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September 6, 2024

Industrial Customer Group
c/o Robert Hobbs
2206 Happy Valley Road
PO BOX 1552
Rossland, BC
V0G 1Y0

Attention: Robert Hobbs

Dear Robert Hobbs:

Re: FortisBC Energy Inc. (FEI) and FortisBC Inc. (FBC) (collectively FortisBC)
Application for Approval of a Rate Setting Framework for 2025 through 2027
(Application)
Response to the Industrial Customer Group (ICG) Information Request (IR) No. 1

On April 8, 2024, FortisBC filed the Application referenced above. In accordance with the regulatory timetable established in BCUC Order G-165-24 for the review of the Application, FortisBC respectfully submits the attached response to ICG IR No. 1.

If further information is required, please contact the undersigned.

Sincerely,

on behalf of FORTISBC

Original signed:

Sarah Walsh

Attachments

cc (email only): Commission Secretary
Registered Interveners

Reference: Exhibit B-1, Section B, Section 2.3.1

1.1 Please provide the rates and rates increases for the past five years for the distribution costs of the electric distribution companies regulated by the AUC?

Response:

FBC does not have a source for the historical rates of electric distribution utilities regulated by the AUC and, therefore, is not able to respond to this request. Further, in contrast to FBC's and BC Hydro's rates, the rates for Alberta utilities are separated into energy charges which are market-based and can vary every month (for the services provided by the energy retailer), and distribution and transmission charges (provided by the regulated utilities). The electric distributors' approved tariffs, therefore, only provide the rates for the transmission and distribution charges section of the customer bills, making it difficult to compare the rates to FBC's bundled rates.

1.2 Please provide a rate comparison of residential rates assuming consumption of 700 Kwh per month of FBC, BC Hydro, and FBC (Alberta)?

Response:

FBC provides the requested comparison of current rates for customers served under FBC's, BC Hydro's and FortisAlberta's residential rates below.

Please note that the rates of FBC, BC Hydro and FortisAlberta are structured differently. At the current time, at 700 kwh per month, residential rates for BC Hydro customers are lower than for FBC customers. Further, based on the August 2024 retail energy charges,¹ residential rates for FBC customers are lower than for FortisAlberta customers.

	Current Rates	
	FBC RS 1	BCH 1101
Customer Charge (\$ per month) ²	22.64	6.231
Tier 1 Energy Rate (\$/kWh)	0.1416	0.0939
Tier 2 Energy Rate (\$/kWh)	N/A	0.1408
Tier 1 Threshold (kWh)	N/A	675
Monthly bill at 700 kWh per month (\$)	121.76	84.32

¹ Disposition 29189-D01-2024.

² Assuming 30 days a month.

	FortisAlberta 11
Service Charge (\$ per month)	29.60256
Transmission Charge (\$/kWh)	0.048476
Distribution Charge (\$/kWh)	0.031933
Energy Charge (\$/kWh)	0.13466
Monthly bill at 700 kwh per month (\$)	180.15

1 At these rates, a customer consuming 700 kWh per month would have a bill of \$121.76 for FBC,
 2 \$84.32 for BC Hydro and \$180.15 for FortisAlberta. BC Hydro's lower monthly bill amount reflects
 3 its tiered rate structure (675 kWh is charged at the lower tier rate) as well as its much larger
 4 customer base and its lower generation costs due to its heritage hydro generation resources.
 5 FortisAlberta's higher monthly bill amount is mainly a function of its higher energy costs due to
 6 the early phase-out of lower cost coal-powered electricity generation in Alberta.

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Reference: Exhibit B-1, Section B, Section 3.1.2, and Table C3-27

“As new Major Projects are reviewed and approved during the term of the Rate Framework, such as the recently filed FBC Fruitvale Substation CPCN project, the flexibility contained within the Rate Framework will allow for the impacts to be incorporated into rates, similar to the Current MRP.”

2.1 Please identify any differences relevant to the inclusion of projects or the recovery of project costs in Regular gross capital expenditures as identified in Table C3-27 under the Current MRP and the Rate Framework?

Response:

There is no difference in the criteria for inclusion of projects in FBC’s regular capital expenditures between the Current MRP and the proposed Rate Framework. The categories of regular capital expenditures identified in Table C3-27 (i.e., Growth, Sustainment, and Other capital) for FBC remain the same. The CPCN threshold for excluding capital projects from regular capital in Table C3-27 has remained the same at \$20 million (as discussed in the response to ICG IR1 2.3). Further, both the Current MRP and the proposed Rate Framework provide for flow-through treatment of certain uncontrollable costs (as well as Clean Growth Initiatives which for FBC currently relate to Electric Vehicles) and exogenous factor approval of capital expenditures that meet the exogenous factor criteria (please also refer to Figure C3-1 of the Application).

2.2 Please confirm that the cost of projects that have not yet been identified may be included with Regular Capital Expenditures?

Response:

Confirmed. FBC is requesting approval of the level of capital expenditures to be incorporated in rates over the term of the proposed Rate Framework from 2025 to 2027. For the most part, FBC expects the capital forecasts to be executed as filed in this Application; however, changing circumstances, including changes in equipment conditions or changes in the pace (or timing) of load growth from current expectations, may lead to the identification of new projects or the deferral or advancement of projects.

2.3 Please provide criteria proposed to be used to distinguish Regular Capital Expenditures from Major Projects?

1 **Response:**

2 Major Projects are generally CPCN projects, which are filed for approval pursuant to the BCUC's
3 CPCN Guidelines. Generally, FBC seeks a CPCN (as opposed to filing for approval as part of the
4 regular capital forecasts) for projects that are forecast to exceed the CPCN materiality threshold
5 of \$20 million. As discussed in Section C3.4.5 of the Application, FBC is proposing to maintain
6 the currently approved CPCN threshold of \$20 million for the term of the proposed Rate
7 Framework.

8 In the case of the Fruitvale Substation project, referenced by the ICG in the preamble, FBC was
9 directed by the BCUC to seek CPCN approval even though the project was forecast to cost less
10 than \$20 million. As such, there may be instances where FBC would seek CPCN approval for a
11 project that is below the CPCN threshold, such as if FBC was directed to do so by the BCUC, or
12 if FBC considers there to be a significant public interest issue or there is a high degree of project
13 complexity. However, any projects with a higher degree of complexity or public impact are likely
14 to exceed the materiality threshold.

15 In certain instances, FBC may file for acceptance of project expenditures pursuant to section 44.2
16 of the *Utilities Commission Act* (UCA). This was the case with the Playmor Substation Rebuild
17 project, which FBC had not identified as part of the three-year regular capital forecasts in the
18 2020-2024 MRP Application.

19 Major Projects may also include projects approved through an Order in Council (OIC) or other
20 regulation.

Reference: Exhibit B-1. Section C, Section 1.2, page C-3

“FortisBC considers that a three-year term will provide a long enough timeframe to allow for some efficiencies in the regulatory process while being short enough that nearer term impacts from the energy transition can be accommodated. FortisBC notes a three-year term to 2027 will also be the midway point to 2030, with 2030 being a significant milestone for many climate goals set out by government.”

3.1 Please discuss the advantages and disadvantages of a 3 year term for FEI and a 5 year term for FBC?

Response:

FortisBC considers the advantages and disadvantages to a five-year term to be similar for both FEI and FBC, as the impacts of the energy transition create uncertainty and cost pressures for both utilities, though due to different drivers. FortisBC describes the impacts of the energy transition on each of FEI’s and FBC’s costs and rates in the response to BCUC Panel Supplemental IR 2 (Exhibit B-2).

The primary advantages of a five-year term compared to a three-year term for both utilities are regulatory efficiency, as a full review of the Rate Framework would not occur at the end of the three-year term, as well as increased time for the Companies to find efficiencies and cost savings. If the Rate Framework were to be set for five years, FEI and FBC would propose, consistent with the approach during the Current MRP term, to include a full review of the regular capital forecasts for the last two years of the term (i.e., 2028 and 2029) as part of the Annual Reviews for 2027 Rates. With this additional regulatory efficiency, FEI and FBC could further focus on the Companies’ responses to the energy transition and other complex issues in the external environment, such as continued adaptation to climate change, ways to address peak demand constraints, and the continued development of low carbon energy solutions.

Although the disadvantage of a five-year term would be greater exposure to uncertainty associated with the energy transition, FortisBC considers that the Rate Framework is flexible enough that the term could be set for five years for both utilities; however, FortisBC also recognizes the feedback received from the BCUC and interveners that a shorter term might be preferable. To be responsive to this feedback but to also recognize that the Rate Framework may still be working well at the end of the proposed three-year term, FortisBC has proposed to set the term for three years, but with the possibility that the Rate Framework could be extended beyond 2027, subject to a review of the operating environment at that time. As explained in Section B3.2.1.1 of the Application, FortisBC proposes to review how the Rate Framework has been functioning in 2027 and to consider the implications of any policy developments, changes to the operating environment or other externalities present at that time. Based on this review and through consultation with the BCUC and interveners, FortisBC may propose to extend the Rate Framework for one or both of the utilities.

However, if the BCUC were to determine that the Rate Framework should be in place for five years for just FBC (and be in place for three years for FEI), FortisBC would need to consider the

specific determinations made by the BCUC regarding the Rate Framework in its decision. FortisBC has designed the Rate Framework such that it could be extended beyond three years, and FortisBC considers that a longer term would achieve greater regulatory efficiencies as a full review of the Rate Framework would not need to occur in 2027. Under an approach where the Rate Framework was approved for five years, as explained above, FortisBC would propose to include a two-year forecast for FBC's regular capital (i.e., forecasts for Sustainment, Growth and Other capital for 2028 and 2029) as part of the Annual Review for 2027 Rates, consistent with the approach in FBC's Annual Review for 2023 Rates during the Current MRP.

3.2 Would a 5 year term for FBC achieve greater regulatory efficiencies for FBC than a 3 year term for FBC?

Response:

Please refer to the response to ICG IR1 3.1.

3.3 Please provide the inflation factor for each year during the Current MRP?

Response:

FortisBC provides the approved inflation factors (CPI/AWE) for FEI and FBC for each year during the Current MRP (i.e., 2020 to 2024) in Table 1 and Table 2, respectively.

Table 1: FEI Approved Formula Inflation Factors from 2020 to 2024

	2020	2021	2022	2023	2024
CPI	2.692%	1.596%	1.281%	4.940%	6.031%
AWE	2.881%	5.745%	6.455%	3.944%	2.731%
Non Labour Split	48%	48%	49%	49%	51%
Labour Split	52%	52%	51%	51%	49%
CPI/AWE	2.790%	3.753%	3.920%	4.432%	4.414%

Table 2: FBC Approved Formula Inflation Factors from 2020 to 2024

	2020	2021	2022	2023	2024
CPI	2.692%	1.596%	1.281%	4.940%	6.031%
AWE	2.881%	5.745%	6.455%	3.944%	2.731%
Non Labour Split	38%	38%	37%	40%	43%
Labour Split	62%	62%	63%	60%	57%
CPI/AWE	2.809%	4.168%	4.541%	4.342%	4.150%

3.4 Please provide a forecast of inflation factors during the proposed Rate Framework?

Response:

Table 1 below provides the forecasts for BC-CPI and BC-AWE from 2025 to 2027.

Table 1: Forecasts of BC-CPI and BC-AWE from 2025 to 2027

	2025	2026	2027
BC-CPI	1.97%	2.00%	1.99%
BC-AWE	2.42%	2.01%	2.07%

The BC-CPI forecasts are an average of figures obtained from four Canadian chartered banks³ as well as the Conference Board of Canada (CBOC). The BC-AWE forecasts are obtained from the CBOC.

³ Some sources do not provide a forecast for 2026 and 2027.

4 Reference: Exhibit B-1, Section C, Section 1.4, page C-6

“Dr. Kaufmann recommends the following X-Factor values for ... FBC: An X-Factor of 0.20 percent, consisting of a 0.20 percent industry PFP and zero percent stretch factor for FBC’s O&M indexing formula.”

4.1 Please confirm that a utilities “base rate” to be indexed is relevant to the determination of an X-factor, in this case for the O&M indexing formula?

Response:

The following response was provided by Dr. Kaufmann:

Not confirmed. The base rates are not relevant to setting the productivity factor for FEI’s and FBC’s O&M indexing formulas. Please refer to the response to BCUC IR1 7.1.

4.2 Please confirm that FBC is seeking approval for a “base rate” to be indexed and without a productivity study?

Response:

Not confirmed. FBC is seeking approval of a 2024 Base O&M per customer and O&M indexing formula of which one of the components is a 0.2 percent O&M productivity factor (X-factor) as recommended by Dr. Kaufmann. Please refer to Appendix C1-1 to the Application for Dr. Kaufmann’s detailed O&M productivity study.

4.3 Please confirm that FBC justifies a change from an X-factor of 0.5 percent to the proposed X-factors of 0.20 percent without sufficient evidence to establish rates based on cost of service?

Response:

The following response is provided by FBC:

Contrary to the assumption in the question, FBC’s Base O&M is based on cost-of-service. As discussed in the response to BCUC IR1 1.1, FortisBC’s approach to setting the 2024 Base O&M is reflective of its actual cost-of-service while also allowing rebasing in the same way that a cost-of-service application or an O&M forecast on a cost-of-service basis would provide, but with improved regulatory efficiency. Further, the proposed X-factor is not applied to the rates but rather is applied to the Base O&M in FBC’s O&M indexing formula.

1 The following response was provided by Dr. Kaufmann:

2 Not confirmed. Dr. Kaufmann's recommendation of a 0.2 percent X-factor for FBC is based on
3 O&M PFP evidence that was developed in response to the BCUC's stated concerns regarding
4 the relevance of the total factor productivity (TFP) evidence for FBC's O&M indexing formula.

5 Please also refer to the responses to BCUC IR1 7.2 and 7.3.

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9 4.4 Please file sufficient evidence for the Commission to approve rates on a cost of
10 service basis for 2025?

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12 **Response:**

13 The Application is seeking approval of a rate-setting framework, which includes relying on an
14 index-based approach for the majority of O&M and forecasts of various flow-through items on an
15 annual basis in the Annual Review process. As such, this question is not seeking information
16 related to the Application, but is essentially requesting that FortisBC file a new cost-of-service
17 application. This would take many months of effort and is clearly not possible within the timeline
18 for responses.

19 Moreover, the ICG made a similar request with respect to the Current MRP during the 2020-2024
20 MRP Application proceeding, which was rejected by the BCUC on page 7 of Appendix B to Order
21 G-156-19:

22 The Panel finds it unreasonable to direct FBC to file a separate cost of service
23 application to be reviewed concurrently with the current Application. Such a
24 direction would require FBC to seek approval from the BCUC of something that is
25 inconsistent with the approvals being sought in the current Application. In the
26 Panel's view, such a direction would be impracticable and inappropriate.

27 Similarly, FBC submits that this information request is impracticable and inappropriate.

28 In addition, please refer to the response to BCUC Panel Supplemental IR 8 which explains why
29 a cost-of-service approach is not supported at this time, as well as the response to BCUC IR1 1.1
30 which discusses how the proposed Rate Framework will incorporate the impact of rebasing into
31 2025 rates. Please also refer to the response to BCSEA IR1 1.1, which discusses that many
32 elements of the Application are consistent with cost-of-service ratemaking.

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4.5 Please confirm that it is standard regulatory practice to establish X factors, in part, based on total factor productivity growth (TFP) and the cost of service?

Response:

The following response was provided by Dr. Kaufmann:

Not confirmed. The standard industry practice is to use cost of service-based methods to set rates (or in the case of FBC's Rate Framework, FBC's base O&M) for the first year of a multi-year incentive regulation plan, and to use index-based methods to establish inflation and X factors used to update rates (or revenues) over the remaining years of the plan. FBC's productivity evidence appropriately uses O&M PFP evidence since FBC's proposed indexing formula only recovers FBC's O&M costs, not its capital costs.

4.6 Please confirm that it is standard regulatory practice to establish X factors with consideration of the whole PBR plan as well as the TFP?

Response:

The following response was provided by Dr. Kaufmann:

Not confirmed. Regulators will review the entire incentive regulation proposal to ensure that the plan, as a whole, is in the public interest. However, it is standard practice for regulators to review the technical evidence underpinning the "inflation minus X" rate adjustment formula by examining each element of the formula (e.g., the inflation factor, productivity factor, and stretch factor) objectively and independently.

4.7 Please comment on whether determination of an X-factor based on O&M PFP should also consider the whole PBR plan as well as the TFP?

Response:

The following response was provided by Dr. Kaufmann:

Please refer to the response to ICG IR1 4.6. Regulators make judgments on whether "the whole plan" is in the public interest, but "an X factor based on O&M PFP" should only consider the quality of the O&M PFP evidence.

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4 4.8 Please comment on whether the proposed X-factor of 0.20 percent can reasonably
5 be expected to be less than the I-factor during the term and that the rates can
6 reasonably be expected to increase faster than inflation during the term?
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8 **Response:**

9 The following response was provided by Dr. Kaufmann:

10 Dr. Kaufmann is recommending that the inflation minus X formula used in FBC's O&M indexing
11 formula be equal to growth in the measured inflation factor minus 0.2 percent. Regardless of the
12 value of measured inflation, the formula driven O&M changes under this formula cannot exceed
13 inflation.

14 FortisBC adds the following response:

15 The question erroneously compares the changes in the O&M indexing formula with changes in
16 rates. FBC's rates are a function of changes in the total revenue requirement. Formula driven
17 O&M is only one component of the total revenue requirement, therefore although the formula
18 driven O&M cannot exceed inflation, the rates can exceed inflation due to increases in other
19 components of the revenue requirement.

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23 4.9 Please comment on whether an X-factor of 0.20 percent will reduce the incentive
24 for management to achieve savings?
25

26 **Response:**

27 The following response was provided by Dr. Kaufmann:

28 No, the 0.20 percent X factor will not reduce the incentive for managers to achieve savings.
29 Incentive regulation is grounded in the principle that utility managers, like managers of other
30 businesses, will respond rationally to financial incentives. More descriptively, incentive regulation
31 uses "carrots" to motivate better performance.

32 The notion that higher X factors increase incentives seems to view the X factor as a "stick," which
33 will "force" a utility to work harder and find efficient costs. This assumption is antithetical to more
34 incentive-compatible regulatory frameworks that encourage efficiencies that benefit both
35 customers and shareholders. In incentive-based plans, incentives are created by establishing
36 price trends that are "external" to the company's own costs. This is analogous to competitive
37 markets, where prices are determined by market-wide forces rather than any individual company's

own costs. When prices are set by external forces, companies have stronger incentives to control costs since doing so does not impact their prices but does reduce costs which, in turn, improves the bottom line.

This process is replicated in incentive regulation. Indeed, as discussed in the LKC Report, incentive regulation uses a competitive market paradigm to establish price trends that simulate competitive market outcomes where competition itself is impractical. While the utility is under an incentive-based plan, its price trends are determined by changes in industry-wide changes in input price inflation and productivity growth. The company's own costs are "external" to these industry-wide forces, so the utility has incentives to reduce costs. Moreover, these incentives are not impacted in any way by the external values of the inflation measure, productivity trend, or stretch factor.

FBC adds the following response:

As explained in the Application, FBC achieved sizable savings during the MRP term. However, the incentives to achieve these savings are not derived from the inclusion or quantum of the productivity factor. Rather, they are derived from the decoupling between revenues and costs during the Plans' terms, the length of the rate plan period, and the amount of costs that are subject to an incentive framework. The incentives are also impacted by the inclusion of an earnings-sharing mechanism. The X-Factor ensures that part of the "expected" industry productivity growth during the Current MRP's term is passed to customers regardless of the actual performance of the Company. In addition, in the case of FBC's performance, customers have received 50 percent of incremental O&M savings during the Current MRP's term (via the ESM which shares savings equally with customers regardless of the value of the X-Factor). At paragraph 166 of Decision 20414- D01-2016, dated December 16, 2016, the AUC explained this issue as follows:

Experts for the distribution utilities pointed out that incentives are not affected by the choice of a particular value of the X factor, whether it is negative, zero or positive, except to the extent that the value selected may affect availability of incremental capital funding through particular capital tracker mechanisms. Rather, these incentives derive from the decoupling between revenues and costs that is explicit in a PBR plan. The Commission agrees. However, the Commission also is aware that indexing prices or revenues by I-X is based on the idea that part of the expected efficiency gains from PBR are passed on to consumers during the PBR plan term through the X factor, regardless of the actual performance of the distribution utilities. The appeal of this approach to consumers is obviously decreased when there are efficiency losses, and the value of X is negative.

4.10 Please identify any Canadian electric utilities with an X-factor of 0.20 percent or less?

Response:

In Canada, in addition to FBC, electric distribution utilities in Ontario and Alberta are operating under forms of I-X regulation.

As discussed in the response to RCIA IR1 45.1, approximately 31.5 percent of Ontario's electric distributors had no stretch factor for the 2023 period, while another 27.8 percent had a stretch factor of 0.15 percent. The average stretch factor for all utilities in Ontario is 0.18 percent. Under the Ontario Energy Board (OEB)'s approach, the X-factor equals the stretch factor since the productivity factor component of the X-factor is set at zero. The table below details the list of Ontario's electric distributors in zero percent and 0.15 percent stretch factor cohorts.

Group I (17 Distributors)		Group II (15 Distributors)	
Stretch Factor = 0%		Stretch Factor = 0.15%	
Cooperative Hydro Embrun Inc.	Lakefront Utilities Inc.	Burlington Hydro Inc.	Newmarket-Tay Power Distribution Ltd.
E.L.K. Energy Inc.	Milton Hydro Distribution Inc.	Centre Wellington Hydro Ltd.	Niagara-on-the-Lake Hydro Inc.
Entegrus Powerlines Inc.	Northern Ontario Wires Inc.	EPCOR Electricity Distribution Ontario Inc.	Niagara Peninsula Energy Inc.
ENWIN Utilities Ltd.	Orangeville Hydro Limited	Fort Frances Power Corporation	Oshawa PUC Networks Inc.
Essex Powerlines Corporation	Ottawa River Power Corporation	GrandBridge Energy Inc.	Rideau St. Lawrence Distribution Inc.
Grimsby Power Incorporated	Sioux Lookout Hydro Inc.	Hydro 2000 Inc.	Tillsonburg Hydro Inc.
Halton Hills Hydro Inc.	Wasaga Distribution Inc.	Kingston Hydro Corporation	Westario Power Inc.
Hearst Power Distribution Company Limited	Welland Hydro-Electric System Corp.	Lakeland Power Distribution Ltd.	
Hydro Hawkesbury Inc.			

In Alberta, the AUC approved an X-Factor of 0.1 percent for the 2024-2028 period. However, as discussed in the response to RCIA IR1 45.1, the AUC also implemented an additional 0.3 percent benefit sharing factor for part of its plan.

The rate mechanism in Quebec is heavily influenced by the policies set by the provincial government, but is essentially a price cap model where rates are only indexed to inflation (no X-Factors). Hydro-Québec is a Crown Corporation with its distribution rates set through

1 amendments to provincial legislation that entered force in 2019.⁴ According to these amendments,
2 on April 1, 2025, and every five years thereafter, Hydro-Québec must apply to the Régie de
3 l'énergie to fix or modify electricity distribution rates. In the intervening period, distribution rates in
4 Quebec are indexed annually based on the annual change in the average Québec Consumer
5 Price Index. In February 2023, provincial legislation was amended further to, in particular,
6 introduce a cap on the indexation rate for Hydro-Québec distribution rates based on the lesser of
7 the average Quebec CPI and the top rate of the Bank of Canada's inflation-control range.⁵
8 According to the 2023 Act, the increase in residential rates has been limited to 3 percent for the
9 rate year beginning April 1, 2023.⁶ Since the rates that apply to business customers are not
10 targeted, they have increased by 6.5 percent, which is equal to the average CPI between
11 September 30, 2021, and September 30, 2022.

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15 4.11 Please justify an X-factor of 0.20 percent for FBC based on comparisons to
16 Canadian electric utilities?

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18 **Response:**

19 The following response was provided by Dr. Kaufmann:

20 The productivity factor is not “based on comparisons” to any particular utility or set of utilities.
21 Instead, the productivity factor is derived using industry-wide productivity trends over a multi-year
22 period. The cross-section and time series data necessary to compute long-term productivity
23 trends for the gas distribution or electricity distribution industries are not available in Canada.

24

⁴ *An Act to simplify the process for establishing electricity distribution rates*, SQ 2019 c 27.

⁵ *An Act mainly to cap the indexation rate for Hydro-Québec domestic distribution rate prices and to further regulate the obligation to distribute electricity*, SQ 2023 c 1.

⁶ The government will cover the increase in excess of 3% through the Fonds d'aide à la clientèle domestique, to be established. This new mechanism will prevent Hydro-Québec from making up its shortfall with residential customers by increasing industrial and commercial rates.

Reference: Exhibit B-1, Section C, Section 1.5.4, page C-13

“FortisBC continues to believe that applying a discount factor to the growth factor used in the indexing formulas equates to double counting the effects of economies of scale on costs’ growth trends.”

5.1 Please explain why FBC’s proposal to reduce the X-factor to only 0.2%, does not address double counting concerns of FBC regarding a discount of the growth factor?

Response:

The following response was provided by Dr. Kaufmann:

FBC’s proposed 0.2 percent X factor is based entirely on the long-run O&M PFP trend for the electricity distribution industry. The O&M PFP trend for the electricity distribution industry includes industry’s realized economies of scale. It is therefore independent of FBC’s own customer growth factor. In addition, any other adjustments will double count the realized economies of scale.

5.2 Please explain why a price cap plan indexed to inflation would not be better than the Rate Framework with an X-factor of 0.20 percent?

Response:

Please refer to the response to RCIA IR1 45.2.

6 Reference: Exhibit B-1, Section C, Section 2.3.1, FBC 2024 Base O&M Calculation

“... the inclusion of amounts to reflect the new activities that are occurring in 2024 that would not be reflected in the 2023 Actual amounts, and incremental net funding which FBC requires during the Rate Framework term.”

6.1 Please identify the activities and the costs of such activities reflected in the 2023 Approved Base O&M that are not occurring in 2024?

Response:

As explained in Section C2.3.1 and depicted in Table C2-10 of the Application, the starting point for the 2024 Base O&M is the 2023 Actual O&M expenditures, not the 2023 Approved Base O&M. Since the 2023 Actual O&M was used to develop the 2024 Base O&M, it already incorporates the savings achieved during the Current MRP for costs/activities that FBC does not expect to occur during the proposed Rate Framework. FBC confirms that there are no further areas of O&M spending that can be removed from the Base O&M that would be in addition to the 2023 savings achieved. Please also refer to the response to BCUC IR1 11.6.

All of the adjustments required for new 2024 spending are identified and described in Section C2.3.3 of the Application. These include the costs for the new facility lease in Kelowna, incremental costs to support the Long Term Electric Resource Plans, and incremental costs to support the power supply function and development of supply resource options.

FBC has identified as part of this Application the funding level that it expects to require during the term of the Rate Framework, which includes the new required spending for 2024 described above and the net incremental funding for 2025 described in Section C2.3.4 of the Application. These new funding requirements, together with the 2023 Actual O&M and the adjustment to include the previously approved Mandatory Reliability Standards (MRS) Assessment Report 13 exogenous factor, form the 2024 Base O&M per customer which FBC is seeking approval of in this Rate Framework Application. That 2024 Base O&M per customer, once approved, represents the formula O&M spending envelope for the term of the Rate Framework, which will be escalated annually by the net inflation factor and FBC's forecast average customers. FBC may undertake new activities or new areas of spending during the term of the Rate Framework as different requirements or needs arise; however, FBC will manage these changes in requirements and spending within the approved formula, with variances between formula and actual O&M shared 50/50 with customers.

6.2 Please explain if future adjustments to the 2023 Approved Base O&M should be made for new activities that are occurring in 2024 and are not yet identified in the Application?

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2 **Response:**

3 Please refer to the response to ICG IR1 6.1.

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7 6.3 Please explain if future adjustments to the 2023 Approved Base O&M should be
8 made for activities occurring at the time of the Application, but are no longer
9 occurring before final rates are approved for each year of the test period?

10

11 **Response:**

12 Please refer to the response to ICG IR1 6.1.

13

Reference: Exhibit B-1, Section C, Section 2.3.3.3

“This work is critical to both identify and further explore the best resource options as well as to develop the new framework under which FBC operations will be coordinated with BC Hydro, as the existing framework does not cover additional FBC generation resources not envisioned in the Canal Plant Agreement.”

7.1 Please identify those FBC generation resources not envisioned in the Canal Plant Agreement, including the monthly energy and capacity profiles for such resources.

Response:

FBC is still in the planning stages of identifying new resources and has not identified any individual generation resources and therefore is not able to provide the monthly energy and capacity profiles requested. As discussed in FBC’s most recently accepted Long-Term Electric Resource Plan (2021 LTERP), FBC’s preferred portfolios include a mix of PPA, market energy, battery storage, SCGT plants using RNG fuel, solar, wind and run of river generation. Please see Sections 10 and 11 and Appendix K, Resource Options Report, of the 2021 LTERP for details regarding the availability of supply side resources.

7.2 Please provide any studies or reports regarding the availability of supply side resources prepared by FBC or its consultants.

Response:

Please refer to the response to ICG IR1 7.1.

7.3 Please provide FBC’s organization chart, broken down by department, identifying the number of positions in each department, including the department responsible for management of the power supply portfolio. Also identify vacant positions by department.

Response:

Please refer to Tables 1 and 2 below for FBC’s and FEI’s number of positions by department and the current (2024 YTD July) approximate number of vacant positions by department stated in Full Time Equivalents (FTEs). FortisBC notes that the number of positions between each department and number of vacant positions varies, and it is expected to vary during the proposed Rate Framework term.

Table 1: FBC's 2024 YTD Number of Positions and Vacancies by Department

Department Name	2024 YTD (July)	Vacancy YTD (July)
Generation	96	3
Operations	177	8
Customer Service	44	9
Energy Management	12	3
Communications & External Relations	8	0
Power Supply	7	1
Information Systems	43	5
Engineering & PM	94	5
Operations Support	41	3
Facilities	4	0
Environment Health & Safety	11	1
Finance & Regulatory Services	17	4
Human Resources	9	1
Governance	3	0
Corporate	3	0
Total	569	43

Table 2: FEI's 2024 YTD Number of Positions and Vacancies by Department

Department Name	2024 YTD (July)	Vacancy YTD (July)
Operations and LNG	749	80
Customer Service	233	27
Energy Solutions & External Relations	246	37
Energy Supply & Resource Dev	16	7
Core Market Administration	19	1
Information Systems	131	13
Engineering Services & PM	264	37
Operations Support	164	14
Facilities	21	0
Environment Health & Safety	38	6
Finance & Regulatory Services	44	5
Human Resources	63	1
Governance	4	0
Corporate	1	0
Total	1,993	228

Reference: Exhibit B-1, Section C, Sections 2.3.3 and 2.3.4, Adjustments for Required 2024 Spending and Table C2-11

8.1 Please provide the 2023 actual expenditures and the 2024 total proposed expenditures for each line item (activity) in Table C2-11 and provide a calculation of the Net Incremental Funding for each line item in Table C2-11.

Response:

Please refer to Table 1 for the requested details for Table C2-11, along with references to the Application for additional details regarding each net incremental funding line item.

FBC notes that the net incremental funding has been updated from \$5.681 million to \$5.556 million related to a correction to the Community Investment funding. Please refer to the response to BCUC IR1 16.2 and the Errata to the Application filed concurrently with these IR responses.

Table 1: 2023 Actual and Proposed 2024 Base O&M for Activities Related to the Net Incremental Funding Listed in Table C2-11 of the Application

	2023 Actuals	2024 Inflator	2024 Projected O&M Base	Net Incremental funding	Base O&M for Rate Framework	For additional Information regarding net incremental funding
\$ millions						
Government, Indigenous and Community Engagement						
Government Relations and Public Policy	\$ -	1.0356	\$ -	\$ 0.066	\$ 0.066	refer to page C-53 of the Application
Community and Indigenous Relations	\$ 0.654	1.0356	\$ 0.677	\$ 1.015	\$ 1.692	refer to pages C-53 to C-55 of the Application
Customer Engagement	\$ 0.991	1.0356	\$ 1.026	\$ 0.150	\$ 1.176	refer to pages C-55 of the Application
Total	\$ 1.645		\$ 1.704	\$ 1.231	\$ 2.935	
Environment and Sustainability						
	\$ 0.732	1.0356	\$ 0.758	\$ 0.500	\$ 1.258	refer to pages C-55 to C-57 of the Application
Corporate Security						
	\$ 0.960	1.0356	\$ 0.994	\$ 0.453	\$ 1.447	refer to page C-57 of the Application
Technology						
Software Licensing fees	\$ 2.570	1.0356	\$ 2.662	\$ 0.650	\$ 3.312	refer to pages C-57, C-58 of the Application
Patching	\$ -	1.0356	\$ -	\$ 0.449	\$ 0.449	refer to pages C-57, C-58 of the Application
Total	\$ 2.570		\$ 2.662	\$ 1.099	\$ 3.761	
System Operations and Adaptation						
Engineering	6.328	1.0356	6.553	0.535	7.088	refer to pages C-58, C-59 of the Application
Generation and System Control	7.100	1.0356	7.353	1.000	8.353	refer to pages C-59, C-60 of the Application
Vegetation Management	5.465	1.0356	5.660	0.478	6.138	refer to pages C-60, C-61 of the Application
Workforce Development	1.600	1.0356	\$ 1.657	0.260	1.917	refer to page C-61 of the Application
Total	\$ 20.493		\$ 21.223	\$ 2.273	\$ 23.496	
Grand Total	\$ 26.400		\$ 27.341	\$ 5.556	\$ 32.897	

8.2 Please provide the 2023 actual expenditures for each activity identified in Section 2.3.3.

Response:

The activities and costs described in Section C2.3.3 of the Application are new/incremental for 2024; therefore, there are no Actual expenditures in 2023 related to these new activities (i.e., the 2023 Actual expenditures for each activity described in Section C2.3.3 are zero).

9 Reference: Exhibit B-1, Section C, Section 3.2. page C-69

“Once projects are evaluated using the value framework, the tool provides the ability to optimize the capital planning portfolio for a given period of time to achieve the greatest benefit within a set of financial and/or resource constraints.”

FBC - Application for a Certificate of Public Convenience and Necessity for Approval of the Fruitvale Substation Project, FBC Reply Argument Part Five: Out of Scope Issues Raised by ICG, para. 62 and para. 13

“ICG’s request that the BCUC order FBC to prepare a plan to address all small rural distribution substations with solutions unique to each location is out of scope of this proceeding.”

“ICG refers to a “Design Code for Rural Substations” which is not in evidence in this proceeding.”

9.1 Please comment on the scope of this proceeding and whether a plan to address all small rural distribution substations with unique solutions to each locations is within scope of this proceeding?

Response:

A plan to address all small FBC rural distribution substations with unique solutions considering each location is not in the scope of this Rate Framework Application proceeding. Rural substations are reviewed and designed on a case-by-case basis, which considers the condition of the equipment, growth in the area, reliability, and land availability.

FBC cannot provide an estimate for all rural distribution substations, as estimating would need to be performed for each unique solution. Rural substations will be reviewed and assessed based on their unique needs and location on a case-by-case basis. FBC does not have a plan for all distribution substations in low density areas to meet the same criteria as in the Fruitvale Substation Project CPCN Application, as each station will be reviewed as required to address the needs identified above.

FBC does not use the “Design Code for Rural Substations”, which is titled *Design Guide for Rural Substations*. This document appears to be published by the United States Department of Agriculture. It is a basic design guide, not an industry code or standard and was issued 23 years ago in 2001. FBC respectfully declines to file this document as part of this proceeding as FBC does not consider this document to have relevance to the requests contained in this Application.

FBC has provided the costs and descriptions for its planned capital expenditures during the proposed three-year term of the Rate Framework. Any projects outside of the Rate Framework, either in years beyond the three-year term or projects that require separate approval (i.e., CPCN approval), will be identified and described at the time of filing the applicable applications.

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9.2 Please provide a plan as contemplated by the above IR, assuming FBC agrees such a plan is within scope of this proceeding?

Response:

Please refer to the response to ICG IR1 9.1.

9.3 Please file the “Design Code for Rural Substations” in this proceeding.

Response:

Please refer to the response to ICG IR1 9.1.

9.4 Please estimate the cost of capital expenditures for all FBC rural distribution substations to meet the same criteria adopted by FBC in the CPCN – Fruitvale Substation Project application?

Response:

Please refer to the response to ICG IR1 9.1.

Reference: Exhibit B-1, Section C, Section 3.4.2.3.2, and Table C3-36

“This category involves ongoing condition assessments of FBC’s 68 transmission and distribution substations for environmental, safety and reliability issues on a six-year cycle, and the completion of the required work identified from these assessments. This includes the entire substation system, including equipment such as transformers, breakers, and batteries. FBC plans and executes the work resulting from the condition assessments in subsequent years.”

10.1 Please prioritize the projects included in Table C3-36 so that the 2024 expenditures do not exceed 110% of the lessor of 2023 actuals or 2023 approved.

Response:

To clarify, Table C3-36 provides FBC’s 2023 and 2024 Approved and 2025-2027 Forecast capital expenditures for Stations Sustainment capital. The description provided by ICG in the preamble to this IR is specifically referring to the Station Assessment/Minor Planned Projects category. The 2023 and 2024 Approved amounts in this category are \$1.196 million and \$1.059 million, respectively.

The 2023 Actuals for Station Sustainment have been added to Table C3-36 below. The 2023 Actuals were slightly lower than 2023 Approved. The variance is due primarily to the Keremeos Transformer Replacement project, which falls under the Station Upgrade/Replacement Projects. As described in Section C3.4.2.3.5 of the Application, the Keremeos Transformer Replacement project was delayed due to longer lead times than anticipated for the power transformer, resulting in lower 2023 capital expenditures.

Revised Table C3-36: FBC Approved and Forecast Stations Sustainment Capital Expenditures 2023-2027 (\$000s)

	2023 Actuals	2023 Approved	2024 Approved	2025 Forecast	2026 Forecast	2027 Forecast
Station Urgent Repairs	528	617	653	680	759	701
Station Assessment/Minor Planned Projects	1,261	1,196	1,059	1,454	1,498	1,549
Spare Parts	-	-	-	1,940	3,484	8,164
Station Sustainment Programs	4,888	4,485	3,796	7,354	6,743	6,859
Station Upgrade/ Replacement Projects	57	543	2,701	9,060	11,143	7,509
Total	6,734	6,841	8,209	20,486	23,627	24,783

FBC respectfully declines to provide the prioritization requested in this question. The 2023 and 2024 capital expenditures referenced in Table C3-36 were previously reviewed and approved as part of FBC's Annual Review for 2023 Rates and are not the subject of approvals requested in this Application. Further, FBC is not seeking approval of specific projects in this Application nor was FBC seeking approval of specific projects in the Annual Review for 2023 Rates, but is instead seeking approval of the level of capital expenditures for each year of the Rate Framework term. Once approved, and in accordance with the treatment of regular capital expenditures under the Current MRP (and proposed for this Rate Framework), the cost-of-service impact of over or under expenditures in regular capital will be captured within the earnings sharing mechanism and will be shared 50/50 with customers.

As explained in Section C3.2 of the Application and in the response to BCUC IR1 24.13, FBC's capital planning process optimizes its capital investments to ensure that FBC can continue to maintain safe, reliable, and cost-effective electric service to its customers. The 2024 Approved capital expenditures are reflective of this optimization process, and any over or under expenditures in this category (and in FBC's regular capital expenditures more broadly) reflect FBC's efforts to manage and optimize costs within the approved level of funding to the extent possible, recognizing that there may be cost pressures and changes in the timing of projects.

The increased forecasts for 2025 through 2027 compared to 2023 Approved (and Actual) and 2024 Approved are described in detail in Section C3.4.2.3 of the Application. As Table C3-36 shows, the increases are primarily in three categories: (1) Spare Parts; (2) Station Sustainment Programs; and (3) Station Upgrade/Replacement Projects.

With regard to specific projects within the Stations Sustainment capital expenditures, FBC does not have a breakdown for Station Urgent Repairs or Station Assessment/Minor Planned Projects. As explained on page C-118 of the Application, Station Urgent Repairs are forecast based on historical costs, with actual expenditures varying from year to year due to the severity and number of equipment failures. Regarding Station Assessment/Minor Planned Projects, FBC has not identified discrete projects for the three-year forecasts during the Rate Framework term, as these minor projects will be identified based on condition assessments each year and the costs have accordingly been forecast based on historical costs. For the Spare Parts category, please refer to pages C-118 and C-119 of the Application for the breakdown, and for the Station Upgrade/Replacement Projects category, please refer to Table C3-37 of the Application. For a breakdown of the Station Sustainment Program forecasts, please refer to the response to BCUC IR1 24.7. Please also refer to the response to ICG IR1 9.1 which explains that rural distribution substations are reviewed and assessed based on their unique needs and location on a case-by-case basis.

10.2 Please add a column in the revised Table C3-36 for 2023 actuals.

1 **Response:**

2 Please refer to the response to ICG IR1 10.1.

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6 10.3 Please provide a table that lists the projects included in Table C3-36 and identify
7 the projects that are included in the revised Table C3-36.

8

9 **Response:**

10 Please refer to the response to ICG IR1 10.1.

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14 10.4 Please provide and explain the planning criteria relevant to transmission and
15 distribution substations? In particular, does FBC apply the same planning criteria
16 for transmission and distribution substations and does N-1 criteria apply to
17 distribution substations?

18

19 **Response:**

20 FBC does not apply the same planning criteria to transmission and distribution projects.

21 FBC's transmission system planning criteria basic principle is as follows:

22 All equipment will operate within its normal facility ratings and normal voltage limits
23 when the system is operating with all scheduled elements in service, and within its
24 emergency facility ratings and emergency voltage limits immediately after a
25 disturbance involving the loss of single or multiple elements [i.e., N-1, N-1-1, or N-
26 2]. The system should be capable of such performance at all times including
27 operations during minimum and maximum forecasted load and generation
28 conditions.

29 FBC's transmission planning criteria of N-1 does not apply to distribution projects.

30 FBC's distribution planning criteria considers the thermal limits of equipment, voltage limits, and
31 contingencies. The thermal limits of equipment are based on the equipment's ampacity ratings,
32 and the voltage limits are based on the Canadian Standards Association (CSA) *CSA Standard*
33 *C235: Preferred Voltage Levels for AC systems up to 50 000 V*. Backup capability of the
34 distribution system to supply customer load during a distribution line contingency and distribution
35 substation transformer contingency are considered for urban and rural areas.

- In the event of an outage to a distribution line supplying an urban area, FBC seeks to supply 80 percent of the distribution line's peak load from neighbouring distribution line ties.
- In the event of an outage of a single transformer at a distribution substation supplying an urban area, FBC seeks to supply 80 percent of the transformer's peak load from neighbouring substations given a single transformer substation configuration, and 100 percent of the transformer's peak load from the remaining transformer and/or neighboring substations given a multi-transformer substation configuration.
- As discussed in the response to ICG IR1 9.1, distribution substations in rural areas are reviewed and assessed on a case-by-case basis based on their unique needs and location.

10.5 Please explain the relevance of N-1 criteria and conditions assessments to planning for distribution substations upgrades that are not needed to meet load growth?

Response:

The N-1 reliability criteria only applies to the transmission system and does not apply to distribution substations. Please refer to the response to ICG IR1 10.4 explaining FBC's distribution planning criteria related to transformer contingencies.

Condition assessments provide vital information about equipment condition, health, reliability, safety, and probability of failure necessary for FBC to continue to maintain safe, reliable, and cost-effective electric service to its customers. Please refer to the response to BCUC IR1 24.6 for further discussion of FBC's station condition assessment approach.

10.6 Please identify the small rural distribution substations currently in FBC's capital plan?

Response:

The following distribution substations located in low density areas are proposed to be upgraded and/or rebuilt over the three-year Rate Framework term:

- Kaleden Transformer Replacement (this project is included in the Station Upgrade/Replacement capital forecasts, as shown in Table C3-37);

- Blueberry Station Upgrade (this project is included in the Station Upgrade/Replacement capital forecasts, as shown in Table C3-37); and
- Christina Lake Station Upgrade (this project is included in the Transmission Growth capital forecasts, as shown in Table C3-30).

10.7 Please explain Table C3-36 and the increase to Stations Sustainment from actual to forecast? Does this increase include expenditures on rural distribution substations similar to the Fruitvale Substation Project?

Response:

Please refer to the response to ICG IR1 10.1.

Reference: Exhibit B-1, Section C, Section 3.4.2.3.3

“Where studies identify issues with the equipment being unavailable, spares need to be available within a year, or other system upgrades need to be planned to correct the issues.”

11.1 Please identify the requirements in Mandatory Reliability Standard TPL-001-4 that require spares to be available within a year.

Response:

TPL-001-4 requirement 2.1.5 requires that the impact of the unavailability of equipment that has a lead time of one year or more be studied. This requirement is provided as follows:

When an entity’s spare equipment strategy could result in the unavailability of major Transmission equipment that has a lead time of one year or more (such as a transformer), the impact of this possible unavailability on System performance shall be studied. The studies shall be performed for the P0, P1, and P2 categories identified in Table 1 with the conditions that the System is expected to experience during the possible unavailability of the long lead time equipment.

If unacceptable System responses occur due to the possible unavailability of the long lead time equipment, TPL-001-4 requirement 2.7 states that corrective actions must be undertaken to prevent or mitigate the unacceptable impact to the electrical system. FBC studies identified that unacceptable System responses occurred and FBC analyzed possible corrective actions and mitigating measures. Purchasing of spare equipment was determined to be the most reasonable solution to be compliant with the TPL-001-4 requirements. Please also refer to the response to BCUC IR1 24.3.

11.2 Please describe any efforts undertaken by FBC to locate spare equipment in the surplus market.

Response:

FBC has researched suppliers of used and rebuilt electrical transmission equipment for acceptable spare equipment but has not located equipment that meets FBC’s specifications at this time.

11.3 Please describe any efforts undertaken by FBC to coordinate with other utilities for access to emergency spare equipment.

Response:

FBC has undertaken the following efforts to coordinate with other utilities to gain access to emergency spare equipment:

- Based on discussions with BC Hydro, it is FBC's understanding that BC Hydro does not have a three-phase 512.5/242 kV spare transformer that could be a possible solution. While BC Hydro may have other spare transformers and spare equipment that could be possible solutions to FBC's spare equipment requirements, FBC's discussions with BC Hydro have not progressed to a point where FBC is able to confirm whether a spare agreement with BC Hydro could be reached or what the cost of this agreement would be.
- FBC has reached out to the Fortis Inc. group of companies in Canada and the US; however, these utilities do not have spare equipment that match FBC's spare requirements.
- FBC reviewed the Canadian Electricity Association (CEA) supported SPARE Connect and North American Electric Reliability Corporation (NERC) Spare Equipment Database (SED); however, these are voluntary programs that do not require entities to share spare equipment when requested, which does not meet TPL-001-4 requirements.
- FBC considered the North American Transmission Forum (NATF) Regional Equipment Sharing for Transmission Outage Restoration (RESTORE) program and Edison Electric Institute (EEI) Spare Transformer Equipment Program (STEP) which are voluntary but require formal agreements among transmission owners to commit to own, maintain, and sell to one another available spare transformers. These programs are currently only applicable to transformers and FBC would need to purchase the requested spare transformers to be a member of these programs. These programs are also only applicable to terrorist attacks, geomagnetic disturbances, and extreme weather events, not end-of-life failures; thus, they do not meet TPL-001-4 requirements.
- FBC considered Grid Assurance; however, it requires annual payments to be a subscriber for each piece of equipment in addition to the cost to purchase the equipment when it is needed, which FBC has determined is not as cost effective when compared to purchasing the required spare equipment.

Furthermore, by their nature, the above programs or efforts to coordinate with other utilities do not meet the requirements of TPL-001-4 as they are either voluntary in nature or rely on a shared spare inventory, which can become unavailable where the counterparty uses the spare for their own system emergency (e.g., in the case of a transformer).

1 11.4 Please describe all the provisions in Mandatory Reliability Standard TPL-001-4
2 that require more action than studies, assessments, plans and coordination.
3

4 **Response:**

5 Many requirements in the TPL-001-4 standard define contingencies that must be analyzed which
6 includes the acceptable System performance for these contingencies.⁷ If the analysis does not
7 meet the defined System performance, then these TPL-001-4 requirements also specify that
8 corrective actions, including an associated completion timeline, must be documented and
9 implemented to correct the System performance issue.

10

⁷ See TPL-001-4 requirements 2.7, 2.7.1, 2.7.2, 2.7.3, 2.7.4, 2.8, 2.8.1, 2.8.2, 3.5, 4.5 and Table 1 – Steady State & Stability Performance Planning Events.

Reference: Exhibit B-1, Section C, Section 3.4.2.3.5, Castlegar Switchgear Replacement

“A third-party condition assessment completed in 2021 found the metal-clad switchgear to be in very poor condition and recommended the switchgear be replaced.”

12.1 Please provide the third party condition assessment in the reference.

Response:

Please refer to Attachment 24.9 provided in the response to BCUC IR1 24.9.

12.2 Please explain why the Castlegar Switchgear was not included in the FBC 2017 Comprehensive Condition Assessment conducted by Metsco (FBC - Application for a Certificate of Public Convenience and Necessity for Approval of the Fruitvale Substation Project, Appendix A).

Response:

The review commissioned in 2017 was primarily focused on breakers inside the Castlegar (CAS) metal-clad switchgear. METSCO’s report was completed based on breaker data available at the time of the assessment. This report did not assess the switchgear enclosures, associated bus-work, and any assets other than the breakers housed in the switchgear. The evaluation of the CAS switchgear breakers was included in the 2017 report.

The 2021 review was initiated due to an arc flash inside the CAS outdoor metal-clad switchgear. An assessment by FBC has revealed that certain switchgear is deteriorating more rapidly than previously anticipated, necessitating a detailed examination on a case-by-case basis.

Reference: Exhibit B-1, Section C, Section 4.13.2, Table C4-7, Treatment of Variances in Revenue Requirement Items from Forecast

13.1 Please provide in tabular format with a working spreadsheet an analysis that identifies all the expenses and revenues that are booked in deferral accounts and those that are not booked in deferral accounts, assuming the deferral accounts in this Application are approved and making any other assumption necessary to complete the table, including the test year? Please include a column that provides a percentage of total expenses and revenues that are subject to a deferral account, and a column that identifies the total expenses and revenues where FBC assumes the risk of variances from forecast?

Response:

FBC provides the requested information in Table 1 below and in the working excel file in Attachment 13.1. As detailed 2025 forecast revenue requirement amounts are not available, FBC used the 2024 Approved⁸ amounts for the purposes of breaking out the expenses and revenues subject to flow-through or specific deferral treatment from those that are subjected to the earnings sharing mechanism. FBC notes there are no new deferral accounts requested for FBC in the Application (except the request to continue the use of the Flow-through deferral account for the proposed Rate Framework term) and there is no change to the deferral treatment for each component of FBC's revenue requirement between the Current MRP and the proposed Rate Framework.

Variances between forecast and actual that are captured by a specific deferral account or by the Flow-through deferral account are fully collected or refunded to customers, whereas variances subject to earnings sharing are shared 50/50 with customers, resulting in FBC assuming half of the risk related to these variances. Please refer to Table C4-7 of the Application which identifies the specific items that are subject to flow-through treatment or earnings sharing treatment.

Table 1: Deferral Account Treatment under the proposed Rate Framework from 2025 to 2027

Deferrals under proposed Rate Framework	2024 Approved (\$000s)	Covered by Flowthrough or Specific Deferrals		Applicable Deferrals (No change btw Current MRP and Proposed)	Covered by Earnings Sharing Deferral	
		\$000s	%		\$000s	%
Cost of Energy	\$ 193,532	\$ 193,532	100.0%	Flowthrough	\$ -	0.0%
O&M, net	63,174	1,274	2.0%	Pension & OPEB Variance, BCUC Fees Variance, Flowthrough	61,900	98.0%
Depreciation & Amortization ¹	65,491	(1,253)	-1.9%	No variance for amortization, Flowthrough for Clean Growth Projects	66,744	101.9%
Property Taxes	18,573	18,573	100.0%	Flowthrough	-	0.0%
Other Revenue	(12,092)	-	0.0%	Flowthrough for Clean Growth Projects	(12,092)	100.0%
Income Taxes ²	12,484	-	0.0%	Flowthrough for Clean Growth Projects, Tax Rate Variances	12,484	100.0%
Interest ²	48,244	-	0.0%	Flowthrough for Clean Growth Projects, Interest Rate Variances	48,244	100.0%
Equity Return	67,841	67,841	100.0%	N/A - No variance	-	0.0%
Total Expenses	\$ 457,247	\$ 279,967	61.2%		\$ 177,280	38.8%
Revenue	\$ 457,247	\$ 457,247	100.0%	Flowthrough	\$ -	0.0%

Notes:

¹ - Negative amount shown in flowthrough column is due to deferral amortization sitting in a net credit position

² - Given the base amounts used are approved amounts, no rate variances for interest or taxes are assumed

⁸ FBC Annual Review for 2024 Rates Decision and Order G-340-23.

FortisBC Energy Inc. (FEI) and FortisBC Inc. (FBC) (collectively FortisBC or the Companies) Application for Approval of a Rate Setting Framework for 2025 through 2027 (Application)	Submission Date: September 6, 2024
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1 **14 Reference: Exhibit B-1, Section C, Section 7, Indicative Rates**

2 14.1 Please provide indicative rates for each year of the proposed term of the Rate
3 Framework?

4

5 **Response:**

6 Please refer to the response to BCOAPO IR1 8.3.

7

Reference: Exhibit B-1, Section D, Section 4.3.2, page D-32

“The functional areas of FI that provide corporate services include the board of directors, executive, financial reporting, treasury and taxation, legal, planning and forecasting, internal audit, insurance/risk management, investor relations, human resources, communications and corporate affairs, sustainability, information systems, and cybersecurity.”

15.1 Please confirm that the above noted functional areas of FI that provide corporate services have not changed from those in the Current MRP?

Response:

All functional areas of FI listed are generally consistent with what is being charged by FI under the Current MRP. As compared to the 2018 Corporate Service Cost (CSC) Study filed with the Current MRP, the only functional area that has been added in the 2023 CSC Study is sustainability.

15.2 Please explain any changes to the services provided by FPHI to FEI and FBC?

Response:

To clarify, corporate support services are provided to FEI and FBC by FHI, not by FPHI. The functional nature of services provided by FHI that are outlined in the 2023 CSC Study have not changed from the 2018 CSC Study.

15.3 Please explain the advantages and disadvantages of FI or FPHI as compared to FBC instructing outside legal counsel and accountants?

Response:

To clarify, corporate support services are provided to FEI and FBC by FHI, not by FPHI.

Further, FBC clarifies that the external legal and accounting services used by FI are primarily related to professional services required primarily for raising equity capital to provide to FI subsidiaries, so are appropriately managed by FI. Additionally, the costs of these external services are not incorporated into the corporate service charges allocated from FI to FHI.

The advantage of FHI managing external legal and certain accounting services in BC is it creates efficiencies by providing the ability to centralize terms of engagement and processing of invoices,

1 with appropriate allocations down to FEI and FBC, instead of having to manage the invoicing
2 function of external legal and accounting firms to ensure correct billings to parties within the
3 FortisBC group.

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7 15.4 Please explain why FBC should not have an internal audit function?
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9 **Response:**

10 FBC has an internal audit function that is mainly resourced at the corporate level and allocated to
11 FBC and other subsidiaries using the Massachusetts Formula. The allocation of corporate
12 services from FHI allows efficiencies, including economies of scale, to be gained by resourcing
13 certain functions corporately, and allocating proportionately down to FBC and other subsidiaries,
14 as opposed to FBC and other subsidiaries each staffing and resourcing an internal audit function
15 independently, which would increase costs for FBC.

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19 15.5 Please explain the role of FI and FPHI in human resources, communications,
20 sustainability and information systems? For each function, identify the number of
21 FBC and FEI employees involved in the function?
22

23 **Response:**

24 To clarify, corporate support services are provided to FEI and FBC by FHI, not by FPHI.

25 As outlined in Table D4-2 of the Application, human resources, communications, sustainability,
26 and information systems are not part of the corporate services provided by FHI to FEI and FBC.
27 Instead, those are functions that are resourced within both FEI and FBC broadly, across several
28 departments and positions. Please also refer to the response to ICG IR1 7.3.

29 As shown in Table 4 and Table 7 of the 2023 CSC Study in Appendix D4-1 to the Application,
30 other than communications and corporate affairs, there are no specific line items listed as charges
31 for FI's role in each of the human resources, sustainability, and information systems functions.
32 However, these functions are provided as corporate support costs through certain FI Executive
33 and other salaried positions. The role of these FI functions is to provide strategic oversight and to
34 coordinate sharing of best practices and experience among the Fortis group of companies.
35 Sharing of best practices allows for more effective and efficient operations at the subsidiary level
36 than if the subsidiary was operating stand-alone from the Fortis group. Examples would include
37 developing Fortis-wide cybersecurity risk management programs for use at subsidiary levels, and
38 development of talent through Fortis-wide leadership development programs. The collaboration

also provides for certain cost efficiencies, where internal Fortis resources can be leveraged instead of the use of external consultants. Please also refer to Section D4.3.2.2 of the Application.

15.6 Please identify services provided in the past three years by FBC and FEI to FI and FPHI ?

Response:

To clarify, corporate support services are provided to FEI and FBC by FHI, not by FPHI.

In addition to corporate support services being charged down to FEI and FBC, there are some corporate-type services provided by FEI and FBC personnel to FHI, which are related to the support for FHI corporate reporting, accounting, taxation, treasury, and human resources. However, FEI and FBC do not provide corporate services to FI.

15.7 Please identify the office locations of all employees of FI and FPHI that provide services to FBC and FEI?

Response:

To clarify, corporate support services are provided to FEI and FBC by FHI, not by FPHI.

Employees of FI who provide corporate services to FEI and FBC are located in Fortis Inc.'s head office at Fortis Place, Suite 1100, 5 Springdale Street, St. John's, NL.

Employees of FHI who provide corporate services to FEI and FBC are located in various offices, including:

- 10th floor, 1111 West Georgia Street, Vancouver, BC
- 300-750 Vaughan Avenue, Kelowna, BC
- 16705 Fraser Highway, Surrey, BC
- 3700 2nd Avenue, Burnaby, BC

15.8 Please identify FBC employees that provide services to FI, FPHI, or FEI?

1 **Response:**

2 FBC employees do not provide corporate services to FI.

3 There are FBC employees that provide services to FPHI, however these services are not for
4 corporate support. The FBC services to FPHI are for the operation and maintenance of third-party
5 contracts for several hydroelectric generating facilities. Transactions between FBC and FPHI are
6 charged out directly, based on time entry of employees involved in the work, and are conducted
7 in accordance with FBC's Code of Conduct and Transfer Pricing Policy (as approved by Order G-
8 5-10A).

9 FBC employees that provide services to FEI do so under a Cost Driver Approach for Shared
10 Services that was previously approved as part of the MRP Decision and Orders G-165-20 and G-
11 166-20, as explained in Section D1 of the Application.

12 With respect to corporate services charged out of FBC, to clarify, corporate services are provided
13 to FEI and FBC by FHI, not by FPHI. The following FBC employees provide corporate services to
14 FHI.

Employee Job Title	FHI Departments charged to
Corporate Controller	Financial Reporting
Manager, Corporate Accounting	Financial Reporting and Taxation
Manager, Corporate Finance & Strategy	Treasury
Financial Reporting & Compliance Advisor	Taxation
Corporate Reporting Analyst	Taxation

15

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19 15.9 Please file all contracts relevant to services entered into between FI, FPHI and
20 FBC?

21

22 **Response:**

23 Services provided from FBC to FPHI are done so under a Code of Conduct and Transfer Pricing
24 Policy, as approved by the BCUC pursuant to Order G-5-10A. There is no contract under which
25 FI charges to FBC, as those are charged through FHI using the Massachusetts Formula as
26 explained in the 2023 CSC Study in Appendix D4-1 to the Application. FPHI does not charge any
27 services to FBC.

28

29

30

31 15.10 Please confirm that the cost of all services provided by FI, FPHI to FBC are
32 allocated pursuant to the Massachusetts formula?

1

2 **Response:**

3 To clarify, corporate support services are provided to FEI and FBC by FHI, not by FPHI.

4 As outlined in Sections 5.3 and 5.4 of the 2023 CSC Study in Appendix D4-1 to the Application,
5 there are specified costs that are excluded from being charged down to FEI and FBC. After these
6 specified exclusions, the cost of all services provided by FI and FHI are allocated using the
7 Massachusetts Formula.

8

Reference: Exhibit B-1, Section D, Section 4.5, page D-36

“In addition to the FI corporate services described above, FHI, the parent company of FEI, provides key corporate functions directly to FEI, FBC and certain of FHI’s other subsidiaries. FHI corporate services provided to FEI and FBC are incremental to the corporate services provided by FI, ...”

“FHI is responsible for planning and conducting audits and operational reviews of all areas of the gas and electric utilities, as well as facilitating the annual enterprise risk management assessment process. This department monitors and evaluates the effectiveness and efficiency of internal controls and risk management strategies for FEI and FBC, as well as providing both assurance and advisory services to 30 support operational areas, enhancing information system controls and data analysis, and ensuring ongoing compliance with regulatory requirements.”

16.1 Please explain why the FHI function of “operational reviews of all areas of the gas and electric utilities” is not within the scope of “owns or operates in British Columbia, equipment or facilities” as found in the definition of a “public utility” in the UCA.

Response:

FHI does not meet the definition of a “public utility” under section 1 of the UCA as it is not a “person, or the person’s lessee, trustee, receiver or liquidator, who owns or operates in British Columbia, equipment or facilities” for the purposes set out in the section. In particular, FHI’s operational reviews of FEI and FBC do not involve FHI “owning or operating” the Companies’ equipment or facilities. Rather, as explained in the Application, these reviews are an internal auditing service which, similar to other services provided by third parties to the Companies, do not fall within the scope of the UCA simply because they are provided to a public utility.

16.2 Please confirm that the Commission has authority to deny recovery of the corporate services allocated costs from FI and FHI?

Response:

Generally speaking, the BCUC has authority to deny costs if it determines those costs not to be prudently incurred. However, FortisBC sees no basis on which the BCUC could reasonably deny recovery of the corporate service costs. The costs of the corporate services provided by FI and FHI are prudent and have been consistently approved for recovery by the BCUC.

Reference: Exhibit B-1, Section D, Section 4.5, pages D-37 and D-38, and Table D4-2

“In addition to the corporate services specifically provided by FHI, the FI corporate service costs, as described in Section D4.3 above and as outlined in Table 7 of the 2023 CSC Study, are also included in the pool of eligible FHI corporate service costs. The pool of eligible FHI corporate service costs allocated to FEI and FBC excludes certain costs that are specific to FHI or are non-recoverable from ratepayers, ...”

17.1 Please provide the percentage of FHI’s operating expenses that were allocated to FEI and FBC in 2023?

Response:

Of the total 2023 FHI operating expenses of \$30.8 million, which are inclusive of the FI management fee as presented in Table 10 of the 2023 CSC Study, approximately 43 percent (or \$13.1 million per Table 12) and 13 percent (or \$3.9 million per Table 12) were allocated to FEI and FBC, respectively.

17.2 Please explain why all corporate service functions are not located in FHI thus eliminating the need for allocations from FI?

Response:

FI’s corporate services differ from those of FHI, and are provided to all of FI’s operating subsidiaries instead of just to FHI. As described in Section D4.3.1 of the Application, FI is listed on the TSX and NYSE, and its activities are in support of raising equity through public capital markets to provide and maintain an equity investment in the operating subsidiaries that FI owns. In addition, FI provides strategic oversight and corporate governance, manages the group-wide insurance program, and coordinates cross-functional sharing of best practices across the operating subsidiaries. These functions are above and beyond what FHI, as a privately held equity parent company, provides to FEI and FBC.

17.3 Please explain why the functions of FI and FHI providing the corporate services to FEI and FBC are not regulated?

Response:

FI and FHI do not meet the definition of a “public utility” under section 1 of the UCA and, as such, these entities are not regulated by the BCUC. However, the allocation methodologies outlined in

the 2023 CSC Study result in costs associated with corporate service functions provided to FEI and FBC, which are subject to review by the BCUC. The costs of the corporate services provided by FI and FHI are reasonable and supported by the 2023 CSC Study, have been historically included in O&M, and have been consistently approved for recovery by the BCUC.

17.4 Please provide the calculation of the Fortis Inc. Management Fee?

Response:

The calculation of the Fortis Inc. Management Fee is outlined in Sections 4.1 through 4.5 of the 2023 CSC Study in Appendix D4-1 to the Application and is provided below.

2023 FI Cost Allocation Calculation (\$000s)		Application Reference
FI Operating Costs Allocated to FHI	\$ 10,550	Table 7 Appendix D4-1
Less: Specified Exclusions Remaining in FHI	2,992	Table 9 Appendix D4-1
Total FI Operating Costs Eligible to FEI, FBC, FMI	7,558	
FEI Portion	73.8% 5,577	Table 11 Appendix D4-1
FBC Portion	21.8% 1,649	Table 11 Appendix D4-1
FMI Portion (Sold in October 2023)	4.4% 332	Table 11 Appendix D4-1
Total FI Operating Costs Eligible to FEI, FBC, FMI	\$ 7,558	

17.5 Please identify the services, if any, provided for the Fortis Inc. Management Fee?

Response:

The services provided by FI in the Fortis Inc. Management Fee are generally outlined in Section 4.2 of the 2023 CSC Study. In addition, as referenced in the preamble, services provided by FI are described in Section D4.3 of the Application and a detailed list of costs are provided in Table 7 of the 2023 CSC Study in Appendix D4-1 to the Application.

17.6 Please confirm that if the functions of FI and FHI providing corporate services to FEI and FBC were located in FEI and FBC the cost of such functions would be regulated and subject to BCUC review?

FortisBC Energy Inc. (FEI) and FortisBC Inc. (FBC) (collectively FortisBC or the Companies) Application for Approval of a Rate Setting Framework for 2025 through 2027 (Application)	Submission Date: September 6, 2024
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1 **Response:**

2 Whether costs of the corporate service functions originate in FI and FHI and then are allocated
3 as corporate services to FEI and FBC, or are resourced directly in FEI and FBC, the recovery of
4 the costs of such functions in rates is subject to BCUC review. As described in Section D4.7, the
5 2023 CSC Study outlines the methodology of how corporate service costs are allocated, which
6 have been historically included in O&M and have been consistently approved for recovery by the
7 BCUC.

1 **18 Reference: Exhibit A-4, BCUC IR#1. IR 24.13**

2 18.1 Please provide a forecast of rate increases during the proposed term of the Rate
3 Framework, assuming the forecast capital expenditures? Please provide a
4 forecast of rate increases during the proposed term of the Rate Framework
5 adjusted for the deferral of capital expenditures identified in response to BCUC
6 IR#1, IR 24.13? And for the capital expenditures in the revised Table C3-36 above.

7
8 **Response:**

9 Please refer to the responses to BCUC IR1 23.1 and 24.1 for the forecast rate impacts from 2025
10 to 2027 related to FBC's Growth capital expenditures and Sustainment capital expenditures,
11 respectively. Please also refer to the response to BCOAPO IR1 8.3 for the high-level indicative
12 rate increases from 2025 to 2027, which includes FBC's forecast capital expenditures.

13 As explained in the response to BCUC IR1 24.13, FBC is not able to defer its forecast capital
14 expenditures to beyond 2027; therefore, there are no changes to the forecast rate impacts based
15 on this response. Further, and assuming that the reference in this IR to the "revised Table C3-36"
16 is referring to the requests in the ICG IR1 10 series, those requests were related to the 2023 and
17 2024 capital expenditures, which were previously approved in the FBC Annual Review for 2023
18 Rates proceeding. FBC is not seeking approval of previously approved capital expenditures in
19 this Application; thus, there are no changes to the forecast rate impacts provided in the responses
20 to BCUC IR1 23.1 and 24.1.

21

Reference: FBC Current MRP proceeding, Exhibit B-17, ICG IR 12.1

19.1 Please update and file the table provided in ICG IR 12.1 in the Current MRP proceeding?

Response:

Please refer to the following updated table based on the response to ICG IR2 12.1 in the 2020-2024 MRP Application proceeding.

	ROE			Equity \$		
	Allowed	Actual Post-ESM	Variance (c) = (b) - (a)	Allowed Equity (\$000s)	Actual After- Sharing Equity (\$000s)	Variance (f) = (e) - (d)
	(a)	(b)	(c) = (b) - (a)	(d)	(e)	(f) = (e) - (d)
2003	9.82%	10.88%	1.06%	\$ 17,300	\$ 20,250	\$ 2,950
2004	9.55%	10.70%	1.15%	\$ 19,638	\$ 23,585	\$ 3,947
2005	9.43%	9.88%	0.45%	\$ 22,544	\$ 24,380	\$ 1,836
2006	9.20%	9.94%	0.74%	\$ 24,873	\$ 26,684	\$ 1,811
2007	8.85%	9.23%	0.38%	\$ 26,212	\$ 28,143	\$ 1,931
2008	9.02%	9.28%	0.26%	\$ 29,688	\$ 31,001	\$ 1,313
2009	8.87%	9.41%	0.54%	\$ 32,215	\$ 34,499	\$ 2,284
2010	9.90%	9.65%	-0.25%	\$ 38,615	\$ 38,293	\$ (322)
2011	9.90%	10.67%	0.77%	\$ 43,292	\$ 46,268	\$ 2,976
2012	9.90%	10.52%	0.62%	\$ 44,047	\$ 48,510	\$ 4,463
2013	9.15%	10.21%	1.06%	\$ 44,054	\$ 48,454	\$ 4,400
2014	9.15%	9.22%	0.07%	\$ 44,065	\$ 44,457	\$ 392
2015	9.15%	9.26%	0.11%	\$ 45,713	\$ 46,336	\$ 623
2016	9.15%	9.38%	0.23%	\$ 47,060	\$ 48,093	\$ 1,033
2017	9.15%	9.31%	0.16%	\$ 47,046	\$ 48,072	\$ 1,026
2018	9.15%	9.29%	0.14%	\$ 48,357	\$ 49,121	\$ 764
2019	9.15%	9.18%	0.03%	\$ 49,115	\$ 49,755	\$ 640
2020	9.15%	9.30%	0.15%	\$ 51,685	\$ 52,804	\$ 1,119
2021	9.15%	9.26%	0.11%	\$ 54,140	\$ 55,774	\$ 1,634
2022	9.15%	9.43%	0.28%	\$ 57,934	\$ 59,540	\$ 1,606
2023	9.65%	9.85%	0.20%	\$ 66,298	\$ 67,353	\$ 1,055

Attachment 13.1

REFER TO LIVE SPREADSHEET MODEL

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