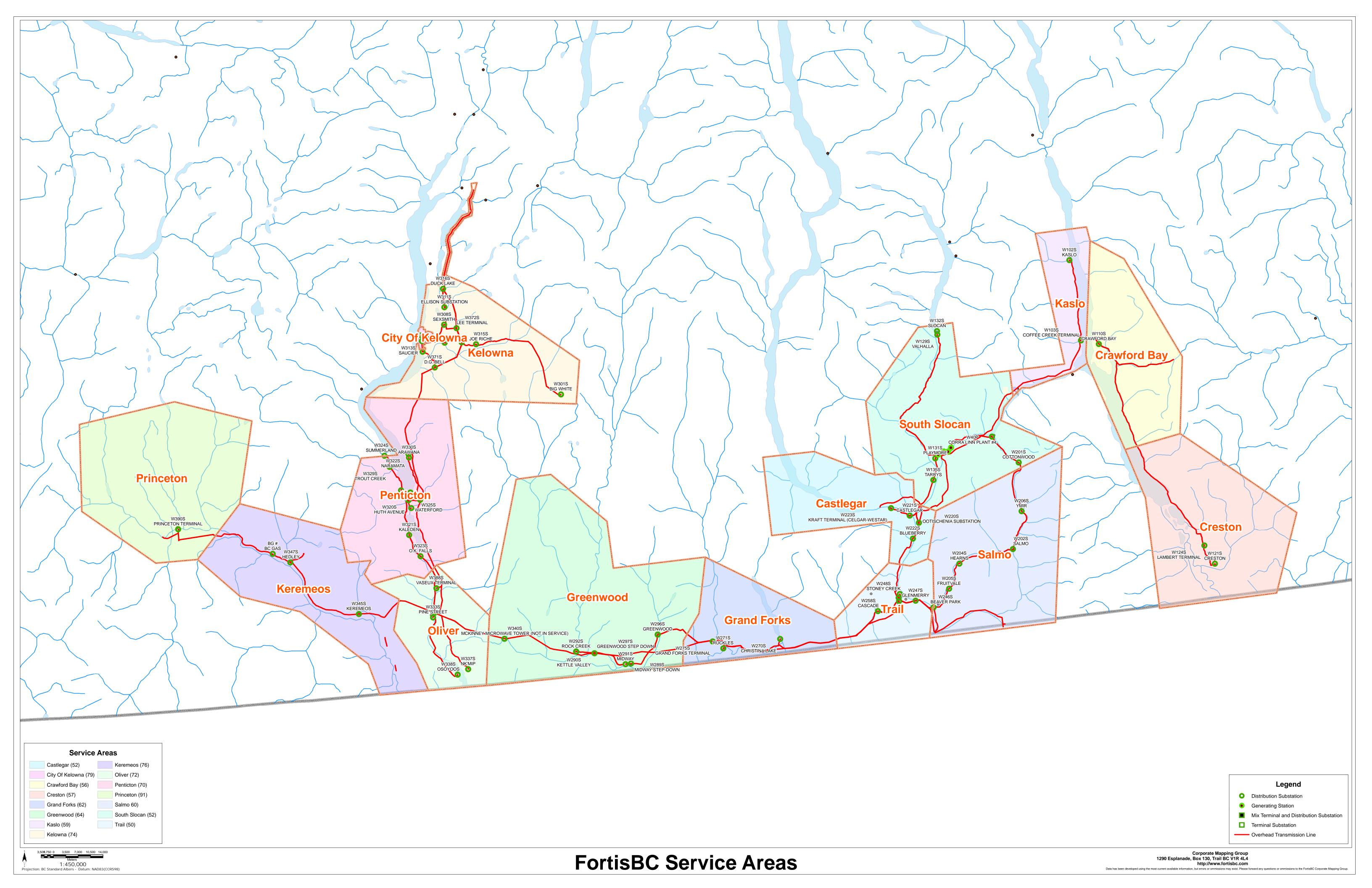
10.8 Estimate the total O&M savings which will result from the implementation of the project. Please separately quantify savings which relate to O&M outside of the PBR formula (such as property tax) and to O&M which is inside the PBR formula. Please explain how FBC proposes to treat any PBR formula-driven O&M savings directly related to the project and why FBC believes this treatment is appropriate. If FBC does not anticipate there to be any PBR formula-driven O&M savings, please explain why not.

#### Response:

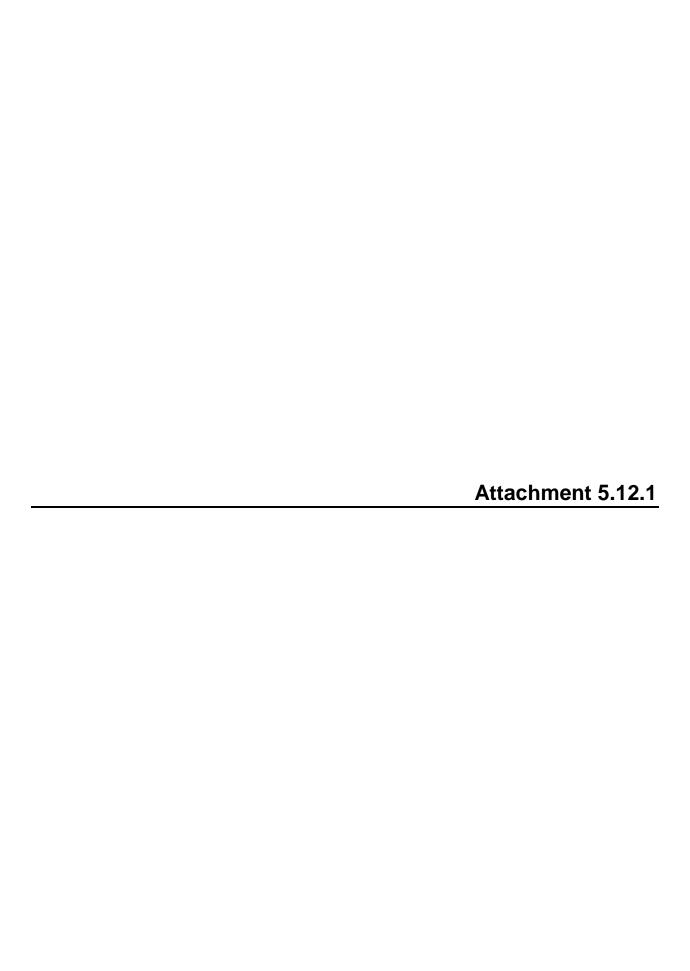
The net incremental O&M savings from this Project is forecast to be \$25 \$31 thousand, comprised of \$175 thousand in operating costs less \$200 \$144 thousand savings (Tables 5-1 and Revised 5-2). This represents less than 0.05 0.06 percent of the forecast formula O&M Expense in 2016 (\$53.6 million) and is not significant enough to warrant a change to base O&M Expense under the PBR Plan.

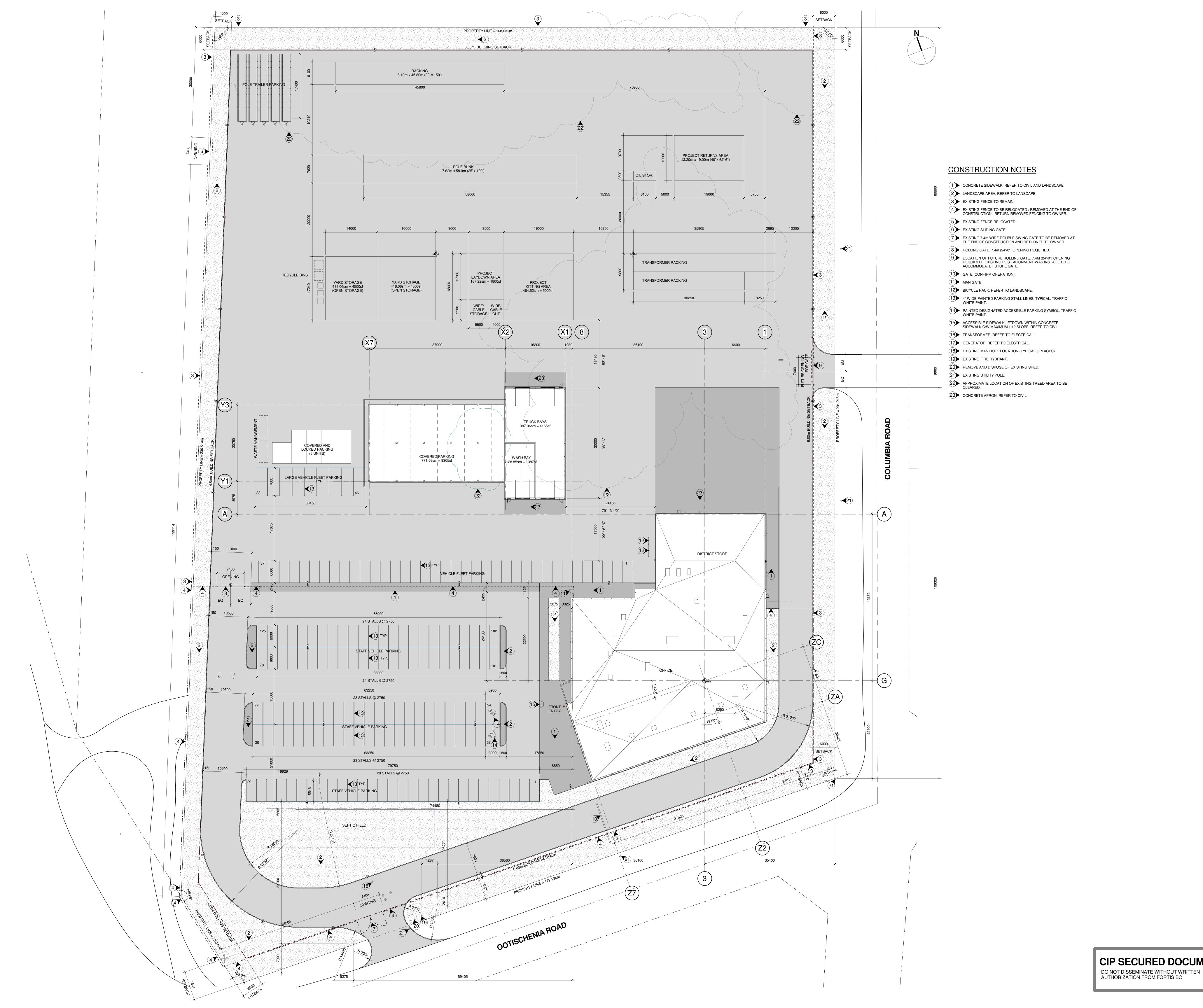
The incremental property taxes are estimated to be \$419,000 as shown in Table 5-6. Property taxes are not included in O&M Expense and therefore are not subject to determination by formula under the PBR Plan. All property tax variances from the amounts included in revenue requirements are recorded in the Flow-through deferral account and returned to, or recovered from, customers in the subsequent year under the PBR Plan.





Attachment 5.11
REFER TO LIVE SPREADSHEET MODELS  Provided in electronic format only
FILED CONFIDENTIALLY
(accessible by opening the Attachments Tab in Adobe)





DRAWING TITLE

CONSULTANT

PROJECT TITLE

CIP SECURED DOCUMENT CHECKED BY:

A102