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September 25, 2025

British Columbia Public Interest Advocacy Ctr. Suite 803 - 470 Granville Street Vancouver, B.C. V6C 1V5

Attention: Leigha Worth

**Executive Director & General** 

Counsel

Residential Consumer Intervener Assoc. 1130 W Pender Street Vancouver, B.C. V6E 4A4

Attention: Michael Vaney,

**Executive Director** 

Dear Leigha Worth and Michael Vaney:

Re: FortisBC Inc. (FBC)

2025 and 2026 Annual Review of Rates (Application)

Response to the BC Public Interest Advocacy Centre representing the British Columbia Old Age Pensioners' Organization, Active Support Against Poverty, Council of Senior Citizens' Organizations of BC, Disability Alliance BC, and Tenants Resource and Advisory Centre (BCOAPO) and the Residential Consumer Intervener Association (RCIA) Information Request (IR) No. 1

On July 31, 2025, FBC filed the Application referenced above. In accordance with the regulatory timetable established in British Columbia Utilities Commission Order G-180-25 for the review of the Application, FBC respectfully submits the attached response to BCOAPO-RCIA IR No. 1.1

FBC has filed a portion of the response to BCOAPO-RCIA IR1 3.1 on a confidential basis as identified in that response and has provided a redacted version for the public record of this proceeding.

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For convenience and efficiency, if FBC has provided an internet address for referenced reports instead of attaching the documents to its IR responses, FBC intends for the referenced documents to form part of its IR responses and the evidentiary record in this proceeding.

September 25, 2025 British Columbia Utilities Commission FBC 2025 and 2026 Annual Review of Rates – BCOAPO-RCIA IR1 Response Page 2



If further information is required, please contact the undersigned.

Sincerely,

FORTISBC INC.

Original signed:

Sarah Walsh

Attachments

cc (email only): Registrar

Registered Interveners



FortisBC Inc. (FBC or the Company)	Submission Date:
2025 and 2026 Annual Review of Rates (Application)	September 25, 2025

Response to BCOAPO-RCIA Information Request (IR) No. 1

Page 1

1	1.0	Reference:	GENERAL
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2 Exhibit B-2, Section 1.1.1, p. 1 & Section 1.4, p. 5

3 Topic: Rate Impact Comparisons

#### Preamble:

FBC states that the permanent rate increase for 2025 is 3.53%, rather than the 5.65% approved on an interim basis effective 1 January 2025. This new rate increase is based on the 2025 approved formula O&M and forecasts in the Rate Setting Framework ("RSF") Decision, the actual 2024 results from the final year of the 2020-2024 Multi-Year Rate Plan, as well as five months of actual results in 2025 where applicable. (Section 1.1.1, p. 1)

FBC states that its proposed revenue requirement for 2026 results in a rate increase of 3.45% in 2026 compared to 2025 Interim Approved. (Section 1.4, p. 5).

1.1 Please provide the 2026 rate increase compared to the permanent rate increase for 2025 of 3.53%, with all other assumptions consistent with FBC's Application. For 2026, please assume no 2025 revenue surplus from higher 2025 interim rates relative to 2025 permanent rates.

#### Response:

The 2026 Forecast revenue deficiency is broken down in Figure 1-2 of the Application and shows the impact of the 2025 revenue surplus separately from the other drivers contributing to the 2026 revenue deficiency. In a hypothetical scenario where the 2025 revenue surplus did not exist (i.e., the 2025 permanent rate increase is 3.53 percent with no surplus), the 2026 rate increase would become 7.67 percent.

In Section 12.4.2.1 of the Application, FBC provides an estimate of the 2026 rate increase under a scenario where 2025 permanent rates were set at 3.53 percent and the difference between interim and permanent rates was returned to customers through a one-time bill adjustment in the first billing cycle in 2026. The 2026 rate increase stated in Section 12.4.2.1 under this scenario was 7.25 percent. However, while responding to this information request, FBC discovered an error in its calculation of 2026 revenue at 2025 Projected rates. Based on the corrected calculation, the 2026 rate increase would be 7.67 percent instead of 7.25 percent. Please refer to the response to BCOAPO-RCIA IR1 1.2 for further details. As FBC is not proposing to change interim 2025 rates, the corrected hypothetical rate increase in 2026 has no impact on the remainder of the Application.

Irrespective of the correction discussed above, the scenario posed by BCOAPO-RCIA in this question is not plausible, as there <u>is</u> a surplus in 2025. Further, as explained in Section 12.4.2.1 of the Application, it is not feasible for FBC to adjust the 2025 interim rates to reflect the lower projected rate increase in 2025 because the majority of the year will have elapsed by the time the



FortisBC Inc. (FBC or the Company)	Submission Date:
2025 and 2026 Annual Review of Rates (Application)	September 25, 2025
Response to BCOAPO-RCIA Information Request (IR) No. 1	Page 2

1 BCUC issues a decision on this Application. Therefore, the only feasible alternative to what FBC

- 2 is proposing is to return the 2025 surplus through a one-time bill adjustment in January 2026.
- 3 FBC explains in Section 12.4.2.1 why this is not the preferred option, noting that this approach
- 4 would result in a significantly higher 2026 rate increase (i.e., 7.67 percent compared to the
- 5 proposed 2026 rate increase of 3.45 percent).

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1.2 Please provide a table by revenue requirement component quantifying the increase or decrease (in both \$ and %) as follows: i) between the applied-for 2025 permanent rate (i.e. 3.53%) and 2024 Approved; ii) between 2026 (assuming no 2025 revenue surplus) and 2025 permanent; and iii) 2026 (assuming no 2025 revenue surplus) and 2024 Approved. As part of the response, please discuss the material drivers of any component increase of 10% or greater where the impact or nature of those material drivers for each component differ from those proportions,

amounts or factors discussed in the Application.

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#### Response:

- As discussed in the response to BCOAPO-RCIA IR1 1.1, FBC discovered an error in the calculation of the 2026 revenue at 2025 Projected rates under the scenario where the 2025 revenue surplus of \$10.199 million is not deferred to 2026. The 2026 rate increase under this scenario would be 7.67 percent, not the 7.25 percent provided in Section 12.4.2.1 of the Application. The following response is, therefore, provided based on the corrected 7.67 percent increase for 2026 if the 2025 revenue surplus is not deferred to 2026.
- Please refer to Table 1 below for a breakdown of the revenue deficiency and equivalent rate impact assuming that the 2025 surplus of \$10.199 million is not deferred to 2026 for the following requested scenarios:
  - i. 2025 increase compared to 2024 Approved (i.e., 3.53 percent);
- 29 ii. 2026 increase compared to 2025 (i.e., 7.67 percent); and
- 30 iii. 2026 increase compared to 2024 Approved (i.e., 11.66 percent).
- For comparison purposes, FBC also included the same breakdowns with the \$10.199 million revenue surplus deferred to 2026 as proposed in the Application.



FortisBC Inc. (FBC or the Company)	Submission Date:
2025 and 2026 Annual Review of Rates (Application)	September 25, 2025
Response to BCOAPO-RCIA Information Request (IR) No. 1	Page 3

## Table 1: Breakdown of Revenue Deficiency by Components of Revenue Requirement For BCOAPO-RCIA Scenarios (i), (ii) and (iii)

		i) 2025			ii) 2026			iii) 2026		
		(No Surplus	2025 (As-		(No Surplus	2026 (As-		(No Surplus	2026 (As-	
		Deferral)	Proposed)		Deferral)	Proposed)		Deferral)	Proposed)	
		Compared to	Compared to		Compared to	Compared to		Compared to	Compared to	
Line	Particular	2024 Approved	2024 Approved	Difference	2025 Projected	2025 Projected	Difference	2024 Approved	2024 Approved	Difference
1	Demand Forecast	(23,220)	(23,220)	-	(2,861)	(2,919)	(59)	(25,167)	(25,167)	-
2	Power Supply	14,388	14,388	-	13,391	13,391	-	27,779	27,779	-
3	O&M (net)	5,743	5,743	-	3,716	3,716	-	9,459	9,459	-
4	Depreciation	8,036	8,036	-	4,840	4,840	-	12,876	12,876	-
5	Amortization	3,790	3,790	-	8,007	340	(7,667)	11,797	4,130	(7,667)
6	Property Tax	3,010	3,010	-	1,775	1,775	-	4,785	4,785	-
7	Other Revenue	(1,743)	(1,743)	-	(123)	(123)	-	(1,866)	(1,866)	-
8	Income Tax	2,063	2,063	-	3,755	916	(2,839)	5,818	2,979	(2,839)
9	Earned Return	4,885	4,880	(5)	5,891	5,884	(7)	10,776	10,764	(12)
10	Deferred Revenue Surplus		10,199	10,199		(10,199)	(10,199)			
11	Total Deficiency (\$000s)	16,952	27,146	10,194	38,391	17,621	(20,771)	56,258	45,740	(10,518)
12										
13	Revenue at Exisitng Rate (\$000s)	480,467	480,467	-	500,279	510,532	10,253	482,414	482,414	-
14	Rate Increase (%)	3.53%	5.65%	2.12%	7.67%	3.45%	-4.22%	11.66%	9.48%	-2.18%

FBC notes that regardless of whether the 2025 revenue surplus is deferred to 2026, the underlying forecasts for the 2025 and 2026 revenue requirements do not change. For example, the treatment of the revenue surplus does not change how the formula O&M is calculated and forecast O&M is determined. Nor would it change how FBC's rate base is calculated and, therefore, there would be no change to the associated depreciation, income tax, and earned return. As shown in Table 1 above, returning the 2025 revenue surplus to customers in 2025 (through a one-time bill adjustment at the beginning of 2026) will only result in the following changes to the revenue requirement:

- The change in amortization (i.e., Line 5) is due to the removal of the credit amortization in 2026 related to the deferral of the 2025 revenue surplus;
- The change in income tax (i.e., Line 8) is related to the removal of the credit amortization for the 2025 revenue surplus;
- The change in earned return (i.e., Line 9) is related to changes in cash working capital, which is due to the change in the 2025 rate increase from 5.65 percent to 3.53 percent; and
- The change in the revenue at existing rates (i.e., Line 1 and Line 13) in Scenario ii) is due the 2025 rate increase becoming 3.53 percent instead of 5.65 percent. Although there is no change to the 2026 demand forecast, the 2026 revenue at 2025 rates would be different than under the approach proposed by FBC.<sup>1</sup> There would be no change in the revenue at existing rates for Scenarios i) and iii) because for both of these scenarios, the revenue is calculated based on the same demand forecasts at the same 2024 Approved rates.

For the same 2026 demand forecast, the difference in 2026 revenue at 2025 rates (Line 1) will equal to the difference between the 2025 increase of 5.65 percent and 2025 increase of 3.53 percent. E.g., \$2,919,490 / \$2,860,866 – 1 = 2.05 percent which is equivalent to (1 + 5.65 percent) / (1 + 3.53 percent) – 1 = 2.05 percent (minor difference due to rounding).



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FortisBC Inc. (FBC or the Company)
2025 and 2026 Annual Review of Rates (Application)

Response to BCOAPO-RCIA Information Request (IR) No. 1

September 25, 2025 Page 4

Submission Date:

None of the above changes are related to the underlying forecasts for the 2025 and 2026 revenue requirement. Therefore, the drivers of the increase in the 2025 revenue requirement from 2024 Approved, and the increase in the 2026 revenue requirement from 2025 as presented in Figures 1-1 and 1-2, respectively, would remain the same. For 2025, the main drivers of the increase continue to be the power supply costs and the resetting of Base O&M for the RSF term as well as the true-up of the 2020-2024 MRP rate base. For 2026, the main drivers continue to be the power supply costs, rate base growth (and the associated increase in depreciation and income tax due to the increase in regular capital additions that were approved in the RSF Decision), as well as amortization of the DSM Expenditures deferral account.

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customer will see that is associated only with the removal of the \$10.2 million deferral generated from overcollection in 2025.

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#### Response:

Since FBC is proposing to return the entire 2025 revenue surplus to customers in 2026 by amortizing the Revenue Deficiency/Surplus deferral account over one year, all else being equal, the elimination of the credit amortization in 2027 for the \$10.199 million surplus will result in a rate impact of approximately 1.93 percent from the proposed 2026 permanent rates. For an average residential customer with an annual consumption of 9,900 kWh, this is equivalent to a bill impact of approximately \$35.44 in 2027.

Please provide the 2027 delivery rate impact (in both \$ and %) a typical residential

If FBC were to return the 2025 surplus to customers through a one-time bill adjustment in January 2026 (and therefore set permanent 2025 rates at 3.53 percent), there would be no rate impact to customers in 2027 associated with the deferred surplus.

subject

to

increased/decreased by more than 10% relative to each year's total revenue

formula

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1.4 Please provide a table reflecting total dollars by revenue requirement component for 2024 Approved, 2025 Projected, and 2026 Forecasted and identify: i) the amount of each revenue requirement component (in both \$ and %) that is subject to either formula or flow-through deferral; ii) the overall amount of revenue requirement subject to either formula or flow-through deferral relative to each year's total revenue requirement; and iii) the material drivers of any revenue

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requirement

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# FortisBC Inc. (FBC or the Company) 2025 and 2026 Annual Review of Rates (Application)

Response to BCOAPO-RCIA Information Request (IR) No. 1

Submission Date: September 25, 2025

Page 5

#### Response:

- 2 FBC notes that the only component within its revenue requirement subject to formula is the Base
- 3 O&M. While BCOAPO-RCIA refers to "formula" in the question, FBC interprets the request as
- 4 seeking a breakdown of FBC's revenue requirements in 2024 Approved, 2025 Projected, and
- 5 2026 Forecast between <u>earnings sharing</u> and flow-through treatment, rather than between
- 6 formula and flow-through treatment. Formula is a type of expenditure approved under the RSF
- 7 Decision, while flow-through is one of the approved variance treatments for FBC's revenue
- 8 requirement; these two mechanisms are not directly comparable and would result in some
- 9 components of the revenue requirement being excluded from the requested calculations. For
- 10 example, Other Revenue is determined through forecasts, not formula; however, the treatment of
- 11 <u>variances</u> in Other Revenue are subject to earnings sharing.
- 12 As such, please refer to Table 1 below for the breakdown of FBC's 2024 Approved, 2025
- Projected (i.e., 2025 rate increase at 5.65 percent as proposed), and 2026 Forecast (i.e., 2026
- rate increase at 3.45 percent as proposed) revenue requirements subject to earnings sharing or
- 15 flow-through treatment in dollars as well as in percentage relative to the total revenue
- 16 requirements. Specifically, please see Line 2 for Formula O&M which is the only revenue
- 17 requirement component that is calculated using a formula as discussed above.
- 18 As shown in Table 1 below, the largest component each year relative to the total revenue
- requirement is the power supply cost, which is subject to flow-through treatment. Further, Table
- 20 1 shows that from 2024 Approved to 2026 Forecast, the proportions of each item subject to
- 21 earnings sharing or flow-through relative to the total revenue requirement are consistent. There
- 22 is no shift in any item between earnings sharing and flow-through treatment, and there is no line
- 23 item where the proportion (or percentage) of earnings sharing or flow-through relative to the total
- revenue requirement changed by more than 10 percent between each year.



FortisBC Inc. (FBC or the Company)	Submission Date:
2025 and 2026 Annual Review of Rates (Application)	September 25, 2025
Response to BCOAPO-RCIA Information Request (IR) No. 1	Page 6

# Table 1: Breakdown of 2024 Approved, 2025 Projected, and 2026 Forecast Revenue Requirement by Earnings Sharing and Flow-through treatment (\$000s)

		2024	2024	2025	2025	2026	2026
		Approved	Approved	Projected	Projected	Forecast	Forecast
Line	Particular	(\$000s)	(% of Total)	(\$000s)	(% of Total)	(\$000s)	(% of Total)
1	Subject to Earnings Sharing						
2	Formula O&M	61,900	13.5%	67,432	13.3%	71,001	13.4%
3	Other Revenue (excl. EV Carbon Credits)	(12,092)	-2.6%	(13,835)	-2.7%	(13,958)	-2.6%
4							
5	Subject to Flow-through						
6	Power Supply Costs	193,532	42.3%	207,920	41.0%	221,311	41.9%
7	Forecast O&M	1,274	0.3%	1,485	0.3%	1,632	0.3%
8	Other Revenue (EV Carbon Credits)	-	0.0%	-	0.0%	-	0.0%
9	Property Tax	18,573	4.1%	21,583	4.3%	23,358	4.4%
10							
11	Neither (See Note 1)						
12	Amortization	(6,562)	-1.4%	(2,772)	-0.5%	(2,432)	-0.5%
13	Deferred Revenue Deficiency/Surplus	-	0.0%	10,199	2.0%	-	0.0%
14							
15	To be Determined w/ Actuals Only (See Note 2)						
16	Depreciation	72,053	15.8%	80,089	15.8%	84,929	16.1%
17	Income Tax	12,484	2.7%	14,547	2.9%	15,463	2.9%
18	Earned Return	116,085	25.4%	120,965	23.8%	126,849	24.0%
19		,		,		,	
20	Total Revenue Requirement (\$000s)	457,247	100.0%	507,612	100.0%	528,153	100.0%

#### 4 Notes to table:

- For amortization, as approved in the RSF Decision and reflected in Table 12-3 of the Application, all
  variances are captured in each respective deferral account and trued-up in subsequent years. This also
  applies to the deferred deficiency/surplus since it is captured in the Revenue Deficiency/Surplus
  deferral account. Please also refer to the response to BCUC IR1 1.1.
- 2. For depreciation, income tax, and earned return (debt and ROE components), the determination of whether these line items (or a portion of these line items) are subject to earnings sharing or flow-through can only occur after the actuals are known. Depending on the cause of the variance, it may be subject to earnings sharing or flow-through treatment. For example, as reflected in Table 12-3 of the Application, the portion of the variance in depreciation that is related to Clean Growth Initiatives or CPCNs would be subject to flow-through treatment, while the rest of the variances in depreciation would be subject to earnings sharing. FBC cannot determine how much of the variance in depreciation is subject to earnings sharing or flow-through until the actuals are known. Similarly, FBC cannot determine how much of the variance in the debt component of earned return would be subject to earnings sharing or flow-through until actuals are known, as the variance could be due to a change in interest rate or a change in Clean Growth or CPCN projects (which are subject to flow-through), or it could be due to other reasons such as variances in regular Growth, Sustainment and Other capital (which are subject to earnings sharing).



FortisBC Inc. (FBC or the Company)	Submission Date:
2025 and 2026 Annual Review of Rates (Application)	September 25, 2025
Response to BCOAPO-RCIA Information Request (IR) No. 1	Page 7

2.0 Reference: **GENERAL** 1 2 Exhibit B-2, Section 1.1.1, p. 1 & Section 1.4, p. 5 3 FEI 2025 & 2026 Delivery Rate Application, Exhibit B-2, Section 1.1.1, 4 p. 1 & Section 1.1.2, p. 2 5 Topic: FBC compared to FEI Delivery Rate Increases 6 Preamble: 7 FBC states that the permanent rate increase for 2025 is 3.53% based on the 2025 8 approved formula O&M and forecasts in the RSF Decision, the actual 2024 results 9 from the final year of the 2020-2024 Multi-Year Rate Plan, as well as five months 10 of actual results in 2025 where applicable. (Section 1.1.1, p. 1) 11 FBC states that its proposed revenue requirement for 2026 results in a rate 12 increase of 3.45% in 2026 compared to 2025 Interim Approved. (Section 1.4, p. 13 5) 14 FEI is proposing a permanent delivery rate increase for 2025 of 9.10% and 10.07% 15 in 2026. (FEI Application, Section 1.1.1, p.1 & Section 1.1.2, p. 2) Please provide a general discussion of what is contributing to the fact that FBC's 16 2.1 17 delivery rate increases for the two test years are approximately 1/3rd (3.53% and 18 3.45% for 2025 and 2026, respectively) of the proposed delivery rate increases for 19 FEI (9.10% and 10.07%). As part of the response, please provide a table 20 comparing each revenue requirement component for both companies (in both \$ 21 and %) for each of the following years: i) 2024 Approved; ii) 2025 permanent; and 22 iii) 2026 permanent. 23

#### Response:

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- The revenue requirement components for 2025 and 2026 (i.e., the years which are the subject of this Annual Review proceeding) are provided in detail in FEI's and FBC's respective Annual Review applications. FEI and FBC are separate utilities, and their revenue requirements and rates are necessarily justified based on each utility's expected revenues and costs for the year and the formula/forecast funding approved for each utility in the RSF Decision.
- The requested comparison does not provide relevant or useful information for comparing the rate increases of FEI and FBC, as the two utilities are not comparable for the following reasons:
  - FEI and FBC provide two different forms of energy to customers:
  - There is a significant size difference between FBC and FEI in terms of the number of customers each utility serves, the size of each utility's service territory, and the resulting size of each utility's revenue requirement and rate base. FBC currently serves approximately 150 thousand electric customers primarily in the Okanagan and Kootenay



FortisBC Inc. (FBC or the Company)	Submission Date:
2025 and 2026 Annual Review of Rates (Application)	September 25, 2025
Response to BCOAPO-RCIA Information Request (IR) No. 1	Page 8

- regions of BC. In contrast, FEI currently serves over 1 million gas customers across the province; and
  - FEI's and FBC's services are different, as FEI provides an unbundled service whereas FBC provides a bundled service. As a result, the comparison of FEI's delivery rate increases to FBC's general rate increases is not apples-to-apples, as FEI's total bills also include the cost of gas and storage and transportation charges.
- FBC, therefore, respectfully declines to provide a comparison between FEI's and FBC's revenue requirements for 2024 Approved, 2025 Projected, and 2026 Forecast.



2025 and 2026 Annual Review of Rates (Application)	FortisBC Inc. (FBC or the Company)	
	2025 and 2026 Annual Review of Rates (Application)	

September 25, 2025 Page 9

Submission Date:

Response to BCOAPO-RCIA Information Request (IR) No. 1

1 3.0 Reference: CUSTOMER GROWTH & VOLUME FORECAST

2 Exhibit B-2, Section 1.4.2, p. 7 & Section 3.3.4, pp. 23-24

3 Topic: Load Changes

#### Preamble:

FBC states that it is projecting total net load will increase in 2025 by 188.3 GWh or 5.4% relative to 2024 Approved. For 2026, total net load is forecast to increase a further 52.2 GWh or 1.4% relative to 2025 Projected. FBC attributes the increase in load primarily to industrial customers. (Section 1.4.2, p. 7)

#### FBC also states:

"Consistent with the forecasting methodology approved in the RSF Decision, the industrial forecast is determined through a combination of customer load surveys and, when not available, escalation of the most recent annual loads by the corresponding provincial GDP growth rates for individual industries.

For 2025, the projected industrial demand is based on survey responses for 2025, with January to May being replaced with actuals. For 2026, FBC received a response from 81 percent (34 of 42) of the surveys sent out. The responding customers represent approximately 98.7 percent of the total industrial load.

As shown in Figure 3-7 below, the 2024 Actual industrial load is 53.9 GWh or 9.6 percent higher than 2024 Approved, primarily due to higher-than-expected load from one customer. For 2025, the projected industrial load is 713.3 GWh, which is an increase of 149.8 GWh from 2024 Approved (or 95.9 GWh from 2024 Actual). For 2026, the forecast industrial load is 773.8 GWh, which is an increase of 60.5 GWh from 2025 Projected. The increases in both 2025 Projected and 2026 Forecast are primarily due to higher forecasts from one customer." (Section 3.3.4, pp. 23-24)

3.1 Absent the increases in demand in 2025 and 2026 by the one industrial customer cited in Section 3.3.4, please explain whether industrial load during the test period is increasing, decreasing or largely unchanged compared to 2024 Approved and the 2024 Actual and, if applicable, provide the change (in both GWh and %) for each year.

#### Response:

For this response, FBC has redacted certain information that FBC is filing on a confidential basis and requests be held confidential by the BCUC in perpetuity, pursuant to Section 23 of the BCUC's Rules of Practice and Procedure regarding confidential documents as set out in Order G-192-25.<sup>2</sup> The redacted information contains confidential and private customer information for

<sup>&</sup>lt;sup>2</sup> As amended by Order G-228-25.



FortisBC Inc. (FBC or the Company)	Submission Date:
2025 and 2026 Annual Review of Rates (Application)	September 25, 2025
Response to BCOAPO-RCIA Information Request (IR) No. 1	Page 10

- which FBC does not have the authority or permission to disclose. FBC is unable to foresee a time 1
- 2 when this information would no longer be considered private and confidential, and therefore
- 3 requests that it remain confidential in perpetuity. Given the private nature of the information, FBC
- 4 submits that only the BCUC should have access to the unredacted confidential version. FBC has
- 5 provided a redacted version for the public record.
- 6 The following tables show the 2025 Projected and 2026 Forecast industrial demand relative to
- 7 2024 Actual and 2024 Approved demand, absent the one industrial customer cited in Section
- 8 3.3.4 of the Application.
- 9 As shown in Table 1 below, compared to 2024 Actual demand, the industrial load for 2025
- Projected and 2026 Forecast is relatively unchanged. 10
  - Table 1: 2025 Projected and 2026 Forecast Relative to 2024 Actual Demand (Excluding One Industrial Customer)



14 As shown in Table 2 below, compared to 2024 Approved demand, the 2025 Projected industrial 15 load decreased while the 2026 Forecast load is largely unchanged.

Table 2: 2025 Projected and 2026 Forecast Relative to 2024 Approved Demand (Excluding One Industrial Customer)



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Please provide a table that summarizes: i) the actual total loads (separately for peak and for annual volumes) by residential, commercial and industrial customers for each year including 2022 to 2024, the 2025 projected load and the 2026 forecast load: ii) the increase or decrease (in both GWh and %) by customer sector and in total between 2026 Forecasted and 2022 Actual; and iii) the material drivers for load increasing more than 10% overall and also those having an impact of

greater than 10% in each respective customer sector.

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FortisBC Inc. (FBC or the Company)	Submission Date:
2025 and 2026 Annual Review of Rates (Application)	September 25, 2025
Response to BCOAPO-RCIA Information Request (IR) No. 1	Page 11

#### Response:

- 2 Table 1 below provides the total loads (separately for peak and for annual volumes) by residential,
- 3 commercial and industrial customers for the years 2022 to 2024 (Actuals), 2025 Projected and
- 4 2026 Forecast. FBC notes that it does not have peak data by customer group so only the
- 5 aggregate values are provided.

Table 1: 2022-2024 Actual, 2025 Projected and 2026 Forecast Residential, Commercial and Industrial Load (Annual and Peak Volumes)

Energy (GWh)	2022	2023	2024	2025P	2026F
Residential	1,320.4	1,325.8	1,314.9	1,331.3	1,334.2
Commercial	969.1	960.8	965.3	988.5	977.7
Industrial	558.5	581.2	617.4	713.3	773.8
System Peak					
Winter Peak (MW)	734.3	676.9	746.6	739.6	740.2
Summer Peak (MW)	689.1	666.4	726.9	670.5	671.1

9 Table 2 below provides the increase or decrease by GWh by customer group and in total between 2026 Forecast and 2022 Actual.

Table 2: Change in GWh By Customer Group

Energy (GWh)	2022	2023	2024	2025P	2026F
Residential	-10.0	5.4	-10.9	16.4	3.0
Commercial	-2.2	-8.4	4.5	23.2	-10.8
Wholesale	9.6	11.9	-5.6	-3.7	2.2
Industrial	86.1	22.7	36.2	95.9	60.5
Lighting	-0.4	-0.5	-0.3	-0.3	-0.2
Irrigation	-6.1	1.7	0.9	1.8	-2.7
Net	77.1	32.8	24.9	133.3	51.9
System Peak					
Winter Peak (MW)	49.6	-57.4	69.7	-7.0	0.6
Summer Peak (MW)	36.1	-22.7	60.6	-56.4	0.6

Table 3 below shows years and customers groups where the load changed by more than 10 percent overall.



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FortisBC Inc. (FBC or the Company)	Submission Date:
2025 and 2026 Annual Review of Rates (Application)	September 25, 2025
Response to BCOAPO-RCIA Information Request (IR) No. 1	Page 12

Table 3: Change in % By Customer Group

Growth Year over Year		2022	2023	2024	2025P	2026F
Residential Energy		-0.7%	0.4%	-0.8%	1.2%	0.2%
Commercial		-0.2%	-0.9%	0.5%	2.4%	-1.1%
Wholesale	_	1.7%	2.1%	-1.0%	-0.6%	0.4%
Industrial		18.2%	4.1%	6.2%	15.5%	8.5%
Lighting	_	-4.3%	-5.8%	-2.9%	-3.3%	-2.4%
Irrigation		-13.9%	4.6%	2.3%	4.4%	-6.5%
Net		2.3%	0.9%	0.7%	3.8%	1.4%
Losses & Company Use		5.0%	-3.3%	1.4%	1.9%	1.3%
Gross		2.5%	0.6%	0.8%	3.6%	1.4%
System Peak						
Winter Peak (MW)		7.2%	-7.8%	10.3%	-0.9%	0.1%
Summer Peak (MW)		5.5%	-3.3%	9.1%	-7.8%	0.1%

3 As shown in the above table, there are four instances where the load changed by more than 10

4 percent from the preceding year.

#### 5 <u>Industrial (2022 and 2025P)</u>

- 6 In 2022 Actual and in 2025 Projected, Industrial load grew by 18.2 percent and 15.5 percent,
- 7 respectively. The primary driver in both cases was load from one large industrial customer.

#### 8 Irrigation (2022)

- 9 In 2022, Irrigation load decreased by nearly 14 percent compared to 2021. Fluctuations in load
- 10 are common in this rate group due to the impacts of weather conditions. Irrigation accounts for
- 11 approximately 1 percent of FBC's total load; therefore, the impact of the change in Irrigation
- 12 customer load in 2022 had an immaterial impact on FBC's overall load forecast and revenue.

#### 13 <u>Winter Peak (2024)</u>

- 14 The 2024 winter peak load was 10.3 percent higher compared to 2023 (though 2023 was almost
- 15 8 percent lower than 2022). Year-over-year oscillations in the winter peak load are expected as
- 16 the peak load is largely driven by the severity of the winter season. The following chart shows
- 17 how the normalized winter peak has oscillated year over year since 2016 and demonstrates that
- the change in 2024 was similar to changes experienced in the past.

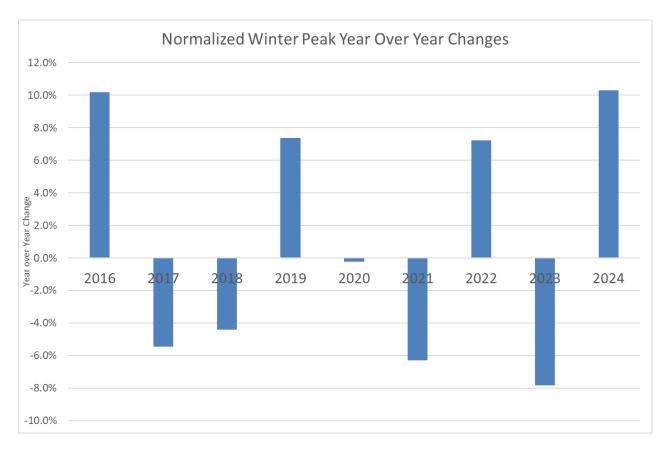


FortisBC Inc. (FBC or the Company)	
2025 and 2026 Annual Review of Rates (Applicatio	n)

Response to BCOAPO-RCIA Information Request (IR) No. 1

Submission Date: September 25, 2025

Page 13



3.3 Please provide a rate impact scenario for 2026 assuming the increased industrial load associated with the one customer does not materialize and is excluded from the 2026 revenue requirement. As part of the response, please provide: i) all impacted schedules along with Figure 1-2 (p. 6); ii) the delivery rate change (in both \$ and %) to the typical residential customer; and iii) a description of the material assumptions that differ from those used to generate this Application, how they affect the scenario's outcome, and why they were either added to, deleted from, or substituted for other assumptions used in the Application.

#### Response:

FBC notes that variances in revenue due to the demand forecast are captured in the Flow-through deferral account; therefore, if the forecast increased load from the industrial customer did not actually materialize in 2026 (i.e., 2026 load equals to the 2025 level), the variance would impact 2028 rates, not 2026 rates, through amortization of the Flow-through deferral account. As such, there would be no change to the 2026 revenue requirement (or 2026 rates) if the forecast growth in demand does not materialize.



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FortisBC Inc. (FBC or the Company)	Submission Date:
2025 and 2026 Annual Review of Rates (Application)	September 25, 2025
Response to BCOAPO-RCIA Information Request (IR) No. 1	Page 14

2026

However, assuming that BCOAPO-RCIA is requesting FBC to provide the impact of a hypothetical 1 2

scenario in which FBC assumes that the industrial customer's load remains unchanged in 2026

3 (i.e., the 2026 forecast equals the 2025 Projected forecast), the 2026 rates would increase from

3.45 percent to 3.74 percent. The bill impact for an average residential customer would increase

5 from approximately \$61.04 to \$66.12 in 2026.

scenario suggested by this question.

6 As shown in Table 1 below, the only changes in the revenue requirement due to the hypothetical 7 reduction to the industrial load forecast are the lower power supply costs and the lower revenue 8 that would be recovered at the existing rates. All other components of FBC's revenue requirement 9 would remain the same; therefore, the drivers of the 2026 deficiency and rate increase remain 10 the same as presented in Figure 1-2 of the Application and as discussed in Section 1.4 of the Application. As such, FBC has not reproduced Figure 1-2 and the financial schedules for the 11

Table 1: Comparison of 2026 Revenue Requirement and Rate Increase if Demand Forecast of Industrial Customer Remains the Same from 2025 to 2026

		2026	
	2026	Forecast	
	Forecast	(BCOAPO-	
Particular	(As-Filed)	RCIA 3.3)	Difference
Cost of Energy	221,311	216,571	(4,740)
O&M (net)	72,633	72,633	-
Depreciation	84,929	84,929	-
Amortization	(2,432)	(2,432)	-
Property Tax	23,358	23,358	-
Other Revenue	(13,958)	(13,958)	-
Deferred Revenue Deficiency/Surplus	-	-	-
Income Tax	15,463	15,463	-
Earned Return	126,849	126,849	
Total Revenue Requirement (\$000s)	528,153	523,413	(4,740)
Revenue at 2025 Rates (\$000s)	510,532	504,537	(5,995)
Revenue Deficiency (\$000s)	17,621	18,876	1,255
Rate Increase (%)	3.45%	3.74%	0.29%
Avg. Residential Rate Impact (\$)	61.04	66.12	5.08
	Cost of Energy O&M (net) Depreciation Amortization Property Tax Other Revenue Deferred Revenue Deficiency/Surplus Income Tax Earned Return Total Revenue Requirement (\$000s) Revenue at 2025 Rates (\$000s) Revenue Deficiency (\$000s) Rate Increase (%)	Particular         Forecast (As-Filed)           Cost of Energy         221,311           O&M (net)         72,633           Depreciation         84,929           Amortization         (2,432)           Property Tax         23,358           Other Revenue         (13,958)           Deferred Revenue Deficiency/Surplus         -           Income Tax         15,463           Earned Return         126,849           Total Revenue Requirement (\$000s)         528,153           Revenue at 2025 Rates (\$000s)         510,532           Revenue Deficiency (\$000s)         17,621           Rate Increase (%)         3.45%	Particular         (As-Filed)         Forecast (BCOAPO-Particular)           Cost of Energy         221,311         216,571           O&M (net)         72,633         72,633           Depreciation         84,929         84,929           Amortization         (2,432)         (2,432)           Property Tax         23,358         23,358           Other Revenue         (13,958)         (13,958)           Deferred Revenue Deficiency/Surplus         -         -           Income Tax         15,463         15,463           Earned Return         126,849         126,849           Total Revenue Requirement (\$000s)         528,153         523,413           Revenue at 2025 Rates (\$000s)         510,532         504,537           Revenue Deficiency (\$000s)         17,621         18,876           Rate Increase (%)         3.45%         3.74%



FortisBC Inc. (FBC or the Company)	Submission Date:
2025 and 2026 Annual Review of Rates (Application)	September 25, 2025
Response to BCOAPO-RCIA Information Request (IR) No. 1	Page 15

4.0 1 Reference: AMORTIZATION OF DEFERRAL ACCOUNTS 2 Exhibit B-2, Section 1.4.8 3 Topic: Increase in DSM Expenditures in 2025 & 2026 Preamble: FBC states: 4 5 "Amortization of deferral accounts in 2025 is projected to increase by \$3.809 6 million, primarily due to a reduction in the credit amortization related to the 2020-7 2024 Flow-through deferral account and the increased amortization of the DSM 8 deferral account due to increased DSM expenditures. 9 Amortization of deferral accounts in 2026 is forecast to increase by \$0.521 million, 10 primarily due to increased amortization from the DSM deferral account resulting from increased DSM expenditures." (Section 1.4.8, p. 9) 11 4.1 12 Please explain the nature/type of DSM expenditures and any specific programs 13 that are driving the increase in 2025 and 2026 along with a table that breaks down 14 the increased DSM expenditures by the participatory rate classes (in both \$ and %) for each year 2024 Approved, 2024 Actual, 2025 Projected, and 2026 15 16 Forecasted. 17 18 Response:

- The increase in amortization from 2025 to 2026 is due to the DSM expenditures in 2025, which are currently projected to be approximately \$21.5 million as shown in Table 1 below.
- 21 The overall increase projected for 2025 is driven primarily by unexpectedly high participation in
- 22 the Residential New Home Program and the Commercial Performance Program. As approved by
- 23 Order G-371-22, FBC may carry over unspent and overspent DSM expenditures in a program
- area to the same program area in the following year.<sup>3</sup>
- 25 FBC does not have an updated forecast for 2026 beyond what was accepted by the BCUC in the
- 26 2023-2027 DSM Expenditures Plan.

-

Decision and Order G-371-22, p. 17.



FortisBC Inc. (FBC or the Company)	Submission Date:
2025 and 2026 Annual Review of Rates (Application)	September 25, 2025
Response to BCOAPO-RCIA Information Request (IR) No. 1	Page 16

Table 1: 2024 Approved and Actual, 2025 Approved and Projected, and 2026 Forecasted DSM Expenditures

Program Area	2024 Approved DSM Plan Expenditures including Carryover		2024 Difference Between Plan and Actuals	2024 Percent Increase/ Decrease Between Plan and Actuals	2025 Approved DSM Plan Expenditures including Carryover	2025 DSM Projected Expenditures for Annual Review Submission	2025 Difference Between Plan and Actuals	2025 Percent Increase/ Decrease Between Plan and Actuals	2026 DSM Expenditures Forecast
Residential	\$3,451,000	\$3,158,000	(\$293,000)	-8%	\$3,859,000	\$5,155,721	\$1,296,721	34%	4,015,000
Commercial	\$3,199,000	\$3,911,000	\$712,000	22%	\$3,643,000	\$4,920,149	\$1,277,149	35%	3,850,000
Industrial	\$3,324,000	\$1,517,000	(\$1,807,000)	-54%	\$3,994,000	\$3,345,820	(\$648,180)	-16%	2,196,000
Low Income	\$1,766,000	\$1,438,000	(\$328,000)	-19%	\$2,118,000	\$1,986,965	(\$131,035)	-6%	1,844,000
Conservation Education and Outreach	\$1,341,000	\$751,000	(\$590,000)	-44%	\$1,355,000	\$1,380,243	\$25,243	2%	1,028,000
Innovative Technologies	\$1,958,000	\$455,000	(\$1,503,000)	-77%	\$875,000	\$717,567	(\$157,433)	-18%	318,000
Enabling Activites	\$1,074,000	\$989,000	(\$85,000)	-8%	\$2,453,000	\$1,655,388	(\$797,612)	-33%	1,846,000
Portfolio Level Activities	\$1,054,000	\$983,000	(\$71,000)	-7%	\$917,000	\$1,095,390	\$178,390	19%	872,000
Demand Response	\$1,047,000	\$655,000	(\$392,000)	-37%	\$1,716,000	\$1,186,064	(\$529,936)	-31%	1,443,000
Total	\$18,214,000	\$13,857,000	(\$4,357,000)	-24%	\$20,930,000	\$21,443,307	\$513,307	2%	\$17,412,000



FortisBC Inc. (FBC or the Company)	Submission Date:
2025 and 2026 Annual Review of Rates (Application)	September 25, 2025
Response to BCOAPO-RCIA Information Request (IR) No. 1	Page 17

To the extent that any 2024 Actual expenditures are lower than 2024 Approved by 10% or more, please explain what has contributed to the failure to meet those projected expenditures and use this context to then discuss the reliability of the Utility's DSM expenditure projections for 2025 and 2026.

#### Response:

4.2

- FBC's actual 2024 DSM expenditures were 76 percent of plan (\$13.857 million actual compared to \$18.214 million planned). Please refer to Attachment 4.2 for the FBC DSM 2024 Annual Report filed with the BCUC on March 31, 2025 which contains details of the actual and planned DSM expenditures. Generally, the underspend compared to plan in 2024 was due to some offers being slower to gain traction in the market than initially anticipated. However, for the most part, FBC is now seeing uptake meeting, and in some cases exceeding, initially anticipated levels. As a result, FBC currently expects to meet DSM Plan expenditures for the full DSM Plan period.
- As explained in the response to BCOAPO-RCIA IR1 4.1, Order G-371-22 enables FBC to carry over unspent and overspent DSM expenditures in a program area to the same program area in the following year. Therefore, FBC has the full 2023-2027 DSM Plan period to achieve the BCUC-accepted expenditures.
- FBC's DSM expenditure projections for 2025 and 2026 are not more or less reliable than historical FBC DSM expenditure projections. FBC's DSM actual expenditures have been relatively in line with the projections accepted for their respective DSM Plans and FBC does not anticipate significant deviations from Plan for 2025 and 2026.
  - With regard to the increases in amortization expense referenced by BCOAPO-RCIA in the preamble, for 2025, as explained in the referenced passage, the projected increase is due primarily to both the reduction in credit amortization related to the 2020-2024 Flow-through deferral account and increased amortization of the DSM deferral account. For 2026, the forecast increase in amortization expense is \$0.521 million. It would be inappropriate to reduce the projected/forecast additions to the DSM deferral account simply to reduce the amortization expense in 2025 and 2026. The projections/forecasts are based on FBC's expected DSM spending, and any minor reduction in these projections/forecasts would have minimal impact on the 2025 or 2026 revenue deficiencies.



FortisBC Inc. (FBC or the Company)	Submission Date:
2025 and 2026 Annual Review of Rates (Application)	September 25, 2025
Response to BCOAPO-RCIA Information Request (IR) No. 1	Page 18

1	5.0	Reference: Load Forecast
2		Exhibit B-2, Section 3.3.7, p. 26
3		Topic: Losses and Company Use
4		Preamble: FBC states:
5 6 7		"FBC continues to use a loss rate assumption of 7.6 percent of gross load (excluding company use), consistent with the loss rate used during the 202-2024 MRP term. System losses consist of:
8		Losses in the transmission and distribution system;
9		<ul> <li>Losses due to wheeling through the BC Hydro system; and</li> </ul>
10		<ul> <li>Unaccounted-for load (meter inaccuracies and theft)."</li> </ul>
11 12 13 14 15		Please provide a breakdown of the 7.6 percent gross load loss across the three identified categories of system losses: (i) losses in the transmission and distribution system, (ii) losses due to wheeling through the BC Hydro system, and (iii) unaccounted-for load (meter inaccuracies and theft).

#### Response:

The table below shows the breakdown of the normalized losses from 2020 to 2024. FBC cannot isolate the losses associated with unaccounted for loads, so they are included in the Transmission and Distribution Losses.

Table 1: Normalized Losses from 2020 to 2024

	2020	2021	2022	2023	2024
(i) Transmission and Distribution System Losses	229,916	230,047	250,650	251,816	254,936
(ii) BC Hydro Wheeling Losses	46,060	57,087	51,972	39,859	41,147
Total	275.976	287.134	302.621	291.675	296.083

5.1.1 Please describe all actions and measures taken by FBC to reduce the unaccounted-for load (meter inaccuracies and theft).

#### Response:

FBC maintains a comprehensive program to reduce unaccounted for load through both meter quality assurance and theft prevention measures. All electricity meters used for revenue purposes comply with Measurement Canada requirements and are tested at the manufacturing facility, retested on arrival at FBC's meter shop, and subject to an annual in-service compliance sampling program to ensure continued accuracy.



FortisBC Inc. (FBC or the Company)	Submission Date:
2025 and 2026 Annual Review of Rates (Application)	September 25, 2025
Response to BCOAPO-RCIA Information Request (IR) No. 1	Page 19

To address electricity theft, FBC operates a dedicated Revenue Protection unit that investigates suspected theft of electricity referred to FBC by law enforcement, customers, and other stakeholders, and by using tools such as meter alarm data, site visits, and interviews. FBC also collaborates with external partners, including Crime Stoppers, to identify unauthorized consumption. Confirmed cases of theft are subject to recovery of the service-related charges (applicable rate schedule) for the duration of unauthorized use and administrative costs as provided for under FBC's Electric Tariff, serving as a deterrent.

<sup>&</sup>lt;sup>4</sup> <u>fortisbcelectrictariff.pdf</u>, Section 8.7.5 (Tampering / Fraud).



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Reference:

FortisBC Inc. (FBC or the Company)	Submission Date:
2025 and 2026 Annual Review of Rates (Application)	September 25, 2025
Response to BCOAPO-RCIA Information Request (IR) No. 1	Page 20

**O&M Expense Forecast Outside the Formula** 2 Exhibit B-2, Section 6.3.2, pp. 51-52 3 **Topic: Insurance Expense** Preamble: FBC states: 4 5 "FBC's annual insurance renewal occurs in July of each year. The 2024 Actual 6 insurance premiums were \$0.082 million lower than 2024 Approved, as the 7 insurance market softened in 2024 compared to recent years. 8 . . . 9 The 2026 Forecast insurance premium expense is \$2.552 million, which is an 10 increase of \$0.012 million from 2025 Projected. The 2026 Forecast is calculated 11 based on the actual insurance renewal from July 2025 to June 2026, plus 5 percent

escalation for the insurance renewal from July 2026 to June 2027 and the \$0.160 million related to the wildfire fighting services paid to the Province." [footnote omitted]

Please reconcile the statement that the "insurance market softened in 2024" with 6.1 the application of a 5 percent escalation factor in forecasting the insurance renewal rate for 2026.

Response:

Insurance premiums are charged by insurers who consider numerous factors, including overall market conditions and the replacement value of assets to be insured. FBC's forecast insurance renewal rate for July 2026 to June 2027 includes a 5 percent escalation to reflect asset replacement value increases as a result of FBC's capital plan, as well as external replacement cost increase factors, such as inflation. While the insurance market softened in 2024 and FBC saw actual insurance premiums decrease more than forecast for that period, FBC cannot be certain that insurance market conditions will continue in that same way in the future. FBC also notes that variances in insurance premiums between forecast and actual are captured in the Flowthrough deferral and will be recovered from or returned to customers in the following year.

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6.1.1 Please provide a revised 2026 forecast of insurance premiums, assuming the July 2026 renewal premium is based on the July 2025 to June 2026 renewal rate, adjusted only for inflation as of July 2025.

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FortisBC Inc. (FBC or the Company)	Submission Date:
2025 and 2026 Annual Review of Rates (Application)	September 25, 2025
Response to BCOAPO-RCIA Information Request (IR) No. 1	Page 21

#### Response:

- 2 As explained in the response to BCOAPO-RCIA IR1 6.1, there are other factors that contribute to
- 3 changes in insurance premiums other than inflation. However, in order to be responsive, if FBC
- 4 forecasts its 2026 insurance premium based on the hypothetical assumption that the increase is
- only related to inflation, the 2026 Forecast insurance premiums would be approximately \$2.521
- 6 million, which is approximately \$31 thousand less than FBC's 2026 Forecast of \$2.552 million.



FortisBC Inc. (FBC or the Company)	Submission Date:
2025 and 2026 Annual Review of Rates (Application)	September 25, 2025
Response to BCOAPO-RCIA Information Request (IR) No. 1	Page 22

1 7.0 Reference: O&M Expense Forecast Outside the Formula

2 Exhibit B-2, Section 6.3.4, pp. 53-54

3 Topic: Clean Growth Initiative – EV Charging Stations

4 **Preamble:** FBC provides:

Table 6-6: Clean Growth Initiative – EV DCFC Stations (\$ millions)

Line		2024		2	2024		2025		2026	
No.	Description	Approved		Actual		Projected		Forecast		
1	Network Management	\$	0.050	\$	0.061	\$	0.121	\$	0.070	
2	Repairs and Maintenance		0.050		0.061		0.086		0.090	
3	Inspection Fees		0.096		0.038		0.050		0.055	
4	FBC Labour Costs		0.070		0.038		0.052		0.070	
5	Third Party Utilities Costs		0.044		0.035		0.056		0.075	
6	Total EV DCFC O&M	\$	0.310	\$	0.232	\$	0.365	\$	0.361	

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At page 53, lines 16-18, FBC states:

"The 2025 Projected O&M is \$0.055 million higher than 2024 Approved due to increases in network management fees, repairs and maintenance, and third-party utilities costs, which are partially offset by lower inspection fees and lower FBC labour costs due to ongoing staffing vacancies."

At page 54, line 2, FBC states:

"BC is also expecting to fill the labour vacancies in 2026."

7.1 Please explain why FBC Labour Costs are projected to increase in 2025 if the identified staffing vacancies are not expected to be filled until 2026.

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#### Response:

FBC labour costs for EV DCFC stations are projected to increase in 2025 compared to 2024 actuals, as staffing vacancies that persisted throughout 2024 are expected to be filled before the end of Q3 2025, resulting in a partial year of additional labour costs. A further increase is forecast for 2026, as FBC expects the increased staffing levels to be maintained in 2026.



FortisBC Inc. (FBC or the Company)	Submission Date:
2025 and 2026 Annual Review of Rates (Application)	September 25, 2025
Response to BCOAPO-RCIA Information Request (IR) No. 1	Page 23

8.0 Reference: **Deferred Charges, Existing Deferral Accounts** Exhibit B-2, Section 7.7.2.1, p. 64 Topic: Annual Review Proceeding Costs (formerly Annual Review of 2020-2024 Rates) Preamble: FBC states: "Also consistent with the existing deferral account, FBC proposes to continue amortizing the deferral account over one year." 8.1 Please explain whether amortizing the costs of the Annual Review for the 2025 and 2026 Rates over one year results in recovery of costs over a period that aligns with the benefits received by ratepayers (i.e., benefits matching). 8.1.1 If not, please explain the basis or criteria used to establish a one-year amortization period. 

#### Response:

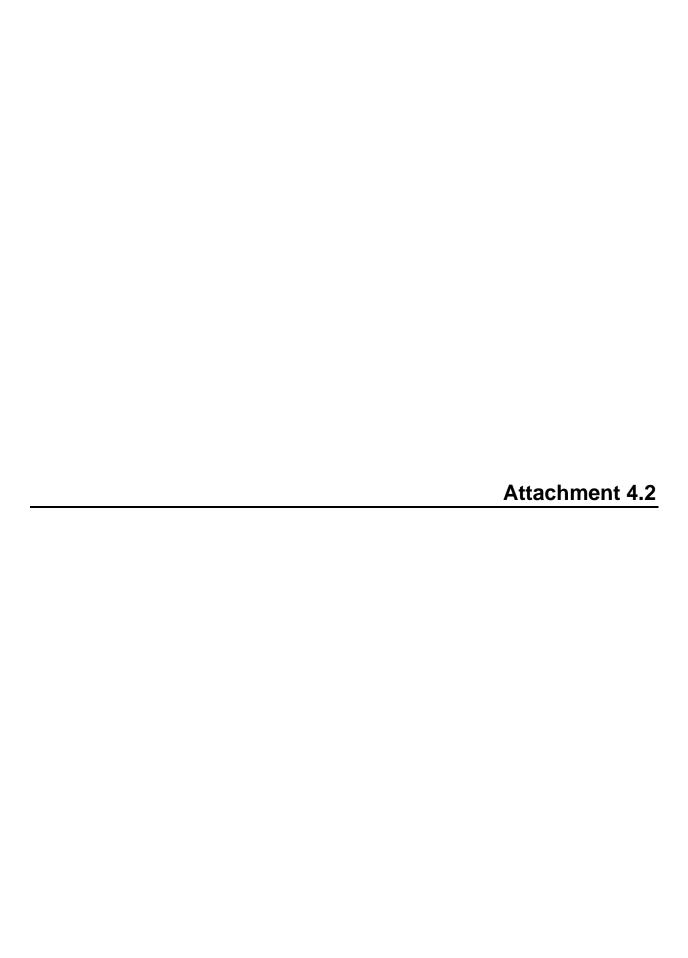
FBC's Annual Review proceeding costs have been consistently amortized over a one-year period as each Annual Review typically is setting rates over a single-year period. Further, since Annual Review proceeding costs would normally be incurred in the preceding year for which the rates are set (i.e., the proceeding costs incurred in 2025 are for setting the rates for 2026), a one-year amortization period aligns the recovery of the proceeding costs with the year in which the costs were incurred for, thus matching the timing of the benefits.

FBC considers the same rationale can be applied in the current Application, despite the Application setting both 2025 and 2026 rates. The proceeding costs for this Application are applicable to the 2025 and 2026 rate-setting years. Due to the timing of the RSF Decision, FBC has filed the Application in mid-2025 to set permanent 2025 and 2026 rates. As 2025 will have essentially elapsed by the time the Decision is issued on the Application, the remaining benefit period is 2026. Further, the level of proceeding costs forecast for the review of the Application are consistent with previous Annual Reviews and have historically been amortized over year. There has been no change to the nature of the costs or the amounts that would warrant a change in amortization period.



FortisBC Inc. (FBC or the Company)	Submission Date:
2025 and 2026 Annual Review of Rates (Application)	September 25, 2025
Response to BCOAPO-RCIA Information Request (IR) No. 1	Page 24

1	9.0 F	Refere	nce: I	Existing Deferral Accounts
2			I	Exhibit B-2, Section 12.4.2.1, p. 144
3			7	Topic: 2023 Revenue Deficiency Deferral Account
4	F	Pream	ble: FB	C states:
5 6 7 8			account	ojected 2025 ending balance in the Revenue Deficiency/Surplus deferral, which will be comprised of the remaining debit balance of \$1.511 million ed above and the credit (surplus) addition of \$7.445 million (net of tax), is million."
9 10	9	9.1		explain whether the projected surplus balance will accrue interest for the of ratepayers.
11			9.1.1	If no, please explain why not.
12 13 14 15	<u>Respon</u>	se:	9.1.2	If yes, please specify the applicable interest rate and how it will be credited to ratepayers.
16	Please r	efer to	the resp	ponse to ICG IR1 1.1.





**Sarah Walsh**Director, Regulatory Affairs

**Gas Regulatory Affairs Correspondence** Email: <a href="mailto:gas.regulatory.affairs@fortisbc.com">gas.regulatory.affairs@fortisbc.com</a>

**Electric Regulatory Affairs Correspondence** Email: <u>electricity.regulatory.affairs@fortisbc.com</u> FortisBC 16705 Fraser Highway Surrey, B.C. V4N 0E8 Tel: (778) 578-3861 Cell: (604) 230-7874 Fax: (604) 576-7074 www.fortisbc.com

March 31, 2025

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

Attention: Patrick Wruck, Commission Secretary

Dear Patrick Wruck:

Re: FortisBC Inc. (FBC)

Electricity Demand Side Management (DSM) - 2024 Annual Report

Attached please find the Electricity DSM Program 2024 Annual Report for FBC.

If further information is required, please contact Sarah Commander, Manager, Regulatory Affairs at (250) 469-6081.

Sincerely,

FORTISBC INC.

Original signed:

Sarah Walsh

Attachment



# FortisBC Inc.

# Electricity Demand-Side Management Programs 2024 Annual Report

March 31, 2025



### **Table of Contents**

1.	REF	PORT OVERVIEW	1
	1.1	Portfolio Results	1
	1.2	Meeting Adequacy Requirements	3
	1.3	Funding Transfers and Carryover	. 4
	1.4	Collaboration & Integration	. 5
	1.5	Portfolio Summary	5
2.	RES	SIDENTIAL PROGRAM AREA	. 6
	2.1	Overview	. 6
	2.2	Home Renovation Program	. 6
	2.3	New Home Program	7
	2.4	Summary	7
3.	COI	MMERCIAL PROGRAM AREA	. 8
	3.1	Overview	. 8
	3.2	Prescriptive Program	. 8
	3.3	Performance Program	. 9
	3.4	Rental Apartment Efficiency Program	10
	3.5	Summary	10
4.	IND	USTRIAL PROGRAM AREA	11
	4.1	Overview	.11
	4.2	Prescriptive Program	.11
	4.3	Performance Program	12
	4.4	Strategic Energy Management Program	12
	4.5	Summary	13
5.	LOV	V INCOME PROGRAM AREA	14
	5.1	Overview	14
	5.2	Self-Install Program	14
	5.3	Direct Install Program	15
	5.4	Prescriptive Program	15
	5.5	Performance Program	16
	5.6	Summary	16



<b>6</b> .	CONSERVATION EDUCATION AND OUTREACH				
	6.1	Overview	17		
	6.2	Residential Customer Engagement Tool	17		
	6.3	Residential Education Program	18		
	6.4	Commercial Education Program	18		
	6.5	School Education and Post-Secondary Program	19		
	6.6	Summary	19		
7.	ENABLING ACTIVITIES				
	7.1	Overview	21		
	7.2	Trade Ally Network	21		
7. 8. 9.	7.3	Codes and Standards	22		
	7.4	Reporting Tool and Customer Application Portal	22		
	7.5	Commercial Energy Specialist Program	23		
	7.6	Community Energy Specialist Program	23		
	7.7	Customer Research	24		
	7.8	Summary	24		
8.	INNOVATIVE TECHNOLOGIES				
	8.1	Overview	25		
	8.2	Innovative Technologies	25		
	8.3	Summary	26		
9.	DEMAND RESPONSE				
	9.1	Overview	27		
	9.2	Residential Demand Response	27		
	9.3	Commercial and Industrial Demand Response	28		
	9.4	Summary	28		
10.	PORTFOLIO LEVEL ACTIVITIES				
	10.1	Overview	29		
11.	COI	NCLUSION	. 30		



## **Index of Tables and Figures**

Table 1-1:	DSM Portfolio Summary Results for 2024 – Expenditures	2
Table 1-2:	DSM Portfolio Summary Results for 2024 - Savings	2
Table 1-3:	Meeting Adequacy Requirements of DSM Regulation	3
Table 1-4:	2024 DSM Funding Transfers and Carryover Amounts (\$000s)	4
Table 1-5:	2025 DSM Budget Including Carryover Amounts (\$000s)	5
Table 2-1:	2024 Residential Program Area Results Summary – Expenditures	6
Table 2-2:	2024 Residential Program Area Results Summary – Savings	6
Table 3-1:	2024 Commercial Program Results Summary – Expenditure	8
Table 3-2:	2024 Commercial Program Results Summary – Savings	8
Table 4-1:	2024 Industrial Program Results Summary - Expenditures	11
Table 4-2:	2024 Industrial Program Results Summary - Savings	11
Table 5-1:	2024 Low Income Program Results Summary – Expenditures	14
Table 5-2:	2024 Low Income Program Results Summary – Savings	14
Table 6-1:	2024 Conservation, Education and Outreach Results Summary – Expenditures	17
Table 7-1:	2024 Enabling Activities Results Summary	21
Table 8-1:	2024 Innovative Technologies Expenditures Results Summary	. 25
Table 9-1:	2024 Demand Response Program Results Summary – Expenditures	27
Table 9-2:	2024 Demand Response Program Results Summary – Savings	27
Table 10-1	· 2024 Portfolio Expenditures Results Summary	. 29

## **List of Appendices**

#### **Appendix A-1** Inventory of DSM Program Evaluation and Research Activities



#### 1. REPORT OVERVIEW

- 2 This Demand-Side Management (DSM) Annual Report (Report) provides highlights of FortisBC
- 3 Inc.'s (FBC or the Company) DSM programs for the year ended December 31, 2024 and provides
- 4 a summary of results achieved in 2024. The Report reviews the progress of FBC's DSM programs
- 5 in meeting the BCUC accepted 2023-2027 DSM Plan<sup>1</sup> (Plan) by educating and incenting FBC's
- 6 customers to conserve energy and improve the energy efficiency of their homes, buildings, and
- 7 businesses.

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- 8 Section 1.1 contains a statement of financial results (Table 1-1), including the Total Resource
- 9 Cost (TRC) benefit/cost ratio cost-effectiveness test results by Program Area for 2024. Sections
- 10 1.1 and 1.2 set out how FBC's DSM programs met the requirements of the British Columbia
- 11 Demand-Side Measures Regulation (DSM Regulation) enacted under the *Utilities Commission*
- 12 Act (UCA). Section 1.3 and 1.4 provides information on funding transfers and carryover as well
- as highlights integral collaboration and integration that supports the delivery of DSM programs.
- 14 Sections 2 through 10 of the Report provide an overview of DSM program activities in 2024 by
- 15 Program Area, including program-level comparisons of actual energy savings and costs to Plan.
- 16 Additional details on 2024 program results, cost effectiveness test results (TRC) and levelized
- 17 costs (LCOE), are included in each Program Area.
- 18 Throughout the Report, any difference in the totals between the DSM Portfolio Overview and
- 19 Program Area tables are due to rounding. Where "zero" values occur, they may reflect rounding
- to the nearest \$000s expenditure level when expenditures were under \$500.

#### 21 1.1 PORTFOLIO RESULTS

- 22 Tables 1-1 and 1-2 provides an overview of FBC's 2024 energy savings, demand savings,
- 23 expenditures and TRC cost-effectiveness test results for all DSM programs, by Program Area,
- 24 and at the portfolio level. FBC achieved an overall portfolio TRC of 1.7 on DSM expenditures of
- 25 \$13.857 million. Electricity savings totaled 34.1 GWh and demand savings totaled 5.8 MW. All
- 26 FBC DSM programs passed the TRC test at the Program Area level.

SECTION 1: REPORT OVERVIEW

The FBC 2023-2027 DSM Plan expenditures were accepted by the BCUC pursuant to Decision and Order G-371-22 (the Decision).

**ALL PROGRAMS** 



#### Table 1-1: DSM Portfolio Summary Results for 2024 – Expenditures

**Utility Expenditures (\$000s) Total Expenditures Incentives Non-Incentives Program Area** (including carryover) 2024 2024 2024 2024 2024 2024 Actual Plan Plan Actual Plan Actual Residential 2,484 2,543 775 615 3,451 3,158 Commercial 2,399 3,207 1,017 704 3,199 3,911 Industrial 1,770 1,189 360 328 3.324 1,517 Low Income 1,267 825 463 613 1,766 1,438 Conservation Education and Outreach 978 751 1,341 751 Innovative Technologies 175 510 455 1,075 455 774 1.957 989 **Enabling Activities** 670 826 320 Portfolio Level Activities -836 983 1,046 983 \_ **Demand Response** 598 1,055 113 57 691 655

8,491

6,455

5,366

18,214

13,857

Table 1-2: DSM Portfolio Summary Results for 2024 - Savings

8,981

Program Area	Annual Energy Savings (GWh)		Annual Demand Savings (MW)		Benefit/Cost Ratios	
	2024 Plan	2024 Actual	2024 Plan	2024 Actual	TRC	LCOE (¢/kWh)
Residential	6.3	5.8	2.2	1.2	1.4	8.4
Commercial	11.2	15.0	1.7	2.6	2.7	6.4
Industrial	8.3	12.5	1.4	0.3	2.2	1.6
Low Income	1.6	0.8	0.1	0.0	1.1	18.8
Conservation Education and Outreach	Savings not estimated		Savings not estimated		Savings not estimated	
Innovative Technologies	Savings not estimated		Savings not estimated		Savings not estimated	
Enabling Activities	Savings not estimated		Savings not estimated		Savings not estimated	
Portfolio Level Activities	Savings not estimated		Savings not estimated		Savings not estimated	
Demand Response	Savings not estimated		2.2	0.9/1.7*	0.4	
ALL PROGRAMS	27.4	34.1	7.6	5.8	1.7	6.0

<sup>\*</sup>Winter Demand Savings/Summer Demand Savings

FBC's actual 2024 DSM expenditures were 76 percent of Plan and the DSM energy savings were 124 percent of Plan. Actual savings exceeded Plan in the Commercial and Industrial Program Areas, however savings were lower than expected in the Residential and Low Income Program Areas.

Throughout the Report, the following general notes also apply to all the Program Areas:

- A "Non-Program Specific Expenses" line item has been included for each Program
  Area in Sections 2 through 9. These expenditures support multiple programs within
  that Program Area and therefore, are not specific to only one program. Generally,
  these expenditures represent items such as training, travel, marketing collateral, and
  consulting services that support the overall Program Area.
- The expenditures, energy savings and cost-effectiveness results presented in the Report are exclusive of third-party funding such as CleanBC funding from the British Columbia Ministry of Energy and Climate Solutions (MECS). For measures that also

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receive third party incentive funding, attribution of energy savings among the parties has been accounted for in both the FEI claimed savings and cost test results.

#### 1.2 MEETING ADEQUACY REQUIREMENTS

- 4 Table 1-3 below shows how the Report meets the adequacy requirements of section 3 of the DSM
- 5 Regulation. The 2023-2027 DSM Plan complies with the adequacy requirements of the DSM
- 6 Regulation that were in effect at the time of Application filing, which includes amendments up to
- 7 March 24, 2017.

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#### Table 1-3: Meeting Adequacy Requirements of DSM Regulation

#### **DSM** Regulation **Compliance Summary** The DSM Regulation adequacy requirements were as follows: A public utility's plan portfolio is adequate for the purposes of Section 44.1 (8) c of the Act only if the plan portfolio includes all the following: a demand-side measure intended specifically Section 3 of the Report discusses programs and incentives for low-income customers, including assist residents of low-income i) Direct Install Program, the Self Install Program and households to reduce their energy the Social Housing Support Program. consumption, or ii) to reduce energy consumption in housing owned or operated by A. a housing provider that is a local government, a society as defined in section 1 of the Societies Act, other than a member-funded society as defined in section 190 of that Act, or an association as defined in section 1 (1) of the Cooperative Association Act, or B. the governing body of a first nation, if the benefits of the reduction primarily accrue to C. the low-income households occupying the housing, D. a housing provider referred to in clause (A), or E. a governing body referred to in clause (B) if the households in the governing body's housing are primarily low income households b) if the plan portfolio is submitted on or after June With regards to rental apartment buildings, FBC's 1, 2009, a demand-side measure intended offers include the Rental Apartment Efficiency specifically to improve the energy efficiency of Program (RAP), detailed in Section 3.4. Tenants rental accommodations can also access the Direct Install and Self Install offers available to qualifying rental properties. c) an education program for students enrolled in Conservation Education and Outreach, schools in the public utility's service area described in Section 6, includes the continuation of the School Education Program which includes d) if the plan portfolio is submitted on or after June programming for grade schools and post-1, 2009, an education program for students secondary institutions in FBC's service area. enrolled in post-secondary institutions in the public utility's service area.



	DSM Regulation	Compliance Summary		
e)	one or more demand-side measures to provide resources as set out in paragraph (e) of the definition of "specified demand-side measure", representing no less than  (i) an average of 1% of the public utility's plan portfolio's expenditures per year over the portfolio's period of expenditures, or  (ii) an average of \$2 million per year over the portfolio's period of expenditures.	FBC's DSM activities related to the codes and standards specified demand-side measure are considered enabling activities by FBC and are discussed in Section 7.		
f)	one or more demand-side measures intended to result in the adoption by local governments and first nations of a step code or more stringent requirements within a step code.	FBC supported BC Energy Step Code (the "Step Code") adoption through its New Home Program (Section 2.3), new construction offers in the Commercial Performance Program (Section 3.3) and provided progressive rebates to align with the Step Code.  It also provided funding for Community Energy Specialists to support energy conservation behaviour campaigns (organizational and community-based) and to promote the Step Code to municipal building inspection staff and local builders and developers (Section 7.6).		

#### 1.3 FUNDING TRANSFERS AND CARRYOVER

- 2 The BCUC Decision and Order G-371-22 (the Decision) on FBC's 2023-2027 DSM Plan accepted
- 3 the amended funding transfer rules between Program Areas where only transfers that exceed 25
- 4 percent of a Program Area's budget out of a Program Area require approval from the BCUC to
- 5 proceed. The Decision further accepted amendments to the carryover rules that allow unspent
- 6 and overspent Plan amounts to be carried over to the subsequent fiscal year.
- 7 Table 1-4 shows the 2024 DSM Plan expenditures and 2024 funding transfers between Program
- 8 Areas. Table 1-5 provides the updated 2025 budget including the total expenditures carried over
- 9 from 2024.

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Table 1-4: 2024 DSM Funding Transfers and Carryover Amounts (\$000s)

Program Area	2024 Plan Expenditures (\$000) (including carryover)	2024 Actual Expenditures (\$000)	2024 Actual less Plan Expenditures (\$000) (including carryover)	Funding Transfer Amount in (out)	Plan Amount Carried over to 2025	Transfer as a percent of Approved (%)
Residential	3,451	3,158	(293)	0	293	0%
Commercial	3,199	3,911	712	(712)	0	-22%
Industrial	3,324	1,517	(1807)	0	1,807	0%
Low Income	1,766	1,438	(328)	0	328	0%
Conservation Education and Outreach	1,341	751	(590)	237	353	18%
Innovative Technologies	1,075	455	(620)	0	620	0%
Enabling Activities	1,957	989	(968)	475	493	24%
Portfolio Level Activities	1,046	983	(64)	0	64	0%
Demand Response	1,055	655	(400)	0	400	0%
ALL PROGRAMS	18,214	13,857	(4,358)	0	4,358	

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#### Table 1-5: 2025 DSM Budget Including Carryover Amounts (\$000s)

Program Area (Sector)	2025 Plan	2024 Carryover	2025 Budget including Carryover
Residential	3,566	293	3,859
Commercial	3,643	0	3,643
Industrial	2,187	1,807	3,994
Low Income	1,790	328	2,118
Conservation Education and Outreach	1,002	353	1,355
Innovative Technologies	255	620	875
Enabling Activities	1,960	493	2,453
Portfolio Level Activities	853	64	917
Demand Response	1,316	400	1,716
	16,572	4,358	20,930

# **COLLABORATION & INTEGRATION**

- 4 FBC continues to work alongside BC's major energy utilities and other entities, including
- 5 governments and industry associations, to integrate and improve DSM programming. The
- 6 Company understands that such collaboration maximizes program efficiency and effectiveness.
- 7 In 2024, FBC, FortisBC Energy Inc. (FEI), and British Columbia Hydro and Power Authority (BC
- 8 Hydro) (collectively, the BC Utilities) continued to collaborate on various programs and projects
- 9 to enhance utility integration, supporting government legislation, policies, and directives. This
- 10 collaboration resulted in cost efficiencies, including streamlined application processes for
- 11 customers, extended program reach, and consistent, unified messaging aimed at improving
- 12 energy literacy.
- 13 Additionally, FBC worked with MECS on CleanBC initiatives, which included administering
- 14 incentives and facilitating applications for CleanBC rebates through FBC's processes, ensuring a
- 15 seamless customer experience, and collaborated to support quality assurance and industry
- 16 capacity training for the Home Performance Stakeholder Council (HPSC). While details of
- 17 collaborative activities are included in the Program Area sections, the tables throughout the
- 18 Report reflect expenditure and savings information for FBC's expenditure portfolio only.

#### 1.5 PORTFOLIO SUMMARY

- 20 FBC's DSM portfolio met the goal of cost effectiveness, with a portfolio level TRC Benefit/Cost
- 21 ratio of 1.7 in 2024. FBC believes that both energy savings accounted for in the portfolio and the
- 22 resulting TRC are conservative, thus likely understated. In addition to the direct energy benefits
- 23 accounted for in the TRC, benefits from additional activities, such as Conservation Education and
- 24 Outreach (CEO), Enabling Activities and Demand Response, play an important role in supporting
- 25 the development and delivery of programs, while helping facilitate market transformation in British
- 26 Columbia. FBC continues to develop and maintain strong, collaborative relationships with other
- 27
- BC utilities, government partners, and key market stakeholders to provide its portfolio of DSM 28 programs.

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# 2. RESIDENTIAL PROGRAM AREA

#### 2 **2.1 OVERVIEW**

- 3 The Residential Energy Efficiency Program Area consists of two programs:
  - Home Renovation Rebate Program (Includes Retail Program); and
  - New Home Program.
- Tables 2-1 and Table 2-2 summarize the planned and actual expenditures and savings for the Residential Program Area.

#### Table 2-1: 2024 Residential Program Area Results Summary – Expenditures

Utility Expenditures (\$000s)						
Ince	Non-Inc	centives	Total Expenditures (including carryover)			
2024 Plan	2024 Actual	2024 Plan	2024 Actual	2024 Plan	2024 Actual	
2,006	1,039	142	411	2,276	1,450	
477	1,504	41	50	549	1,554	
-	-	553	153	586	153	
-	-	39	-	41	-	
2,484	2,543	775	615	3,451	3,158	
	2024 Plan 2,006 477	Incentives   2024   2024   Plan   Actual   2,006   1,039   477   1,504   -	Incentives         Non-Inc           2024         2024         2024           Plan         Actual         Plan           2,006         1,039         142           477         1,504         41           -         -         553           -         -         39	Incentives         Non-Incentives           2024         2024         2024         2024           Plan         Actual         Plan         Actual           2,006         1,039         142         411           477         1,504         41         50           -         -         553         153           -         -         39         -	Non-Incentives	

Table 2-2: 2024 Residential Program Area Results Summary – Savings

Program		Annual Energy Savings (GWh)		Annual Demand Savings (MW)		Benefit/Cost Ratios	
	2024 Plan	2024 Actual	2024 Plan	2024 Actual	TRC	LCOE (¢/kWh)	
Home Renovation Program	5.7	4.5	1.9	0.8	1.5	7.1	
New Home Program	0.6	1.3	0.3	0.5	1.3	11.8	
Labour	Savings n	Savings not estimated		Savings not estimated		Savings not estimated	
Non-Program Specific Expenses	Savings not estimated		Savings not estimated		Savings not estimated		
ALL PROGRAMS	6.3	5.8	2.2	1.2	1.4	8.4	

#### 2.2 Home Renovation Program

- The Home Renovation Rebate (HRR) Program encourages customers to take a whole home
- 14 approach to their energy efficiency upgrades by consolidating space heating, water heating and
- 15 building envelope measures into one overarching program. This program is a collaboration
- 16 between the BC Utilities and MECS.
- 17 Retail and lighting programs directed towards the home renovation segment are included in this
- 18 section. FBC collaborates with BC Hydro, retailers, and distributors to offer point-of-sale
- 19 incentives on several low cost and easy to install measures such as LED fixtures, controls, draft
- 20 proofing, water savers, bathroom fans, air purifiers and connected thermostats. Rebates for
- 21 ENERGY STAR appliances for existing homes are also available.

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- 1 The following are key updates for the program in 2024:
  - HRR achieved 64 percent of planned expenditures and 79 percent of planned energy savings.
    - Participation and incentives in HRR was driven by lower cost retail rebates such as draftproofing, water savers and lighting controls. This is likely due to an extended in market period over the previous year. In addition, heat pump service rebates and ENERGY STAR appliance rebates had strong, consistent participation.
    - Heat pump and insulation rebates saw lower than planned participation, however participation was consistent with the previous year. FBC is collaborating with BC Hydro on opportunities to drive heat pump adoption for electrically heated homes in 2025.

#### 2.3 NEW HOME PROGRAM

- 12 The New Home Program aligns with and provides incentives for the tiers of the BC Energy Step
- 13 Code for Part 9 Buildings, as per Section 3 of the DSM Regulation. The New Home Program
- 14 provides incentives for builders who adopt and comply with the Energy Step Code in
- 15 municipalities across BC. FBC, in partnership with FEI, supports local governments in their
- 16 adoption of the Step Code as part of an ongoing initiative for market transformation to high
- 17 performance homes. Rebates for ENERGY STAR appliances in new homes are also available.
- 18 The following are key updates for the program in 2024:
  - The New Home Program exceeded plan budget by 283 percent and target savings by 217 percent. Strong participation continued from 2023 and participation was largely driven by the previous program iteration. This is likely due to the significant upfront planning required in the construction process for new homes.
  - In 2024, the New Home Program was redesigned and relaunched in collaboration with FEI to align with changes to the BC Building Code. The revised program offers enhanced incentives for achieving Step 4 and Step 5 of the BC Energy Step Code.

#### 2.4 SUMMARY

- 27 Overall, the Residential Program Area achieved 92 percent of Plan for a total expenditure of
- 28 \$3.158 million. The difference between achieved and planned energy savings can be attributed
- 29 to the higher proportion of high performance new construction and lower uptake in high efficiency
- 30 residential retrofits. FBC invested \$3.158 million providing multiple avenues for residential
- 31 customers to access energy efficiency programs including home renovations, point-of-sale retail
- 32 incentives, and through driving the adoption of high-performance homes in the residential new
- 33 construction industry. Overall, the participation in residential programs resulted in over 5.8
- 34 GWh/year of electricity savings.



# 1 3. COMMERCIAL PROGRAM AREA

#### 2 *3.1 OVERVIEW*

- 3 Commercial DSM programs encourage commercial customers (including institutions and
- 4 government) to reduce electricity use. The Commercial Energy Efficiency Program Area consists
- 5 of three programs:
  - Prescriptive Program;
- Performance Program; and
- Rental Apartment Efficiency Program.
- 9 Tables 3-1 and 3-2 summarize the planned and actual expenditures and savings for the Commercial Program Area.

#### Table 3-1: 2024 Commercial Program Results Summary – Expenditure

**Utility Expenditures (\$000s) Total Expenditures Non-Incentives Incentives** (including carryover) **Program** 2024 2024 2024 2024 2024 2024 Plan **Actual** Plan **Actual** Plan **Actual** Commercial Prescriptive 1,224 1,512 51 82 1,194 1,594 Commercial Performance 1,166 1,671 122 75 1,206 1,747 Rental Apartment 10 24 36 10 43 34 661 Labour 706 537 537 --Non-Program Specific Expenses 102 96 **ALL PROGRAMS** 2,399 3,207 1,017 3,199 3,911

Table 3-2: 2024 Commercial Program Results Summary - Savings

Program		Annual Energy Savings (GWh)		Annual Demand Savings (MW)		Benefit/Cost Ratios	
	2024 Plan	2024 Actual	2024 Plan	2024 Actual	TRC	LCOE (¢/kWh)	
Commercial Prescriptive	6.1	10.6	1.4	2.1	3.7	2.7	
Commercial Performance	4.9	4.3	0.3	0.5	2.2	14.7	
Rental Apartment	0.2	0.1	0.0	0.0	0.8	2.4	
Labour	Savings not estimated		Savings not estimated		Savings not estimated		
Non-Program Specific Expenses	Savings no	Savings not estimated		ot estimated	Savings not estimated		
ALL PROGRAMS	11.2	15.0	1.7	2.6	2.7	6.4	

#### 3.2 Prescriptive Program

The Prescriptive Program includes incentives for the purchase and installation of specific qualifying new construction and retrofit measures. It provides rebates for energy efficient measures where the savings are well understood - and where installation may not be a part of a larger, more complex upgrade. Examples of such measures include LED lighting and lighting controls, commercial refrigeration, variable speed drives, and high efficiency commercial heat

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- 1 pumps. The Prescriptive Program has two market delivery channels. Commercial customers can
- 2 purchase qualifying measures at the vendor of their choice and apply for the rebate directly from
- 3 FBC. Alternatively, for select qualifying measures (such as lighting and kitchen equipment),
- 4 commercial customers can receive a rebate as a point-of-sale rebate from participating trade
- 5 allies. Trade allies then apply for reimbursement of the point-of-sale rebates from FBC.
- 6 The following are key updates for the program in 2024:
- The program achieved 134 percent of planned expenditures and 174 percent of planned
   savings.
  - Savings and incentives were driven by commercial lighting rebates through point-of-sale vendors.
- Participation and energy savings were also higher than anticipated with the heat pump offer.
- The carryover in 2023 was higher than the 2024 Plan number which resulted in a negative
   carryover in the Prescriptive non-incentive expenditures.

#### 3.3 PERFORMANCE PROGRAM

- 16 The Performance Program provides incentives to encourage commercial customers to identify,
- 17 assess, and implement custom building energy-efficiency projects for existing and new buildings.
- 18 The program is administered jointly with FEI, providing customers with a one-stop program in the
- 19 FBC service territory to evaluate and implement building-scale energy efficiency projects. FBC
- 20 Technical Advisors provide customer outreach and engagement for the Performance Program.
- 21 The commercial retrofit offer in the Performance Program provides incentives for customers to
- 22 engage a qualified energy consultant to study potential building-scale electrical and natural gas
- 23 energy efficiency and retro-commissioning opportunities. Incentives are also available to
- 24 encourage the implementation of cost-effective electric energy efficiency measures. The
- 25 commercial new construction offer in the Performance Program encourages the design of high-
- 26 performance commercial buildings. Capital incentives are available for customers that design new
- 27 buildings that exceed BC Building Code.
- 28 Joint with FEI and BC Hydro, incentives are also available through the Performance Program for
- 29 the recommissioning of commercial building heat, ventilation, and air conditioning systems.
- 30 The following are key updates for this program in 2024:
- The Performance Program achieved 145 percent of planned expenditures and 88 percent of planned savings.
  - Higher than planned incentive costs were driven by increased participation in the commercial new construction offer.



Savings were below Plan because of lower-than-expected participation in the Continuous
 Optimization and Commercial Retrofit offers.

### 3 3.4 RENTAL APARTMENT EFFICIENCY PROGRAM

- 4 The Rental Apartment Efficiency Program (RAP), in collaboration with FEI, provides energy
- 5 assessments and the direct installation of in-suite measures, such as low-flow showerheads, and
- 6 faucet aerators in hotels, motels and rental suites in multi-unit residential buildings (MURBs).
- 7 The following are key updates for the program in 2024:
  - The program achieved 79 percent of planned expenditures. The program had higher than
    planned incentive costs as building owners continue to be interested in the program to
    support tenants and plan for larger retrofits.
  - The program had lower than planned non incentive costs due to lower than expected costs to manage and operate the program.

#### 13 *3.5 SUMMARY*

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- 14 Overall, the Commercial Program Area achieved 122 percent of planned expenditures for a total
- 15 expenditure of \$3.911 million and achieved 134 percent of planned savings. The difference
- 16 between achieved and planned savings can be attributed to increased participation in the
- 17 commercial new construction and commercial lighting offers. Overall, the participation in
- 18 Commercial programs resulted in nearly 15 million kWh/year of electricity savings.



# 1 4. INDUSTRIAL PROGRAM AREA

#### 2 **4.1 OVERVIEW**

- 3 The Industrial Energy Efficiency Program Area consists of three programs:
- Prescriptive Program;
- Performance Program; and
- Strategic Energy Management (SEM) Program.
- 7 Tables 4-1 and 4-2 summarize the planned and actual expenditures and savings for the Industrial
- 8 Program Area.

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#### Table 4-1: 2024 Industrial Program Results Summary - Expenditures

	Utility Expenditures (\$000s)						
Program	Ince	Non-Inc	centives	Total Expenditures (including carryover)			
	2024 Plan	2024 Actual	2024 Plan	2024 Actual	2024 Plan	2024 Actual	
Industrial Prescriptive	785	582	12	57	1,244	640	
Industrial Performance	785	354	26	7	1,265	362	
Strategic Energy Management	200	252	36	-	368	252	
Labour	=	-	286	264	447	264	
Non-Program Specific Expenses	-	-	-	-	-	-	
ALL PROGRAMS	1,770	1,189	360	328	3,324	1,517	

Table 4-2: 2024 Industrial Program Results Summary - Savings

Program		ergy Savings Wh)		nand Savings IW)	Benefi	t/Cost Ratios
	2024 Plan	2024 Actual	2024 Plan	2024 Actual	TRC	LCOE (¢/kWh)
Industrial Prescriptive	5.5	2.6	1.0	0.0	1.9	5.0
Industrial Performance	2.0	1.2	0.2	0.2	2.2	4.3
Strategic Energy Management	0.8	8.7	0.2	0	13.1	0.1
Labour	Savings no	ot estimated	Savings no	ot estimated	Savings	not estimated
Non-Program Specific Expenses	Savings no	ot estimated	Savings no	ot estimated	Savings	not estimated
ALL PROGRAMS	8.3	12.5	1.4	0.3	2.2	1.6

#### 4.2 PRESCRIPTIVE PROGRAM

- 14 The Prescriptive Program includes fixed incentives for the purchase and installation of specific
- 15 qualifying new construction and retrofit measures. It provides rebates for energy efficient
- measures where the savings are well understood and their installation is not typically part of a
- 17 larger, more complex upgrade. Examples of such measures include LED horticultural lighting,
- 18 variable speed drives, irrigation equipment, and compressed air systems.
- 19 The Prescriptive Program has two delivery channels. Industrial customers can purchase
- 20 qualifying measures and apply for rebates directly from FBC. Alternatively, for select qualifying

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- 1 measures such as horticultural lighting and irrigation equipment, industrial customers can receive
- 2 their incentive as a point-of sale rebate from participating trade allies. Trade allies then apply for
- 3 reimbursement of the paid rebates from FBC.
- 4 The following are key updates for the program in 2024:
  - The Prescriptive Program achieved 51 percent of planned expenditures and 47 percent of planned savings.
  - Energy savings and incentives were driven by LED horticultural lighting.
- Participation was lower than Plan due to high interest rates in early to mid-year which delayed projects.

#### 4.3 Performance Program

- 11 The Performance Program provides incentives to encourage customers to identify, assess and
- 12 implement measures that use energy for process-related activities. The program is administered
- 13 jointly with FEI, providing customers with a one-stop program in the FBC service territory to
- 14 evaluate and implement industrial energy efficiency projects. FBC Technical Advisors provide
- 15 customer outreach and engagement for the Performance Program. The program offers co-funding
- 16 for plant wide audits, feasibility studies, and implementation incentives. The Plant Wide Audit offer
- 17 provides incentives for customers to engage a qualified energy consultant to perform a high-level,
- whole facility audit to identify opportunities to use electricity and natural gas more efficiently within
- 19 an industrial facility. The Feasibility Study offer provides incentives to study a specific process or
- 20 system within an industrial facility to use electricity and natural gas more efficiently. DSM
- 21 incentives are available to encourage the implementation of cost-effective electric energy
- 22 efficiency measures.
- 23 The following are key updates for the program in 2024:
  - The Industrial Performance Program achieved 29 percent of planned expenditures.
    - Incentives and savings were lower than expected in part due to project delays caused by supply chain disruptions. These projects are expected to complete in the later years of the DSM Plan.

#### 4.4 STRATEGIC ENERGY MANAGEMENT PROGRAM

- 29 The Strategic Energy Management (SEM) Program is a comprehensive offering for large and
- 30 medium industrial customers that provides them with energy modeling, energy efficiency coaching
- 31 and strategic planning support to achieve both operational savings and to encourage larger capital
- 32 upgrades. The program is administered in collaboration with FEI.
- 33 The following are key updates for the program in 2024:

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#### ELECTRIC DEMAND-SIDE MANAGEMENT 2024 ANNUAL REPORT



- The program achieved 68 percent of planned expenditures.
  - In 2024, SEM milestone incentives were eliminated, but customer energy-saving incentives were increased to maintain participant engagement and focus on completing energy efficiency projects at participating sites. Expenditures were lower than anticipated due to delays in launching a second SEM cohort group. This SEM cohort group will be active in 2025.
  - Savings were higher than expected due to strong consultant engagement that facilitated the completion of several significant projects at participating sites, resulting in combined energy savings that surpassed Plan.

### 4.5 SUMMARY

- 11 Overall, the Industrial Program Area achieved 46 percent of planned expenditures for a total
- 12 expenditure of \$1.517 million, however, planned savings achieved 151 percent of plan. The lower
- than planned expenditures can be attributed to project delays in the Performance Program and
- 14 fewer than anticipated projects in the Prescriptive Program. The difference between achieved and
- planned savings can be attributed to strong performance in the Strategic Energy Management
- Program. Overall, the participation in Industrial programs resulted in over 12.5 million kWh/year
- 17 of electricity savings.



# 1 5. LOW INCOME PROGRAM AREA

#### 2 **5.1 OVERVIEW**

- 3 This program area focuses on creating energy savings opportunities for low income customers.
- 4 It includes programs for low income customers as well as programs for charities and housing
- 5 providers, including Indigenous community housing providers, which in turn benefits FBC's low
- 6 income customers. The Low Income Program Area consists of four programs:
- Self Install Program;
- Direct Install Program;
- Prescriptive Program; and
- Performance Program.
- 11 Tables 5-1 and 5-2 summarize the planned and actual expenditures and savings for the Low
- 12 Income Program Area.

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#### Table 5-1: 2024 Low Income Program Results Summary – Expenditures

**Utility Expenditures (\$000s)** Total Expenditures **Non-Incentives Incentives Program** (including carryover) 2024 2024 2024 2024 2024 2024 Plan **Actual** Plan Actual Plan Actual Self Install (ESK) 43 101 12 18 89 62 Direct Install (ECAP) 477 674 500 160 218 694 Prescriptive 574 229 22 0 609 229 Performance 150 107 11 165 109 246 Labour 241 305 305 Non-Program Specific Expenses 10 0 10 0 **ALL PROGRAMS** 613 1,766 1,438 1,267 825 463

Table 5-2: 2024 Low Income Program Results Summary – Savings

Program		Annual Energy Savings (GWh)		Annual Demand Savings (MW)		Benefit/Cost Ratios	
	2024 Plan	2024 Actual	2024 Plan	2024 Actual	TRC	LCOE (¢/kWh)	
Self Install (ESK)	0.3	0.1	0.0	0.00	3.1	19.5	
Direct Install (ECAP)	0.4	0.4	0.0	0.00	0.9	14.7	
Prescriptive	0.8	0.2	0.0	0.01	1.2	9.0	
Performance	0.1	0.2	0.1	0.03	1.4	44.3	
Labour	Savings no	Savings not estimated		ot estimated	Savings not estimated		
Non-Program Specific Expenses	Savings no	Savings not estimated		ot estimated	Savings not estimated		
ALL PROGRAMS	1.6	0.8	0.1	0.04	1.1	18.8	

#### 5.2 SELF-INSTALL PROGRAM

18 The Self Install Program provides participants with an Energy Savings Kit (ESK) that includes

energy saving measures along with an instruction booklet and directions to access online "how

SECTION 5: LOW INCOME PROGRAM AREA

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- 1 to" videos. All measures are easy to install and participants install themselves. The Self Install
- 2 program is a partnership program with FEI.
- 3 The following are key updates for the program in 2024:
  - The program achieved 163 percent of planned expenditures and 33 percent of planned kWh savings.
    - Participation in the program was impacted by the delayed launch of the program's
      marketing campaign due to the provincial election interregnum. Because FBC coordinates
      with the BC Utilities and the marketing campaign is coordinated provincially for the utilities,
      the provincial election delayed the campaign. After the FBC marketing campaign
      launched, the postal strike that began in November also negatively impacted program
      participation.

### 12 5.3 DIRECT INSTALL PROGRAM

- 13 The Direct Install Program provides an in-home visit from a program contractor to assess their
- home's energy efficiency, install basic measures (e.g., LED lighting, low-flow showerheads, etc.)
- 15 and provide customized energy efficiency coaching. Additionally, some participants gualify to
- 16 receive more robust measures such as fridges and insulation. Partners in the Direct Install
- 17 Program include FEI and BC Hydro.
- 18 The following are key updates for the program in 2024:
- The program achieved 103 percent of planned expenditures and realized planned energy savings.
  - FBC expanded fridge replacement criteria and enhanced outreach efforts to housing providers, resulting in participation from several housing providers with multi-unit apartment buildings. Additionally, the Province's free air-conditioner offer for low-income and heat-vulnerable customers, delivered through the Direct Install Program, contributed to slightly higher participation levels than planned.

#### 5.4 Prescriptive Program

- 27 The Prescriptive Rebate Program provides rebates, implementation support, funding for energy
- 28 studies, and training for housing providers. It also includes rebates for individual low income
- 29 customers and Indigenous communities' residential buildings. Prescriptive rebates provide a
- 30 straightforward path for participants in energy efficiency programs. Prescriptive rebates are
- 31 available for measures such as commercial lighting, kitchen equipment, ventilation, insulation,
- 32 windows/doors and heat pumps; and for Indigenous communities, additional measures for health
- and safety (e.g., mould or asbestos removal), air sealing, and appliance maintenance are
- 34 included.
- 35 The following are key updates for the program in 2024:

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- The program achieved 38 percent of planned expenditures and 25 percent of energy savings.
  - Program performance can be attributed to other offers in the market that are competing with this program and to slow uptake of new offers added to the program in the latter part of the year. The new offers include ventilation, insulation, and windows and doors.

#### 5.5 Performance Program

- 7 The Performance Program provides incentives to support Indigenous communities to construct
- 8 high-performance homes and commercial buildings. For example, participants access incentives
- 9 by meeting the BC Energy Step Code standards for Part 3 and Part 9 buildings. The program is
- 10 administered jointly with FEI.
- 11 The following are key updates for the program in 2024:
  - The FBC Low Income Performance Program is designed to support new home construction in Indigenous communities. It achieved 66 percent of planned expenditures and doubled its energy savings target.
  - The Performance Program was updated in 2024 to include elevated incentives for Step Codes 3, 4 and 5 to encourage more energy efficient construction. While the new program was marketed to Indigenous communities after launching mid-year it missed communities' planning window for projects in 2024. Only five communities within FBC's service area are eligible to participate in this program and efforts are currently focused on strengthening relationships and building capacity within those communities to encourage and enable future participation.

#### 22 **5.6 SUMMARY**

- 23 Overall, the Low Income Program Area achieved 81 percent of total planned expenditures for a
- total expenditure of \$1.438 million. The participation in Low Income programs resulted in over 0.8
- 25 GWh/year of electricity savings.



# 1 6. CONSERVATION EDUCATION AND OUTREACH

#### 2 *6.1 OVERVIEW*

- 3 The Conservation Education and Outreach (CEO) initiatives provide education about energy 4 conservation and efficiency, as well as non-program specific outreach communications. This 5 program area fosters a culture of conservation within the province by providing education to a 6 broad range of customers and stakeholders, including hard-to-reach residential and commercial 7 customers, and students. The goal of these programs is to inform customers on how to conserve 8 energy (behaviour change) and to educate about energy conservation, efficiency and incentive programs. The costs of CEO activities are included at the portfolio level and have an impact on 9 10 the overall portfolio cost-effectiveness. Conservation Education and Outreach includes the following programs: 11
- Customer Engagement Tool;
- Residential Education Program;
- Commercial Education Program; and
- School Education Program.

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16 Tables 6-1 summarizes the planned and actual expenditures for the CEO Program Area.

### 17 Table 6-1: 2024 Conservation, Education and Outreach Results Summary – Expenditures

	Utility Expenditures (\$000s)					
Program	Non-Ind	centives	Total Expenditures (including carryover)			
	2024	2024	2024	2024		
	Plan	Actual	Plan	Actual		
Residential Customer Engagement Tool	333	231	457	231		
Residential Education Program	109	98	149	98		
Commercial Education Program	95	153	130	153		
School Education and Post-Secondary Program	56	112	77	112		
Labour	385	158	528	158		
ALL PROGRAMS	978	751	1,341	751		

#### 6.2 Residential Customer Engagement Tool

- The Customer Engagement Tool home energy reports help customers understand their energy use in comparison to energy used by similar homes and encourages customers to reduce their energy through actionable advice. The online portal "My Energy Use" offers a home assessment survey that helps customers understand their energy consumption better. By completing the home assessment survey, users receive a customized action plan tailored to their specific needs, which can guide them in reducing their energy use more effectively.
- 26 The following are key updates for the program in 2024:

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- Lower than planned expenditures are due to further development of the tool not proceeding because of an unexpected program overlap with an energy rating tool being developed externally for BC residential homeowners, and FBC not pursuing a proposed Virtual Energy Audit program, after further customer research.
- Similar to 2023, FBC sent six home energy reports to approximately 8,000 customers throughout 2024.

#### 6.3 Residential Education Program

- 8 The Residential Education Program provides information to residential customers and the public
- 9 on electricity conservation and energy literacy through direct engagement (either face-to-face or
- 10 through online tools). This outreach extends to low income and multilingual customers. Ongoing
- partnerships with regional districts, municipalities, social service organizations, and local sports
- 12 organizations expand outreach opportunities to engage with Residential customers.
- 13 Promotional activities include a multimedia rebate awareness campaign, engagement
- 14 campaigns, educational seminars, and participation in home shows and community events. The
- 15 program covers the cost of developing and producing educational and marketing materials for
- events, as well as prizes for audience engagement, such as draft proofing kits, used at events
- 17 targeting residential customers.
- 18 The following are key updates for the program in 2024:
  - FBC continued with the "We've got Rebates" general awareness campaign driving participation in its rebate programs.
  - FBC and FEI maintained a commitment to direct customer engagement by participating in over 40 events in FBC's territory. During these events, more than 4,500 meaningful conversations were held, focusing on energy literacy, conservation, efficiency, and rebate programs.

#### 6.4 COMMERCIAL EDUCATION PROGRAM

- 26 The Commercial Education Program provides ongoing communication and education about
- 27 energy conservation and efficiency measures as well as behavioural change educational
- 28 programming to help commercial customers reduce their organization's energy consumption.
- 29 Commercial Education includes small to large businesses in a variety of sub sectors such as
- 30 retail, offices, multi-family residences, schools, hospitals, hospitality services and
- municipal/institutions. Promotional activities include face-to-face engagement, print and online marketing, and participating in industry association meetings and tradeshows. FBC and FEI also
- 33 host the Efficiency in Action Awards, which recognizes commercial customers for their innovation
- 34 in energy efficiency and the electricity savings achieved. Additionally, FBC and FEI provide
- 35 support for behavioral and technical education campaigns delivered by energy specialists in their
- 36 respective organizations such as the Energy Wise Network which is offered in partnership with



- 1 BC Hydro. These initiatives also guide and support energy specialists, thermal energy managers
- 2 or energy/facilities managers in their respective organizations or communities.
- 3 In 2024, FBC continued the "We've got Rebates" general awareness campaign driving
- 4 participation in its rebate programs.

# 5 6.5 SCHOOL EDUCATION AND POST-SECONDARY PROGRAM

- 6 The School Education Program includes the Live It Earth series, a Kindergarten to Grade 8
- 7 curriculum connected resource, and the assembly style presentation, Energy Champions, which
- 8 is currently delivered in collaboration with the BC Lions. A program for Grades 9 to 12, introduced
- 9 in partnership with Live It Earth, offered students practical experience in storytelling through film
- and opportunities to engage with professionals from the energy efficiency sector. FBC and FEI
- 11 enjoy ongoing partnerships with post-secondary institutions and support additional energy
- 12 efficiency training for academic and trades training initiatives. This includes in-class programs,
- 13 on-campus education campaigns, instructional tool development, and education campaigns
- delivered by energy specialists, thermal energy managers or energy/facilities managers.
- 15 The following are key updates for the program in 2024:
  - FBC and FEI sponsored curriculum-connected programs for Grades K to 9 that focus on energy literacy, conservation, and efficiency. The Live It Earth series delivered energy efficiency and conservation education to students in Grades K to 7 through an interactive online learning platform. Additionally, FBC partnered with Relay Education to provide interactive energy conservation-focused workshops for students in Grades 6 to 7.
  - FBC and FEI supported the Climate Action Ripple Effect (CARE) initiative in Vernon.
     CARE engages teachers, students, and community climate experts in creating student projects that align with UN Sustainable Development Goals, including energy efficiency and conservation. In 2024, the initiative involved over 700 students, 15 teachers, 60 community members and mentors, resulting in 18 projects focused on energy efficiency.
  - For students enrolled in post-secondary academic institutions, FBC, in collaboration with FEI, delivered virtual presentations on demand-side management policies and programs in British Columbia, as well as employment opportunities within the energy management sector. Additionally, FBC and FEI provided funding support to Okanagan College and Selkirk College for hands-on training on high-performance buildings using a science based, envelope-first approach.

#### 6.6 SUMMARY

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- 33 The CEO Program Area continues to support the DSM Portfolio goals of energy conservation in
- various ways. Several initiatives and campaigns were undertaken in 2024, positively influencing
- 35 customer attitudes about efficiency. Educating all types of customers and students remains a
- 36 strong priority. FBC is committed to ensuring that the information provided is relevant and timely.
- 37 FBC continued its collaboration with FEI in 2024 to maximize efficiencies across both utilities.

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#### ELECTRIC DEMAND-SIDE MANAGEMENT 2024 ANNUAL REPORT



- 1 Costs continue to be shared on school, residential, and commercial outreach as applicable. FBC
- 2 remains focused on behavioral change opportunities and partnering with post-secondary
- 3 institutions to foster a culture of conservation in British Columbia while driving program awareness
- 4 and participation.

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### 7. ENABLING ACTIVITIES

#### 2 **7.1 OVERVIEW**

- 3 Enabling Activities are initiatives that support and supplement FBC's C&EM program
- 4 development and delivery. These programs, activities and projects provide resources common to
- 5 the support and delivery of all program area activities. The costs of Enabling Activities are included
- 6 at the portfolio level and are reflected in the overall portfolio cost-effectiveness. The Enabling
- 7 Activities include the following:
- Trade Ally Network;
  - Codes and Standards;
- Reporting Tool and Customer Application Portal;
- Commercial Energy Specialist Program;
- Community Energy Specialist Program; and
- Customer Research.
- 14 Table 7-1 summarizes the planned and actual expenditures for the Enabling Activities Program
- 15 Area.

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Table 7-1: 2024 Enabling Activities Results Summary

	Utility Expenditures (\$000s)							
Program	Ince	Non-Inc	entives	Total Expenditures (including carryover)				
	2024	2024	2024	2024	2024	2024		
	Plan	Actual	Plan	Actual	Plan	Actual		
Trade Ally Network	-	-	187	108	229	108		
Codes and Standards	251	233	259	26	624	259		
Reporting Tool & Customer Application Portal	-	-	84	137	103	137		
Commercial Energy Specialist Program	213	205	36	-	304	205		
Community Energy Specialist Program	310	233	8	-	389	233		
Customer Research	-	-	9	-	10	-		
Labour	-	-	244	49	298	49		
ALL PROGRAMS	774	670	826	320	1,957	989		

#### 7.2 TRADE ALLY NETWORK

- 19 The Trade Ally Network (TAN) includes expenditures related to FBC's work with industry. FBC
- 20 relies on trade allies, such as contractors and distributors that install energy efficiency measures
- 21 and provide qualifying products. This program also supports funding energy efficiency training, a
- 22 specified demand-side measure outlined in the DSM Regulation Section 1.2
- 23 The following are key updates for 2024:

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<sup>&</sup>lt;sup>2</sup> BC Utilities Commission Act, Demand-Side Measures Regulation (BC Reg. 326/2008) Section 1 amended March 24, 2017.

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- In collaboration with program partners, and the Home Performance Stakeholder Council (HPSC), FBC supported the development of the Home Performance Industry through trades outreach, training, and ongoing development of the Home Performance Contractor Network (HPCN) - a database of retrofit contractors in BC that meet specific trade designation and training qualifications.
- While participation in 2024 co-op advertising saw a slight decline compared to previous years, and some planned building envelope training sessions did not come to fruition, work was initiated in 2024 to assess industry readiness for adopting deep energy retrofits and to help build contractor capacity. This effort will continue throughout 2025.

#### 7.3 CODES AND STANDARDS

- 11 The Codes and Standards budget finances FBC's support for codes and standards policy
- development and research, through in-kind and financial co-funding arrangements. A portion of
- 13 the codes and standards funding is allocated to advancing the BC Energy Step Code as FBC
- 14 supports the education and awareness of this new voluntary building standard. This includes
- 15 support for high performance builder training, quality installation manuals, as well as energy
- modelling and blower door testing by certified energy advisors. FBC also works with and supports
- 17 several international, national, and provincial entities to help develop new or update existing
- building codes and standards for buildings, HVAC equipment, appliances, and lighting products.
- 19 Funding for codes and standards research is provided on a case-by-case basis.
- 20 The Codes and Standards area "supports the development of or compliance with specified
- standard or a measure respecting energy conservation or the efficient use of energy", as referred
- 22 to in the definition of "specified demand-side measures" in the DSM Regulation Section 1 and
- 23 supports implementation and adoption of such measures and aims to educate and provide
- 24 training to the industry.
- 25 The following are key updates for 2024:
  - Program achieved 42 percent of Plan. This was due to unanticipated delays in funding agreements.
  - Financial measures to assist in codes and standards development were lower than the plan. This includes funding to Standards Development Organizations for development of standards or technical guides and funding for research used to help inform potential changes to Canadian national or BC building codes, related to energy efficiency and GHG emissions reductions.

### 7.4 REPORTING TOOL AND CUSTOMER APPLICATION PORTAL

- 34 The Reporting Tool & Customer Application Portal includes expenditures related to the Demand-
- 35 Side Management Tracking System (DSMS). This system manages DSM rebates from the
- 36 application stage through to payment, including application review, approval, payment file exports,



- 1 reporting, and customer communications. The budget consists of licensing and hosting fees and
- 2 the labour required to operate and maintain the portal.
- 3 As of 2024, dependency on third parties was eliminated by handling all integrations internally,
- 4 continuing to reduce costs.

### 5 7.5 COMMERCIAL ENERGY SPECIALIST PROGRAM

- 6 The Commercial Energy Specialist Program is a joint initiative between FBC and FEI that co-
- 7 funds Energy Specialist, Analyst or Thermal Energy Manager positions in large commercial
- 8 organizations. FBC offers up to \$45 thousand in annual funding per participant, while FEI matches
- 9 this amount. The priority is to identify and implement energy efficiency upgrades for their
- organizations and to participate in FBC and FEI's DSM programs. They are also responsible to
- 11 identify and implement non-program specific opportunities to use electricity and natural gas more
- efficiently. FBC considers this an energy management program, and hence a specified demand-
- 13 side measure, as defined in Section 1 the DSM Regulation and subject to Section 4.3
- 14 The following are key updates for 2024:

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- There were eight contracted positions within the Commercial Energy Specialist Program that focused on both FEI and FBC related projects within their organizations. This program is funded to encourage activities that result in energy savings and program participation in the Commercial Program Area. An evaluation was conducted in early 2025 to quantify savings from 2024 that were not already captured in the Commercial Program Area. The evaluation study identified an additional 42,733 kWh of energy savings not previously captured in the Commercial Program Area.
- In 2024, the annual funding for Energy Specialist and Thermal Energy Manager positions was increased by \$10 thousand and incorporated into contract renewals. This adjustment was essential to retain talent and attract higher-skilled applicants for open roles.

#### 7.6 COMMUNITY ENERGY SPECIALIST PROGRAM

The Community Energy Specialist Program provides financial support to local municipal governments and regional districts, and institutional customers to facilitate energy efficiency planning activities like the development of community energy plans, energy efficient design practices and organizational policies such as adopting advanced energy efficiency standards for the entities' own buildings. FBC in partnership with FEI fund up to \$120 thousand annually within its service territory. C&EM contributes up to 75 percent of this amount, with the remaining portion provided by FBC and FEI's External Relations department. The planning must be targeted at reducing electricity usage and demand. FBC considers this an energy management program,

SECTION 7: ENABLING ACTIVITIES

<sup>&</sup>lt;sup>3</sup> BC Utilities Commission Act, Demand-Side Measures Regulation (BC Reg. 326/2008) Section 4(4)(5), amended March 24, 2017.

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#### ELECTRIC DEMAND-SIDE MANAGEMENT 2024 ANNUAL REPORT



- 1 and hence a specified demand-side measure, as defined in Section 1 the DSM Regulation and
- 2 subject to Section 4.4

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- 3 The following are key updates for 2024:
- Lower than anticipated expenses resulted from hiring challenges within local
   governments.
  - There were six contracted positions within the Community Energy Specialist Program that focused on both FBC and FEI related projects within their organizations.

#### 8 7.7 CUSTOMER RESEARCH

- 9 The Customer Research budget includes residential and commercial end use studies, ongoing
- 10 research to track the impact of C&EM communications, communications testing, and customer
- 11 segmentation research.
- 12 Research activities for 2024 supported an Income Qualified segmentation analysis for both FEI
- and FBC, however FBC funds used to support the project were under \$1 thousand. No additional
- 14 research activities were required for FBC in 2024.

#### 15 *7.8 SUMMARY*

- Overall, the Enabling Program Area achieved just over 50 percent of total planned expenditures.
- 17 The gap between achieved and planned savings can be primarily attributed to municipalities
- 18 facing hiring challenges in the Community Energy Specialist Program, lower than anticipated
- 19 participation in the co-op advertising program, and a delay in planned contractor training due to
- 20 ongoing industry training analysis.

<sup>&</sup>lt;sup>4</sup> BC Utilities Commission Act, Demand-Side Measures Regulation (BC Reg. 326/2008) Section 4(4)(5), amended March 24, 2017.

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# 8. INNOVATIVE TECHNOLOGIES

#### 2 **8.1 OVERVIEW**

- 3 The Innovative Technologies Program Area funding supports the development, or increased use,
- 4 of a "technology, a system of technologies, or a building or industrial facility design that could
- 5 achieve significant reductions of energy usage or significantly more efficient use of energy." FBC
- 6 uses innovative technology funding to support feasibility studies, technology pilots, and field
- 7 studies to assess the potential for these technologies.
- 8 In 2024, expenditures for Innovative Technologies were 42 percent of plan. The variance was
- 9 primarily due to delays in pilot activities. The Deep Energy Retrofit project, which encompasses
- 10 both incentive and non-incentive costs, commenced in 2024. However, an extended contractor
- proposal period delayed the start of construction until the end of November 2024. This extension
- was provided to build local contractor capacity, a specific goal of the project. The construction for
- the Deep Energy Retrofit project is on track to be completed in 2025.
- 14 Tables 8-1 summarizes the planned and actual expenditures for Innovative Technologies.

#### Table 8-1: 2024 Innovative Technologies Expenditures Results Summary

# **Utility Expenditures (\$000s)**

Program		penditures g carryover)
	2024 Plan	2024 Actual
Incentive Costs	274	-
Non-Incentive Costs	656	364
Labour	145	91
ALL PROGRAMS	1,075	455

#### 17 8.2 INNOVATIVE TECHNOLOGIES

18 The table below details the projects undertaken throughout the year and their current status.

Technology Screening Activity	Activity Description
Battery Storage Study	A prefeasibility study assessed the viability of residential battery storage systems in the FBC service territory. The study included an examination of market adoption barriers, interviews with customers, installers, and manufacturers, and recommendations for the technology's future steps. The final report and presentation were completed in early 2024. Significant adoption barriers were identified.

Technology innovation program defined in the Demand-Side Measures Regulation 326/2008 (amended Mar. 24, 2017).



Technology Screening Activity	Activity Description
Low Voltage Heat Pumps Study	A prefeasibility study assessed the viability of Low Voltage Heat Pumps in the FBC service territory. The study included an examination of market adoption barriers, interviews with customers, installers, and manufacturers, and recommendations for the technology's future steps. The final report and presentation were completed in mid 2024 with significant adoption barriers identified.
Smart Agriculture Controls Study	A prefeasibility study assessed the viability of Smart Agriculture Controls in the FBC service territory. The study included an examination of market adoption barriers, interviews with customers, installers, and manufacturers, and recommendations for the technology's future steps. The final report and presentation are planned to be complete in early 2025.
Deep Energy Retrofits	The Yaqan Nukiy Deep Energy Retrofit project development began in 2023. This involves selecting up to four homes within the Lower Kootenay Band and completing a comprehensive energy upgrade to them. Measures include window replacements, heating system upgrades and wall/roof insulation addition. Final homes were selected in mid 2024 and a local construction contractor was procured in November 2024. Construction is expected to be completed in 2025 with measurement and verification expected to be completed in 2026.
Hybrid Heating	Funds were allocated for the Hybrid Heating Pilot Project in 2023 for measurement and verification equipment. The commissioning of the equipment occurred late in 2023, and the measurement and verification period is anticipated to continue until spring 2025.
Commercial and Industrial Demand Response	Funds were allocated for the Commercial and Industrial Demand Response pilot program for startup software and IT setup. This was launched in 2024 and is anticipated to be completed in 2025.

# 1 *8.3 SUMMARY*

- 2 Overall, the Innovative Technologies Program Area achieved 42 percent of total planned
- 3 expenditures. The difference between achieved and planned expenditures can be attributed to
- 4 delays in construction activities for the Deep Energy Retrofit project.



# 9. DEMAND RESPONSE

#### 2 **9.1 OVERVIEW**

- 3 Demand Response programs and pilots encourage customers to connect eligible devices to a
- 4 demand response platform, that FBC can then manage to reduce the amount of electricity
- 5 consumption during peak hours of the winter and summer seasons. The objective of Demand
- 6 Response programs is to reduce electrical load during peak periods either by lowering
- 7 consumption or shifting the load to non-peak periods. Demand Response is made up of two
- 8 programs:

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- Residential Demand Response; and
- Commercial and Industrial Demand Response.
- 11 Tables 9-1 and 9-2 summarize the planned and actual expenditures and savings for Demand
- 12 Response.

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Table 9-1: 2024 Demand Response Program Results Summary – Expenditures

	Utility Expenditures (\$000s)						
Program	Ince	Non-Incentives		Total Expenditures (including carryover)			
	2024	2024	2024	2024	2024	2024	
	Plan	Actual	Plan	Actual	Plan	Actual	
Residential Demand Response	113	50	307	196	551	246	
Commercial and Industrial Demand Response	-	7	27	145	35	152	
Labour	-	-	357	256	469	256	
Non-Program Specific Expenses	-	-	-	-	-	-	
ALL PROGRAMS	113	57	691	598	1,055	655	

Table 9-2: 2024 Demand Response Program Results Summary - Savings

Program	Annual Energy Savings (GWh)		Annual Demand Savings (MW)		Benefit/Cost Ratios	
	2024 Plan	2024 Actual	2024 Plan	2024 Actual	TRC	LCOE (¢/kWh)
Residential Demand Response	0	0	2.2	0.9/1.7*	0.4	
Commercial and Industrial Demand Response	Savings not estimated		Savings not estimated		Savings not estimated	
Labour	Savings not estimated		Savings not estimated		Savings not estimated	
Non-Program Specific Expenses	Savings not estimated		Savings not estimated		Savings not estimated	
ALL PROGRAMS	0	0	2.2	1.7	0.4	0.0

\*Winter Demand Savings/Summer Demand Savings

#### 9.2 Residential Demand Response

- 18 Residential Demand Response activities include the Power Hours Rewards Program, which
- 19 targets connected thermostats and electric vehicles (EVs) via telematics, the onboard software
- within the vehicles. This program is currently available to all FBC residential electric customers.
- 21 The following are key updates for the program in 2024:

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- FortisBC's Power Hours Rewards program had its first year in market, targeting connected thermostats and electric vehicles via telematics, the onboard software within vehicles.
  - Over 1,400 customers registered for the program and connected over 1,600 devices that were used for demand response events during both the winter and summer seasons.
  - New partnerships were made towards the end of 2024 with equipment manufacturers to expand the number of eligible models of thermostats and EVs that can be accepted into the program.
  - Expenditures and demand savings for Residential Demand Response were below plan as
    a result of fewer EVs participating in the program. Despite overall participation being as
    expected, there were a greater number of customers with thermostats who registered than
    customers with EVs, and thermostats have lower average incentive amounts and demand
    savings than electric vehicles.

# 13 9.3 COMMERCIAL AND INDUSTRIAL DEMAND RESPONSE

- 14 Commercial and Industrial Demand Response activities include a commercial and industrial
- automated demand response pilot, as well as a horticultural load shifting pilot. The commercial
- and industrial automated demand response pilot launched in 2024. Pilot activities included
- 17 customer recruitment and connecting the buildings to allow for automated dispatch. This pilot is
- scheduled to conclude in 2025. The horticultural load shifting pilot also began in 2024 and targets
- 19 horticultural customers with grow lights to schedule their lighting operations to off-peak hours.
- This pilot is set to conclude in 2025.
- 21 The following are key updates for the program in 2024:
  - FBC completed the procurement process for a commercial and industrial automated demand response pilot and began recruitment. The pilot is currently underway and expected to complete in the 2025 calendar year.
  - Additionally, FBC launched a pilot investigating load shifting for horticultural customers.
     The pilot participants began shifting their facility's operations to reduce their impact on peak demand in August 2024. The pilot is scheduled to conclude in 2025.
  - Expenditures for Commercial and Industrial Demand Response were greater than
    expected due to higher upfront costs than expected to begin the commercial and industrial
    automated demand response pilot, as well as the costs to operate the horticultural load
    shifting pilot. It is expected that these expenditures will not impact overall planned values
    for this program.

#### 9.4 SUMMARY

- 34 The Demand Response Program Area demand savings and expenditures were both slightly
- 35 below planned values. The reasons for this discrepancy are primarily due to fewer EV participants
- than anticipated in the Residential Demand Response program.

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# 10. PORTFOLIO LEVEL ACTIVITIES

#### 2 **10.1 OVERVIEW**

- 3 Portfolio level activities are required to properly plan and implement the proposed DSM programs
- 4 and support efforts to meet the energy savings targets. Their expenses include provisions for
- 5 planning and evaluation staff. These staff members perform DSM project due diligence, including
- 6 savings verification, and oversee program evaluation studies; prepare long term DSM Plans and
- 7 DSM Expenditure Plans; and undertake conservation potential and avoided costs studies.
- 8 This area includes evaluation and portfolio level activities.
  - Evaluation studies are conducted to determine if FBC's DSM program objectives are being
    met and savings are being realized. Evaluation of energy efficiency programs provides
    internal and external accountability in the estimates of energy and demand savings.
    Evaluation activities and studies are undertaken in collaboration with FEI.
  - Portfolio Level Activities are comprised largely of planning as well as staffing costs and
    consultant fees for the numerous studies. Portfolio Level Activities are those activities for
    which the costs cannot be assigned to individual DSM programs. These distinct Portfolio
    Level Activities can include expenditure such as DSM support and portfolio level staff
    labour, some staff training and conferences, facilities and equipment, some industry
    association memberships, regulatory work and EECAG<sup>6</sup> activities.
- 19 Expenditures in 2024 for Evaluation and Portfolio-Level Activities were largely as planned.
- Table 10 -1 includes the annual expenditures for DSM Studies, Evaluation, and Reporting portfolio activities.

Table 10-1: 2024 Portfolio Expenditures Results Summary

**Utility Expenditures (\$000s) Total Expenditures Non-Incentives Program** (including carryover) 2024 2024 2024 2024 Plan Actual Plan Actual **Evaluation** 179 186 224 186 Portfolio-Level Activities 657 797 823 797 **ALL PROGRAMS** 836 983 1,047 983

Details on Program Evaluation Activities undertaken by FBC in 2024 are included in Appendix A-1.

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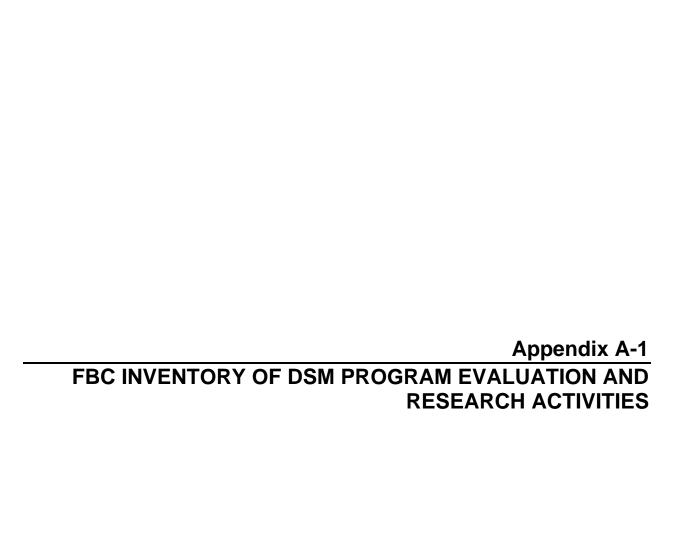
The Energy Efficiency and Conservation Advisory Group (EECAG) provides insight and feedback on FBC and FEI's portfolio of DSM activities and related issues. In 2024, EECAG sessions were not held.



### 1 11. CONCLUSION

- 2 In 2024, FBC achieved 76 percent of its approved DSM expenditures and 124 percent of its
- 3 annual energy savings target, as outlined in the 2023-2027 DSM Plan. This result was realized a
- 4 total energy savings of 34.1 GWh, driven by Industrial savings of 12.5 GWh, Commercial savings
- 5 of 15.0 GWh, and Residential savings of 5.8 GWh. Customer incentives comprised the largest
- 6 cost component of expenditures, making up 61 percent of the overall portfolio.
- 7 This Report details how FBC delivered its energy conservation programs in a cost-effective
- 8 manner, achieving an overall portfolio TRC Benefit/Cost ratio of 1.7 while exceeding planned
- 9 energy savings targets. FBC continues to offer a robust portfolio of DSM programming accessible
- 10 to all customer rate classes, while meeting the adequacy requirements of the DSM Regulation
- and operating according to the Company's DSM Guiding Principles.
- 12 In 2025, FBC will continue to provide a comprehensive portfolio of DSM programming accessible
- to all customer groups and locations, in full compliance with the adequacy requirements of the
- 14 DSM Regulation and in alignment with the Company's DSM Guiding Principles.

Section 11: Conclusion Page 30





Evaluation Name	Program Area	Type of Evaluation	Evaluation Partners	Evaluation Status
Home Renovation Program Evaluation	Residential	Process & Impact	FortisBC Energy Inc. & FortisBC Inc.	Evaluation of the program from design to delivery, including assessment of free-ridership, and identifying opportunities and areas for improvement.  Completed in Q2 2024.
Participant and Building Owner Surveys	Commercial	Process	FortisBC Energy Inc. & FortisBC Inc.	Surveys conducted with building owners and tenants to assess customer satisfaction, program awareness, and gather feedback for future program design.  Completed annually.
Custom Efficiency Program (CEP) Evaluation	Commercial & Industrial	Process & Impact	FortisBC Energy Inc. & FortisBC Inc.	Evaluation of the program from design to delivery, including assessment of free-ridership, understanding participants' motivations for participation, identifying opportunities and areas for improvement, and validation of energy savings.  Completed in Q2 2024.
Commercial Energy Assessment Program (CEAP) Evaluation	Commercial	Process	FortisBC Energy Inc. & FortisBC Inc.	Survey conducted with program participants, and key stakeholders to assess the delivery and implementation of the Commercial Energy Assessment Program measures.  Completed in Q1 2024.
Direct Install Quality Assurance	Low Income	Evaluation Study	FortisBC Energy Inc., FortisBC Inc. & BC Hydro	Ongoing quality assurance to ensure direct install measures are installed according to program policies and procedures.
Ongoing Customer Feedback Surveys	Low Income	Process	FortisBC Energy Inc., FortisBC Inc. & BC Hydro	Surveys with Direct Install program participants to gather feedback on their customer experience, satisfaction with the program and the program representatives.  Completed in Q4 2024.
Low Income Program Evaluation	Low Income	Process & Impact	FortisBC Energy Inc. & FortisBC Inc.	Composed of: (1) deemed savings review of the Direct Install (ECAP) and Social Housing and Retrofit Support (SHRSP) programs and (2) synthesis of findings from ECAP feedback surveys to identify opportunities and areas for improvement.  To be completed in 2025.



Evaluation Name	Program Area	Type of Evaluation	Evaluation Partners	Evaluation Status
Energy Audit 2023	Enabling Activities	Impact	FortisBC Energy Inc. & FortisBC Inc.	The study is an update to an energy savings audit to verify energy savings from projects completed in 2023.  Completed in Q1 2024.
Energy Audit 2024	Enabling Activities	Impact	FortisBC Energy Inc. & FortisBC Inc.	The study is an update to an energy savings audit to verify energy savings from projects completed in 2024.  To be completed in 2025.
Commercial End Use Study	Enabling Activities	Communications	FortisBC Energy Inc. & FortisBC Inc.	The survey identified energy end-uses in FortisBC's commercial gas and electric customers. The results are intended to support a variety of FortisBC processes and strategic initiatives such as load forecasting, energy conservation program design, long-term resource planning, and conservation potential reviews.  Completed in Q3 2024.
Customer Satisfaction Index	Enabling Activities	Communications	FortisBC Energy Inc. & FortisBC Inc.	The study is expected to identify aspects of the customer experience that are driving customer satisfaction with energy efficiency programs and potential actions for FortisBC.  To be completed in 2025.
Measure Library Review	Portfolio	Process	FortisBC Energy Inc. & FortisBC Inc.	Comprehensive review and update of the Measure Library workbook, and integration to DDSM.  To be completed in 2025.