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August 23, 2022

Residential Consumer Intervener Association c/o Midgard Consulting Inc.
Suite 828 – 1130 W Pender Street
Vancouver, B.C.
V6E 4A4

Attention: Mr. Peter Helland, Director

Dear Mr. Helland:

Re: FortisBC Inc. (FBC)

Application for Acceptance of Demand-Side Management (DSM) Expenditures Plan for the period covering from 2023 to 2027 (Application)

Response to the Residential Consumer Intervener Association (RCIA) Information Request (IR) No. 1

On June 6, 2022, FBC filed the Application referenced above. In accordance with regulatory timetable established in British Columbia Utilities Commission Order G-182-22 for the review of the Application, FBC respectfully submits the attached response to RCIA IR No. 1.

For convenience and efficiency, FBC has occasionally provided an internet address for referenced reports instead of attaching lengthy 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.

If further information is required, please contact the undersigned.

Sincerely,

FORTISBC INC.

Original signed:

Diane Roy

Attachments

cc (email only): Commission Secretary

Registered Parties



FortisBC Inc. (FBC) Application for Acceptance of Demand-Side Management (DSM) Expenditures Plan for the period covering from 2023 to 2027 (Application)	Submission Date: August 23, 2022
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1. Reference: Exhibit B-1, Application, pg. 6, 20

2023-2027 DSM Plan vs LT DSM Plan

3 At page 6 of the Application FBC provides Table 3-2:

Table 3-2: 2023-2027 DSM Plan Compared with the LT DSM Plan¹⁰

Plan	2023	2024	2025	2026	2027	Total
Expenditures (\$000s)						
2023-2027 DSM Plan	\$14,455	\$15,436	\$16,572	\$17,412	\$18,707	\$82,583
LT DSM Plan	\$11,249	\$11,907	\$13,139	\$12,951	\$14,014	\$63,260
Difference	\$3,206	\$3,529	\$3,433	\$4,461	\$4,693	\$19,323
Energy savings (GWh)						
2023-2027 DSM Plan	26.4	27.4	28.6	29.7	31.3	143.4
LT DSM Plan	27	27.3	29.3	28.6	27.6	139.8
Difference	-0.6	0.1	-0.7	1.1	3.7	3.6

Based on the data provided in Table 3-2, RCIA performed the following calculations:

	LT	2023-2027	Incremental	Incremental Increase
	DSM Plan	DSM Plan	Amount	(vs. LT DSM Plan)
Cost (\$k)	\$63,260	\$82,583	\$19,323	31%
Energy Savings (GWh)	139.8	143.4	3.6	3%
Cost of Energy Avoided (\$ / MWh)	\$453	\$576	\$5,368	1186%

^{*} Blue denotes values calculated by RCIA

1.1 Please discuss the cost-effectiveness of the incremental \$19.3 M in spending for the current plan relative to the LT DSM Plan given the disparity in the cost of energy avoided between the LT DSM Plan spending and the incremental spending.

Response:

- FBC is unable to determine the cost effectiveness of the incremental expenditures as a whole, as there are differences between the LT DSM Plan and 2023-2027 DSM Plan for programs and measures covered by both studies and some of the incremental expenditures also occur in programs and measures not included in the LT DSM Plan. Both the LT DSM Plan and 2023-2027 DSM Plan forecasts of expenditures and savings are cost-effective.
- However, a comparison of cost-effectiveness between the LT DSM Plan and 2023-2027 DSM Plan for several of the program areas is presented in the table below:



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Table 1: Comparison of 2023-2027 DSM Plan and LT DSM Plan TRC Ratios

Program Area	LT DSM Plan	2023-2027 DSM Plan
Residential	1.8	1.4
Commercial	2.6	1.4
Industrial	3.3	2.1
Other Program Areas	-	-
TOTAL	2.0	1.3

- 2 Please note that in the LT DSM Plan, the Residential program area also includes the Low
- 3 Income program area. Expenditure values have also been inflated to 2023 dollars. Other
- 4 Program Areas contains all program areas without energy savings (Conservation, Education
- 5 and Outreach, Enabling Activities, Innovative Technologies, Demand Response, Portfolio).
- 6 These program areas are not broken out or specified in the LT DSM Plan.
- Please also refer to the response to BCUC IR1 3.1 for an explanation of differences between the LT DSM Plan and 2023-2027 DSM Plan.

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At page 20 of the Application, FBC states:

"FBC's proposed DSM portfolio for 2023-2027 is cost-effective, with a TRC of 1.3, based on the methodology set out in section 4 of the DSM Regulation."

1.2 Please calculate the TRC of the LT DSM Plan spending.

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Response:

As noted in Section 1.1 of the LT DSM Plan, the portfolio TRC test is 2.0. Please refer to the response to BCOAPO IR1 4.1 for further discussion regarding the cost effectiveness of the LT DSM Plan.

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1.3 Please calculate the TRC of the \$19.3 M of incremental spending (when comparing the 2023-2027 DSM Plan to the LT DSM Plan).

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Response:

28 Please refer to the response to RCIA IR1 1.1.



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1	2. F	Reference: Exhibit B-1, Application, Appendix A, pg. 13
2		Rental Apartment Efficiency Program
3	A	at the above-noted location, FBC states:
4 5 6		"The Rental Apartment Efficiency Program (RAP) will not be a program under FBC's residential program area. The program has been consolidated under the commercial program area."
7 8 9 10	2	As a result of the re-organization of the RAP program to the commercial program area, please discuss any changes in accessing the RAP program that will be experienced by residential consumers living in rental apartments.
11	Respon	se:

Response:

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There are no changes in accessing the RAP program that will be experienced by residential consumers living in rental apartments as a result of the administrative re-organization of the RAP program under the Commercial Program Area.



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1	3. Refe	rence:	Exhibit B-1, Application, pp. 25-26
2			FBC Proposed Transfer Rules
3	At the	e above-r	noted location, FBC states:
4		"FBC is	s proposing the following changes to the funding transfer rules:
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6		•	Remove the requirement of prior approval: FBC will endeavor to file
7 8			for approval as soon as it is aware that a transfer above 25 percent is required; however, often it is not known for certain that the 25 percent
9 10			limit will be passed until it is about to occur or already occurring.
11			Additionally, the exact amount of the transfer above 25 percent is difficult to forecast ahead of its occurrence, and time is also required to draft and
12			submit an application to the BCUC."
13	3.1		FBC's proposal, if prior approval from the BCUC is not required for
14			rs that exceed 25%, what mechanisms would FBC envision or propose for
15			SUC to retroactively disallow such a transfer (should the BCUC deem such
16		disallov	wance required)?
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18	Response:		

19 Please refer to the response to CEC IR1 9.3.

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- 1 4. Reference: Exhibit B-1, Application, Appendix A, pg. 37
- 2 Rental Apartment Efficiency Program
- 3 At the above-noted location, Posterity Group provides Exhibit 20:

	TRC	mTRC	UCT	PCT	RIM	LCOE \$/kWh
OVERALL PORTFOLIO	1.3	1.4	1.8	3.2	0.5	\$0.06
Residential						
Home Renovation	1.6	1.8	2.5	4.1	0.5	\$0.05
New Home	1.0	1.1	1.6	2.9	0.5	\$0.08
Residential Program Area	1.4	1.6	2.3	3.9	0.5	\$0.06
Commercial						
Prescriptive	1.7	2.0	4.0	2.8	0.8	\$0.03
Performance	1.1	1.3	2.9	2.7	0.6	\$0.04
Rental Apartment	0.4	0.4	0.3		0.2	\$0.34
Commercial Program Area	1.4	1.6	3.3	2.8	0.7	\$0.03
Industrial						
Prescriptive	2.6	3.0	5.8	3.0	1.1	\$0.02
Performance	1.5	1.7	1.6	3.2	0.6	\$0.06
Strategic Energy Management	1.0	1.2	1.5	2.1	0.5	\$0.07
Industrial Program Area	2.1	2.4	3.4	3.0	0.8	\$0.03
Low Income						
Self Install	3.2	3.6	2.3	7.7	0.6	\$0.04
Direct Install	0.7	0.9	0.5	2.5	0.3	\$0.19
Prescriptive	1.3	1.4	1.0	2.7	0.4	\$0.11
Performance	1.6	1.9	0.9	5.2	0.3	\$0.13
Low Income Program Area	1.2	1.3	0.9	3.0	0.4	\$0.13

RCIA notes that the TRC value for the Rental Apartment program is given as 0.4, the lowest TRC value for any of the programs listed in Exhibit 20.

4.1 Please discuss the low TRC value for the Rental Apartment program. Can FBC explain the apparent poor performance of the program as indicated by the TRC value?

Response:

The RAP's TRC value in the 2023-2027 FBC DSM Plan is lower compared to the one in the 2019-2022 FBC DSM Plan due to:

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 Increased non-incentive costs, primarily due to increasing administration costs for planned program development activities for RAP, anticipation of a higher number of energy assessments that do not convert to measure implementation, and anticipation of higher costs for the direct install component of RAP, which is labour-intensive;

- Conservative estimates for achievable electricity savings due to diminishing returns for opportunities associated with lighting upgrades; and
- Limited capacity to increase participation in FBC's RAP program between 2023-2027, since there are fewer market rental apartment buildings left in the region that have not already utilized the program.

4.2 Did FBC calculate the TRC value for the Rental Apartment program when it was previously organized under the "Residential" category? If yes, please provide and compare to the current value.

Response:

Yes, FBC calculated the TRC when it was organized under the Residential Program Area.
Please refer to the response to BCUC IR1 4.8 for a comparison of past years' TRC values against forecast 2023-2027 DSM Plan TRC values.



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1	5.	Reference	ce: Exhibit B-1, Application, Appendix A, pg. 13
2			Residential Program Changes
3		At the ab	ove-noted location, Posterity Group states:
4 5			Compared with the previous DSM Plan, the 2023 – 2027 DSM Plan has the allowing key updates in the Residential program area:
6			
7 8			Air conditioners and air sealing added as new measures under the Home Renovation Rebate program.
9 10			Connected home bundle added as a new measure under the New Home program
11 12			• LED bulbs removed from the Lighting (under Home Renovation Program). LED controls and fixtures remain.
13 14 15			 Step 2 and Step 3 new home code measures are ramped down to align with the Step Code updates. Starting in 2025, there are no Step 2 and 3 measures – the focus instead shifts to the higher Step 4, and 5 measures."
16 17 18			lease provide the rationale for removal of LED bulbs from the Lighting program.
19	Respo		no reappose to BCUC ID4 40.0
20 21	riease	Telel to ti	ne response to BCUC IR1 12.2.
22 23 24 25 26	<u>Respo</u>	in	lease provide additional detail on the manner in which air conditioners are cluded in the Home Renovation Rebate program.
27	Please	refer to th	ne response to BCUC IR1 12.3.1.
28 29			
30 31 32 33			lease provide additional detail on the air sealing measures added to the Home enovation Rebate program.



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(IR) No. 1

1 Response:

- 2 The air sealing measure added under the Home Renovation Rebate Program is for FBC
- 3 customers in electrically heated homes to complete draft proofing upgrades to improve the
- 4 building envelope.
- 5 For details on measure assumptions please refer to the response to BCUC IR1 12.1.

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5.4 Please provide additional detail on the "Connected home bundle" measure.

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Response:

12 Please refer to the responses to BCUC IR1 12.1 and CEC IR1 13.1.

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5.5 Please summarize the key changes that will be noticeable to residential consumers using the New Home program that will result from eliminating Step 2 and Step 3 measures and shifting focus to Step 4 and Step 5 measures.

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Response:

- 21 Full program details will be evaluated and finalized when the Provincial building code updates
- 22 are confirmed.
- 23 Forthcoming building code changes aim to make Step 3 the new energy baseline for residential
- 24 construction¹. As a result, eligibility for incentives will rise to follow the new baseline, mirroring
- 25 the current structure of the New Home program.
- 26 Customers are expected to experience increasing benefits at the higher tiers of the Step Code
- 27 including further reductions in energy costs, increased comfort, reduced sound transmission,
- 28 and improved indoor air quality.
- 29 Builders are the group likely to notice the biggest impact when moving to Step 4 and Step 5. To
- 30 meet the higher steps, changes will be required to building envelope, airtightness and
- 31 mechanical design. Additionally, intentional collaboration between the builder and the entire
- 32 trade team through an integrated design process will benefit each project. Integrated design is
- 33 a net new process for the residential construction industry.

Energy Step Code May 2022 Stakeholder Update, https://mailchi.mp/energystepcode/may2022.



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6. Reference: Exhibit B-1, Application, Appendix B, pg. 2

2 **2021 DSM Program Performance**

- 3 At the above-noted location, FBC states:
- 4 "FBC's actual 2021 DSM expenditures were 103 percent of 2021 Plan including carryover and the DSM energy savings were 91 percent of Plan."
 - Please comment on the reasons for 2021 energy savings under-performing the planned amount by 9%, despite DSM expenditures exceeding the planned amount by 3%.

Response:

- 11 The reasons for the 2021 energy savings under-performing the planned amount by 9 percent,
- despite DSM expenditures exceeding the planned amount by 3 percent are detailed in each
- program area section of the 2021 FBC Annual Report included in Appendix B. Major drivers are
- 14 summarized here:

15 **Residential**

• The Home Renovation Rebate Program saw higher than Plan incentive expenditures, but lower savings due to the Double Rebates offer which launched in fall of 2020 and finished on June 30, 2021, temporarily increasing customer incentives.

19 Low Income

- The Social Housing Support Program saw lower than Plan energy savings while having higher than forecast expenditures due to the nature of projects going through the program in 2021.
- The Self Install program saw a decline in participation that may be attributed to shifting customer priorities as a result of the ongoing COVID-19 pandemic, extreme weather events, or competing offers in market.

Commercial

- The higher than anticipated expenditures in the both the Prescriptive and Custom programs are primarily due to the limited time COVID-19 recovery offers with higher incentives.
- The actual Prescriptive and Custom program energy savings were slightly below plan due to the projects going through the programs in 2021.



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Industrial

- The higher than anticipated expenditures in the both the Prescriptive and Custom programs are primarily due to the limited time COVID-19 recovery offers with higher incentives.
- The actual Custom program energy savings were slightly below plan due to the projects going through the program in 2021.
 - 6.2 Has FBC adjusted or modified its energy savings forecasting as a result of the 9% under-performance of energy savings noted in 2021? Please discuss why or why not.

Response:

- Yes, FBC's program expenditures and energy savings forecasts in the 2023-2027 DSM Plan reflect recent expenditure and energy savings trends observed in each active program.
- 17 However, FBC notes that the COVID recovery incentives provided during 2020 and 2021 were
- temporary and therefore not reflected in FBC's program forecasts going forward.



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1	7.	Referen	ce: Exhibit B-1-1, Errata to the Application
2			DSM Plan Proposed Expenditures
3 4			tes that the updated Table 4.2 is presented as a lower-resolution image in the ocument, relative to the original version provided in the Application.
5		7.1 P	lease provide a higher-resolution version of Table 4.2, as updated in the Errata.
7	Resno	nse:	

Response:

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8 Please refer to the response to CEC IR1 5.1.



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8.	Refere	ence: Exhibit A-3, BCUC IR1, IR 1.3	
		DSM Expenditure Rate Impacts	
	At the	above-noted location, the BCUC asked:	
		•	•
			At the above-noted location, the BCUC asked: "Please provide, in percentage and dollar values, annual rate impacts for each year of the 2023–2027 DSM Plan duration proposed 2023." 8.1 If not already done in response to the noted BCUC IR, pleas requested rate and revenue impacts (in percentage and dollar down by rate class (e.g. residential, commercial, industrial, etc.).

Please refer to the response to BCOAPO IR1 6.1.