Sarah Walsh
Director, Regulatory Affairs

Gas Regulatory Affairs Correspondence
Email: gas.regulatory.affairs@fortisbc.com

Electric Regulatory Affairs Correspondence
Email: electricity.regulatory.affairs@fortisbc.com

FortisBC
16705 Fraser Highway
Surrey, B.C. V4N 0E8
Tel: (778) 578-3861
Cell: (604) 230-7874
Fax: (604) 576-7074
www.fortisbc.com

May 15, 2025

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

Dear Commission Secretary:

Re: FortisBC Inc. (FBC)

2025 Cost of Service Allocation (COSA) and Revenue Rebalancing Application (Application)

Updated Application - Blacklined

On May 15, 2025, FBC filed the above referenced Updated Application. As indicated in the cover letter to the Updated Application, FBC hereby files the attached Blacklined version of the Updated Application for reference purposes to assist the BCUC and interveners in identifying the specific revisions.

If further information is required, please contact the undersigned.

Sincerely,

FORTISBC INC.

Original signed:

Sarah Walsh

Attachments

cc (email only): Registered Interveners

Sarah Walsh
Director, Regulatory Affairs

Gas Regulatory Affairs Correspondence
Email: gas.regulatory.affairs@fortisbc.com

Electric Regulatory Affairs Correspondence
Email: electricity.regulatory.affairs@fortisbc.com

FortisBC
16705 Fraser Highway
Surrey, B.C. V4N 0E8
Tel: (778) 578-3861
Cell: (604) 230-7874
Fax: (604) 576-7074
www.fortisbc.com

May 15, 2025

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

Dear Commission Secretary:

Re: FortisBC Inc. (FBC)

2025 Cost of Service Allocation (COSA) and Revenue Rebalancing Application (Application)

Updated Application

FBC is filing the attached updated Application (Updated Application) to correct for errors discovered during the course of responding to Information Request (IR) No. 1, to present new rebalancing options in light of the updated revenue-to-cost (R/C) ratios, and to amend its approvals sought to reflect a new preferred rebalancing option and updated transformation discounts. FBC describes these changes below and includes references to each section and page number of the original Application (as well as appendices) where each change has occurred in Table 3 of this cover letter. In addition to the Updated Application, FBC is filing a blacklined version comparing the Updated Application to the original Application under separate cover for reference purposes to assist the BCUC and interveners in identifying the specific revisions.

In the course of responding to IR No. 1, FBC and its third-party expert EES Consulting Inc. (EES Consulting) identified errors in the COSA model as summarized in Table 2 below. As a result of correcting these errors, the R/C ratios of most rate classes have changed. While for most rate classes the adjustments to the R/C ratios are minor, one rate class – Large Commercial Transmission (RS 31) – has now moved outside of the range of reasonableness (RoR), and one rate class – Wholesale Transmission (RS 41) – has moved within the RoR. Given the updated R/C ratios, FBC has developed new rebalancing options and proposed a new preferred rebalancing option. These new options and new rebalancing proposal are reflected in Sections 7.2 and 7.3 of the Updated Application. Additionally, as a result of the changes to the COSA model, FBC has amended its requests related to the transformation discounts for RS 21, RS 30 and RS 40.

In consideration of the substantive changes to the Application regarding the rebalancing options, FBC proposes that the BCUC establish an amended regulatory timetable which includes a second round of IRs. FBC has provided a draft procedural order as Appendix F-3 to the Updated Application and also provides the proposed timetable below.

Table 1: Proposed Regulatory Timetable

Action	Date (2025)
BCUC IR No. 2	Thursday, June 5
Intervener IR No. 2	Thursday, June 12
FBC Responses to IR No. 2	Friday, July 4
FBC Final Argument	Friday, July 18
Intervener Final Arguments	Friday, August 1
FBC Reply Argument	Monday, August 18

Summary of Revisions to the COSA Report and COSA Model

The Updated Application includes a number of changes to the COSA inputs to correct for the errors discovered in responding to IR No. 1. These changes are summarized in Table 2 below and include a reference to the applicable IR where the correction is discussed. FBC has updated Appendix B with the revised COSA model.

Table 2: Summary of COSA Model Changes

IR Reference	Explanation of Correction
BCUC IR1 6.1	FBC inadvertently excluded neutral conductors from the line length data provided to EES Consulting as part of the 2025 Minimum System Study (MSS) analysis. The impact of correcting for this error (i.e., including the neutral conductors) is that the customer-related portion of conductor costs decreases from 71% to 65%.
BCMEU IR1 1.3	A data input error was discovered whereby the historical load information specific to the November load for RS 41 was too high. This has been corrected in the updated COSA model.
BCMEU IR1 1.2, 1.2.1, and 2.1	EES Consulting revised the approach to calculating Billing Demand for rate classes where Billing Demand can be based on a demand ratchet. RS 30, 40 and 41 demand values were revised to use actual monthly ratchet values from the historical year, rather than an annual average. RS 31 demand values use a ratchet value calculated on the forecast year values due to RS 38 adjustments not in the historical year.
BCOAPO IR1 4.2	Offsetting entries for *GST* and *Amortization & Other* line items were included in the original COSA model. These items netted to zero and have no impact on the COSA, but have now been corrected.

The changes summarized in Table 2 above affected the allocation of the approved revenue requirement and rate base amongst the rate classes, but did not impact the functionalization or classification of those costs. Accordingly, there are only limited adjustments required to the tables contained in the EES COSA Report (Appendix A to the Application), and none of the tables in the original Application (excluding the R/C ratio and revenue rebalancing tables) require corrections. Therefore, in addition to the updated COSA model in Appendix B, FBC

provides the applicable updated tables from the EES COSA Report (Appendix A) below. For clarity, the Updated Application does not include an amended EES COSA Report.

Updated Table 4-1 to EES COSA Report: Total Rate Base

	2017 COSA	2020 COSA	2024 COSA (millions)
Residential	$733.6	$757.5	$835.4
Other Retail	396.0	457.2	502.9
Wholesale	154.9	169.0	204.1
Total System	**$1,284.5**	**$1,383.7**	$1,542.4

Updated Table 4-2 to EES COSA Report: Total Revenue Requirement

	2017 COSA	2020 COSA	2024 COSA (millions)
Residential	$188.2	$184.9	$224.1
Other Retail	122.1	129.6	161.0
Wholesale	50.4	49.4	66.5
Total System	**$360.7**	**$364.0**	$451.6

Updated Table 4-4 to EES COSA Report: Revenue and Requirements Comparison – 2024 COSA

	2024 Forecasted Rate Revenues	2024 Allocated Revenue Requirement	2024 Adjusted Revenue to Cost Ratio
Residential	$222,911,124	$224,110,800	**99.5%**
Small Commercial	$48,050,546	$44,682,060	**107.5%**
Commercial	$67,579,081	$66,014,202	**102.4%**
Large Commercial Primary	$26,204,954	$26,014,092	**100.7%**
Large Commercial Transmission	$17,457,593	$16,573,430	**105.3%**
Lighting	$2,403,403	$2,407,389	**99.8%**
Irrigation	$4,082,302	$5,279,269	**77.3%**
Wholesale Primary	$54,138,777	$57,599,301	**94.0%**
Wholesale Transmission	$8,746,523	$8,898,758	**98.3%**
Total	**$451,574,302**	**$451,579,302**	**100.0%**

Additionally, and as explained in Table 2 above, the correction to the line length data utilized as part of the MSS analysis has resulted in changes to the customer-related portion of conductor costs. For ease of reference, FBC has provided a corrected description from page 19 of the EES COSA Report below. The descriptions of the classification of the other distribution accounts on page 19 of the EES COSA Report are unchanged.

- ***Conductors & Devices***. The results of the minimum system analysis show 65% customer-related and 35% demand-related. The customer-related costs allocate based on actual customers.

Summary of Changes to the Application and Appendices

FBC submits the attached Updated Application reflecting the changes described above. For ease of identification of the revisions made, FBC provides the following table summarizing the changes contained in the Updated Application.

Table 3: Summary of Application and Appendices Changes

Description
Application:
• **Section 1, Page 1, Revised Lines 31-32**
• **Section 2.1, Revised all Approvals Sought**
• **Section 4.2, Page 10, Removed Lines 6-11**
• **Section 5.1.2.1, Page 13, Revised Lines 22-23**
• **Section 5.3, Revised Table 5-5 and Page 20, Revised Lines 3-5**
• **Section 7.1, Page 26, Revised Lines 23-30**
• **Section 7.2 (revised all)**
• **Section 7.3 (revised all)**
• **Section 8, Page 38 (Revised Lines 32-36) and Page 39 (Revised Lines 1-7)**
• **Section 9, Page 40, Revised Lines 5-13**
Appendices:
• **Appendix B – Updated FBC COSA Model**
• **Appendix D – Updated FBC Electric Tariff – Blacklined**
• **Appendix F** ○ **F-2 – Updated Draft Order** ○ **New F-3 – Draft Procedural Order with Timetable**

If further information is required, please contact the undersigned.

Sincerely,

FORTISBC INC.

Original signed:

Sarah Walsh

Attachments

cc (email only): Registered Interveners

FORTISBC INC.

2025 Cost of Service Allocation (COSA) and Application for Approval of Revenue Rebalancing

Updated Application

May 15, 2025

Deleted: February 14

Table of Contents

Deleted:
...

List of Appendices

Index of Tables

Deleted: -

Deleted: and Figures

Deleted: Table 2-1: Proposed Regulatory Timeline 3¶
Table 5-1: FBC Customer Classes 12¶
Table 5-2: Revenue Requirement for 2025 COSA 13¶
Table 5-3: Rate Base for 2025 COSA 14¶
Table 5-4: Load Forecast 15¶
Table 5-5: 2025 COSA Study Revenue to Cost Ratios 19¶
Table 7-1: Option 1 – 2025 COSA R/C Ratio Results after Revenue Rebalancing 28¶
Table 7-2: Option 2 – 2025 COSA R/C Ratio Results after Revenue Rebalancing 29¶
Table 7-3: Option 3 – 2025 COSA R/C Ratio Results after Revenue Rebalancing 31¶
Table 7-4: Option 4 – 2025 COSA R/C Ratio Results after Revenue Rebalancing 32¶
Table 7-5: Option 5 – 2025 COSA R/C Ratio Results after Revenue Rebalancing 34¶
Table 7-6: Summary of Revenue Shifts and Resulting R/C Ratios Between Rate Schedules for All Rebalancing Options 35¶
Table 7-7: Summary of Monthly Bill Impact in % and $ for an Average Customer in Each Rate Schedule for All Rebalancing Options 35¶
Table 7-8: Final 2025 COSA Results with Proposed Revenue Rebalancing 37¶

1. INTRODUCTION

FortisBC Inc. (FBC or the Company) files this 2025 Cost of Service Allocation (COSA) and Revenue Rebalancing Application (Application) with the British Columbia Utilities Commission (BCUC) pursuant to sections 58 to 61 of the *Utilities Commission Act* (UCA). The Application reviews FBC's existing retail rates in the context of an updated COSA study and proposes a limited number of rebalancing adjustments to better align FBC's rates with its cost to serve.

FBC last rebalanced its rates as part of its 2017 COSA and Rate Design Application (2017 COSA and RDA). In 2020, FBC submitted an updated COSA (2020 COSA) in compliance with the 2017 COSA and RDA Decision and Order G-40-19 (2017 COSA and RDA Decision), but no adjustments to rates were proposed or implemented as a result. Since the 2017 COSA and RDA and 2020 COSA, FBC has completed its Advanced Metering Infrastructure (AMI) project, and AMI data consisting of individual hourly metered load data from all customers by rate class for historical year 2022 is now available. Given the passage of time since the last COSA and the availability of AMI data, FBC considered that an updated COSA was warranted to determine if rate rebalancing was required.

Consistent with past COSAs, FBC retained EES Consulting Inc. (EES Consulting), a third-party expert in public utility rate design matters, to perform a comprehensive COSA study for this Application. As discussed in more detail in its report (EES COSA Report), EES Consulting completed the COSA study following standard utility practice and using inputs and allocation methodologies substantially the same as past practice for the Company. The COSA study considered each of the rate schedules associated with Residential, Commercial, Lighting, Irrigation, and Wholesale customers. The impact of FBC's two market-based rates, Standby and Maintenance Service and the recently approved Large Commercial Interruptible Rate, is also considered. The COSA study results provide the revenue-to-cost (R/C) ratios of each rate schedule (RS), which shows the extent to which each recovers its allocated cost of service. The EES COSA Report is provided as Appendix A to the Application and the COSA model is provided as Appendix B.

The results of the COSA study indicate that the R/C ratios of four rate schedules fall outside the range of reasonableness (RoR) of 95 to 105 percent. FBC is proposing to rebalance rates to bring all rate schedules with the exception of Irrigation (RS 60) to within the RoR, with Small Commercial (RS 20) and Large Commercial Transmission (RS 31) receiving rate decreases, offset by increases to the Irrigation and the Wholesale Primary (RS 40) customer classes.

Deleted: a

Deleted: two

Deleted: (RS 40 and RS 41)

FBC's approvals sought are set out in Section 2 of the Application and its rebalancing proposals are discussed in detail in Section 7. Based on the analysis and considerations set out in the Application, FBC considers that its rebalancing proposals will result in an appropriate balance of rate design principles and other relevant considerations, are just and reasonable, and should be approved as proposed.

2. APPROVALS SOUGHT, PROPOSED REGULATORY PROCESS AND ORGANIZATION OF THE APPLICATION

2.1 *APPROVALS SOUGHT*

In this Application, FBC is seeking approval pursuant to sections 58 to 61 of the UCA to implement the following rate changes, effective January 1, 2026, as a result of revenue rebalancing:

- Rebalancing of all billing-determinant-related rate components included in RS 20 and 22 such that revenues are decreased by 2.4 percent;
- Rebalancing of all billing-determinant-related rate components included in RS 31 and 33 such that revenues are decreased by 0.3 percent; and
- Rebalancing of all billing-determinant-related rate components included in RS 40 and 42 such that revenues are increased by 1.1 percent.

With regard to RS 60 and 61, FBC seeks approval to phase-in the rebalancing of all billing-determinant-related rate components included in RS 60 and 61 such that revenues are increased by 3.0 percent each year for five years (with the in-season irrigation rate from April to October increasing by 3.9 percent each year). In order to implement the phase-in of RS 60 and maintain revenue neutrality, FBC seeks approval of a non-rate base deferral account titled the Irrigation Rebalancing Phase-in deferral account, attracting FBC's weighted average cost of capital (WACC). The deferral account will be amortized over the proposed five-year phase-in period and recovered from all customers through FBC's general rate increases.

Additionally, based on the results of the 2025 COSA study, FBC is seeking approval to update the transformation discount offered to customers under RS 21 who choose to take service at the primary distribution voltage, as well as RS 30 and 40 customers who choose to take service at the transmission line voltage level:

- For RS 21, an update to the transformation discount from $0.409 per kW of Billing Demand to $0.4841 per kW (from $0.371 to $0.4357 on a kVA basis) of Billing Demand;
- For RS 30, an update to the transformation discount from $6.727 per kVA of Billing Demand to $5.98 per kVA of Billing Demand; and
- For RS 40, an update to the transformation discount under the Wires Charge from $3.390 per kVA of Billing Demand to $3.78 per kVA of Billing Demand, and a reduction to the Energy Charge from $0.00985 per kWh to $0.00926 per kWh.

Rather than implement these changes mid-year, FBC is requesting that the rebalancing proposals and transformation discount updates be implemented effective January 1, 2026, to align with FBC's general rate changes which are typically effective on January 1st of each year. Implementing the rebalancing and transformation discount changes at the same time as FBC's

Deleted: 3.1

Deleted: 2.5

Deleted: R

Deleted: 2.5

Deleted: ;

Deleted: <#>Rebalancing of all billing-determinant-related rate components included in RS 41 and 43 such that revenues are increased by 0.4 percent.¶

Deleted: 247

Deleted: 6.237

Deleted: 11

Deleted: 00642

general rate change is practical and preferrable as it avoids multiple rate changes in the year, thus mitigating the potential for customer confusion and lack of acceptance.

Finally, pursuant to sections 59 to 61 of the UCA, FBC is seeking approval of the establishment of a new rate base deferral account, titled the 2025 COSA deferral account, to record the costs associated with the regulatory review of the Application, and is proposing to amortize the deferral account over one year, commencing January 1, 2026. FBC estimates the total regulatory proceeding costs to be $450 thousand based on the proposed regulatory timetable provided in Table 2-1. The forecast costs include BCUC costs, Participant Cost Award funding, external legal fees, and consulting fees for EES Consulting. FBC considers a one-year amortization period appropriate as the rate impact to customers is relatively small at 0.13 percent, which equates to $1.70 per year for an average residential customer.[1] Please refer to Appendix E which addresses the considerations identified in the BCUC's Regulatory Account Filing Checklist.

2.2 *PROPOSED REGULATORY PROCESS*

FBC proposes a written public hearing process with one round of information requests (IRs) as an appropriate and efficient review process for this Application. Given that FBC is not proposing any changes to its currently approved rate designs and is proposing only limited rebalancing, FBC believes that one round of IRs will be sufficient. Therefore, FBC proposes the following regulatory timetable for the review of the Application. A draft procedural order is provided in Appendix F-1.

Table 2-1: Proposed Regulatory Timeline

Action	Date (2025)
BCUC Issues Procedural Order by	Tuesday, March 11
FBC provides Notice by	Friday, March 21
Intervener Registration Deadline	Tuesday, April 8
BCUC Information Request (IR) No. 1	Wednesday, April 9
Intervener IR No. 1	Wednesday, April 16
FBC Response to IR No. 1	Thursday, May 15
FBC Written Final Argument	Thursday, May 29
Intervener Written Final Arguments	Thursday, June 12
FBC Written Reply Argument	Thursday, June 26

[1] Compared to 2025 rates approved on an interim basis by Order G-314-24 for an average residential customer with annual consumption of 9,900 kWh.

2.3 ORGANIZATION OF THE APPLICATION

The remainder of the Application is organized into the following sections:

- Section 3 provides the history of FBC's rate design and the BCUC's decisions on previous rate design applications (RDAs) and COSA studies;
- Section 4 describes the consultation which FBC undertook prior to filing this Application;
- Section 5 provides an overview of FBC's COSA methodology and cost allocation process, as well as the R/C ratios and results;
- Section 6 provides the BCUC's and other regulators findings regarding the range of reasonableness and appropriate target for revenue rebalancing;
- Section 7 describes the revenue rebalancing options and FBC's proposed rebalancing;
- Section 8 describes the other proposed changes resulting from the 2025 COSA study related to the transformation discount; and
- Section 9 concludes the Application.

3. CONTEXT AND CONSIDERATIONS FOR COSA ANALYSIS

A COSA study is a fundamental component of the design of a utility's rates. A COSA study provides important contextual information in assessing how the current/proposed rates and rate structures perform against the relevant rate design principles, as well as other considerations, such as the effectiveness of the utility's rates to recover the cost of service, the fairness of cost apportionment among each customer class, and the potential of any undue discrimination or revenue instability due to the current/proposed rate design.

FBC's current rate design and structures were developed through a number of COSA and RDA proceedings over the years, most notably, the 2009 COSA and RDA[2] and the 2017 COSA and RDA[3].

In the following sections, FBC outlines the rate design principles used when considering the options and proposals in this Application and provides the regulatory history and relevant findings and directives from previous COSA and RDA decisions.

3.1 *COSA AND RATE DESIGN PRINCIPLES*

As described in Section 5 of the Application, FBC's COSA is conducted in accordance with the widely accepted rate design principles identified by Dr. Bonbright in his seminal work, *Principles of Public Utility Rates*. These principles are the same as those used in the 2017 COSA and RDA and are as summarized by the BCUC in the BC Hydro Residential Inclining Block (RIB) Rate Re-Pricing Application Decision[4]. The rate design principles, in no particular order, are as follows:

- Principle 1: Recovering the Cost of Service; the aggregate of all customer rates and revenues must be sufficient to recover the utility's total cost of service.
- Principle 2: Fair apportionment of costs among customers (appropriate cost recovery should be reflected in rates).
- Principle 3: Price signals that encourage efficient use and discourage inefficient use.
- Principle 4: Customer understanding and acceptance.
- Principle 5: Practical and cost-effective to implement (sustainable and meet long-term objectives).
- Principle 6: Rate stability (customer rate impacts should be managed).
- Principle 7: Revenue stability.

[2] The 2009 COSA and RDA was filed on October 30, 2009, and the BCUC Decision and Order G-156-10 (2009 COSA and RDA Decision) was issued on October 19, 2010.
[3] The 2017 COSA and RDA was filed on December 22, 2017, and the BCUC Decision and Order G-40-19 (2017 COSA and RDA Decision) was issued on February 25, 2019.
[4] Appendix A of Order G-45-11 dated March 14, 2011, p. 5.

- Principle 8: Avoidance of undue discrimination (interclass equity must be enhanced and maintained).

FBC does not always apply all eight principles in a given context and also does not assign any priority or any particular weighting to the eight principles. As discussed in this Application, rate design (or revenue rebalancing in the case of this Application) is a complex balancing process as it frequently requires the application of multiple, and sometimes conflicting, principles and the consideration of viewpoints from various stakeholders. In addition, as different rate design principles may have varying levels of importance in different contexts, FBC applies its experience and judgement to consider and balance the most relevant principles in a given context when evaluating the different rate design (or revenue rebalancing) solutions. Rate design should strive to strike a balance among competing rate design principles based on the specific characteristics of customers in each rate schedule.

In addition to the eight Bonbright rate design principles, FBC considered its regulatory history of COSA and rate design applications, and the BCUC's previous findings and determinations on these applications, as further described below.

3.2 *FBC COSA HISTORY AND PREVIOUS COMMITMENTS*

3.2.1 Regulatory History of FBC's COSA and Rate Design Applications

FBC's most recent COSA and rate design applications include the 2009 COSA and RDA and the 2017 COSA and RDA. Additionally, in 2020 FBC submitted the 2020 COSA as a compliance filing to Order G-40-19; however, no adjustments to rates were proposed or implemented.

The 2009 COSA and RDA and the 2017 COSA and RDA incorporated proposals for changes to the structures of existing rates. In particular, the 2017 COSA and RDA proposed the phased removal of the Residential Conservation Rate, the re-opening of the residential time-of-use (TOU) rate, the flattening of the declining-block Commercial Rate Schedule (RS 21) rate, and multi-class adjustments to the fixed-cost elements of rates to better reflect cost causation. With the exception of the TOU rate proposals, the BCUC approved these changes as part of the 2017 COSA and RDA Decision.

In both the 2009 and 2017 applications, revenue rebalancing occurred as a result of the COSA studies.

3.2.2 Relevant Directives from the 2017 COSA and RDA Decision

In the 2017 COSA and RDA Decision, the BCUC made a number of determinations that are relevant to the current Application. These are outlined below.

With regard to the classification of distribution costs utilizing the Minimum System Study (MSS) approach, including the Peak Load Carrying Capability (PLCC) credit, the Panel made the following findings:

> … the purpose of the 2017 COSA Study is to equitably allocate the costs of operating the utility to FBC's various customer classes. The Panel must therefore assess whether the MSS method with the PLCC adjustment reasonably assigns FBC's distribution costs to the driver of those costs (i.e. demand or customer). The Panel agrees with FBC, the CEC and BCOAPO that the MSS method with the PLCC adjustment reasonably reflects cost causation because most distribution costs, with the exception of substations and services and meters, are driven by a combination of both the size of the load and the number of customers.[5]
>
> …
>
> The Panel is satisfied that the MSS, when combined with the PLCC adjustment to avoid double-counting of demand, is a reasonable approach for classifying distribution costs. There is no evidence that this approach does not provide reasonable results based on FBC's specific circumstances.[6]

FBC has used the MSS method with the PLCC adjustment to classify distribution costs within the 2025 COSA study.

With regard to the treatment of Standby and Maintenance Service rate (RS 37) revenues, the Panel stated the following:

> The Panel accepts FBC's approach of applying the RS 37 revenues as an offset to the overall revenue requirement. We find this approach appropriate because all customers are contributing to the fixed costs of FBC's system which is providing service to RS 37; thus all customers should receive the benefits of the RS 37 revenue.[7]

There have been no changes in circumstances that necessitate a change in the treatment of RS 37 revenues within the 2025 COSA and none have been made.

In addition to the above, a number of COSA study-related matters were raised by interveners and were examined in the 2017 COSA and RDA proceeding. The key findings and determinations from the 2017 COSA and RDA Decision are as follows:

- Generation Related Transmission Assets (GRTA) are to be classified as Transmission rather than Production.[8]
- The functionalization and classification of Demand Side Management (DSM) costs between Transmission and Distribution should remain consistent with previous COSAs, such that the investments in accounts 369 (Services), 370 (Meters/AMI Meters), 371

[5] 2017 COSA and RDA Decision, p. 14.
[6] 2017 COSA and RDA Decision, p. 14.
[7] 2017 COSA and RDA Decision, p. 17.
[8] 2017 COSA and RDA Decision, p. 18.

(Installation at Customer Premises) and 373 (Street Lights and Signal Systems) are not excluded from the value used for the distribution rate base.[9]

- The use of the two Coincident Peak (CP) allocator is the most appropriate allocator for production and transmission rate base.[10]

The inputs to the 2025 COSA study are consistent with the above findings from the 2017 COSA and RDA Decision.

[9] 2017 COSA and RDA Decision, p. 19.
[10] 2017 COSA and RDA Decision, p. 19.

4. STAKEHOLDER CONSULTATION

Before filing the Application, FBC conducted stakeholder consultation consisting of a virtual technical COSA workshop. The aim of the workshop was to present a high-level overview of the inputs and methodologies employed in the 2025 COSA study, provide the outcomes of the study, and gather feedback on potential rebalancing options.

Please refer to Appendix C of the Application for FBC's workshop presentation.

4.1 *PARTICIPATION*

An invitation to the workshop was sent to BCUC staff and all interveners in the FBC 2017 COSA and RDA proceeding, the FBC Large Commercial Industrial Rate proceeding, and the FBC Annual Review for 2024 Rates.

Representatives from the following stakeholder groups attended the virtual workshop, which was held on December 17, 2024:

- BC Hydro;
- British Columbia Municipal Electric Utilities Association (BCMEU);
- BC Sustainable Energy Association (BCSEA);
- Commercial Energy Consumers Association of British Columbia (CEC);
- Industrial Customer Group (ICG); and
- MoveUP.

BCUC staff also attended the workshop.

4.2 *WORKSHOP COMMENTS*

The comments and questions during the workshop were primarily regarding the availability of additional information on the breakdown of load and end-uses, as well as a request for load details from municipal utilities served by FBC.

A question was asked as to whether adjustments to the COSA methodology would be in scope for the regulatory process. FBC responded that it believed that the COSA methodology could be explored as part of the regulatory proceeding. The availability of the 2025 COSA study was queried, and FBC confirmed that the full electronic study would be filed.[11]

Two specific follow-up items were requested during the workshop:

[11] The EES COSA Report is provided as Appendix A to the Application and the COSA model is provided as Appendix B.

- Details behind the calculations of the rebalancing scenarios provided (a request of ICG); and
- Historic R/C ratio information (a request from the CEC).

FBC provided the requested information to all workshop attendees shortly after the workshop and has included the information as part of Appendix C to the Application.

4.3 WRITTEN SUBMISSIONS

FBC requested that any written submissions on the material presented during the workshop be submitted on or before January 10, 2025. None were received.

Deleted: FBC notes that the final R/C ratios and rebalancing scenarios in this Application differ slightly than those provided after the workshop due to refinements to the model that have occurred since the workshop was held. FBC also notes that after further consideration of the five rebalancing options presented in the workshop, it replaced one of the options (Option 5 in the workshop presentation) with a new option (Option 1 as described in Section 7.2 of this Application). Please refer to Section 7 of the Application for further details regarding the rebalancing options.¶

5. 2025 COSA STUDY METHODOLOGY AND RESULTS

A COSA study allocates the costs of providing utility service to the various customer classes served by the utility based upon the cost-causal relationship associated with specific expenditures. This approach is taken to develop a fair and equitable assignment of costs to each customer class so that customers pay for the costs that they cause. The primary output of the study is the cost to be collected by rate class, which can be used to guide the adjustment of existing rates or as a basic input for rate design.

The outcome of the COSA process is revenue neutral and the primary concern for the Company is that the principles of cost-causation and equity are upheld within the cost allocation methodologies and assumptions while considering and balancing Bonbright's rate design principles described in Section 3.1.

As previously stated, FBC retained EES Consulting to develop the COSA study with inputs provided by the Company. FBC last filed a COSA study in 2020 as a compliance filing to the 2017 COSA and RDA Decision. EES also conducted a COSA study in 2009 and has been utilized by FBC to perform COSA and rate design work since 1982. As discussed in more detail in the EES COSA Report, EES Consulting completed the COSA study for this Application following standard utility practice and using inputs and allocation methodologies substantially the same as past practice for FBC, including those reviewed and accepted in the 2009 COSA and RDA proceeding and the 2017 COSA and RDA proceeding, as discussed in Section 3.2.2. The results of the COSA study are used to ensure that rates are fair, equitable and not unduly discriminatory. The COSA results show the extent to which each rate schedule recovers its allocated cost of service.

This section is organized as follows:

- Section 5.1 discusses the primary financial and customer-related inputs;
- Section 5.2 describes the key processes of the functionalization, classification and allocation exercises undertaken in order to complete the 2025 COSA study; and
- Section 5.3 provides the 2025 COSA results, including the R/C ratio for each customer class.

5.1 *ASSUMPTIONS AND INPUTS FOR THE 2025 COSA STUDY*

The following section describes the primary financial and customer-related inputs for the 2025 COSA study including:

- The customer classes included in the study;
- The revenue requirement;
- The rate base; and
- The load associated with each customer class.

5.1.1 Customer Classes (Segmentation)

Customers are grouped into classes that reflect common usage characteristics or facility requirements. The main FBC customer classes are provided in the following table.

Table 5-1: FBC Customer Classes

Customer Class	Default Rate Schedule
Residential	RS 01
Small Commercial	RS 20
Commercial	RS 21
Large Commercial Primary	RS 30
Large Commercial Transmission	RS 31
Lighting	RS 50
Irrigation	RS 60
Wholesale Primary	RS 40
Wholesale Transmission	RS 41

Notes to Table:

(1) For the purposes of cost allocation, any load and revenue associated with Time-of-Use (TOU) rate schedules is included in the totals for the default rate that would normally apply to a customer. There are very few TOU customers, and the embedded-cost COSA does not differentiate costs by TOU period.

(2) Large Commercial Primary and Large Commercial Transmission are often grouped and referred to as "Industrial" in FBC regulatory filings, which is reflected in several tables in this Application.

FBC serves six customers at the wholesale level under either the Wholesale Primary or Wholesale Transmission classes.

In the 2025 COSA study, residential customers make up 87 percent of the total number of customers and over 38 percent of energy sales. Wholesale customers make up another 17 percent of energy sales, with the remaining 45 percent composed of commercial, irrigation and lighting class consumption.

Since conducting the 2020 COSA study, FBC has had an additional rate approved by the BCUC. This rate, the Large Commercial Interruptible Rate (RS 38), is a non-firm, market-based rate. For the purposes of the 2025 COSA study, FBC has treated both the revenues and costs of RS 38 in a manner that is consistent with how RS 37 revenues and costs are treated. This aspect of the COSA is discussed in Section 5.1.2.1 below.

5.1.2 Revenue Requirement

For the 2025 COSA study, FBC used the 2024 Approved revenue requirement of $457.2 million, which was approved by the BCUC in Decision and Order G-340-23, as the basis for the cost allocation. Consistent with the COSA study approved in the 2017 COSA and RDA Decision, the

2024 Approved revenue requirement is offset by the RS 37 revenue, as discussed in Section 3.2.2 above, and adjusted to account for known and measurable changes since the approval of the 2024 revenue requirement. In the case of the 2025 COSA study, an adjustment has been made to incorporate the RS 38 revenues, as discussed in Section 5.1.2.1 below.

Table 5-2 below summarizes the revenue requirement used for the 2025 COSA study, which is based on FBC's 2024 Approved revenue requirement with adjustments for the revenues of RS 37 and RS 38. The detailed breakdown of FBC's revenue requirement used for the 2025 COSA is provided in the EES COSA Report in Appendix A, Schedule 3.1.

Table 5-2: Revenue Requirement for 2025 COSA

Cost Category	Value ($ millions)
Cost of Energy	193.4
O&M and A&G Expenses	63.3
Return, Depreciation & Taxes	212.6
Gross Revenue Requirements	469.3
Less Other Revenue	12.1
Net Revenue Requirements (2024 Approved)	**457.2**
Less RS 37 Revenues	2.1
Less RS 38 Revenues	3.6
2025 COSA Revenue Requirements	**451.6**

5.1.2.1 Treatment of RS 38 Revenue

RS 38 is FBC's Large Commercial Interruptible Service. This is a market-based, non-firm rate approved by Order G-136-23. RS 38 rates are calculated based on the hourly Mid-C price in effect when the service is used.

At the time of filing this Application, FBC has a single customer taking service under RS 38. However, there were no RS 38 revenues for the 2024 test year as the customer's load was served under RS 31 at the time. FBC considers it appropriate to reflect the change in the COSA load apportionment as a known and measurable change to the test year.

Revenues for RS 38 are difficult to forecast due to the uncertainty arising from the relationship between Mid-C pricing and the Customer's nominated Price Cap, as well as the likelihood of interruption. The actual hours of service provided to the RS 38 Customer cannot be known in advance. Based on the customer's 2022 total load served under RS 31 and the RS 38 customer's RS 31 Contract Demand, as determined in the RS 31 Agreement, FBC has estimated the revenue to be approximately $3,574,198 using the hourly Mid-C pricing during the same period for the purposes of the 2025 COSA study.

Deleted: the initial nominated Price Cap of 15 MW

Deleted: 8

Since both the RS 37 and RS 38 rates are calculated based on the hourly Mid-C price in effect when the service is used, FBC applied the same treatment approved for RS 37 as part of the 2017 COSA and RDA Decision to the revenues of RS 38, which is allocated to all customers as an offset to the revenue requirement for compensating for the use of the system paid by all customers.

5.1.3 Rate Base

Consistent with the approach used in previous COSA studies (2009 and 2017), FBC used the average of the 2021 and 2022 actual rate base, which is $1,542.4 million for the purposes of cost allocations in the 2025 COSA study. The use of a two-year average is intended to smooth out the impact of large capital expenditures.

Table 5-3 below provides a summary of the rate base used for the 2025 COSA study which reflects a gross plant of $2,316.1 million plus working capital and unamortized deferrals of $127.1 million, offset by accumulated depreciation of $669.2 million and customer contributions of $231.7 million. Distribution plant makes up approximately 53.2 percent of the gross plant, followed by 22.5 percent for transmission plant, 14.4 percent for power production, and 9.9 percent for general plant. FBC's detailed rate base by account used for the 2025 COSA is provided in the EES COSA Report in Appendix A, Schedule 4.1.

Table 5-3: Rate Base for 2025 COSA

Cost Category	Amount ($ millions)
Total Gross Plant	2,316.1
Less Accumulated Depreciation	(669.2)
Less Customer Contributions	(231.7)
Working Capital, Deferrals & Other	127.1
Total Rate Base	**1,542.4**

5.1.4 Load and Average Customer Count

The gross load and average customer count used for the 2025 COSA study is based on the 2024 Approved forecasts. Table 5-4 below provides the summary of the gross load and average customer count used for the 2025 COSA study, which are 3,396 GWh and 152,006 customers, respectively. FBC notes that the gross load of 3,396 GWh excludes the projected load in RS 37 as well as the projected load in RS 31 that would be served through RS 38. The peak demand forecast used for the 2025 COSA cost allocations is 777 MW in the winter months and 629 MW in the summer months. The detailed gross load and average customer count used for the 2025 COSA are provided in the EES COSA Report in Appendix A, Schedule 8.4.

For comparison, in 2017 the total system energy was 3,282 GWh forecast for the year. The system energy change from 2017 to 2024 reflects an average annual increase of 0.6 percent per year. The number of customers, however, has increased by an average of 1.9 percent per year. The difference in the customer growth and energy sales growth is due in part to a change in the mix of customer types and the average use per customer.

Table 5-4: Load Forecast

Customer Class	Load (GWh)	% Load	Count
Residential	1,299	38.3	132,389
Commercial	974	28.7	17,125
Industrial	486	14.3	42
Wholesale	590	17.4	6
Lighting & Irrigation	47	1.3	2,444
Total	**3,396**	**100.0**	**152,006**

As shown in Table 5-4 above, residential customers make up 87.1 percent of the total number of customers and over 38.3 percent of energy sales. Wholesale customers make up another 17.4 percent of energy, with the remaining 44.3 percent related to commercial, industrial, and other retail classes.

5.1.5 Load Analysis

A notable change in the 2025 COSA study compared to the 2017 COSA study is the availability of AMI data for detailed hourly load and consumption history in all customer classes. The load summary above relies on detailed load and consumption data for all customer classes. Using the actual 2022 hourly AMI data, parameters such as load and coincidence factors can be calculated more accurately. This is an improvement from the 2017 COSA study where only aggregate or sample data was used.

The availability of AMI data also validated the reasonableness of the data that had been used in previous years. EES found that the use of AMI data did not cause any significant swings as compared to previous COSA results.

More details on the load analysis are contained in Section 3.5.1 of the EES COSA Report.

5.2 *THE KEY COSA PROCESSES – FUNCTIONALIZATION, CLASSIFICATION AND ALLOCATION*

This section describes the key processes of the functionalization, classification and allocation exercises undertaken to complete the 2025 COSA study. A detailed discussion of how the costs included in the COSA are functionalized, classified and allocated is contained in Section 3 of the EES COSA Report.

The COSA analysis allocates FBC's rate base and revenue requirement to the various customer classes of service to determine each class's level of revenue responsibility. Costs are allocated to the various customer classes of service based upon a fair and equitable method that reflects the cost-causal relationships for the production and delivery of the services.

The first step of the COSA is to functionalize FBC's rate base and revenue requirement as production, transmission, and distribution. The second step is to classify the functionalized costs to demand, energy, and customer-related component costs:

- Demand-related costs are those that FBC incurs to meet a customer's maximum instantaneous usage requirement and is usually measured in kilowatts (kW).
- Energy-related costs are those that vary directly with longer periods of consumption and are usually measured in kilowatt-hours (kWh).
- Customer-related costs are those that vary with the number and type of customers served.

In the third step, these three component costs are allocated to each class of service based upon the most equitable method for each specific cost. At that point, the revenue requirement has been allocated to each class of service and a determination of the necessary revenue adjustments between classes of service can be made.

The following sections provide a summary of how the main steps of functionalization, classification and allocation are applied for FBC. The results of each process can be found in the EES COSA Report (Appendix A to the Application).

5.2.1 Functionalization

The first step in the COSA process is to functionalize the rate base and revenue requirement. Functionalization is the separation of cost data into the functional activities performed in the operation of a utility system (i.e. production, transmission, and distribution) using FBC's system of accounts for both the rate base and revenue requirement.

The Production function includes both rate base and expense items associated with generation owned by FBC and power purchase expenses.

The Transmission function includes those costs for operating and maintaining the transmission lines, poles, towers, substations, etc., used to deliver power to the distribution network's load centres. Transmission is generally lines measured at 35,000 volts and above.

The Distribution function includes all services required to move the electricity from the point of interconnection between the transmission system and the distribution system to the end user of the power.

Functionalization of the rate base and revenue requirement is discussed in detail in Sections 3.3.1 and 3.3.2 of the EES COSA Report, respectively.

5.2.2 Classification

The second step in developing the COSA is to classify the functionalized expenses to traditional cost-causation categories. Classification determines the portion of the cost that is related to specific cost-causal factors, such as those that are demand-related, energy-related, or customer-related.

Production costs are related to supplying power to customers on the system. Production facilities are designed and operated to meet system peak demands and total energy requirements. Transmission costs are related to the bulk transfer of power to load centres on the system. These transmission facilities are typically designed and operated to meet system peak demand requirements. The distribution system is designed to extend service to all customers attached to the system and to meet the peak load capacity requirement of each customer.

The classification for each of FBC's functionalized expenses is summarized below, with the detail, rationale and results contained in the referenced sections of the EES COSA Report.

5.2.2.1 Generation and Transmission Rate Base

For Generation, consistent with the 2017 COSA, the output from the Kootenay River plants was priced as if it were at the BC Hydro 3808 Tariff rate to determine the equivalent split in costs between demand and energy, with this split applied to the actual costs of these projects for the purposes of classification.

For Transmission, the cost of providing transmission service to a customer is directly proportional to the contribution to system peak demand that customers impose on the system. As such, transmission assets in FBC's rate base are classified as 100 percent demand-related, consistent with previous COSA studies.

Please refer to Section 3.4.1 of the EES COSA Report for further details.

5.2.2.2 Distribution Rate Base

For the classification of distribution plant, a minimum system study (MSS) was performed to determine the split between customer- and demand-related costs. A similar approach was taken in the 2017 COSA. The MSS assumes a certain size of the distribution plant such as the number of poles, conductions, and transformers is required to serve the minimum load requirements of customers, thus the costs associated with such minimum system are dependent on the number of customers, i.e., customer-related regardless of their level of load demand. The remaining costs of the distribution plant are then classified as demand-related since any cost associated with the distribution plant beyond the minimum system requirement is considered to be due to the customers' level of load demand being greater than the level that a minimum system can serve.

While the minimum system is, in theory, designed to carry only a minimal amount of load, the actual facilities designated as the minimal size are capable of carrying an amount of load beyond the theoretical level, therefore overstating the level of the customer-related component. Along

with the minimum system results, an offset to account for the peak load carrying capability (PLCC) of a minimum system was incorporated into the analysis.

Please refer to Section 3.4.2 of the EES COSA Report for further details.

5.2.2.3 Other Rate Base

Functionalized general plant, after being functionalized to Production, Transmission and Distribution, was classified using the resulting percentage of total rate base for each function. For example, general plant assigned to generation was split between demand and energy in the same manner as the generation rate base. Accumulated depreciation accounts and working capital accounts were classified in the same fashion as the corresponding gross plant accounts. Customer contributions were assigned to classes based on poles, conductors and transformers.

Please refer to Section 3.4.4 of the EES COSA Report for further details.

5.2.2.4 Production/Power Supply Expenses

FBC power supply resources include FortisBC-owned generation, long-term power purchase contracts including a tariff-based purchase from BC Hydro, and market purchases. Because power supply sources vary by month, power supply costs were classified to demand and energy for each month and then allocate to customer classes based on each class's contribution to system peak and energy loads for each month. Each of the resources are considered separately as it relates to the split between demand-related and energy-related costs in the 2025 COSA. On a combined basis, the total purchased power expenses were classified 35 percent demand-related and 65 percent energy-related on an annual basis.

Please refer to Section 3.4.5 of the EES COSA Report for further details.

5.2.2.5 Other Expenses

There are other expenses and revenues, such as for some Customer Service costs, depreciation, and administrative and general expenses that are considered separately within the 2025 COSA. Some revenues, such as those for pole attachments, are treated as an offset to the revenue requirement.

Please refer to Section 3.4.6 of the EES COSA Report for further details.

5.2.3 Allocation

The third step in performing a COSA is the allocation of the utility's total functionalized and classified revenue requirement to the customer classes of service. This is performed through the application of a proper allocation methodology.

Allocation of costs to specific customer classes is based on the customer's contribution to the specific classifier selected. For instance, demand-related costs are allocated to a customer group

using that customer group's contribution to the particular measurement of system demand, whether coincident peak (CP), non-coincident peak (NCP) or some variation determined to be appropriate for the particular cost item. An analysis of customer requirement, loads, and usage characteristics is completed to develop allocation factors reflecting each of the classifiers employed within the COSA. The analysis may include an evaluation of the system design and operations, its accounting and physical asset records and detailed studies of customer load data.

Allocation reflects the extent to whether the components of the functionalized and classified revenue requirement are driven by demand-related, energy-related, or customer-related factors.

Section 3.5 of the EES COSA Report describes the allocation factors used in the COSA for the revenue requirement and rate base. Notable among these is the continued use of the 2 CP allocator for generation and transmission rate base accounts.

5.3 *2025 COSA STUDY RESULTS*

The R/C ratio for each customer class is calculated by dividing the revenue at current rates by the total allocated costs. The approved 2024 revenue requirement includes revenues calculated using an average rate for each class, consistent with the method used in past years. For the purposes of the 2025 COSA, revenues were calculated under each tariff based on the billing determinants for each class.

Using the revenues at approved rates for 2024[12] results in projected rate revenues of $451.6 million, after the adjustments for RS 37 and RS 38 revenues. The calculated revenue from rates in the 2025 COSA using the actual billing determinants, multiplied by the various rate components, is $442.8 million, which is 1.99 percent lower than the revenue forecast provided in the Evidentiary Update to the FBC Annual Review for 2024 Rates.

Since the expected revenues derived from billing components and forecast load differ slightly from the 2024 Approved revenues, an adjustment is made on a pro-rated basis to ensure that total allocated revenue divided by total allocated costs is equal to unity or 100 percent. The resulting R/C ratios help inform the need for revenue rebalancing without consideration of overall rate increases considered in separate proceedings. Revenue rebalancing is the method by which the utility shifts revenue responsibility from one customer group to another.

The R/C ratios in the 2025 COSA study are shown in the following table.

Table 5-5: 2025 COSA Study Revenue to Cost Ratios

Customer Class	Default Rate Schedule	Revenue to Cost Ratio
Residential	RS 01	99.5%
Small Commercial	RS 20	107.5%

Deleted: 6

Deleted: 8.3

[12] Evidentiary Update to the FBC Annual Review for 2024 Rates, Appendix A.

Customer Class	Default Rate Schedule	Revenue to Cost Ratio
Commercial	RS 21	102.4%
Large Commercial Primary	RS 30	100.7%
Large Commercial Transmission	RS 31	105.3%
Lighting	RS 50	99.8%
Irrigation	RS 60	77.3%
Wholesale Primary	RS 40	94.0%
Wholesale Transmission	RS 41	98.3%

Deleted: 3.9
Deleted: 99.3
Deleted: 4.7
Deleted: 100.3
Deleted: 82.9
Deleted: 92.1
Deleted: 4.6

As shown in the table above, the R/C ratios of five of the nine customer classes are within the range of 95 percent to 105 percent. The Small Commercial and Large Commercial Transmission customer classes are above this range, while the Irrigation and Wholesale Primary classes are below the range.

Deleted: is
Deleted: ,
Deleted: , and Wholesale Transmission

In the following section, FBC discusses the range of reasonableness (RoR) and its proposal for rebalancing.

6. RANGE OF REASONABLENESS AND TARGET FOR REVENUE REBALANCING

It is industry standard practice to assess R/C ratios based on whether they fall within an established RoR. As cost allocations in a COSA necessarily involve assumptions, estimates, simplifications, judgements and generalizations, the use of an RoR is warranted and is a widely accepted practice used to evaluate the appropriateness of the R/C ratios and whether revenue rebalancing may be needed.

Consistent with this practice, FBC has considered the results of the 2025 COSA for each rate schedule in light of the accepted RoR and considers that each rate schedule that falls within the RoR is recovering its fair cost. If a rate schedule falls outside of the RoR, this indicates that revenues are either insufficient to cover the cost of service or exceed the cost of service, which suggests that rate rebalancing may be in order. The RoR is therefore used as an indication of the rate schedules that may require rebalancing.

As discussed in the subsections below, FBC considers that an RoR of 95 percent to 105 percent remains appropriate and that rebalancing to within the RoR, rather than to unity, is the most reasonable approach and reflective of industry standard practice.

6.1 *RANGE OF REASONABLENESS OF 95% TO 105% REMAINS APPLICABLE*

Consistent with past BCUC determinations, FBC has continued to utilize an RoR of 95 percent to 105 percent in this Application.

In the 2009 COSA and RDA Decision, the BCUC approved FBC's proposed RoR of 95 percent to 105 percent.[13] The appropriateness of the 95 percent to 105 percent RoR was reaffirmed by the BCUC Panel in the 2017 COSA and RDA Decision, where the Panel found that this RoR for FBC continued to be appropriate, noting that the range is consistent with past BCUC decisions on FBC's RoR and there have been no changes in circumstance which indicated that a widening (or narrowing) of the range was required at the time.[14]

The availability of data from AMI has validated the load assumptions made in the previous COSA study. This factor alone does not significantly reduce the uncertainty inherent in the various assumptions and judgement that are part of the COSA study process. FBC considers that there is no change in circumstances sufficient to require a change to the RoR of 95 percent to 105 percent.

[13] Page 78.
[14] 2017 COSA and RDA Decision, p. 26.

6.2 REBALANCING TO WITHIN THE ROR IS MOST REASONABLE APPROACH AND CONSISTENT WITH MOST RECENT BCUC DECISIONS

In assessing the appropriate target for rebalancing, FBC considered the BCUC's previous decisions. FBC considered the 2009 and 2017 COSA and RDA Decisions, as well the BCUC's more recent findings in Decision and Order G-135-18 regarding FEI's 2016 Rate Design Application (RDA) and its most recent decision on rebalancing in the FEI 2023 COSA and Revenue Rebalancing Application.[15] As discussed below, in the BCUC's more recent decisions, it has endorsed the approach of rebalancing to within the RoR, as opposed to rebalancing to unity. FBC agrees with this approach.

In the 2009 COSA and RDA Decision, the BCUC found that the appropriate target for revenue-to-cost ratios in each class is unity or one, and the BCUC directed FBC to adjust its rates with the goal of achieving R/C ratios of one for each class. The BCUC also found that future rebalancing should only be required when a customer class falls outside of the RoR.[16]

In the 2017 COSA and RDA Decision, the BCUC directed that rebalancing be limited to those customer classes that were outside the RoR (the Lighting customer class (RS 50) and the Large Commercial Transmission customer class (RS 31)), and specifically directed that the Lighting customer class be rebalanced to achieve an R/C ratio of 100 percent, with the resulting revenues allocated to the Large Commercial Transmission class.[17] The BCUC further found the following:[18]

> … where a customer class has an R/C ratio within the range of reasonableness, there is insufficient evidence to conclude that the rate needs to be rebalanced. This is not to say that such a customer class is proven to be fully covering its costs, but rather, there is insufficient evidence it is not doing so. In the interests of another Bonbright principle, rate stability, where there is insufficient justification to rebalance rates, the Panel chooses not to rebalance them. Thus, the Panel agrees with FBC and most interveners, and finds that customer classes with R/C ratios inside the range of reasonableness do not require their rates to be rebalanced.

The BCUC's rationale for directing RS 50 to be rebalanced to unity was as follows:[19]

> The Panel agrees with the CEC that an R/C ratio of unity provides the best evidence that a customer class is fully recovering its costs and no more. Rates set to achieve R/C ratios of 95 percent or 105 percent, the endpoints of the range of reasonableness, are inherently less likely to cover only the allocated costs of their respective customer classes.

[15] FEI 2023 COSA and Revenue Rebalancing Application, Decision and Order G-144-24.
[16] 2009 COSA and RDA Decision, pp. 78-79.
[17] 2017 COSA and RDA Decision, p. 26.
[18] 2017 COSA and RDA Decision, p. 27.
[19] 2017 COSA and RDA Decision, p. 28.

The effect of these previous decisions has been that FBC's rates have only been rebalanced when the R/C ratio of a portion of a customer class taking service under the same rate schedule falls outside of the RoR, and only then to rebalance to a revenue-to-cost ratio of unity where sufficient revenues are available, and to as close to unity as possible if they are not.

However, subsequent to the filing of the 2017 COSA and RDA, as part of the regulatory process to review FEI's 2016 Rate Design Application (FEI 2016 RDA), BCUC staff submitted an independent consultant report from Elenchus Research Associates Inc. (Elenchus Report)[20].

As expressed in its report, Elenchus was of the view that any R/C ratio that is within the defined RoR can be considered to be full cost recovery. An R/C ratio that is below the range is considered to indicate under-recovery of costs and any R/C ratio that is above the range indicates over-recovery of costs.

The BCUC Panel in the FEI 2016 RDA Decision stated that it places weight on the evidence provided by Elenchus that:

- Any R/C ratio that is within the defined RoR can be considered to be full cost recovery;
- Rebalancing should be undertaken to move all classes that are outside the approved range to the nearest boundary;
- It is not appropriate to periodically rebalance to R/C ratios of 1.00; and
- Elenchus is not aware of any jurisdiction that periodically rebalances rates so that all R/C ratios are 1.00.[21]

The BCUC further found the following:[22]

> While the BCUC, in its COSA and R/C Ratios Decision, accepted that in theory an R/C ratio of 100 percent for each rate schedule would indicate that the revenues recovered from each rate schedule are equal to the cost to serve them, the assumptions, estimates and judgements involved in a COSA study, make it appropriate to use a range of reasonableness. In the Panel's view, the range of reasonableness should be used as a guideline to inform rate design and rebalancing. However, in some circumstances it is appropriate not to rebalance to within the accepted range of reasonableness when considering other rate design principles.
>
> …
>
> Accordingly, the Panel finds there is insufficient evidence for the position that FEI should rebalance to unity. The Panel finds that FEI's approach reflects a reasonable balance of rate design principles and appropriately considers the rate

[20] FEI 2016 RDA proceeding, Exhibit A2-10.
[21] FEI 2016 RDA Decision and Order G-135-18, p. 42.
[22] FEI 2016 RDA Decision and Order G-135-18, pp. 41-42.

impacts to the residential class which is within the range of reasonableness prior to any rebalancing.

In the BCUC's decision on FEI's 2023 COSA and Revenue Rebalancing Application, the BCUC directed that the rate classes outside of the RoR be brought within the RoR of 95 to 105 percent (but not rebalanced to unity).[23] The Panel also explicitly rejected a proposal that FEI aim to achieve unity in its R/C ratios, stating:[24]

> FEI's approach to assess the need for rebalancing a rate class is to rely on a range of reasonableness of 95 percent to 105 percent within which a rate schedule's revenue is considered to be recovering its costs. The CEC has raised no concern with this methodology in the current proceeding but has recommended the BCUC direct FEI in the next COSA proceeding to prepare rebalancing proposals that aim towards unity and ultimately do away with the range of reasonableness. The Panel disagrees. The evidence in this proceeding suggests that an R:C ratio calculation is derived from forecast revenues and costs for the test year and the COSA is reliant upon numerous assumptions and judgements. Thus, an R:C ratio has inherent uncertainty and it follows that R:C ratios are best interpreted as a range on either side of a theoretical mid-point of unity. Therefore, the Panel agrees with FEI's approach to use an R:C range within which a rate schedule's revenue is considered to be recovering its costs to assess the need to rebalance a rate class. Because of this, the Panel is not persuaded by the CEC that there is a need to achieve unity and rejects the CEC's recommendation to depart from the use of a range of reasonableness to assess the need for and the degree of rebalancing required, in this or the next COSA study.

The BCUC's approach to rebalancing in the 2016 and 2023 FEI proceedings is consistent with other recent rebalancing decisions made by Canadian regulators.

On December 16, 2021, the Ontario Energy Board (OEB) issued Filing Requirements For Electricity Distribution Rate Applications - 2022 Edition for 2023 Rate Applications - For Small Utilities, chapter 2A of which discussed Cost of Service standards, including rebalancing.[25] The OEB guide includes instructions on rebalancing that specifies:

> Results flowing from the updated cost allocation model may show some ratios being outside of the OEB-approved ranges. In these cases, distributors must ensure that their cost allocation proposals include **adjustments to bring them within the OEB-approved ranges** within a reasonable period of time.

The OEB also specified that rebalancing is to be within the RoR (not to unity):

[23] FEI 2023 COSA and Revenue Rebalancing Decision and Order G-144-24, pp. 25-26.
[24] FEI 2023 COSA and Revenue Rebalancing Decision and Order G-144-24, pp. 20-21.
[25] https://www.oeb.ca/sites/default/files/Chapter-2A-Filing-Requirements-2023-20211216.pdf.

> In particular, if the proposed ratios are outside the OEB's policy range in the test year, the distributor must show the proposed ratios in subsequent years that would **move the ratios to within the policy range**. [Emphasis added]

In addition to the OEB, applications including rebalancing proposals have also been before the Nova Scotia Utility and Review Board (NSURB). In a recent Decision, in addition to confirming that its typical RoR is 95 percent to 105 percent, the NSURB stated:

> The Board recognizes that the allocation of costs in a cost-of-service study is not an exact science. **That is the reason why the Board strives to keep revenue-to-cost ratios within a range as opposed to requiring them to be set precisely at 100%.**[26]

Consistent with the Elenchus Report, recent decisions of the BCUC, and the decisions of the OEB and NSURB, FBC agrees that a rate schedule with an R/C ratio that falls within the RoR is recovering its fair cost and indicates that no rebalancing is required. FBC further considers that any R/C ratio that is within the defined RoR can be considered to be full cost recovery; therefore, rebalancing should be undertaken to move classes that are outside the approved range to the nearest boundary, not to unity. As FBC considers this to reflect industry standard practice, FBC has followed this approach in its rebalancing proposals set out below.

[26] IN THE MATTER OF AN APPLICATION of the RIVERPORT ELECTRIC LIGHT COMMISSION for Approval of Amendments to its Schedule of Rates and Charges for the provision of electric supply and services to its customers and its Schedule of Rules and Regulations 2023 NSUARB 56 M10810.

7. REVENUE REBALANCING PROPOSALS

In this section, FBC discusses its revenue rebalancing considerations, assesses and compares five rebalancing options and sets out why its preferred revenue rebalancing option reflects the best balancing of rate design principles.

7.1 *REVENUE REBALANCING CONSIDERATIONS*

In evaluating revenue rebalancing options, FBC applied the rate design principles identified by Dr. Bonbright, which FBC summarized in Section 3.1 above. FBC uses these principles to identify the issues related to each rebalancing option and to select its preferred option.

FBC does not apply the eight Bonbright principles in any priority or with any particular weighting. In addition, different principles may have varying levels of importance in different contexts. For example, all rebalancing options presented in Section 7.2 below will have either no impact or minimal impact to Bonbright rate design principle 1 – Recovering the Cost of Service, principle 3 – Price signals that encourage efficient use and discourage inefficient use, principle 5 – Practical and cost-effective to implement, principle 7 – revenue stability, and principle 8 – Avoidance of undue discrimination.

As illustrated in the section below, rate design (or revenue rebalancing in the case of this Application) is a complex balancing process as it frequently requires the application of multiple, sometimes conflicting, principles and the consideration of viewpoints from various stakeholders. FBC applies it experience and judgement to consider and balance the most relevant principles when evaluating the different revenue rebalancing solutions. The rebalancing should strive to strike a balance among competing principles based on the specific characteristics of customers in each rate schedule.

The results of the 2025 COSA study show that RS 20 and RS 31 are above 105 percent, while RS 40 and RS 60 are below 95 percent. In accordance with the preceding discussion, FBC has sought to rebalance each rate class with an R/C ratio outside of the RoR to the nearest boundary, subject to other rate design considerations. However, a simple shift of the revenue between RS 20, RS 31, RS 40 and RS 60 is not feasible because the total decrease in revenues resulting from bringing RS 20 and RS 31 down to 105 percent is less than the revenue required to bring RS 40 and RS 60 up to 95 percent. As such, the rebalancing of these four rate schedules to the nearest RoR boundary would lead to the rebalancing not being revenue neutral. Additionally, such a rebalancing approach would result in a significant rate impact to RS 60 customers.

In considering the options for rebalancing in this context, FBC was primarily guided by Bonbright principles 2, 4 and 6. In particular:

Deleted: is
Deleted: , 41, and
Deleted: from
Deleted:
Deleted: and
Deleted: to
Deleted: , RS 41,
Deleted: increase
Deleted: required
Deleted: more
Deleted: , RS 41,
Deleted: is more than the revenue decrease from RS 20 being brought down to 105 percent
Deleted: or unity

- **Principle 2 – Fair apportionment of costs among customers**

  FBC considered the extent to which all R/C ratios fall within the RoR of 95 percent to 105 percent, such that the cost recovery through each rate schedule closely reflects the fair apportionment of costs from each customer group.

- **Principle 4 – Customer understanding and acceptance**

  FBC considered the number of rate schedules that would be adjusted and, in particular, whether any customer group would be adjusted even though their R/C ratio is already within the RoR.

- **Principle 6 – Rate Stability (Customer rate impact should be managed)**

  FBC considered whether any customer group would experience significant rate increases or rate shock (an increase greater than 10 percent in any year).

FBC developed five rebalancing options and assessed each option in Section 7.2 below against the rate design principles outlined above.[27] The proposed rebalancing approach is presented in Section 7.3.

7.2 REVENUE REBALANCING OPTIONS

This section discusses the different revenue rebalancing options which FBC developed based on the results of the 2025 COSA study. In all options, rebalancing would be accomplished by adjusting all rate components (Customer Charge, Energy Charge and Demand Charge where present) by the same percentage.

In the subsections below, FBC assesses each revenue rebalancing option against Bonbright's rate design principles and identifies the preferred rebalancing option.

7.2.1 Option 1: Rebalance All Out-of-Range Rate Schedules to the Boundary of the RoR, With Additional Credit from Rebalancing Allocated to Other Rate Schedules Currently with R/C Ratios Above 100%

Option 1 involves rebalancing RS 20 and RS 31 down to an R/C ratio of 105 percent, and rebalancing RS 40 and RS 60 up to 95 percent. This requires a reduction to the revenue recovered (at 2024 Approved rates) from RS 20 of approximately $1.134 million and from RS 31 of approximately $0.055 million, while increasing the revenue to be recovered from RS 40 and RS 60 by approximately $0.581 million and $0.933 million, respectively. However, in order to ensure revenue neutrality after the rebalancing, the credit variance of approximately $0.324 million (i.e., the sum of $0.581 million and $0.933 million, less the sum of $1.134 million and $0.055 million)

[27] As part of the stakeholder consultation workshop held on December 17, 2024, FBC presented five potential revenue rebalancing options. One of the options presented during the workshop involved no rebalancing to RS 60 (i.e., "Rebalancing Option 5" in the workshop presentation). After further consideration, FBC has removed the Option 5 included in the workshop presentation. The result of this change is that all options in the Application contemplate at least some rebalancing of RS 60.

Deleted: Option 1: Revenue Rebalancing Between RS 20, 40, 41 and 60, With Additional Credit from Rebalancing Allocated to Other Rate Schedules Currently with R/C Ratios Above 100 Percent¶

Option 1 involves rebalancing RS 20 down to an R/C ratio of 105 percent, and rebalancing RS 40, RS 41, and RS 60 up to 95 percent. This requires a reduction to the revenue recovered (at 2024 Approved rates) from RS 20 of approximately $1.481 million, while increasing the revenue to be recovered from RS 40, RS 41, and RS 60 by approximately $1.695 million, $0.031 million, and $0.633 million, respectively. However, in order to ensure revenue neutrality after the rebalancing, the credit variance of approximately $0.878 million (i.e., the sum of $1.695 million, $0.031 million and $0.633 million, less $1.481 million) will be distributed to other rate schedules that currently have R/C ratios over 100 percent (i.e., RS 21, RS 31, and RS 50) proportionally based on their revenue at 2024 Approved rates.¶

Table 7-1 below provides the initial 2025 COSA R/C ratios (as presented in Table 5-5 above) before any rebalancing, the revenue shifts for rebalancing under Option 1, the approximate bill impact per month in percentage and in dollars, and the final R/C ratios after the revenue shift.¶

Table 7-1: Option 1 – 2025 COSA R/C Ratio Results after Revenue Rebalancing¶

Rate Schedule	Initial CO R/C
RS 01 Residential	99
RS 20 Small Commerical	108
RS 21 Commerical	103
RS 30 Large Commercial Primary	99
RS 31 Large Commerical Transmission	104
RS 40 Wholesale Primary	92
RS 41 Wholesale Transmission	94
RS 50 Lighting	100
RS 60 Irrigation	82

Under Option 1, as shown in Table 7-1 above, an average RS 20 customer will see a rate reduction of approximately 3.1 percent, while an average RS 40, 41 and 60 customer will see a rate increase of approximately 3.2 percent, 0.4 percent, and 14.6 percent, respectively. The rate impacts to the other rate schedule (RS 21, RS 31, and RS 50) are approximately 1 percent (credit). FBC notes that the rate impact under Option 1 of 14.6 percent for RS 60 (equivalent to approximately $47.80 per month for the average RS 60 customer) would be considered rate shock.¶

When assessed against the Bonbright rate design principles, Option 1 aligns with principle 2 by bringing all R/C ratios within the RoR:¶

Principle 2 – Fair apportionment of costs among customers¶

All R/C ratios of the applicable rate schedules would fall within the RoR of 95 percent to 105 percent. Therefore, the cost recovery through each rate schedule closely reflects the fair apportionment of costs from each customer grou ...

Deleted: developed a new option (Option 1 presented in Section 7.2.1 below) and

Deleted: five

will be distributed to other rate schedules that currently have R/C ratios over 100 percent (i.e., RS 21 and RS 30) proportionally based on their revenue at 2024 Approved rates.

Table 7-1 below provides the initial 2025 COSA R/C ratios (as presented in Table 5-5 above) before any rebalancing, the revenue shifts for rebalancing under Option 1, the approximate bill impact per month in percentage and in dollars, and the final R/C ratios after the revenue shift.

Table 7-1: Option 1 – 2025 COSA R/C Ratio Results after Revenue Rebalancing

Rate Schedule	Initial COSA R/C	Revenue Shift ($000s)	Approx. Monthly Bill Impact (%)	Approx. Monthly Bill Impact ($)	COSA after Rebalancing R/C
RS 01 Residential	99.5%	-	-	-	99.5%
RS 20 Small Commerical	107.5%	(1,134)	(2.4%)	(6.2)	105.0%
RS 21 Commerical	102.4%	(233)	(0.3%)	(10.9)	102.0%
RS 30 Large Commercial Primary	100.7%	(90)	(0.3%)	(198.3)	100.4%
RS 31 Large Commerical Transmission	105.3%	(55)	(0.3%)	(1,156.1)	105.0%
RS 40 Wholesale Primary	94.0%	581	1.1%	4,838.0	95.0%
RS 41 Wholesale Transmission	98.3%	-	-	-	98.3%
RS 50 Lighting	99.8%	-	-	-	99.8%
RS 60 Irrigation	77.3%	933	22.9%	70.5	95.0%

Under Option 1, as shown in Table 7-1 above, an average RS 20 and RS 31 customer will see a rate reduction of approximately 2.4 percent and 0.3 percent, respectively, while an average RS 40 and RS 60 customer will see a rate increase of approximately 1.1 percent and 22.9 percent, respectively. The rate impacts to the other rate schedules (RS 21 and RS 30) are approximately 0.3 percent (credit). FBC notes that the rate impact under Option 1 of 22.9 percent for RS 60 (equivalent to approximately $70.50 per month for the average RS 60 customer) would be considered rate shock.

When assessed against the Bonbright rate design principles, Option 1 aligns with principle 2 by bringing all R/C ratios within the RoR:

- **Principle 2 – Fair apportionment of costs among customers**

  All R/C ratios of the applicable rate schedules would fall within the RoR of 95 percent to 105 percent. Therefore, the cost recovery through each rate schedule closely reflects the fair apportionment of costs from each customer group.

However, Option 1 does not align with principles 4 and 6:

- **Principle 4 – Customer understanding and acceptance**

  Option 1 results in adjustments to the revenues of RS 21 and RS 30 even though their R/C ratios are already within the RoR. Although the rate impacts (credit) to these customer groups are small at around 0.3 percent, the change in rates affects the majority of rate

schedules and is therefore considered to have a greater impact on customer understanding and acceptance.

- **Principle 6 – Rate Stability (Customer rate impact should be managed)**

  The rate impact of approximately 22.9 percent to RS 60 customers would be significant under Option 1. This level of rate increase would be considered rate shock.

7.2.2 Option 2: Rebalance RS 20, RS 31 and RS 40 to the RoR Boundary, and Rebalance RS 60 to Achieve Revenue Neutrality

Option 2 involves rebalancing RS 20 and RS 31 down to an R/C ratio of 105 percent, and rebalancing RS 40 up to 95 percent. This requires a reduction to the revenue recovered (at 2024 Approved rates) from RS 20 of approximately $1.134 million and from RS 31 of approximately $0.055 million, while increasing the revenue to be recovered from RS 40 by approximately $0.581 million. In order to achieve revenue neutrality, the debit variance of approximately $0.609 million will be fully assigned to RS 60 based on its revenue at 2024 Approved rates. This results in RS 60's R/C ratio moving from 77.3 percent to 88.9 percent.

Table 7-2 below provides the initial 2025 COSA R/C ratios (as presented in Table 5-5 above) before any rebalancing, the revenue shifts for rebalancing under Option 2, the approximate bill impact per month in percentage and in dollars, and the final R/C ratios after the revenue shifts.

Table 7-2: Option 2 – 2025 COSA R/C Ratio Results after Revenue Rebalancing

Rate Schedule	Initial COSA R/C	Revenue Shift ($000s)	Approx. Monthly Bill Impact (%)	Approx. Monthly Bill Impact ($)	COSA after Rebalancing R/C
RS 01 Residential	99.5%	-	-	-	99.5%
RS 20 Small Commerical	107.5%	(1,134)	(2.4%)	(6.2)	105.0%
RS 21 Commerical	102.4%	-	-	-	102.4%
RS 30 Large Commercial Primary	100.7%	-	-	-	100.7%
RS 31 Large Commerical Transmission	105.3%	(55)	(0.3%)	(1,156.1)	105.0%
RS 40 Wholesale Primary	94.0%	581	1.1%	4,838.0	95.0%
RS 41 Wholesale Transmission	98.3%	-	-	-	98.3%
RS 50 Lighting	99.8%	-	-	-	99.8%
RS 60 Irrigation	77.3%	609	14.9%	46.0	88.9%

Under Option 2, an average RS 20 customer and RS 31 customer will see a rate reduction of approximately 2.4 percent and 0.3 percent, respectively, while an average RS 40 and RS 60 customer will see a rate increase of approximately 1.1 percent and 14.9 percent, respectively. FBC notes that the rate impact under Option 2 of 14.9 percent for RS 60 (equivalent to approximately $46 per month for the average RS 60 customer) would be considered rate shock.

When assessed against the Bonbright rate design principles, Option 2 partially aligns with principle 2 and aligns with principle 4:

- **Principle 2 – Fair apportionment of costs among customers (partially)**

  Except for RS 60, all R/C ratios of the applicable rate schedules fall within the RoR. RS 60 will move closer to the RoR, but will still be below 95 percent.

- **Principle 4 – Customer understanding and acceptance**

  Option 2 results in adjustments to only the rate schedules that fall outside of the RoR, which would likely result in a higher level of customer understanding and acceptance compared to options where rate schedules that are already within the RoR are rebalanced.

However, Option 2 does not fully align with principle 6:

- **Principle 6 – Rate Stability (Customer rate impact should be managed)**

  The rate impact of approximately 14.9 percent to RS 60 customers would be significant under Option 2. This level of rate increase would be considered rate shock. FBC discusses how to mitigate this rate impact in Section 7.3.

7.2.3 Option 3: Revenue Rebalancing Between RS 01, 20, 31, 40, 41, 50 and 60, With the R/C Ratio of RS 60 Capped at 85 Percent

Option 3 involves rebalancing all rate schedules except for RS 21 and RS 30. Under Option 3, the revenue to be recovered (at 2024 Approved rates) from RS 20 and RS 31 customers will be reduced by approximately $1.134 million and $0.055 million, respectively, which will bring the R/C ratios of RS 20 and RS 31 down to 105 percent. The revenue to be recovered (at 2024 Approved rates) from RS 40 customers increases by approximately $0.581 million, which will bring the R/C ratio of RS 40 up to 95 percent. RS 20, 31 and 40 will therefore be rebalanced to the RoR boundaries.

In order to somewhat mitigate the rate impact to RS 60 customers, the RS 60 R/C ratio will be capped at 85 percent, which will result in an increased revenue recovery from RS 60 customers of approximately $0.405 million. However, in order to ensure revenue neutrality after the rebalancing, the debit variance of approximately $0.203 million (i.e., the sum of $0.581 million and $0.405 million, less the sum of $1.134 million and $0.055 million) will be distributed to other rate schedules that currently have R/C ratios under 100 percent (i.e., RS 01, RS 41 and RS 50) proportionally based on their revenue at 2024 Approved rates.

Table 7-3 below provides the initial 2025 COSA R/C ratios (as presented in Table 5-5 above) before any rebalancing, the revenue shifts for rebalancing under Option 3, the approximate bill impact per month in percentage and in dollars, and the final R/C ratios after the revenue shifts.

Table 7-3: Option 3 – 2025 COSA R/C Ratio Results after Revenue Rebalancing

Rate Schedule	Initial COSA R/C	Revenue Shift ($000s)	Approx. Monthly Bill Impact (%)	Approx. Monthly Bill Impact ($)	COSA after Rebalancing R/C
RS 01 Residential	99.5%	195	0.1%	0.1	99.6%
RS 20 Small Commerical	107.5%	(1,134)	(2.4%)	(6.2)	105.0%
RS 21 Commerical	102.4%	-	-	-	102.4%
RS 30 Large Commercial Primary	100.7%	-	-	-	100.7%
RS 31 Large Commerical Transmission	105.3%	(55)	(0.3%)	(1,156.1)	105.0%
RS 40 Wholesale Primary	94.0%	581	1.1%	4,838.0	95.0%
RS 41 Wholesale Transmission	98.3%	8	0.1%	636.0	98.4%
RS 50 Lighting	99.8%	2	0.1%	0.1	99.9%
RS 60 Irrigation	77.3%	405	9.9%	30.6	85.0%

Under Option 3, an average RS 20 customer and RS 31 customer will see a rate reduction of approximately 2.4 percent and 0.3 percent, respectively, while an average RS 40 and RS 60 customer will see a rate increase of approximately 1.1 percent and 9.9 percent, respectively. The rate increases to the other rate schedules (RS 01, RS 41 and RS 50) are approximately 0.1 percent. FBC notes that the rate impact under Option 3 of 9.9 percent for RS 60 (equivalent to approximately $30.6 per month for the average RS 60 customer) would still be close to rate shock (and would likely be considered rate shock when combined with FBC's annual general rate increase).

When assessed against the Bonbright rate design principles, Option 3 does not fully align with principles 2, 4 or 6:

- **Principle 2 – Fair apportionment of costs among customers**

  Except for RS 60, all R/C ratios of the applicable rate schedules fall within the RoR. However, RS 60 will only be rebalanced to an R/C ratio of 85 percent to moderately mitigate the rate impact to RS 60 customers.

- **Principle 4 – Customer understanding and acceptance**

  Option 3 results in adjustments to the revenues of RS 01, RS 41 and RS 50 even though their R/C ratios are already within the RoR. Although the rate increases to these customer groups are minor at around 0.1 percent, the change in rates affects the majority of rate schedules and is therefore considered to have a greater impact on customer understanding and acceptance.

- **Principle 6 – Rate Stability (Customer rate impact should be managed)**

  The rate impact of approximately 9.9 percent to RS 60 customers would be significant under Option 3. When combined with FBC's annual general rate increase, this level of rate increase would likely be considered rate shock.

7.2.4 Option 4: Rebalance RS 20 and RS 31 to the Boundary of the RoR, Cap RS 60 at a 5% Rate Increase, and Rebalance RS 40 to Achieve Revenue Neutrality

Under Option 4, RS 20 and RS 31 would be rebalanced down to an R/C ratio of 105 percent. RS 60 would be rebalanced to a maximum 5 percent rate increase, and RS 40 would be used to maintain revenue neutrality. This requires a reduction to the revenue recovered (at 2024 Approved rates) from RS 20 of approximately $1.134 million and from RS 31 of approximately $0.055 million, while increasing the revenue to be recovered from RS 60 by approximately $0.204 million. In order to achieve revenue neutrality, the debit variance of approximately $0.986 million will be fully allocated to RS 40 based on its revenue at 2024 Approved rates. This results in RS 40's R/C ratio moving from 94.0 percent to 95.7 percent.

Table 7-4 below provides the initial 2025 COSA R/C ratios (as presented in Table 5-5 above) before any rebalancing, the revenue shifts for rebalancing under Option 4, the approximate bill impact per month in percentage and in dollars, and the final R/C ratios after the revenue shifts.

Table 7-4: Option 4 – 2025 COSA R/C Ratio Results after Revenue Rebalancing

Rate Schedule	Initial COSA R/C	Revenue Shift ($000s)	Approx. Monthly Bill Impact (%)	Approx. Monthly Bill Impact ($)	COSA after Rebalancing R/C
RS 01 Residential	99.5%	-	-	-	99.5%
RS 20 Small Commerical	107.5%	(1,134)	(2.4%)	(6.2)	105.0%
RS 21 Commerical	102.4%	-	-	-	102.4%
RS 30 Large Commercial Primary	100.7%	-	-	-	100.7%
RS 31 Large Commerical Transmission	105.3%	(55)	(0.3%)	(1,156.1)	105.0%
RS 40 Wholesale Primary	94.0%	986	1.8%	8,214.7	95.7%
RS 41 Wholesale Transmission	98.3%	-	-	-	98.3%
RS 50 Lighting	99.8%	-	-	-	99.8%
RS 60 Irrigation	77.3%	204	5.0%	15.4	81.2%

Under Option 4, an average RS 20 and RS 31 customer will see a rate reduction of approximately 2.4 percent and 0.3 percent, respectively, while an average RS 40 and RS 60 customer will see a rate increase of approximately 1.8 percent and 5.0 percent, respectively.

When assessed against the Bonbright rate design principles, Option 4 aligns with principle 6:

- **Principle 6 – Rate Stability (Customer rate impact should be managed)**

  The rate impacts to all impacted rate classes are well below 10 percent, with the impacts ranging from a decrease of 2.4 percent to an increase of 5.0 percent.

However, Option 4 does not fully align with principles 2 and 4:

- **Principle 2 – Fair apportionment of costs among customers**

  Under Option 4, all rate schedules except for RS 60 will be within the RoR; however, RS 60, with an R/C ratio of 81.2 percent after rebalancing, will still be well below the lower bound of the RoR.

- **Principle 4 – Customer understanding and acceptance**

  Only customers in RS 20, 31, 40 and 60, whose R/C ratios are outside the RoR, will be impacted by the revenue rebalancing. This minimizes the number of customers that will be impacted by the revenue rebalancing. However, in order to achieve revenue neutrality under this option, RS 40 will be rebalanced beyond the lower bound of the RoR (i.e., 95.7 percent), which could erode the level of understanding and acceptance in that rate class.

7.2.5 Option 5: Rebalance RS 31 and RS 40 to the Boundary of the RoR, Cap RS 60 at an R/C Ratio of 80%, and Rebalance RS 20 to Achieve Revenue Neutrality

Under Option 5, RS 31 would be rebalanced down to an R/C ratio of 105 percent and RS 40 would be rebalanced up to an R/C ratio of 95 percent. RS 60 would be rebalanced but would be capped at an R/C ratio of 80 percent, and RS 20 would be used to maintain revenue neutrality. This requires a reduction to the revenue recovered (at 2024 Approved rates) from RS 31 by approximately $0.055 million, while increasing the revenue to be recovered from RS 40 by approximately $0.581 million and from RS 60 by approximately $0.141 million. In order to achieve revenue neutrality, the credit variance of approximately $0.666 million will be fully distributed to RS 20 based on its revenue at 2024 Approved rates. This results in RS 20's R/C ratio moving from 107.5 percent to 106.0 percent.

Table 7-5 below provides the initial 2025 COSA R/C ratios (as presented in Table 5-5 above) before any rebalancing, the revenue shifts for rebalancing under Option 5, the approximate bill impact per month in percentage and in dollars, and the final R/C ratios after the revenue shifts.

Table 7-5: Option 5 – 2025 COSA R/C Ratio Results after Revenue Rebalancing

Rate Schedule	Initial COSA R/C	Revenue Shift ($000s)	Approx. Monthly Bill Impact (%)	Approx. Monthly Bill Impact ($)	COSA after Rebalancing R/C
RS 01 Residential	99.5%	-	-	-	99.5%
RS 20 Small Commerical	107.5%	(666)	(1.4%)	(3.6)	106.0%
RS 21 Commerical	102.4%	-	-	-	102.4%
RS 30 Large Commercial Primary	100.7%	-	-	-	100.7%
RS 31 Large Commerical Transmission	105.3%	(55)	(0.3%)	(1,156.1)	105.0%
RS 40 Wholesale Primary	94.0%	581	1.1%	4,838.0	95.0%
RS 41 Wholesale Transmission	98.3%	-	-	-	98.3%
RS 50 Lighting	99.8%	-	-	-	99.8%
RS 60 Irrigation	77.3%	141	3.5%	10.7	80.0%

Under Option 5, an average RS 20 and RS 31 customer will see a rate reduction of approximately 1.4 percent and 0.3 percent, respectively, while an average RS 40 and RS 60 customer will see a rate increase of approximately 1.1 percent and 3.5 percent, respectively.

When assessed against the Bonbright rate design principles, Option 5 aligns with principle 6:

- **Principle 6 – Rate Stability (Customer rate impact should be managed)**

  The rate impacts to all impacted rate classes are well below 10 percent, with the impacts ranging from a decrease of 1.4 percent to an increase of 3.5 percent.

However, Option 5 does not align with principles 2 and 4:

- **Principle 2 – Fair apportionment of costs among customers**

  Under Option 4, two rate schedules (RS 20 and RS 60) will still be outside of the RoR, which is the most out of any of the options evaluated.

- **Principle 4 – Customer understanding and acceptance**

  This option ranks poorly for customer understanding and acceptance, as RS 20 will still be above the RoR, while RS 60 will still be significantly below the RoR.

7.2.6 Summary of Revenue Rebalancing Options

Table 7-6 below summarizes the revenue shifts as well as the resulting R/C ratios of each rate schedule, and Table 7-7 below summarizes the estimated bill impact in both percentage and in dollars for the average customer by rate schedule for each rebalancing option.

Table 7-6: Summary of Revenue Shifts and Resulting R/C Ratios Between Rate Schedules for All Rebalancing Options

	Option 1: Rebalance All Out-of-Range Rate Schedules to the RoR Boundary, With Additional Credit from Rebalancing Allocated to Other Rate Schedules Currently with R/C Ratios Above 100%		Option 2: Rebalance RS 20, RS 31 and RS 40 to the RoR Boundary, and Rebalance RS 60 to Achieve Revenue Neutrality		Option 3: Revenue Rebalancing Between RS 01, 20, 31, 40, 41, 50 and 60, With the R/C Ratio of RS 60 Capped at 85 Percent		Option 4: Rebalance RS 20 and RS 31 to the RoR Boundary, Cap RS 60 at a 5% Rate Increase, and Rebalance RS 40 to Achieve Revenue Neutrality		Option 5: Rebalance RS 31 and RS 40 to the RoR Boundary, Cap RS 60 at an R/C Ratio of 80%, and Rebalance RS 20 to Achieve Revenue Neutrality	
	Revenue Shift ($000s)	R:C Ratio	Revenue Shift ($000s)	R:C Ratio	Revenue Shift ($000s)	R:C Ratio	Revenue Shift ($000s)	R:C Ratio	Revenue Shift ($000s)	R:C Ratio
RS 01	-	99.5%	-	99.5%	195	99.6%	-	99.5%	-	99.5%
RS 20	(1,134)	105.0%	(1,134)	105.0%	(1,134)	105.0%	(1,134)	105.0%	(666)	106.0%
RS 21	(233)	102.0%	-	102.4%	-	102.4%	-	102.4%	-	102.4%
RS 30	(90)	100.4%	-	100.7%	-	100.7%	-	100.7%	-	100.7%
RS 31	(55)	105.0%	(55)	105.0%	(55)	105.0%	(55)	105.0%	(55)	105.0%
RS 40	581	95.0%	581	95.0%	581	95.0%	986	95.7%	581	95.0%
RS 41	-	98.3%	-	98.3%	8	98.4%	-	98.3%	-	98.3%
RS 50	-	99.8%	-	99.8%	2	99.9%	-	99.8%	-	99.8%
RS 60	933	95.0%	609	88.9%	405	85.0%	204	81.2%	141	80.0%

Table 7-7: Summary of Monthly Bill Impact in % and $ for an Average Customer in Each Rate Schedule for All Rebalancing Options

	Option 1		Option 2		Option 3		Option 4		Option 5	
	Approx. Monthly Bill Impact (%)	Approx. Monthly Bill Impact ($)	Approx. Monthly Bill Impact (%)	Approx. Monthly Bill Impact ($)	Approx. Monthly Bill Impact (%)	Approx. Monthly Bill Impact ($)	Approx. Monthly Bill Impact (%)	Approx. Monthly Bill Impact ($)	Approx. Monthly Bill Impact (%)	Approx. Monthly Bill Impact ($)
RS 01	-	-	-	-	0.1%	0.1	-	-	-	-
RS 20	(2.4%)	(6.2)	(2.4%)	(6.2)	(2.4%)	(6.2)	(2.4%)	(6.2)	(1.4%)	(3.6)
RS 21	(0.3%)	(10.9)	-	-	-	-	-	-	-	-
RS 30	(0.3%)	(198.3)	-	-	-	-	-	-	-	-
RS 31	(0.3%)	(1,156.1)	(0.3%)	(1,156.1)	(0.3%)	(1,156.1)	(0.3%)	(1,156.1)	(0.3%)	(1,156.1)
RS 40	1.1%	4,838.0	1.1%	4,838.0	1.1%	4,838.0	1.8%	8,214.7	1.1%	4,838.0
RS 41	-	-	-	-	0.1%	636.0	-	-	-	-
RS 50	-	-	-	-	0.1%	0.1	-	-	-	-
RS 60	22.9%	70.5	14.9%	46.0	9.9%	30.6	5.0%	15.4	3.5%	10.7

When comparing amongst the different revenue rebalancing options, as shown in Tables 7-6 and 7-7 above, Options 2 and 4 strike the best balance between achieving rebalancing amongst the applicable rate schedules, limiting the rebalancing to rate schedules that are currently outside of the RoR, and minimizing the rate impact to RS 60 customers. FBC notes the following regarding the options:

- Only Option 1 will rebalance all rate schedules to within the RoR. However, this option will lead to a significant rate impact for RS 60 customers at approximately 22.9 percent.
- Option 2 results in all rate schedules moving to within the RoR except for RS 60, and it results in no impacts to the rate schedules that are already within the RoR prior to rebalancing, thus minimizing rate impacts to the majority of customer classes. While not fully moving to the lower bound of the RoR, RS 60 moves much closer to the lower bound (from 77.3 percent to 88.9 percent). However, the rate impact to RS 60 is significant, at 14.9 percent.
- Option 3 better mitigates the rate impact to RS 60 compared to Options 1 and 2 by capping the R/C ratio of RS 60 at 85 percent. However, the resulting rate impact to RS 60 is still 9.9 percent, which when combined with FBC's annual general rate increase, would likely still be considered rate shock. Further, Option 3 affects the most rate schedules out of all of the options, as all rate schedules will be rebalanced except for RS 21 and RS 30 (albeit the impact of the rebalancing on most rate schedules is minor at 0.1 percent).
- Option 4 limits the rebalancing to the rate schedules outside of the RoR (RS 20, RS 31, RS 40 and RS 60). Further, by capping the rate increase at 5 percent for RS 60, the rate impacts for all rate classes subject to rebalancing are reasonably mitigated. However, RS 60 will still be well below the lower bound of the RoR (the RS 60 R/C ratio will be 81.2 percent after rebalancing), and, in order to achieve revenue neutrality, RS 40 will be rebalanced slightly higher than the lower bound of the RoR (i.e., RS 40 will move from 94.0 percent to 95.7 percent).
- Similar to Option 4, Option 5 limits the rebalancing to the rate schedules outside of the RoR (RS 20, RS 31, RS 40 and RS 60). Under Option 5, the rate impact to RS 60 is further

mitigated by capping RS 60's R/C ratio at 80 percent. However, in order to achieve revenue neutrality, RS 20 is only moved from an R/C ratio of 107.5 percent to 106.0 percent and is thus still outside of the upper bound of the RoR. Given that RS 60 is still well outside the RoR, and RS 20 would still be above the upper bound of the RoR, FBC considers this option to rank poorly in terms of Bonbright principles 2 and 4.

7.3 OPTION 2 IS THE PREFERRED REBALANCING OPTION

Based on the evaluation of the revenue rebalancing options against Bonbright's rate design principles, Option 2 is FBC's preferred and proposed option. Option 2 reflects the best balance between the above-discussed rate design principles when compared to other revenue rebalancing options. In order to mitigate the rate impact to RS 60 customers from rebalancing, FBC proposes to phase-in the impact over five years, as further discussed below.

Table 7-8 below presents the final 2025 COSA results after the proposed revenue rebalancing under Option 2.

Table 7-8: Final 2025 COSA Results with Proposed Revenue Rebalancing

Rate Schedule	Initial COSA R/C	Revenue Shift ($000s)	Approx. Monthly Bill Impact (%)	Approx. Monthly Bill Impact ($)	COSA after Rebalancing R/C
RS 01 Residential	99.5%	-	-	-	99.5%
RS 20 Small Commerical	107.5%	(1,134)	(2.4%)	(6.2)	105.0%
RS 21 Commerical	102.4%	-	-	-	102.4%
RS 30 Large Commercial Primary	100.7%	-	-	-	100.7%
RS 31 Large Commerical Transmission	105.3%	(55)	(0.3%)	(1,156.1)	105.0%
RS 40 Wholesale Primary	94.0%	581	1.1%	4,838.0	95.0%
RS 41 Wholesale Transmission	98.3%	-	-	-	98.3%
RS 50 Lighting	99.8%	-	-	-	99.8%
RS 60 Irrigation	77.3%	609	14.9%	46.0	88.9%

FBC proposes to phase-in the rate increase due to revenue rebalancing to RS 60 customers over a 5-year period. As shown in Table 7-9 below, a 5-year phase-in period will reduce the immediate impact to RS 60 customers from 14.9 percent to 3.0 percent. FBC considers a 5-year phase-in period the most appropriate as it avoids rate shock (even when considering the combined impact of the rebalancing and FBC's annual general rate increases).

Table 7-9: Comparison of Bill Impact to RS 60 Customers due to Revenue Rebalancing over a Phase-in Period from One to Five Years

Phase-in Period	1 year	2 Years	3 Years	4 Years	5 Years
Revenue Shift per year ($000s)	$ 609	$ 305	$ 203	$ 152	$ 122
Effective Increase due to rebalancing each year (%)	14.9%	7.5%	5.0%	3.7%	3.0%
Appox. Monthly Bill Impact to RS 60 Customers - Year 1 ($)	$ 46.0	$ 23.0	$ 15.3	$ 11.5	$ 9.2

Deleted: 3

Deleted: Based on the evaluation of the revenue rebalancing options against Bonbright's rate design principles, Option 3 is FBC's preferred and proposed option. Option 3 reflects the best balance between the above-discussed rate design principles when compared to other revenue rebalancing options. Additionally, Option 3 results in the least bill impact to the average RS 60 customer at approximately 2.5 percent, avoiding the potential of rate shock.¶
Table 7-8 below presents the final 2025 COSA results after the proposed revenue rebalancing under Option 3.¶
Table 7-8: Final 2025 COSA Results with Proposed Revenue Rebalancing¶

Rate Schedule	Initial R/
RS 01 Residential	
RS 20 Small Commerical	1
RS 21 Commerical	1
RS 30 Large Commercial Primary	
RS 31 Large Commerical Transmission	1
RS 40 Wholesale Primary	
RS 41 Wholesale Transmission	
RS 50 Lighting	1
RS 60 Irrigation	...

In accordance with the approved rate design for RS 60, Irrigation customers are charged at RS 20 or RS 21 rates during the off-season (i.e., from November to March). As shown in Table 7-8 above, under the preferred Option 2, the rates for RS 20 will be reduced by 2.4 percent due to revenue rebalancing. In order for the overall revenue from RS 60 to increase by 3.0 percent (or a revenue shift of approximately $122 thousand) based on a 5-year phase-in as shown in Table 7-9 above, the irrigation in-season rates from April to October will need to increase by approximately 3.9 percent each year to offset the off-season reduction from RS 20 rates as illustrated in Table 7-10 below.

Table 7-10: Final 2025 COSA Results with Proposed Revenue Rebalancing

	Revenue before Rebalancing ($000s)	Revenue after Rebalancing - Preferred Option 2 w/ 5-yr Phase-in ($000s)	% Change
RS 60 In-season (Apr to Oct)	$ 3,316.8	$ 3,447.3	3.9%
RS 60 Off-season (Nov to Mar) @ RS 20 Rates	339.8	331.8	-2.4%
RS 60 Off-season (Nov to Mar) @ RS 21 Rates	425.7	425.7	0.0%
Total RS 60 Revenue ($000s)	**$ 4,082.3**	**$ 4,204.8**	**3.0%**

In order to facilitate the phase-in of the impact to RS 60 customers and maintain overall revenue neutrality, FBC is seeking BCUC approval pursuant to sections 59 to 61 of the UCA for a non-rate base deferral account, titled the Irrigation Rebalancing Phase-in deferral account, attracting FBC's WACC, to capture the revenue deficiency resulting from the phase-in for RS 60 customers. The deferral account will be amortized over the same 5-year phase-in period for RS 60 customers and will be recovered from all customers through FBC's general rate increases.

8. PROPOSED CHANGES TO TRANSFORMATION DISCOUNTS

For customers under RS 21, 30, and 40, delivery voltage discounts are available in consideration of the variations from the typical service connection. As a result of the 2025 COSA study, these discounts need to be updated to reflect the updated cost allocations for each of these rate schedules. This approach is consistent with the 2017 COSA and RDA.

For RS 21, the rate is designed on the basis that customers receive service at the secondary voltage. However, some customers might choose to own the transformation equipment required to convert their service voltage from the primary level to the secondary level. In these cases, the customer is taking service at the primary voltage available at the location of the interconnection, and the customer is entitled to a discount from the demand charge under the rate schedule as transformation and secondary costs would normally be included in the rate.

Similarly, the rates of RS 30 and RS 40 are designed on the basis that customers are normally taking service at the primary voltage. However, if the customers choose to take service at the transmission voltage with their own associated transformation equipment, a discount on the delivery is available.

FBC currently has 27 customers under RS 21, two customers under RS 30, and one customer under RS 40 that are taking service at the higher voltage with the transformation discount.

Consistent with past COSA Studies, the 2025 COSA results were used to establish the difference in costs in order to set the appropriate discount for taking service at a higher voltage level. The COSA is set up to account for the voltage level associated with each customer class. This allows the allocation of costs for the specific facilities used by customers within the class. To determine the difference in costs solely based on a change in voltage level, the COSA was recalculated assuming a higher voltage level for the class in question. The difference was calculated independently for each class where such a discount is offered but assumed the entire class rather than specific customers were served at the higher voltage level. None of the load data or allocation factors were changed for the various classes when completing the calculation. The only difference is that certain costs were no longer assigned to the class. The resulting difference in the unit costs for each class was then taken from the 2025 COSA to determine the appropriate discount level on a per kVA basis.

The updated transformation discounts for RS 21, 30, and 40 based on the results of the 2025 COSA study are presented below:

- For RS 21, the transformation discount will be increased from the current level of $0.409 per kW to $0.4841 per kW (from $0.371 to $0.4357 on a kVA basis) of Billing Demand. The discount is applied to the Demand Charge portion of the eligible customer's bill. The transformation discount is listed as the Delivery and Metering Voltage Discounts under FBC's electric tariff for RS 21.

Deleted: reduced

Deleted: 247

- For RS 30, the transformation discount will be reduced from the current level of $6.727 per kVA to $5.98 per kVA of Billing Demand. The discount is applied to the Demand Charge portion of the eligible customer's bill. The transformation discount is listed as the Delivery and Metering Voltage Discounts under FBC's electric tariff for RS 30.

- For RS 40, the transformation discount will be increased from the current level of $3.390 per kVA to $3.78 per kVA of Billing Demand applied to the Wires Charge portion of the eligible customer's bill, and reduced from $0.00985 per kWh to $0.00926 per kWh applied to the Energy Charge of the eligible customer's bill. The transformation discount is listed as the Delivery Voltage Discount under FBC's electric tariff for RS 40.

Deleted: 6.237

Deleted: reduced

Deleted: 11

Deleted: 00642

9. CONCLUSION

The results of the 2025 COSA show that the R/C ratios of five of the nine customer classes are within the range of 95 percent to 105 percent which, as explained in Section 6 of the Application, is the accepted range for R/C ratios for evaluating the adequacy of each rate schedule to recover its allocated cost of service. The Small Commercial and Large Commercial Transmission customer classes are above this range, while the Irrigation and Wholesale Primary classes are below the range.

Deleted: is

Deleted: ,

Deleted: , and Wholesale Transmission

Based on the results of the 2025 COSA and the considerations set out in Section 7, FBC seeks approval of its preferred revenue rebalancing proposal (Option 2). In order to mitigate the rate impact for RS 60 customers of rebalancing, FBC proposes to phase-in the impact over five years and seeks approval of a deferral account to implement the phase-in approach. The proposed revenue rebalancing option, when combined with the phasing in of the increased recovery from RS 60 customers, results in a reasonable balance of rate design principles, and just and reasonable rates for customers.

Deleted: 3

FBC is also proposing to update the transformation discount offered to customers under RS 21, 30, and 40 who choose to take service at a higher voltage level based on the result of the 2025 COSA study. The updated transformation discounts are presented in Section 8 of the Application.

A blacklined version of the tariff changes based on the proposals in the Application is provided in Appendix D. A Draft Order setting out the approvals sought is provided in Appendix F-2 of the Application.