



**Sarah Walsh**  
Director, Regulatory Affairs

**Gas Regulatory Affairs Correspondence**  
Email: [gas.regulatory.affairs@fortisbc.com](mailto:gas.regulatory.affairs@fortisbc.com)

**Electric Regulatory Affairs Correspondence**  
Email: [electricity.regulatory.affairs@fortisbc.com](mailto: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](http://www.fortisbc.com)

November 23, 2023

Commercial Energy Consumers Association of British Columbia  
c/o Owen Bird Law Corporation  
Vancouver Centre II  
2900 – 733 Seymour Street  
Vancouver, BC  
V6B 0S6

Attention: Christopher P. Weafer

Dear Christopher P. Weafer:

**Re: FortisBC Energy Inc. (FEI)**

**2023 Cost of Service Allocation (COSA) Study and Application for Approval of Revenue Rebalancing (Application) ~ Project No. 1599563**

**Response to the Commercial Energy Consumers Association of BC (CEC) Information Request (IR) No. 1**

---

On July 20, 2023, FEI filed the Application referenced above. In accordance with the regulatory timetable established in BCUC Order G-218-23 for the review of the Application, FEI respectfully submits the attached response to CEC IR No. 1.

If further information is required, please contact the undersigned.

Sincerely,

**FORTISBC ENERGY INC.**

***Original signed:***

Sarah Walsh

Attachments

cc (email only): Commission Secretary  
Registered Interveners

FortisBC Energy Inc. (FEI or the Company) 2023 Cost of Service Allocation (COSA) Study and Application for Approval of Revenue Rebalancing (Application)	Submission Date: November 23, 2023
Response to the Commercial Energy Consumers Association of BC (CEC) Information Request (IR) No. 1	Page 1

1    **1.    Reference:    Exhibit B-1, Section 1, Page 6**

9    **Commercial Rate Schedules (RS 2, 2U, 2B, 3, 3U, 3B, and 23):**

10    2. For Rate Schedules 2, 2U, and 2B:

- 11    • Approval to adjust the basic charges and delivery charges to align with the 2,000 GJ  
12    threshold between small and large commercial customers discussed in Section 5.2.3 of  
13    the Application, as follows:

14            i. Increase the Basic Charge by \$0.2026 per day from \$0.9485 to \$1.1511 per  
15            day; and

16            ii. Decrease the Delivery Charge by \$0.225 per GJ.

17    3. For Rate Schedules 3, 3U, 3B, and 23:

- 18    • Approval to adjust the basic charges and delivery charges to align with the 2,000 GJ  
19    threshold between small and large commercial customers discussed in Section 5.2.3 of  
20    the Application, as follows:

21            i. Increase the Basic Charge by \$0.4730 per day from \$4.7895 to \$5.2625 per  
22            day; and

23            ii. Decrease the Delivery Charge by \$0.050 per GJ.

3    1.1    Please advise whether FEI consulted with commercial customers of rate schedules  
4    2, 2U, 2B, 3, 3U, 3B and 23 prior to the filing of the Application.

5    1.1.1    Please provide details of the engagement activities that were undertaken  
6    with commercial customers on these rate schedules, if any.

7    1.1.2    Please provide a summary of the feedback received from engagement  
8    with commercial customers prior to the filing of the Application, if any.

9  
10    **Response:**

11    FEI did not undertake any stakeholder engagement or consultation activities prior to filing this  
12    Application for the reasons discussed in the response to BCUC IR1 1.1. Regarding the  
13    commercial customers, as summarized in Table 5-23 of the Application, the impact of the  
14    proposed revenue rebalancing for RS 2 customers is a minor bill increase (0.04 percent), and the  
15    impact to RS 3/23 customers is a minor bill decrease (0.04 percent). In fact, FEI proposed Option  
16    5 specifically in consideration of the impact on RS 2 and RS 3/23 customers, which is why, in  
17    part, FEI has proposed to use RS 1 to absorb the revenue shifts from RS 5/25 and RS 22. Further,  
18    as shown in Table 5-17, the impact to all customer classes is minor as a result of the proposals  
19    in this Application, as FEI is only proposing minor rebalancing to bring all applicable customer  
20    classes into the range of reasonableness.

FortisBC Energy Inc. (FEI or the Company) 2023 Cost of Service Allocation (COSA) Study and Application for Approval of Revenue Rebalancing (Application)	Submission Date: November 23, 2023
Response to the Commercial Energy Consumers Association of BC (CEC) Information Request (IR) No. 1	Page 2

1    **2. Reference: Exhibit B-1, Section 4.2.2.3, Page 22**

9    **4.2.2.3 Treatment of Biomethane Customer Costs**

10 FEI's biomethane service offering allows customers to elect to receive a portion of their natural  
 11 gas as renewable natural gas. Renewable natural gas is a renewable and carbon neutral energy  
 12 source that reduces greenhouse gas (GHG) emissions when used in place of conventional natural  
 13 gas. The current underlying cost recovery mechanisms for FEI's biomethane service were  
 14 approved by Order G-133-16,<sup>46</sup> and, pursuant to the 2020-2024 MRP Decision for FEI,<sup>47</sup> all  
 15 biomethane related costs and revenues, including the original seven interconnections that were  
 16 previously accounted for in FEI's delivery margin revenue requirement, are now included in the  
 17 Biomethane Variance Account (BVA) with the balance to be recovered from customers through  
 18 the Biomethane Energy Recovery Charge (BERC) and the BVA Rate Rider. As such, there are  
 19 no biomethane costs and revenues accounted for in the 2023 COSA (i.e., all biomethane related  
 20 assets or costs as well as any offsetting revenues such as the BVA Rate Rider are removed from  
 21 FEI's rate base or cost of service for allocation purposes).

2  
 3    2.1 Please provide, in a table format, FEI's annual sales (in GJ and \$) related to its  
 4    biomethane service offering for the years 2016 to 2023 (forecast), and as  
 5    percentage of total gas sales (in GJ and \$).  
 6

7    **Response:**

8    As discussed in Section 4.2.2.3 of the Application and referenced in the preamble, all biomethane  
 9    related costs and revenues are included in the Biomethane Variance Account (BVA), with the  
 10    balance recovered through the Biomethane Energy Recovery Charge (BERC) and the BVA rate  
 11    rider. The costs and sales revenue related to FEI's biomethane service offering are not recovered  
 12    through the delivery rates and are therefore not allocated as part of the 2023 COSA study.  
 13    Accordingly, the annual sales of FEI's biomethane service offering since 2016 are not relevant to  
 14    the 2023 COSA study and results.

15    However, to be responsive, FEI has provided the requested information in Table 1 below. The  
 16    Biomethane sales dollars and total gas sales dollars reflect the Cost of Gas only and exclude the  
 17    Delivery Margin. Table 1 also excludes the biomethane marketer volumes.

18    **Table 1: FEI Annual Sales related to Biomethane Service Offering**

	2016	2017	2018	2019	2020	2021	2022	2023
FEI Annual Biomethane Sales (\$)	\$ 1,915,759	\$ 2,273,370	\$ 2,606,398	\$ 3,104,471	\$ 3,152,914	\$ 6,503,041	\$ 13,729,217	\$ 25,325,840
FEI Annual Biomethane Sales (GJ)	146,342	216,625	259,763	305,366	306,172	581,377	1,124,333	2,023,100
	-	-	-	-	-	-	-	-
Biomethane sales to total gas sales (\$)	0.6%	0.5%	0.7%	0.7%	0.7%	0.9%	1.3%	2.2%
Biomethane sales to total gas sales (GJ)	0.1%	0.2%	0.2%	0.2%	0.2%	0.4%	0.7%	1.3%

19  
 20  
 21  
 22  
 23    2.2 Please provide, in a table format, a breakdown of FEI's annual sales (in GJ and \$)  
 24    from its biomethane service offering for the years 2016 to 2023 (forecast) by type  
 25    of customer (i.e., residential, commercial, industrial, other).



FortisBC Energy Inc. (FEI or the Company) 2023 Cost of Service Allocation (COSA) Study and Application for Approval of Revenue Rebalancing (Application)	Submission Date: November 23, 2023
Response to the Commercial Energy Consumers Association of BC (CEC) Information Request (IR) No. 1	Page 3

1  
2 **Response:**

3 Please refer to Tables 1 and 2 below for the requested information.

4 **Table 1: FEI's Annual Biomethane Sales in GJ by Type of Customer**

FEI Annual Biomethane Sales (GJ)	2016	2017	2018	2019	2020	2021	2022	2023
Residential	60,479	88,390	96,858	113,369	111,316	103,739	120,204	140,500
Commercial	12,778	29,417	29,657	35,949	40,239	44,066	146,873	314,600
Industrial	-	-	118	22,013	15,017	157,627	683,394	1,395,900
Transportation	73,085	98,818	133,129	134,034	139,602	275,946	173,862	172,100
<b>Total</b>	<b>146,342</b>	<b>216,625</b>	<b>259,763</b>	<b>305,366</b>	<b>306,172</b>	<b>581,377</b>	<b>1,124,333</b>	<b>2,023,100</b>

6 **Table 2: FEI's Annual Biomethane Sales in Dollars by Type of Customer**

FEI Annual Biomethane Sales (\$)	2016	2017	2018	2019	2020	2021	2022	2023
Residential	\$ 765,884	\$ 931,550	\$ 972,732	\$ 1,166,308	\$ 1,172,717	\$ 1,227,354	\$ 1,659,177	1,905,640
Commercial	164,630	310,012	297,932	370,147	423,715	520,337	1,815,476	4,051,480
Industrial	-	-	1,188	226,451	160,468	1,864,618	8,269,100	17,368,020
Transportation	985,245	1,031,809	1,334,546	1,341,564	1,396,015	2,890,731	1,985,464	2,000,700
<b>Total</b>	<b>\$ 1,915,759</b>	<b>\$ 2,273,370</b>	<b>\$ 2,606,398</b>	<b>\$ 3,104,471</b>	<b>\$ 3,152,914</b>	<b>\$ 6,503,041</b>	<b>\$ 13,729,217</b>	<b>\$ 25,325,840</b>

7  
8  
9  
10  
11 2.3 Please provide, in a table format, FEI's forecast annual sales (in GJ and \$) related  
12 to its biomethane service offering for the years 2024 to 2030, as per its 2022 Long  
13 Term Gas Resource Plan ('LTGRP'), and as percentage of total forecast gas sales  
14 (in GJ and \$).

15  
16 **Response:**

17 Please refer to Table 1 below for the total forecast Biomethane (renewable natural gas or RNG)  
18 supply and cost for the years 2024 to 2030 under the Diversified Energy (Planning) Scenario from  
19 FEI's 2022 LTGRP.

20 **Table 1: FEI's Forecast RNG Supply and Costs from 2024 to 2030**

Year	RNG Supply (PJ)	Percentage of Total Gas Supply	RNG Estimated Cost (\$ million)	Percentage of Total Gas Cost
2024	12.9	6%	304.3	27%
2025	16.1	8%	387.2	31%
2026	19.3	10%	473.5	33%
2027	22.5	11%	563.2	34%
2028	25.6	13%	656.5	41%
2029	28.8	15%	753.4	42%
2030	32.2	17%	858.5	44%

FortisBC Energy Inc. (FEI or the Company) 2023 Cost of Service Allocation (COSA) Study and Application for Approval of Revenue Rebalancing (Application)	Submission Date: November 23, 2023
Response to the Commercial Energy Consumers Association of BC (CEC) Information Request (IR) No. 1	Page 4

1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16

2.4 In the context of FEI's planned expansion of its biomethane service offering (as per its 2022 LTGRP), beyond the current year:

2.4.1 What is FEI's outlook for the longevity of the current underlying cost recovery mechanisms for FEI's biomethane service?

2.4.2 Under what changed circumstances would FEI see fit to include biomethane related assets and costs in its COSA studies?

2.4.3 In the absence of the current underlying cost recovery mechanisms for FEI's biomethane service and in a scenario where biomethane-related assets and costs were to be included in the 2023 COSA, please provide the resulting R:C and M:C ratios (consistent with the format of Table 1-1 of the Application).

**Response:**

FEI considers that the current accounting mechanism for biomethane assets should be maintained and is the appropriate long-term approach for biomethane accounting.

FEI's biomethane assets in place to produce biomethane are effectively the same as a natural gas producer's assets to extract conventional natural gas from a gas well and deliver it to market. While conventional natural gas is market priced, it is reasonable to assume that the costs related to those gas extraction assets are embedded in the market price of gas, which FEI accounts for in its Commodity Cost Reconciliation Account (CCRA). Therefore, FEI considers that the price for biomethane costs should continue to be set in a similar fashion as conventional natural gas by accounting for the acquisition and/or production assets of biomethane in the Biomethane Variance Account (BVA) for recovery. This approach is reasonable and is appropriate now and in the long term.

FEI considers that the currently approved accounting mechanisms for biomethane are logical and reasonable. All biomethane related costs and revenue have been recorded in the BVA since 2016 following the BCUC's Decision and Order G-133-16, except for the initial seven interconnects which FEI was subsequently approved to transfer to the BVA as part of the 2020-2024 Multi-year Rate Plan (MRP) Decision and Order G-165-20. As such, there are no biomethane costs or revenues in FEI's delivery rates and FEI is unable to provide an alternate COSA study with R:C and M:C ratios that would include the biomethane costs and revenues. FEI is not seeking approval to transfer biomethane costs and revenues to the delivery margin for recovery through delivery rates, and such inclusion of biomethane costs and revenues in the COSA study would require extensive analysis and investigation of various scenarios which would not be reasonable to undertake as part of the IR response process.



FortisBC Energy Inc. (FEI or the Company) 2023 Cost of Service Allocation (COSA) Study and Application for Approval of Revenue Rebalancing (Application)	Submission Date: November 23, 2023
Response to the Commercial Energy Consumers Association of BC (CEC) Information Request (IR) No. 1	Page 5

1 The R:C and M:C ratios from a COSA study are intended to evaluate how well FEI's existing  
2 rates, which exclude the BERC rate and BVA riders, are performing in terms of whether the  
3 revenue from each rate schedule is recovering its fair costs within the defined range of  
4 reasonableness. Any adjustment to the R:C and M:C ratios to include biomethane costs would be  
5 an inaccurate reflection of FEI's existing rates and not relevant, as FEI is not seeking approval to  
6 include any biomethane costs in its cost of gas rates and/or delivery rates.

7  
8

9

10 2.5 In the context of FEI's plans (as per its 2022 LTGRP) for hydrogen service offering  
11 in the coming years, please provide FEI's position with respect to (future) hydrogen  
12 assets and costs and their treatment for COSA study purposes.

13

14 **Response:**

15 While it is too early to provide a definitive cost recovery and allocation approach for a hydrogen  
16 service, FEI expects to use hydrogen in a similar way as it uses biomethane, by blending it into  
17 its distribution system. FEI would therefore expect to account for hydrogen similarly to  
18 biomethane.

19

20

21

22 2.6 Do COSA studies (by design) reflect the current service offering mix, or are they  
23 forward-looking?

24

25 **Response:**

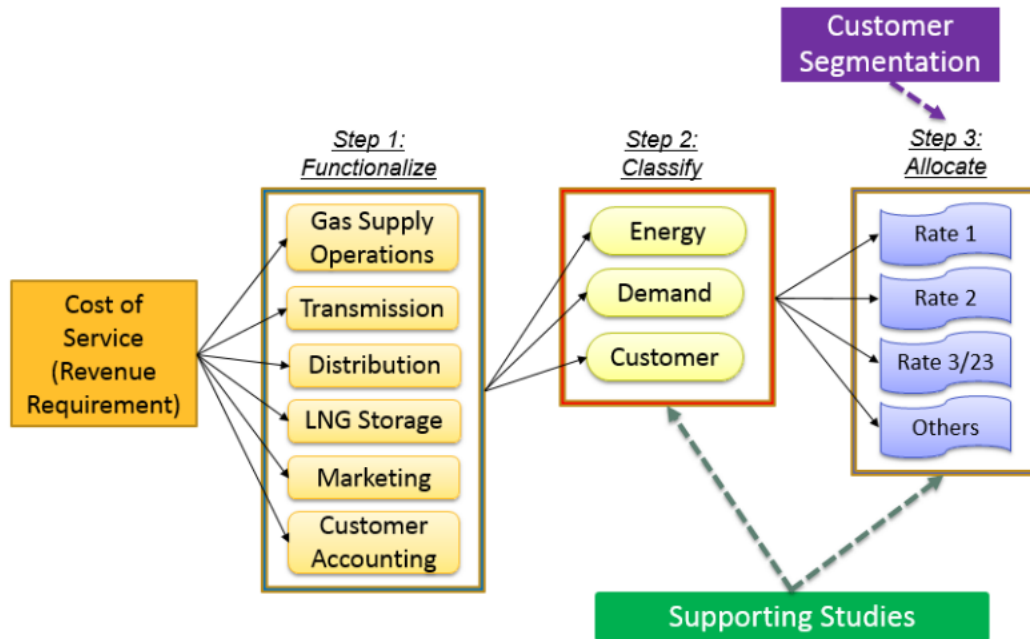
26 FEI's COSA studies from the 1993 Phase B Rate Design and thereafter have used the most  
27 recently completed revenue requirement, making them a point in time study. However, when there  
28 are known significant changes or additions that take place within the next few years of the COSA  
29 study, these known and measurable changes are added into the COSA study. To the extent the  
30 base data is a forward test year plus known and measurable changes after the test year, the  
31 COSA studies are forward-looking.

32

FortisBC Energy Inc. (FEI or the Company) 2023 Cost of Service Allocation (COSA) Study and Application for Approval of Revenue Rebalancing (Application)	Submission Date: November 23, 2023
Response to the Commercial Energy Consumers Association of BC (CEC) Information Request (IR) No. 1	Page 6

3. Reference: Section 4, Page 16, Figure 4-2

1 Figure 4-2: FEI Cost of Service Allocation Steps



2 2  
3 3.1 Please provide, in a table format, a summary of the revenue requirement split  
4 described as Step 1 in Figure 4-2 of the Application of the 2016 COSA and the  
5 2023 COSA:

6 3.1.1 As percentage of Gross O&M for each of the following revenue  
7 requirement 'totals' consistent with the table provided as Appendix C<sup>1</sup>:  
8 Distribution, Transmission, LNG Plant, Meter Reading, Energy Supply  
9 and Resource Development, General Operations, Energy Solutions and  
10 External Relations, Customer Care, Business and IT Services,  
11 Administration and General, and Capitalized Overhead.

12 3.1.2 Please provide a short commentary on any stand-out trend over the  
13 2016-2023 timespan with respect to O&M elements mentioned in CEC  
14 3.1.1 above.

16 Response:

17 Please refer to Table 1 below for the functionalized costs of FEI's revenue requirement in both  
18 the 2016 and 2023 COSA studies. As shown in the table, based on the allocation by percentage,  
19 the majority of the change between the 2016 and 2023 COSA results is related to gas supply.  
20 The increase in gas supply in the 2023 COSA is primarily due to the overall increase in the

<sup>1</sup> Exhibit B-1, Appendix C, PDF Pages 139 & 140.

1 commodity cost of natural gas (and propane for Revelstoke), at approximately 20 percent per  
 2 year.

3 **Table 1: FEI's Functionalized Revenue Requirement for 2016 COSA and 2023 COSA**

Particular	Revenue Requirement 2016 COSA (\$000s)		Revenue Requirement 2023 COSA (\$000s)	
	(\$000s)	(%)	(\$000s)	(%)
Gas Supply (Incl. Gas Costs)	\$ 479,718	38%	\$ 1,145,300	52%
LNG Storage Tilbury Base	36,274	3%	17,878	1%
LNG Storage Mt. Hayes	7,573	1%	6,963	0%
LNG Tilbury 1A	-	0%	33,869	2%
Transmission	171,890	14%	266,575	12%
Distribution	462,883	37%	599,406	27%
Marketing	50,084	4%	79,955	4%
Customer Accounting	52,140	4%	38,808	2%
<b>Total</b>	<b>\$ 1,260,561</b>	<b>100%</b>	<b>\$ 2,188,754</b>	<b>100%</b>

4  
 5 The higher gas costs (commodity) in 2023 compared to 2016 result in a higher percentage of the  
 6 total revenue requirement functionalized to Gas Supply, when gas costs are included. Since gas  
 7 costs are a flow through and not included in the delivery margin, their inclusion in Table 1 above  
 8 skews the comparability between 2016 and 2023. As such, FEI provides Table 2 below to  
 9 compare the allocation of the delivery margin (excluding gas costs) by percentage. Once gas  
 10 costs are excluded, the allocation percentages for the various delivery margin functions are similar  
 11 between 2016 and 2023.

12 **Table 2: FEI's Functionalized Delivery Margin for 2016 and 2023 COSA (Excluding Cost of Gas)<sup>2</sup>**

Particular	Revenue Requirement 2016 COSA (\$000s)		Revenue Requirement 2023 COSA (\$000s)	
	(\$000s)	(%)	(\$000s)	(%)
Gas Supply Operation (excl. Gas Costs) <sup>1</sup>	2,004	0%	10,984	1%
LNG Storage Tilbury Base	36,274	5%	17,878	2%
LNG Storage Mt. Hayes	7,573	1%	6,963	1%
LNG Tilbury 1A	-	0%	33,869	3%
Transmission	179,021	23%	266,575	25%
Distribution	462,883	59%	599,406	57%
Marketing	50,084	6%	79,955	8%
Customer Accounting	52,140	7%	38,808	4%
<b>Total</b>	<b>\$ 789,979</b>	<b>100%</b>	<b>\$ 1,054,438</b>	<b>100%</b>

13  
<sup>2</sup> In the 2016 COSA, the Tilbury 1A Expansion was included as a known and measurable change and was functionalized together with the Tilbury Base Plant. When combined, the allocation for the Tilbury Base Plant and Tilbury 1A is about 5 percent in both the 2016 COSA and 2023 COSA.



FortisBC Energy Inc. (FEI or the Company) 2023 Cost of Service Allocation (COSA) Study and Application for Approval of Revenue Rebalancing (Application)	Submission Date: November 23, 2023
Response to the Commercial Energy Consumers Association of BC (CEC) Information Request (IR) No. 1	Page 8

1 Table 3 below provides the percentage of FEI’s O&M expense by activity between the 2016 COSA  
 2 and 2023 COSA. Although O&M has increased since the 2016 COSA, the change in the allocation  
 3 percentage of each activity over the total net O&M expense is small. FEI also notes that the LNG  
 4 plant O&M has increased between the 2016 COSA and 2023 COSA because, at the time of the  
 5 2016 COSA, the Tilbury 1A Expansion was not in service but was included in the 2016 COSA as  
 6 a known and measurable change, whereas for the 2023 COSA, the Tilbury 1A Expansion has  
 7 been in service since 2019.

8 **Table 3: Gross O&M as a % of Total Revenue Requirement for 2016 COSA and 2023 COSA**

Particular	2016 COSA (O&M Activities View)		2023 COSA (O&M Activities View)	
	(\$000s)	(%)	(\$000s)	(%)
Distribution Total	\$ 56,371	24%	\$ 66,707	23%
Transmission Total	24,348	10%	36,489	12%
LNG Plant Total	6,466	3%	18,314	6%
Meter Reading Total	11,776	5%	14,409	5%
Energy Supply & Resource Development Total	4,714	2%	6,288	2%
General Operations Total	41,116	17%	47,563	16%
Energy Solutions & External Relations Total	26,086	11%	38,755	13%
Customer Care Total	30,132	13%	33,201	11%
Business & IT Services Total	29,487	12%	31,073	11%
Administration & General Total	41,125	17%	61,849	21%
<b>Gross Operating &amp; Maintenance Expense</b>	<b>\$ 271,620</b>	<b>114%</b>	<b>\$ 354,647</b>	<b>121%</b>
O&M Transferred to the BVA	(959)	0%	(5,237)	-2%
Capitalized Overhead	(32,594)	-14%	(56,744)	-19%
<b>Net Operating &amp; Maintenance Expense</b>	<b>\$ 238,067</b>	<b>100%</b>	<b>\$ 292,666</b>	<b>100%</b>

9  
10

FortisBC Energy Inc. (FEI or the Company) 2023 Cost of Service Allocation (COSA) Study and Application for Approval of Revenue Rebalancing (Application)	Submission Date: November 23, 2023
Response to the Commercial Energy Consumers Association of BC (CEC) Information Request (IR) No. 1	Page 9

1    **4.    Reference:    Section 4.1.1.1, Page 17**

8    same basis. For FEI, the 2023 COSA contains the following functions: Gas Supply Operations,  
9    Transmission, Distribution, Liquefied Natural Gas (LNG) Storage, Marketing, and Customer  
10   Accounting. Costs that are directly related to the defined function are assigned to those functions.  
11   General costs and intangible plant costs are typically functionalized across all functions according  
12   to the relative functional portions of gross plant in service.

2  
3            4.1    Of the costs (revenue requirement 'totals') provided in Appendix C (see CEC  
4            3.1.1), which costs are considered 'general costs and intangible plant costs' for  
5            COSA purposes and are therefore 'typically functionalized across all functions'?

6            4.1.1    Please provide a reference in the Application where one can one find the  
7            'across-all-functions' functionalization of said costs and the related  
8            assumptions and/or calculations.

9  
10   **Response:**

11   The statement on page 17 of the Application and referenced in the preamble above is referring to  
12   FEI's General Plant assets and Intangible Plant assets that are included in FEI's rate base. The  
13   statement is not referring to O&M, which is shown in Appendix C of the Application, as this IR  
14   suggests.

15   Examples of General Plant assets include buildings (e.g., office buildings), office equipment and  
16   furniture, computer hardware and software, vehicles, small tools, telephone, and radio. Examples  
17   of Intangible Plant assets include water/land rights and application software. Since these types of  
18   assets are not directly related to defined functions (i.e., Gas Supply Operations, Transmission,  
19   Distribution, LNG Storage, Marketing, or Customer Accounting), they are allocated proportionally  
20   across all functions based on the value of total gross plant in service. General Plant assets and  
21   the associated costs in FEI's 2023 rate base (which is the basis of FEI's rate base underpinning  
22   the 2023 COSA study) are shown in Appendix B of the Application (Schedule 6.1, Lines 12 to 28).  
23   Intangible Plant assets and the associated costs in FEI's 2023 rate base are also shown in  
24   Appendix B of the Application (Schedule 6, Lines 2 to 16).

25   Although the statement referenced in the preamble is specifically related to General Plant and  
26   Intangible Plant assets and not O&M, some O&M expenses can be considered general in nature  
27   and are either functionalized based on gross plant in service or based on gross O&M. For  
28   example, General Operations O&M which includes facilities management, supply chain,  
29   measurement, property services, system planning, engineering, and project management would  
30   be primarily for supporting functions with direct assets such as transmission, distribution, and LNG  
31   storage; as such, these O&M costs are functionalized proportionally based on the value of total  
32   gross plant in service in those functions. The costs related to these O&M activities are shown on  
33   page 1 of Appendix C (Lines 36 to 43). Other O&M activities that are considered general in nature  
34   include Business & IT Services and Corporate Service, which are shown on page 2 of Appendix  
35   C (Lines 59 to 73). These costs are functionalized proportionally based on gross O&M (before  
36   Business & IT Services and Corporate Service).

FortisBC Energy Inc. (FEI or the Company) 2023 Cost of Service Allocation (COSA) Study and Application for Approval of Revenue Rebalancing (Application)	Submission Date: November 23, 2023
Response to the Commercial Energy Consumers Association of BC (CEC) Information Request (IR) No. 1	Page 10

1  
2  
3  
4  
5  
6  
7

4.1.2 Please explain what would constitute gross-plant-in-service for FEI's Marketing and Customer Accounting functions, for purposes of its cross-all-functions functionalization exercise for COSA purposes.

8 **Response:**

9 The gross plant in service (GPIS) that is used to functionalize general and intangible plant, and  
10 certain O&M expenses as discussed in the response to CEC IR1 4.1, are the total plant costs that  
11 are directly related to LNG facilities, Transmission plant and Distribution plant. None of these plant  
12 costs are functionalized to Gas Supply Operations, Marketing, or Customer Accounting.

13 Generally, costs that are being functionalized broadly using the GPIS allocator are assets or  
14 operations that are indirectly linked to the plant that it services, such as LNG facilities,  
15 transmission plant, and distribution plant, but are not considered to be part of this plant. For  
16 example, the office building assets under the General Plant would be to provide supporting  
17 service for LNG facilities, transmission, and distribution plant, but the building itself is not part of  
18 the LNG facilities, transmission plant or distribution plant. As such, these costs are allocated  
19 broadly using GPIS. This treatment has been consistently applied in FEI's COSA studies dating  
20 back to the 1993 Phase B Rate Design.

21  
22

23

24 4.2 On lines 10-12 in the above Reference, FEI states that 'general costs and  
25 intangible plant costs are typically functionalized across all functions according to  
26 the relative functional portions of gross plant in service'. If certain functions (such  
27 as Gas Supply Operations, Marketing and/or Customer Accounting) have 'zero'  
28 gross-plant-in-service, then how does FEI functionalize cross-all-functions for  
29 COSA purposes?

30

31 **Response:**

32 There are no General Plant and Intangible Plant costs functionalized to Gas Supply Operations,  
33 Marketing, and/or Customer Accounting. Please refer to the response to CEC IR1 4.1.2.

34 Gas Supply Operations is generally functionalized with Gas Control-related O&M, as shown in  
35 Appendix C of the Application (page 1, Line 33). Marketing is generally functionalized with Energy  
36 Solutions & External Relations O&M which are activities related to sales and marketing, as shown  
37 in Appendix C, page 2, Lines 45 to 50. Customer Accounting is generally functionalized with  
38 Customer Care O&M, which are activities related to customer service, customer billing and credits

FortisBC Energy Inc. (FEI or the Company) 2023 Cost of Service Allocation (COSA) Study and Application for Approval of Revenue Rebalancing (Application)	Submission Date: November 23, 2023
Response to the Commercial Energy Consumers Association of BC (CEC) Information Request (IR) No. 1	Page 11

1 & collections, and are shown in Appendix C, page 2, Lines 52 to 57. Certain O&M costs such as  
 2 Business & IT Services and Corporate Service are allocated across all functions based on gross  
 3 O&M (before Business & IT Services and Corporate Service O&M), as discussed in the response  
 4 to CEC IR1 4.1.

5  
6

7

8 4.3 Please explain the nature of Unamortized Deferred Charges for each of the COSA  
 9 functions (including Marketing and Customer Accounting), which are included on  
 10 line 13 of Schedule 3 of Appendix D<sup>3</sup> in the Application.

11 4.3.1 Please advise whether 'Unamortized Deferred Charges' are considered  
 12 in the across-all-functions functionalization exercise for COSA purposes.

13

14 **Response:**

15 Unamortized deferred charges are costs or recoveries approved by the BCUC to be recovered  
 16 from or returned to customers in a future period. The mid-year unamortized balance of rate base  
 17 deferral accounts is part of FEI's rate base, as shown in Schedule 3 of Appendix D of the  
 18 Application, and is functionalized accordingly. An example of FEI's rate base deferral accounts is  
 19 shown in the Evidentiary Update to the FEI Annual Review for 2023 Delivery Rates proceeding.<sup>4</sup>

20 The following table sets out the functionalization of each rate base deferral account included in  
 21 the 2023 COSA study. While there are deferrals that are included in a singular function, there are  
 22 several that are applicable to multiple functions and were accordingly allocated based on Total  
 23 Gas Plant in Service. Those deferral accounts that were allocated using Total Gas Plant in Service  
 24 are also included in the table below.

Line No.	Deferral Account	Function	Allocator to Spread Costs Across Multiple Functions
1	Midstream Cost Reconciliation Account (MCRA)	Gas Supply Operations	
2	Commodity Cost Reconciliation Account (CCRA)	Gas Supply Operations	
3	Revenue Stabilization Adjustment Mechanism (RSAM)	Customer Accounting	
4	Interest on CCRA / MCRA / RSAM / Gas Storage	Customer Accounting	
5	SCP Mitigation Revenues Variance Account	Transmission	

<sup>3</sup> Exhibit B-1, Appendix D, Schedule 3, PDF Page 144, Line 13.

<sup>4</sup> Exhibit B-13, Appendix B, Schedules 11, 11.1 and 11.2.

FortisBC Energy Inc. (FEI or the Company) 2023 Cost of Service Allocation (COSA) Study and Application for Approval of Revenue Rebalancing (Application)	Submission Date: November 23, 2023
Response to the Commercial Energy Consumers Association of BC (CEC) Information Request (IR) No. 1	Page 12

Line No.	Deferral Account	Function	Allocator to Spread Costs Across Multiple Functions
6	Pension & OPEB Variance	LNG functions, Transmission & Distribution	Total Gas Plant in Service
7	BCUC Levies Variance	LNG functions, Transmission & Distribution	Total Gas Plant in Service
8	Demand-Side Management (DSM)	Marketing	
9	NGV Conversion Grants	Marketing	
10	Emissions Regulations	Marketing	
11	On-Bill Financing Pilot Program	Customer Accounting	
12	Greenhouse Gas Reduction Regulation Incentives	Distribution	
13	CNG and LNG Recoveries	Distribution	
14	Whistler Pipeline Conversion	Transmission	
15	Gas Asset Records Project	LNG functions, Transmission & Distribution	Total Gas Plant in Service
16	Gains and Losses on Asset Disposition	LNG functions, Transmission & Distribution	Total Gas Plant in Service
17	Net Salvage Provision/Cost	LNG functions, Transmission & Distribution	Net Salvage re Gas Plant in Service
18	PCEC Start Up Costs	Transmission	
19	BCUC Initiated Inquiry Costs	LNG functions, Transmission & Distribution	Total Gas Plant in Service
20	2017 Rate Design Application	LNG functions, Transmission & Distribution	Total Gas Plant in Service
21	PGR Application and Preliminary Stage Development Costs	LNG functions, Transmission & Distribution	Total Gas Plant in Service
22	Transportation Service Report	LNG functions, Transmission & Distribution	Total Gas Plant in Service
23	2021 Generic Cost of Capital Proceeding	LNG functions, Transmission & Distribution	Total Gas Plant in Service
24	City of Coquitlam Application Proceeding	LNG functions, Transmission & Distribution	Total Gas Plant in Service
25	2022 Long Term Gas Resource Plan Application	LNG functions, Transmission & Distribution	Total Gas Plant in Service
26	2020–2024 MRP Application	LNG functions, Transmission & Distribution	Total Gas Plant in Service
27	2021 Renewable Gas Program Comprehensive Review	LNG functions, Transmission & Distribution	Total Gas Plant in Service
28	GCU Preliminary Stage Development Costs	LNG functions, Transmission & Distribution	Total Gas Plant in Service
29	Transmission Integrity Management Capabilities	LNG functions, Transmission & Distribution	Total Gas Plant in Service



FortisBC Energy Inc. (FEI or the Company) 2023 Cost of Service Allocation (COSA) Study and Application for Approval of Revenue Rebalancing (Application)	Submission Date: November 23, 2023
Response to the Commercial Energy Consumers Association of BC (CEC) Information Request (IR) No. 1	Page 13

Line No.	Deferral Account	Function	Allocator to Spread Costs Across Multiple Functions
30	Annual Review of 2020-2024 Rates	LNG functions, Transmission & Distribution	Total Gas Plant in Service
31	FEFN - Common Rates and 2022 Revenue Requirement Application Costs	LNG functions, Transmission & Distribution	Total Gas Plant in Service
32	New CPCN Application Costs	LNG functions, Transmission & Distribution	Total Gas Plant in Service
33	Pension & OPEB Funding	LNG functions, Transmission & Distribution	Total Gas Plant in Service
34	US GAAP Pension & OPEB Funded Status	LNG functions, Transmission & Distribution	Total Gas Plant in Service
35	COVID-19 Customer Recovery Fund	LNG functions, Transmission & Distribution	Total Gas Plant in Service
36	Stargas Assets Acquisition Deferral Account	Distribution	
37	FEFN - Transitional Balance	LNG functions, Transmission & Distribution	Total Gas Plant in Service

1  
2



FortisBC Energy Inc. (FEI or the Company) 2023 Cost of Service Allocation (COSA) Study and Application for Approval of Revenue Rebalancing (Application)	Submission Date: November 23, 2023
Response to the Commercial Energy Consumers Association of BC (CEC) Information Request (IR) No. 1	Page 14

1    **5.    Reference:    Exhibit B-1, Section 4.1.1.2, Page 18**

28    required to determine the appropriate apportionment between the two classifications. FEI  
29    conducted a Minimum System Study (MSS) with Peak Load Carrying Capability (PLCC)  
30    adjustment, as further discussed in Section 4.3.2.4 of this Application, to aid the classification of  
31    distribution costs into both customer and demand related costs.

2

3            5.1    Please explain the split between the customer-related costs and the demand-  
4            related costs, resulting from the 2016 COSA MSS.

5

6    **Response:**

7    Please refer to the response to BCUC IR1 9.1.

8



FortisBC Energy Inc. (FEI or the Company) 2023 Cost of Service Allocation (COSA) Study and Application for Approval of Revenue Rebalancing (Application)	Submission Date: November 23, 2023
Response to the Commercial Energy Consumers Association of BC (CEC) Information Request (IR) No. 1	Page 15

1    **6.    Reference:    Exhibit B-1, Section 4.3.3.2, Page 37**

2            4    The three-year weighted average LF is calculated based on the annual LF by region and by rate  
3            5    schedule using the number of customers per rate schedule in each region. Furthermore, the  
4            6    annual LF by region and by rate schedule is calculated based on an estimate of the peak day  
5            7    demand for each rate schedule on a regional basis using the regional temperature and a  
6            8    regression analysis that uses average monthly temperature and actual demand data for 10  
7            9    months (excludes July and August).

8            6.1    Please confirm the definition of region (i.e., the number and names of regions) for  
9                   purposes of FEI's load factor (LF) analysis.

10    **Response:**

11    The regions that are used for calculating the three-year weighted average LF are:

- 12            • Lower Mainland;
- 13            • Inland;
- 14            • Columbia;
- 15            • Vancouver Island;
- 16            • Whistler; and
- 17            • Fort Nelson

18    Please refer to the tables below for the customer count of each region from 2020 to 2022 used  
19    for the calculation of the three-year weighted average LF. Please also refer to the response to  
20    BCUC IR1 13.2 for a detailed explanation of the calculation of the three-year weighted average  
21    LF used in the 2023 COSA study.



### Customer Count By FEI Region

Year	Rate Schedule	LOWER MAINLAND	INLAND	COLUMBIA	VANCOUVER ISLAND	WHISTLER	FTN	Total
2020	RATE1	567,372	235,063	22,077	124,627	2,977	1880	953,996
	RATE2	54,619	21,924	2,132	10,117	305	452	89,549
	RATE3	5,076	871	88	687	73	17	6,812
	RATE5	493	40	3	50	5	0	591
	RATE23	430	254	24	37	1		746
	RATE25	222	66	6	6	1	0	301
	Total Customer Count		628,212	258,218	24,330	135,524	3,362	2349

Year	Rate Schedule	LOWER MAINLAND	INLAND	COLUMBIA	VANCOUVER ISLAND	WHISTLER	FTN	Total
2021	RATE1	569,546	237,600	22,316	129,764	3,045	1860	964,131
	RATE2	54,671	22,014	2,148	10,270	305	445	89,853
	RATE3	5,241	893	97	698	73	17	7,019
	RATE5	531	40	3	50	5		629
	RATE23	391	254	16	35	1		697
	RATE25	196	64	6	6	1		273
	Total Customer Count		630,576	260,865	24,586	140,823	3,430	2322

Year	Rate Schedule	LOWER MAINLAND	INLAND	COLUMBIA	VANCOUVER ISLAND	WHISTLER	FTN	Total
2022	RATE1	573,352	240,693	22,595	132,861	3,070	1836	974,407
	RATE2	54,702	22,217	2,162	10,312	306	445	90,144
	RATE3	5,416	914	100	712	70	16	7,228
	RATE5	588	41	3	56	7	0	695
	RATE23	320	251	16	32	1		620
	RATE25	176	62	6	4	-	0	248
	Total Customer Count		634,554	264,178	24,882	143,977	3,454	2297

FortisBC Energy Inc. (FEI or the Company) 2023 Cost of Service Allocation (COSA) Study and Application for Approval of Revenue Rebalancing (Application)	Submission Date: November 23, 2023
Response to the Commercial Energy Consumers Association of BC (CEC) Information Request (IR) No. 1	Page 17

1           6.2     Please provide the rationale for why the regression analysis excludes  
2                    consideration of average monthly temperature and actual demand data for the  
3                    months of July and August.

4  
5     **Response:**

6     Please refer to the response to BCUC IR1 13.2.

7  
8

9  
10           6.3     Please explain whether the exclusion of July and August data (in the regression  
11                    analysis) is specific to certain rate schedules, or does it apply across all rate  
12                    schedules in any given region?

13  
14     **Response:**

15     Please refer to the response to BCUC IR1 13.2.

16  
17

18  
19           6.4     Please comment on whether and how the increased use of gas heat pumps for  
20                    heating and cooling applications might affect how FEI considers seasonal  
21                    (temperature and demand) data in the regression analysis, impacting load factors.

22  
23     **Response:**

24     FEI does not expect an increased use of gas heat pumps will significantly change the load factors  
25     calculation. Gas heat pumps still use natural gas for heating during both shoulder and winter  
26     seasons and, while there will be a reduction in overall consumption throughout the year due to  
27     the more efficient technology, the relationship between the peak day demand and the average  
28     demand throughout the year should remain consistent.

29     FEI notes that the purpose of the three-year weighted average LF is to calculate the coincidental  
30     peak (CP), which is then used for allocating demand-related costs. The lower the LF, the higher  
31     the CP, resulting in a higher allocation of demand-related costs. Ultimately, if there is increased  
32     adoption of new heating technology such as gas heat pumps, it will be reflected in the historical  
33     data that will be used as part of the regression analysis; therefore, the appropriate allocation of  
34     demand-related costs will continue to be reflected in the COSA study.

35

FortisBC Energy Inc. (FEI or the Company) 2023 Cost of Service Allocation (COSA) Study and Application for Approval of Revenue Rebalancing (Application)	Submission Date: November 23, 2023
Response to the Commercial Energy Consumers Association of BC (CEC) Information Request (IR) No. 1	Page 18

1    7.    **Reference:    Exhibit B-1, Section 4, Table 4-13**

**Table 4-13: Customer Weighting Factor Study and Customer Administration Factor Results**

Rate Schedule	Customer Weighting Factor	Customer Admin & Billing Factor
1	1.0	1.0
2	2.1	1.1
3	9.1	2.0
4	15.4	25.6
5	15.8	25.3
6	19.3	1.0
7	48.7	75.5
22	97.8	137.8
22A	309.5	137.8
22B	669.6	137.8
23	11.7	21.5
25	20.8	25.6
27	48.7	78.1

2

3            7.1    Please advise whether FEI employed the same methodology in its 2016 COSA as  
4            that which it employed in its 2023 COSA, to develop the weighing factors that are  
5            included in Table 4-13.

6            7.1.1    If no, please provide the rationale for with explanations for the notable  
7            differences in methodology.

8

9    **Response:**

10    Please refer to Table 1 below which provides a comparison between the 2016 and 2023 weighting  
11    factors for both the Customer Weighting and Customer Admin & Billing factors.

FortisBC Energy Inc. (FEI or the Company) 2023 Cost of Service Allocation (COSA) Study and Application for Approval of Revenue Rebalancing (Application)	Submission Date: November 23, 2023
Response to the Commercial Energy Consumers Association of BC (CEC) Information Request (IR) No. 1	Page 19

1 **Table 1: Comparison of Customer Weighting and Customer Admin & Billing Factors between**  
 2 **2016 COSA and 2023 COSA**

Rate Schedule	Customer Weighting Factor		Customer Admin & Billing Factor	
	2023	2016	2023	2016
1	1.0	1.0	1.0	1.0
2	2.1	1.7	1.1	1.0
3	9.1	7.0	2.0	1.2
4	15.4	13.6	25.6	0.9
5	15.8	11.1	25.3	43.0
6	19.3	13.3	1.0	43.0
7	48.7	132.5	75.5	43.0
22	97.8	49.9	137.8	75.0
22A	309.5	399.2	137.8	75.0
22B	669.6	562.6	137.8	75.0
23	11.7	10.3	21.5	75.0
25	20.8	17.6	25.6	75.0
27	38.5	46.2	78.1	75.0

3  
 4 ***Customer Weighting Factors for Meters and Distribution Service (Columns 2 and 3 of Table***  
 5 ***1)***

6 For the Customer Weighting factor used to allocate costs related to meters and distribution  
 7 services (i.e., middle column of Table 4-13 of the Application), FEI used the same methodology  
 8 in both the 2016 and 2023 COSA studies.

9 As shown in Table 1 above, the difference between the 2016 and 2023 Customer Weighting factor  
 10 for Meters and Distribution Service is small; however, in general, the average cost to connect  
 11 larger customers, such as commercial and industrial customers, is higher in 2023 when compared  
 12 to 2016 due to inflationary cost increases for meters and service lines, especially for the larger  
 13 capacity meter sets. The cost increase for larger capacity meter sets results in a small increase  
 14 in the weighting factors for RS 2 and RS 3 customers.

15 ***Customer Weighting Factors for Administration and Billing (Column 4 and 5 of Table 1)***

16 For the Customer Weighting factor used to allocate Administration & Billing (i.e., third column of  
 17 Table 4-13), the weightings used in the 2016 COSA study were derived as part of the FEU 2012  
 18 Common Rates, Amalgamation and Rate Design Application (2012 RDA). As explained in BCUC  
 19 Technical IR1 3.1 from the 2016 COSA and RDA proceeding<sup>5</sup>, the process used to develop the  
 20 factors did not involve any empirical analysis or calculations but was through conversations with  
 21 customer service managers using their insight and experience, along with input from EES  
 22 Consulting. As such, while the Customer Weighting factor developed in the 2012 RDA and again

<sup>5</sup> Exhibit B-15, BCUC Technical IR1 3.1.

FortisBC Energy Inc. (FEI or the Company) 2023 Cost of Service Allocation (COSA) Study and Application for Approval of Revenue Rebalancing (Application)	Submission Date: November 23, 2023
Response to the Commercial Energy Consumers Association of BC (CEC) Information Request (IR) No. 1	Page 20

1 used in the 2016 COSA and RDA was not based on the actual tracking of hours by customer  
2 class, it was still based on internal knowledge from staff responsible for customer administration  
3 and billing at that time.

4 In contrast, the Customer Weighting factor for Administration & Billing used in the 2023 COSA  
5 study was developed through a more quantitative approach, using the 2022 Actual O&M (labour  
6 & non-labour) related to the Key Account Managers from the Energy Solutions department as well  
7 as the Customer Service department for billing and contact centres. The method is summarized  
8 below:

- 9 1) For marketing-related activities with dedicated resources, each Key Account Manager and  
10 Energy Solutions Manager (Small Volume and Large Volume Customers) from the Energy  
11 Solutions department provided an estimate of their average time spent on each rate  
12 schedule which will be used to apportion the total O&M for the related activities and  
13 resources into the individual rate schedule.
- 14 2) For industrial billing and measurement, an estimate of time spent on each industrial rate  
15 schedule is provided by the Manager of Industrial Accounts which will be used to apportion  
16 the total O&M related to billing and measurement of industrial customers into the individual  
17 rate schedule.
- 18 3) For customer service-related activities such as general customer billing and administration  
19 (i.e., not just for industrial customers) and contact centres, the total O&M is apportioned  
20 based on the total customer count in each rate schedule as these activities would be  
21 dependent on the number of customers from each rate schedule (e.g., it is expected that  
22 more calls would be received by FEI's contact centres from residential customers and that  
23 a higher number of bills would be processed from residential customers based on the  
24 number of residential customers compared to other rate schedules).
- 25 4) Once the 2022 Actual O&M of each related activity is apportioned based on Steps 1), 2),  
26 and 3) above, the total cost of the related activities on a per customer and per rate  
27 schedule basis is calculated.
- 28 5) To calculate the weighting factors for the Administration & Billing of each rate schedule,  
29 the total cost per customer of each rate schedule from Step 4) is divided by the total cost  
30 per RS 1 customer, which is used since the weighting factor is meant to provide a  
31 weighting to administration and billing costs relative to residential customers.

32 For further details related to the analysis on Customer Weighting factors for Administration and  
33 Billing that are used in the 2023 COSA study, please refer to Attachment 14.1B in the response  
34 to BCUC IR1 14.1.

35 FEI considers the approach used for estimating the 2023 Customer Admin & Billing factors is  
36 more accurate and more consistent with the time spent (therefore costs) by FEI staff, particularly  
37 on the individual industrial sales rate schedules and transportation service rate schedules. The  
38 improvement is reflected in Table 1 above which shows that the most significant change between

FortisBC Energy Inc. (FEI or the Company) 2023 Cost of Service Allocation (COSA) Study and Application for Approval of Revenue Rebalancing (Application)	Submission Date: November 23, 2023
Response to the Commercial Energy Consumers Association of BC (CEC) Information Request (IR) No. 1	Page 21

1 2016 and 2023 is the individual weightings for the industrial sales service (RS 5, 6, and 7) and for  
2 the transportation sales service (RS 22, 22A, 22B, 23, 25, and 27) customers as discussed above.  
3 For example, in the 2023 weighting factor for administration and billing, considerations were made  
4 for the time spent by FEI's staff on large commercial transportation service customers in RS 23  
5 which is expected to be significantly different than large industrial firm customers in RS 22, 22A,  
6 and 22B. Similarly, the time spent by FEI's staff on the RS 6 natural gas vehicle service, with a  
7 total of 13 customers, is expected to be much different than time spent on RS 5 general firm  
8 service and RS 7 fully interruptible customers. The characteristics of the customers from each of  
9 these rate schedules are different enough that it is more reasonable and accurate to use differing  
10 factors for each. In contrast, as can be seen in Table 1 above, the Customer Weighting factors  
11 for Administration and Billing used in the 2016 COSA study assumed industrial customers in RS  
12 5, 6, and 7 are the same, and assumed transportation service customers in RS 22, 22A, 22B, 23,  
13 25, and 27 are the same in terms of time spent (and costs) related to administration and billing.

14  
15

16

17 7.2 Please provide, in a summary table, the 2016 COSA weighing factors alongside  
18 those provided in Table 4-13 of the Application.

19

20 **Response:**

21 Please refer to the response to CEC IR1 7.1.

22

23

24 7.2.1 Please provide a commentary on any differences that stand out as it  
25 concerns weighing factors for Rate Schedules 2 and 3.

26

27 **Response:**

28 Please refer to the response to CEC IR1 7.1.

29

FortisBC Energy Inc. (FEI or the Company) 2023 Cost of Service Allocation (COSA) Study and Application for Approval of Revenue Rebalancing (Application)	Submission Date: November 23, 2023
Response to the Commercial Energy Consumers Association of BC (CEC) Information Request (IR) No. 1	Page 22

1    **8.      Reference:    Exhibit B-1, Section 4.6, Page 47**

2                    4    to each rate schedule adequately recover their allocated cost of service. As discussed in  
3                    5    Section 3.5, in the 2016 COSA Decision, the BCUC determined that the R:C ratios should be  
4                    6    used to inform rate design and rate rebalancing proposals, but also directed FEI to present both  
5                    7    the R:C and M:C ratios for each rate schedule in the next COSA study.<sup>74</sup> Further, in the 2016  
6                    8    COSA Decision, the BCUC determined that a range of reasonableness for the R:C ratios of  
7                    9    between 95 percent and 105 percent was appropriate for evaluating the adequacy of each rate  
8                    10   schedule to recover their allocated cost of service.

9                    8.1    Please confirm how FEI used the M:C ratios in the 2023 COSA.

10                    8.1.1    Please advise whether FEI used the M:C ratios to inform any of the  
11                    12                    rebalancing options presented in the Application, and if so which option?  
12                    13                    Please elaborate on if and how the M:C ratios were used.

13                    8.1.2    More specifically, please comment on how the M:C ratio of Rate  
14                    15                    Schedule 3 was considered, and whether it informed the development of  
15                    16                    rebalancing options 2 through to 5.

16                    **Response:**

17                    FEI did not use the M:C ratios in the 2023 COSA study to inform the revenue rebalancing options.  
18                    Please refer to the response to BCUC IR1 17.1 for further details. Please also refer to the  
19                    response to BCUC IR1 17.3 which demonstrates that even if the M:C ratios were used to inform  
20                    revenue rebalancing, FEI's existing rates continue to perform as intended.

FortisBC Energy Inc. (FEI or the Company) 2023 Cost of Service Allocation (COSA) Study and Application for Approval of Revenue Rebalancing (Application)	Submission Date: November 23, 2023
Response to the Commercial Energy Consumers Association of BC (CEC) Information Request (IR) No. 1	Page 23

1    **9.      Reference:    Exhibit B-1, Section 5, Page 57**

13    Given the distinct load factor differences between the Small Commercial and Large Commercial  
14    customers, the current threshold of 2,000 GJ remains reasonable and should continue to be used  
15    as the economic crossover point between RS 2 and RS 3/23 customer groups. While differences  
16    can also be found at other threshold levels, the threshold and the relationship between load factor  
17    and consumption would need to be significantly different than 2,000 GJ as well as the trend shown  
18    in Figure 5-5 above to support moving away from the existing threshold of 2,000 GJ.

2

3            9.1      In the above paragraph, FEI states that ‘the current threshold of 2,000 GJ remains  
4            reasonable and should continue to be used as the economic crossover point  
5            between RS 2 and RS 3/23 customer groups.’ Please comment on:

6                    9.1.1    Whether the pursuit of energy efficiency measures by FEI or its  
7                    customers could over time impact the 2,000 GJ threshold, as such  
8                    initiatives are amassed. And if so, what type of impact(s) might FEI  
9                    expect and of what magnitude?

10

11    **Response:**

12    FEI does not believe energy efficiency measures will have a significant impact on the  
13    segmentation between RS 2 and RS 3/23 customers. For example, even though FEI has  
14    distributed energy efficiency incentives to the Commercial sector prior to and since the last COSA  
15    study in 2016, Figure 5-5 of the Application shows that the segmentation between the two  
16    customer groups has largely remained the same at 2,000 GJ. As such, FEI continues to consider  
17    that the economic crossover point of 2,000 GJ is reasonable. Please also refer to the response  
18    to BCUC IR1 21.4 for further discussion on why FEI does not believe changes to the segmentation  
19    threshold between RS 2 and RS 3/23 customers is warranted at this time.

20

21

22

23                    9.1.2    Whether FEI considers that accumulated rate increases (over time) could  
24                    have a bearing on the 2,000 GJ threshold as well. And if so, what type of  
25                    impact(s) might FEI expect and of what magnitude?

26

27    **Response:**

28    The economic crossover point between the rates of RS 2 and RS 3/23 has been set at 2,000 GJ  
29    since at least the 1993 Phase B RDA. FEI reviewed the segmentation in both the 2016 COSA  
30    and 2023 COSA studies, and it has remained close to 2,000 GJ even though there has been  
31    accumulated rate increases over the period since 1993. Further, as demonstrated in the response  
32    to BCUC IR1 21.4, there has been no evidence to suggest that the segmentation between RS 2  
33    and RS 3/23 customers is shifting significantly away from 2,000 GJ. The analysis included in this





FortisBC Energy Inc. (FEI or the Company) 2023 Cost of Service Allocation (COSA) Study and Application for Approval of Revenue Rebalancing (Application)	Submission Date: November 23, 2023
Response to the Commercial Energy Consumers Association of BC (CEC) Information Request (IR) No. 1	Page 24

- 1 Application supports the continued use of 2,000 GJ as the economic crossover point between the
- 2 two rate schedules.
  
- 3



FortisBC Energy Inc. (FEI or the Company) 2023 Cost of Service Allocation (COSA) Study and Application for Approval of Revenue Rebalancing (Application)	Submission Date: November 23, 2023
Response to the Commercial Energy Consumers Association of BC (CEC) Information Request (IR) No. 1	Page 25

1    **10. Reference: Exhibit B-1, Section 5, Option 2a and Option 2b, Pages 60 & 61**

29    As previously explained, the Seasonal (RS 4) and General Interruptible Service (RS 7/27) rates  
30    are set at a discount to RS 5/25 rates,<sup>86</sup> therefore, rebalancing RS 5/25 would result in a

<sup>86</sup> For RS 4, the Off-Peak period delivery charge is derived from the RS 5 demand charge converted to a volumetric rate at 100 percent load factor, plus the RS 5/25 delivery charge. From November 1 to March 31 (referred to as the Extension Period), customers under RS 4 are fully interruptible and the delivery charge is set based on the delivery charge of RS 7/27 times 1.5. For RS 7/27, as approved by the BCUC in the 2016 RDA Decision (pages 21 to 24), the existing delivery charges with a load factor of 62.5 percent are based on a discount of approximately 18 percent as compared to RS 5/25 (General Firm Service) customers with a load factor of 90.9 percent.



1    commensurate reduction to RS 4 and RS 7/27 in order to maintain their current discount to RS  
2    5/25.

3    10.1 Please provide a description of the process through which the discount(s) to RS  
4    5/25 are generally determined for purposes of establishing RS 4 and RS 7/27  
5    rates.

7    **Response:**

8    Please refer to Attachment 3.1 provided in the response to RCIA IR1 3.1 for an explanation of the  
9    rate design principles for RS 4 and RS 7/27 rates. Please also refer to the response to BCUC IR1  
10    19.6 for the specific calculations for each rate element of RS 4 and RS 7/27.

14    10.2 Please explain why FEI does not explore (in the context of the 2023 COSA  
15    rebalancing proposals) alternatives to maintaining the current percentage  
16    discounts (to RS 5/25) for RS 4 and RS 7/27.



FortisBC Energy Inc. (FEI or the Company) 2023 Cost of Service Allocation (COSA) Study and Application for Approval of Revenue Rebalancing (Application)	Submission Date: November 23, 2023
Response to the Commercial Energy Consumers Association of BC (CEC) Information Request (IR) No. 1	Page 26

1 **Response:**

2 As explained in the response to RCIA IR1 3.1, the discount is meant to extract a value for FEI's  
3 interruptible service. Customers that take interruptible service, as opposed to firm service, allow  
4 FEI to avoid system upgrades. The avoidance of the incremental cost of service impacts of these  
5 incremental system upgrades benefits all of FEI's customers. The current approach, which was  
6 approved as part of the 2016 RDA Decision<sup>6</sup>, continues to be reasonable, and there have been  
7 no changes in circumstances since the 2016 RDA Decision which would indicate that changes to  
8 the discounting method for setting the rates for RS 4 and RS 7/27 are needed or warranted.

9 FEI filed this Application in response to the 2016 COSA Decision<sup>7</sup>, in which the BCUC directed  
10 FEI to file a comprehensive and updated COSA study for review by the BCUC five years after the  
11 release of its final decision in the 2016 RDA. The BCUC further directed that, depending on the  
12 results of the next COSA study and other considerations, if FEI determined that rate design and/or  
13 rebalancing should take place, that FEI would file such proposals together with the COSA study.

14 As per the direction above, based on the results of the 2023 COSA study and other  
15 considerations, there is no need for a rate design to take place.

16

---

<sup>6</sup> FEI 2016 RDA Decision and Order G-135-18, pp. 23-24.

<sup>7</sup> Order G-4-18, Directive 4.

FortisBC Energy Inc. (FEI or the Company) 2023 Cost of Service Allocation (COSA) Study and Application for Approval of Revenue Rebalancing (Application)	Submission Date: November 23, 2023
Response to the Commercial Energy Consumers Association of BC (CEC) Information Request (IR) No. 1	Page 27

1    11.    **Reference:    Exhibit B-1, Section 5, Page 64, Table 5-6**

**Table 5-6: Option 2b – 2023 COSA R:C and M:C Results after Revenue Rebalancing**

Rate Schedule	Initial COSA		Revenue Shift (\$000s)	Approx. Annual Bill Impact (%)	COSA after Rebalancing	
	R:C	M:C			R:C	M:C
<b>Rate Schedule 1</b> <i>Residential Service</i>	97.3%	95.0%	-	-	97.3%	95.0%
<b>Rate Schedule 2</b> <i>Small Commercial Service</i>	98.0%	95.6%	4,519	1.2%	99.2%	98.1%
<b>Rate Schedule 3/23</b> <i>Large Commercial Sales and Transportation</i>	104.0%	111.2%	-	-	104.0%	111.2%
<b>Rate Schedule 5/25</b> <i>General Firm Sales and Transportation</i>	106.9%	126.9%	(3,344)	(1.8%)	105.0%	119.5%
<b>Rate Schedule 6</b> <i>Natural Gas Vehicle Service</i>	96.2%	91.0%	-	-	96.2%	91.0%
<b>Rate Schedule 22</b> <i>Large Volume Transportation Service</i>	110.0%	110.2%	(151)	(4.5%)	105.0%	105.1%
<b>Rate Schedule 22A</b> <i>Transportation Service (Closed) Inland</i>	101.8%	101.9%	-	-	101.8%	101.9%
<b>Rate Schedule 22B</b> <i>Transportation Service (Closed) Columbia</i>	100.1%	100.1%	-	-	100.1%	100.1%

2

3            11.1    Please advise whether FEI considered a rebalancing option such that some of the

4                            RS 22 revenue shift would be absorbed by RS 22A and/or RS 22B.

5                        11.1.1    Please provide a commentary on whether this would be a viable

6    alternative to consider for rebalancing the RS 22 revenue shift.

7

8    **Response:**

9    FEI did not consider a revenue shift from RS 22 to RS 22A and/or RS 22B because these rate

10    schedules have an R:C ratio slightly higher than 1, whereas, RS 1 and RS 2 have R:C ratios

11    below 1.<sup>8</sup> Using rate schedules with R:C ratios less than 100 percent to absorb revenue

12    rebalancing is reasonable and moves these rate schedules further within the range of

13    reasonableness, whereas using rate schedules with R:C ratios over 100 percent to absorb a

14    revenue shift pushes these rate schedules toward the edge of the range of reasonableness.

15    Please refer to the response to BCOAPO IR1 1.7 for further discussion on why it is appropriate

16    to use rate schedules with R:C ratios less than 100 percent to absorb revenue shifts.

17

---

<sup>8</sup> FEI notes that RS 6 has an R:C ratio below 1 but contains a very small number of customers, volume and revenue; therefore, using RS 6 for rebalancing is not effective.



FortisBC Energy Inc. (FEI or the Company) 2023 Cost of Service Allocation (COSA) Study and Application for Approval of Revenue Rebalancing (Application)	Submission Date: November 23, 2023
Response to the Commercial Energy Consumers Association of BC (CEC) Information Request (IR) No. 1	Page 28

1    **12.    Reference:    Exhibit B-1, Section 5, Page 64**

10    Table 5-7 below summarizes the resulting changes to RS 2, RS 4, RS 5/25, RS 7/27, and RS 22  
11    under Option 2b. There is no impact to RS 1 customers due to revenue rebalancing under Option  
12    2b. Instead, RS 2 customers will experience a bill impact of approximately 1.2 percent, which  
13    results in an annual bill impact of approximately \$49.83 for the average RS 2 customer with  
14    322 GJ of consumption annually.

2  
3    12.1    Please provide, in table format, the annual \$ bill impact for RS 2 customers under  
4    rebalancing Option 2b, such that:

5            12.1.1    RS 2 customers are segmented by the load factor increments provided  
6            in Figure 5-3 of the Application (5% LF increments), and the  
7            accompanying columns include the annual \$ bill impact and the  
8            percentage bill impact (%).

9            12.1.2    For each of the RS 2 customer segments (5% LF increments), please  
10           include two other columns to indicate the total number of customers in  
11           the segment, and the average annual consumption per customer (GJ) for  
12           that customer segment.

13  
14    **Response:**

15    Please refer to Table 1 below for the information requested based on the load factor segments  
16    shown in Figure 5-3 of the Application. The bill impact is calculated based on the changes in the  
17    RS 2 Basic Charge and Delivery Charge under Option 2b as set out in Table 5-7 of the Application.

1  
2

**Table 1: Annual Bill Impact for RS 2 Customers by Load Factor at 5% Segments under Rebalancing Option 2b**

Load Factor	Annual Bill Impact \$/customer	Annual Bill Impact %	Total No. of Customers	Avg. Annual GJ per customer
5%	\$30	2.4%	871	195
10%	\$2	0.5%	2	13
15%	\$8	1.4%	1,919	53
20%	\$22	2.2%	11,163	140
25%	\$40	2.6%	29,380	256
30%	\$53	2.8%	16,285	344
35%	\$77	2.9%	7,245	497
40%	\$104	3.0%	4,129	670
45%	\$111	3.1%	2,581	717
50%	\$110	3.1%	1,811	710
55%	\$97	3.0%	1,424	628
60%	\$93	3.0%	1,179	598
65%	\$79	3.0%	1,147	513
70%	\$79	3.0%	1,247	512
75%	\$69	2.9%	1,043	446
80%	\$65	2.9%	900	419
85%	\$64	2.9%	743	413
90%	\$66	2.9%	672	429
95%	\$54	2.8%	640	350
100%	\$52	2.8%	616	339

3  
4

1    **13.    Reference:    Exhibit B-1, Section 5, Page 65**

**Table 5-7: Summary of Rate Changes under Option 2a**

Rate Schedule	Current 2023		
	Approved Rates	Changes	Option 2b
<b>RS 2 - Small Commercial</b>			
Basic Charge (\$/Day)	\$ 0.9485	\$ -	\$ 0.9485
Delivery Charge (\$/GJ)	\$ 4.568	\$ 0.1547	\$ 4.723
<b>RS 4 - Seasonal</b>			
Basic Charge (\$/Month)	\$ 14.4230	\$ -	\$ 14.4230
Delivery Charge - Off-Peak (\$/GJ)	\$ 1.904	\$ (0.309)	\$ 1.595
Delivery Charge - Extended (\$/GJ)	\$ 2.549	\$ (0.069)	\$ 2.480
<b>RS 5/25 - General Firm Service</b>			
Basic Charge (\$/Month)	\$ 469.0000	\$ -	\$ 469.0000
Delivery Charge (\$/GJ)	\$ 1.085	\$ (0.071)	\$ 1.014
Demand Charge (\$/GJ/Month)	\$ 30.278	\$ (1.989)	\$ 28.2890
<b>RS 7/27 - General Interruptible Service</b>			
Basic Charge (\$/Month)	\$ 880.0000	\$ -	\$ 880.0000
Delivery Charge (\$/GJ)	\$ 1.748	\$ (0.095)	\$ 1.653
<b>RS 22 - Large Volume Transportation</b>			
Basic Charge (\$/Month)	\$ 3,664.0000	\$ -	\$ 3,664.0000
Firm Demand Charge (\$/GJ/Month)	\$ 32.199	\$ (0.505)	\$ 31.694
Firm MTQ (\$/GJ)	\$ 0.1930	\$ (0.009)	\$ 0.1840
Interruptible MTQ (\$/GJ)	\$ 1.2520	\$ (0.026)	\$ 1.2260

2

3            13.1    Please confirm that Table 5-7 on page 65 of the Application includes the summary  
 4            of rate changes under Option 2b.

5

6    **Response:**

7    Confirmed. The heading of Table 5-7 should be: “Summary of Rate Changes under Option 2b”.  
 8    The summary of rate changes under Option 2a is shown in Table 5-4 of the Application.

9

1    **14. Reference: Exhibit B-1, Section 5, Table 5-9, Page 67**

**Table 5-9: Option 3 – 2023 COSA R:C and M:C Results after Revenue Rebalancing**

Rate Schedule	Initial COSA		Revenue Shift (\$000s)	Approx. Annual Bill Impact (%)	COSA after Rebalancing	
	R:C	M:C			R:C	M:C
<b>Rate Schedule 1</b> <i>Residential Service</i>	97.3%	95.0%	4,519	0.4%	97.7%	95.6%
<b>Rate Schedule 2</b> <i>Small Commercial Service</i>	98.0%	95.6%	4,071	1.1%	99.1%	97.9%
<b>Rate Schedule 3/23</b> <i>Large Commercial Sales and Transportation</i>	104.0%	111.2%	(4,071)	(1.2%)	102.8%	107.7%
<b>Rate Schedule 5/25</b> <i>General Firm Sales and Transportation</i>	106.9%	126.9%	(3,344)	(1.8%)	105.0%	119.5%
<b>Rate Schedule 6</b> <i>Natural Gas Vehicle Service</i>	96.2%	91.0%	-	-	96.2%	91.0%
<b>Rate Schedule 22</b> <i>Large Volume Transportation Service</i>	110.0%	110.2%	(151)	(4.5%)	105.0%	105.1%
<b>Rate Schedule 22A</b> <i>Transportation Service (Closed) Inland</i>	101.8%	101.9%	-	-	101.8%	101.9%
<b>Rate Schedule 22B</b> <i>Transportation Service (Closed) Columbia</i>	100.1%	100.1%	-	-	100.1%	100.1%

2

3

4

5

6

14.1 Please confirm that the revenue and cost data and the resulting R:C ratio are based on the best estimates that FBC has access to.

**Response:**

7

8

9

10

11

12

13

Confirmed. The revenue and cost data and the resulting R:C ratios are based on FEI's 2023 Approved revenue requirement. Further, analysis supporting the 2023 COSA study such as the minimum system study (MSS), the determination of the customer weighting factors and customer admin and billing, and calculation of the three-year weighted average load factor are based on actual data at the time of developing the 2023 COSA study. However, FEI notes that when completing a COSA study many assumptions, estimates and allocations must be used to determine the final R:C results.

14

15

16

17

18

19

20

14.2 Please confirm that an R:C ratio of 1:1 or 100% is a fair balance for the customer ratepayers in the class to which the R:C ratio applies.

**Response:**

21

22

23

24

Not confirmed. When the R:C ratio of a rate schedule is between 95 percent and 105 percent, revenues of that rate schedule are considered to be fairly recovering allocated costs. For further explanation on why FEI does not consider rebalancing to unity is the best approach, please refer to the response to BCUC IR1 19.4.





FortisBC Energy Inc. (FEI or the Company) 2023 Cost of Service Allocation (COSA) Study and Application for Approval of Revenue Rebalancing (Application)	Submission Date: November 23, 2023
Response to the Commercial Energy Consumers Association of BC (CEC) Information Request (IR) No. 1	Page 32

1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12

14.3 With the Generic Cost of Capital (GCOC) Stage 1 Decision on the 2023 test year revenue requirements, please provide the anticipated impacts on the R:C ratios and discuss whether or not FEI would propose to include this data or has included an assumption about the GCOC result and, if so, please provide the percentages, amounts, and results for inclusion in the rate rebalancing.

**Response:**

Please refer to the response to BCUC IR1 3.1.

FortisBC Energy Inc. (FEI or the Company) 2023 Cost of Service Allocation (COSA) Study and Application for Approval of Revenue Rebalancing (Application)	Submission Date: November 23, 2023
Response to the Commercial Energy Consumers Association of BC (CEC) Information Request (IR) No. 1	Page 33

1    **15.    Reference:    Exhibit B-1, Section 5, Page 74**

13            customer. However, the large increase in the Basic Charge of RS 3/23 will have a significant  
14            impact on large commercial customers that have small or minimal volumes since these  
15            customers would have limited to no opportunity to offset the increased Basic Charge through  
16            decreased consumption (as shown in Table 5-14 above, the variable charges of RS 3/23 will  
17            be reduced under Option 4 to offset some of the increase in the Basic Charge). For example,  
18            assuming a particular large commercial customer has no volumes (which could occur over  
19            time when the commercial property is under development/renovation, changing  
20            ownership/lease, or vacant) and pays the Basic Charge only, they will experience the  
21            maximum bill impact of \$1,466 per year since this customer would not be able to offset the  
22            increase through the reduced variable charges. This level of bill impact is worse than Option  
2            23            3 and is therefore more misaligned with the rate design principle of rate stability.

3            15.1    Please provide an estimate of the number of RS 3/23 customers which would be  
4            most impacted by rebalancing Option 4 due to having no or low volumes.

5  
6    **Response:**

7    Please see Table 1 below for the bill impacts under Option 4 (in dollars and in percentage) to RS  
8    3/23 customers with annual consumptions from zero to 15,000 GJ at 500 GJ increments, and the  
9    number of customers in each increment based on 2022 Actuals (i.e., the same underlying data  
10    used for Figure 5-4 of the Application). The crossover point for annual consumption between bill  
11    increases and bill savings is at approximately 3,985 GJ. Based on 2022 Actuals, there were 5,655  
12    customers with annual volumes less than 3,985 GJ. However, FEI considers those impacted the  
13    most under Option 4 would be RS 3/23 customers that consume less than 1,500 GJ. These  
14    customers would experience bill increases of more than 10 percent. Table 1 below shows that  
15    there are approximately 702 customers that consumed less than 1,500 GJ in 2022.

1  
2

**Table 1: RS 3/23 Bill Impact by Annual Consumption at 500 GJ Increments and Number of Customers per Increment**

Annual Volume (GJ)	Bill Impact (\$)	Bill Impact (%)	Number of Customers
-	1,465	84%	5
500	1,281	35%	241
1,000	1,097	19%	155
1,500	913	12%	301
2,000	729	8%	926
2,500	545	5%	1,465
3,000	361	3%	1,142
3,500	177	1%	797
4,000	(7)	0%	641
4,500	(191)	-1%	504
5,000	(375)	-2%	356
5,500	(559)	-2%	296
6,000	(743)	-3%	242
6,500	(927)	-3%	188
7,000	(1,111)	-4%	133
7,500	(1,295)	-4%	104
8,000	(1,479)	-4%	83
8,500	(1,663)	-5%	66
9,000	(1,847)	-5%	62
9,500	(2,031)	-5%	43
10,000	(2,215)	-5%	40
10,500	(2,399)	-6%	19
11,000	(2,583)	-6%	18
11,500	(2,767)	-6%	25
12,000	(2,951)	-6%	21
12,500	(3,135)	-6%	14
13,000	(3,319)	-6%	16
13,500	(3,503)	-6%	9
14,000	(3,687)	-7%	13
14,500	(3,871)	-7%	13
15,000	(4,055)	-7%	7

3  
4  
5  
6  
7  
8

15.2 Please provide, in table format, the annual \$ bill impact for RS 3/23 customers under rebalancing Option 4, such that:

1           15.2.1   RS 3/23 customers are segmented by the load factor increments  
 2                   provided in Figure 5-4 of the Application (5% LF increments), and the  
 3                   accompanying columns include the annual \$ bill impact and the  
 4                   percentage bill impact (%).

5           15.2.2   For each of the RS 3/23 customer segments (5% LF increments), please  
 6                   include two other columns to indicate the total number of customers in  
 7                   the segment, and the average annual consumption per customer (GJ) for  
 8                   that customer segment.

9  
 10   **Response:**

11   Please refer to Table 1 below for the information requested based on the load factor segments  
 12   shown in Figure 5-4 of the Application. The bill impact is calculated based on the changes in the  
 13   RS 3/23 Basic Charge and Delivery Charge under Option 4 as shown in Table 5-14 of the  
 14   Application.

15           **Table 1: Annual Bill Impact for RS 3/23 Customers by Load Factor at 5% Segments under**  
 16   **Rebalancing Option 4**

Load Factor	Annual Bill Impact \$/customer	Annual Bill Impact %	Total No. of Customers	Avg. Annual Consumption GJ per customer
5%	\$ 371	2.8%	28	2,976
10%	\$ 1,466	83.8%	-	-
15%	\$ 910	11.9%	83	1,510
20%	\$ 829	9.8%	149	1,730
25%	\$ 325	2.4%	809	3,101
30%	\$ (23)	(0.1%)	999	4,047
35%	\$ 73	0.4%	1,223	3,787
40%	\$ 55	0.3%	1,539	3,836
45%	\$ 22	0.1%	1,099	3,924
50%	\$ 3	0.0%	639	3,977
55%	\$ (96)	(0.5%)	371	4,246
60%	\$ (41)	(0.2%)	247	4,096
65%	\$ 103	0.6%	170	3,704
70%	\$ 187	1.2%	133	3,475
75%	\$ 31	0.2%	115	3,900
80%	\$ (43)	(0.2%)	89	4,100
85%	\$ 80	0.5%	46	3,768
90%	\$ 28	0.2%	58	3,907
95%	\$ (185)	(1.0%)	45	4,488
100%	\$ 295	2.1%	39	3,183

17

18



FortisBC Energy Inc. (FEI or the Company) 2023 Cost of Service Allocation (COSA) Study and Application for Approval of Revenue Rebalancing (Application)	Submission Date: November 23, 2023
Response to the Commercial Energy Consumers Association of BC (CEC) Information Request (IR) No. 1	Page 36

1 **16. References: Exhibit B-1, Section 6, Page 88 and Exhibit B-1, Appendix B, PDF**  
 2 **Page 126**

**UTILITY INCOME AND EARNED RETURN  
 FOR THE YEAR ENDING DECEMBER 31, 2023  
 (\$000s)**

Line No.	Particulars (1)	2022	2023 Forecast		Change (6)
		Approved (2)	at 2022 Approved Rates (3)	Revised Revenue (4)	
1	<b>ENERGY VOLUMES</b>				
2	Sales Volume (TJ)	156,232	160,101		3,868
3	Transportation Volume (TJ)	77,825	61,672		(16,152)
4		234,057	221,773	-	(12,284)

3  
 4 16.1 Please augment Table 6-1 on page 88 of the Application to also include total  
 5 balancing charge and FEI's total midstream costs for years 2016, 2017 and 2023  
 6 (forecast).  
 7

8 **Response:**

9 FEI has updated Table 6-1 below with the total balancing charges and total midstream costs for  
 10 the years 2016, 2017 and 2023. The total balancing charges for 2023 are for the months of  
 11 January to September only, based on actual charges incurred to date. For the remaining months  
 12 of the year, FEI does not forecast balancing charges as FEI has no way of estimating when  
 13 shippers may incur balancing charges. FEI's forecast midstream costs for 2023 are for the full  
 14 year.

15 **Updated Table 6-1: Total Transportation Service Balancing Charges and Total Midstream Costs**

	2016	2017	2018	2019	2020	2021	2022	2023F	Average
Total Balancing Charge (\$000s)	864	1,081	696	2,385	433	428	4,827	787	1,438
Total FEI Midstream Costs (\$000s)	113,057	87,724	177,977	188,029	186,092	178,533	91,350	118,040	142,600
% of Balance Charge to Total Midstream	0.8%	1.2%	0.4%	1.3%	0.2%	0.2%	5.3%	0.7%	1.0%

16  
 17  
 18  
 19  
 20 16.2 Similar to the table<sup>9</sup> referenced above, please provide in table format the annual  
 21 'sales' and 'transportation' energy volumes in TJ for the years 2016 to 2023  
 22 (forecast).  
 23

24 **Response:**

25 Please see Table 1 below for the annual sales and transportation volumes in TJ for the years  
 26 2016 to 2022 Actual and 2023 Forecast.

<sup>9</sup> Exhibit B-1, Appendix B, PDF Page 126.

FortisBC Energy Inc. (FEI or the Company) 2023 Cost of Service Allocation (COSA) Study and Application for Approval of Revenue Rebalancing (Application)	Submission Date: November 23, 2023
Response to the Commercial Energy Consumers Association of BC (CEC) Information Request (IR) No. 1	Page 37

1 **Table 1: Energy Sales and Transportation Volume (TJ) from 2016 to 2013**

Line No.	Particulars	Actuals							Forecast
		2016	2017	2018	2019	2020	2021	2022	2023
<b>1 ENERGY VOLUMES</b>									
2	Sales Volume (TJ)	117,999	138,091	131,181	142,326	152,104	156,988	166,309	160,101
3	Transportation Volume (TJ)	78,420	82,004	79,635	83,795	66,666	70,472	64,362	61,672
4	Total	196,419	220,095	210,816	226,121	218,770	227,460	230,671	221,773

2  
3  
4  
5  
6 16.3 Please comment on any trends observed regarding transportation volumes and  
7 balancing charges over the period 2016 to 2023 (forecast).  
8

9 **Response:**

10 ***Transportation Volumes:***

11 Generally, trends observed regarding the Transportation Service demand volumes are directly  
12 related to the number of customers participating in the Transportation Service Model at any given  
13 time, the temperature throughout the year resulting in higher or lower heating demand load, and  
14 process or industrial load from customers that impact total load based on business or economic  
15 decisions and conditions. Transportation volumes from 2016 to 2023 are provided in Table 1  
16 below.

17 **Table 1: Actual Transportation Volumes (TJ) from 2016 to 2022 and 2023<sup>10</sup>**

	2016	2017	2018	2019	2020	2021	2022	2023
<b>Transportation Volume (TJ)</b>	78,420	82,004	79,635	83,795	66,666	70,472	64,362	61,672
YoY Increase (Decrease) TJ		3,584	(2,369)	4,160	(17,129)	3,806	(6,110)	(2,690)
YoY Increase (Decrease) %		4.6%	(2.9%)	5.2%	(20.4%)	5.7%	(8.7%)	(4.2%)

18  
19 During the period reflected in Table 1 above, the most significant change has been Transportation  
20 Service customers moving back to bundled service for the 2019/20 gas year that commenced  
21 November 1, 2019, and was likely influenced by the pipeline rupture incident on Enbridge's T-  
22 South system (T-South Rupture Incident). In 2019, 42 percent (over 900 Transportation Service  
23 customers) provided notice to FEI of their intention to return to bundled service, which is reflected  
24 in the change to Transportation Service volumes from 2019 to 2020. The increase in  
25 Transportation Service volume in 2021 was due to restored pipeline capacity on Enbridge's T-  
26 South system and colder than normal temperatures, particularly in December 2021, resulting in  
27 higher heating load demand.

<sup>10</sup> 2023 Transportation Volumes are for the months of January to September.

1 The volatility during the 2022/23 winter was just as severe as that which occurred during the T-  
 2 South Rupture Incident. The average Sumas daily price between November and March was  
 3 approximately \$16.19 Cdn/GJ, which was over \$9 Cdn/GJ higher than FEI's rate. This led to  
 4 several calls from Transportation Service customers to FEI throughout the winter, as the high cost  
 5 of gas at the Huntingdon/Sumas market was impacting their businesses. As a result,  
 6 approximately 233 additional Transportation Service customers have returned to bundled service  
 7 effective November 1, 2023. The corresponding decrease in the Transportation Service volume  
 8 load will be reflected in the 2024 numbers.

9 **Balancing Charges:**

10 Balancing charges incurred are a direct reflection of a shipper agent's ability to secure adequate  
 11 resources on behalf of their customers while adhering to FEI's balancing rules and provisions<sup>11</sup>  
 12 under both normal and higher demand periods. Shipper agents are responsible for nominating to  
 13 FEI the physical gas supply required to meet the demand of their customers, as well as for  
 14 meeting the balancing requirements of their customers. Please refer to Table 2 below for the  
 15 Balancing Charges in \$ and in TJ from 2016 to 2023.

16 **Table 2: Actual Balancing Charges (\$000s) from 2016 to 2022 & 2023<sup>12</sup>**

	2016	2017	2018	2019	2020	2021	2022	2023
<b>Total Balancing Volume (TJ)</b>	348	332	208	1,070	413	394	608	560
% of Total Transportation Volume	0.4%	0.4%	0.3%	1.3%	0.6%	0.6%	0.9%	0.9%
<b>Total Balancing Charge (\$000s)</b>	864	1,081	696	2,385	433	428	4,827	787
YoY Increase (Decrease) \$		217	(385)	1,690	(1,953)	(5)	4,399	(4,040)
YoY Increase (Decrease) %		25.2%	(35.6%)	242.8%	(81.9%)	(1.1%)	1028.5%	(83.7%)

17  
 18 As Table 2 shows, the balancing volume represents a very small portion of the total transportation  
 19 volume, with an average of approximately 0.7 percent from 2016 to 2023 (as of September). Even  
 20 in 2019 when the balancing charge was at its highest, the balancing volume only comprised  
 21 approximately 1.3 percent of total transportation volume in that year. FEI observes that over time,  
 22 regional events such as colder than normal winter periods, where hold to authorize restrictions  
 23 and/or capacity constraints resulting in capacity curtailments are put into place, generally  
 24 contribute to an increase in the volume of charges incurred. The increase in charges in 2019  
 25 compared to 2018 was due to the restrictions caused by the T-South Rupture Incident. The  
 26 increase in 2022 compared to 2021 volumes was due to the near design day temperatures in  
 27 December 2022, where hold to authorize and capacity curtailment restrictions were in place,  
 28 resulting in additional balancing charges.

<sup>11</sup> The transportation rate schedules establish the terms and conditions of the transportation service. They provide the operational and system-balancing rules, as well as the charges the customer may incur if balancing provisions are not met.

<sup>12</sup> 2023 Balancing Charges are for the months of January to September.