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October 3, 2022

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

Attention: Ms. Leigha Worth, Executive Director

Dear Ms. Worth:

Re: FortisBC Energy Inc. (FEI)

Project No. 1599352

Application for Acceptance of Demand-Side Management (DSM) Expenditures for 2023 (Application)

Response to the British Columbia 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, Tenant Resource and Advisory Centre, and Together Against Poverty Society *et al.* (BCOAPO) Information Request (IR) No. 1

On July 5, 2022, FEI filed the Application referenced above. In accordance with the regulatory timetable established in British Columbia Utilities Commission Order G-219-22 for the review of the Application, FEI respectfully submits the attached response to BCOAPO IR No. 1.

For convenience and efficiency, FEI has occasionally provided an internet address for referenced reports instead of attaching lengthy documents to its IR responses. FEI 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 ENERGY INC.

Original signed:

Diane Roy

Attachments

cc (email only): Commission Secretary
Registered Parties

Table of Contents **Page No.**

A. INTRODUCTION AND PROGRAM CHANGES

1.0 Reference: FEI 2023 DSM Application

Section 1, page 1, lines 13-16,

Section 1, page 1, lines 10-13 and page 2, lines 1-3

Topic: DSM Program Changes

Preamble: FEI states:

> "FEI is filing a one-year plan because new policy direction included in the late-2021 CleanBC Roadmap to 2030 (Roadmap) is anticipated to result in changes to the Demand-Side Measures (DSM) Regulation before 2024 that are likely to have implications for FEI's DSM portfolio." **(Application, page 1)**

1.1 Further to BCUC IR 1.1, please explain FEI's likely course of action in the event the DSM regulation is not finalized before 2024, including whether FEI will file another one-year 2024 DSM plan in that event.

<u>Response:</u>

Please refer to the response to BCUC IR1 1.1.

Preamble: FEI states:

> "The 2023 DSM Plan is a continuation of many of the cost-effective programs previously accepted in FEI's 2019-2022 DSM Plan, with some additions and

modifications including activities that support the transition to advanced DSM programming such as deep retrofits, gas heat pumps and dual fuel hybrid heating systems." **(Application, page 1)**

"FEI's proposed DSM expenditure schedule is also supported by FEI's 2021 Annual DSM Report included as Appendix B. The 2021 Annual DSM Report describes the results of FEI's 2021 programs, most of which FEI is proposing to continue." **(Application, page 2)**

1.2 Please identify all DSM programs FEI is proposing to discontinue as well and provide the full rationale supporting the Utilities decision to do so.

<u>Response:</u>

FEI is not proposing to discontinue any programs.

1.3 Of the programs that FEI is proposing to discontinue, please identify those programs that are "cost-effective" and explain FEI's rationale for their discontinuance.

<u>Response:</u>

As noted in the response to BCOAPO IR1 1.2, FEI is not proposing to discontinue any programs.

2.0 Reference: FEI 2023 DSM Application

Section 1, page 1, Table 1.1

Topic: DSM Expenditures and Savings

Preamble:

Table 1.1 provides a high-level comparison of the expenditures and energy savings for the 2023 DSM Plan compared with the 2022 DSM Plan. Table 1.1 indicates that the expenditures are increasing approximately $34.8 million from $106.3 million to $141.1 million, and the energy savings are increasing from 1,150,189 GJ to 1,601,386 GJ, an increase of approximately 451,197 GJ.

2.1 Please confirm that the 2023 DSM Plan reflects an increase in spending of $34.8 million which equates to a 32.7% increase compared to the 2022 DSM Plan.

<u>Response:</u>

Confirmed. FEI notes that in recent years it has proven the ability to ramp up expenditures year-over-year and between 2018 and 2021 has averaged an annual DSM expenditure increase of 46.5 percent.

2.2 Please confirm that the 2023 DSM plan energy savings is forecast to increase by 451,197 GJ which equates to an increase of 39.2% compared to the 2022 DSM Plan.

<u>Response:</u>

Confirmed.

2.3 Please explain the factors that are driving a greater energy savings increase as compared to the increase in DSM expenditures.

<u>Response:</u>

The primary factors driving greater energy saving increases relative to the increase in expenditures in the 2023 DSM Plan are set out below.

- Planned natural gas savings from the Conservation Education and Outreach programs are now calculated and included in the DSM Plan.
- Several program areas with relatively high cost-effectiveness are expanded relative to 2022, including:
    - In the Industrial program area:
        - The Strategic Energy Management program is being expanded in 2023.
        - Projected participation in prescriptive programs is higher than in the 2019-2022 DSM Plan. Recent participation in these programs has exceeded 2019-2022 DSM Plan projections and participation projections in the 2023 DSM Plan are consistent with the actual participation in previous years.
    - In the Commercial program area:
        - Additional heating plant optimization measures are being added.
        - The Rental Assistance Program (RAP) is being consolidated into the commercial sector, and an expanded RAP in 2023 includes more direct install measures.
        - Projected participation in custom projects is higher in the 2023 DSM Plan consistent with the actual participation in previous years.

2.4 Please explain any potential issues FEI has identified that could prevent it from achieving this level of incremental energy savings in 2023.

Response:

Energy savings are primarily a factor of program participation, thus anything that impacts customer participation in DSM programs would impact FEI's ability to achieve these energy savings. Some potential factors that could impact customer participation include, but are not limited to:

- Priorities that take customer attention away from energy efficiency (e.g., pandemics, fires, floods, earthquakes, etc.);
- New entrants in the energy efficiency marketplace shifting program participation from FEI to another entity (e.g., provincial, federal, municipal or any other third-party programs that have not been designed to work in conjunction with FEI DSM programs); and
- External factors (e.g., economic recession, increased costs of financing, supply chain weaknesses, etc.).

B. BACKGROUND AND REQUIRED CONSIDERATIONS

3.0 Reference: FEI 2023 DSM Application

Section 3.1, page 6, Table 3-1

Topic: Proposed 2023 DSM Expenditures

3.1 Please provide an expanded Table 3-1 that includes the following:

1) an additional column that provides the dollar variance between the 2023 and 2022 DSM plans;

2) an additional row for each column that sums the dollars and percentages for the Residential, Commercial, Industrial and Low-income program areas; and

3) an additional row for each column that sums the dollars and percentages for the Conservation Education and Outreach, Innovative Technologies, Enabling Activities, and Portfolio Activities.

<u>Response:</u>

Please refer to the requested table below. The requested information for item 1) is included in the column titled "Variance ($)" and remains unadjusted from the original Table 3-1. The requested information in items 2) and 3) are highlighted in the table.

Program Area	Total Utility Expenditure (000's)			
	2023	2022	Variance ($)	Variance %
Residential	$43,994	$34,816	$9,178	26%
Commercial	$26,570	$19,800	$6,770	34%
Industrial	$6,848	$8,462	-$1,614	-19%
Low Income	$13,251	$10,984	$2,267	21%
Requested Sub-total	*$90,663*	*$74,062*	$16,601	*22%*
Conservation Education and Outreach	$9,713	$9,433	$280	3%
Innovative Technologies	$25,960	$11,871	$14,089	119%
Enabling Activities	$12,010	$8,921	$3,089	35%
Portflio Activities	$2,730	$1,979	$751	38%
Requested Sub-total	*$50,413*	*$32,204*	$18,209	*57%*
ALL Programs	$141,077	$106,266	$34,811	33%

Accepted expenditures pursuant to Order G-138-18, Order G-135-21 and Order G-301-21
Please note totals may slightly differ due to rounding

3.2 Please provide a similar table to the enhanced Table 3-1 as per IR 3.1, that provides a comparison between the forecasted 2023 DSM Natural Gas Energy Savings to the 2022 DSM accepted Natural Gas Energy Savings.

Response:

Please refer to the requested table below.

Program Area	Utility Incremental Savings (GJ/Year)		
	2023	2022	Variance
Residential	250,319	238,323	5%
Commercial	563,816	381,421	48%
Industrial	628,423	466,317	35%
Low Income	77,408	64,128	21%
Requested Sub-total	***1,519,966***	***1,150,189***	***32%***
Conservation Education and Outreach[1]	81,420	-	-
Innovative Technologies	-	-	-
Enabling Activities	-	-	-
Portfolio Activities	-	-	-
Requested Sub-total	***81,420***	***-***	***-***
ALL Programs	1,601,386	1,150,189	39%

Savings as forecast in the DSM Plans accepted pursuant to Order G-138-18, Order G-135-21 and Order G-301-21

Note to Table:

[1]*The projected energy savings for the Conservation Education and Outreach program area begin in 2023 and are applied to the Portfolio overall.*

C. CONSISTENCY WITH LONG TERM GAS RESOURCE PLAN

4.0 Reference: FEI 2023 DSM Application

Section 3.4.1, page 10, lines 12-32

Topic: 2023 DSM Plan Comparison to LTGRP

Preamble: FEI states:

- "The energy savings between the LTGRP and DSM Plan are closely aligned. The energy savings achieved in the 2022 LTGRP High DSM Setting are 1.7 million incremental GJs while the DSM Plan energy savings are 1.6 million incremental GJs;
- The 2022 LTGRP recommended pursuing the high DSM expenditure setting to reach energy savings and related GHG emission reduction targets as a key pillar in the Clean Growth Pathway. The 2023 expenditures in the high DSM setting for the LTGRP are $235 million. While the 2023 DSM Plan total expenditures are lower at $141 million, the 2023 spending does represent a step change from 2022 planned DSM expenditures of $106 million, indicating a transition toward this increased level of DSM activity;
- The 2023 DSM Plan total expenditure is less than the LTGRP DSM high setting in 2023 for 22 the following reasons:
  - o The LTGRP analysis is a long-term outlook on DSM potential, using 2019 as a base year for its analysis. It does not consider program design that incorporates ramp up requirements for new measures and programs or potential ramp down of old measures.
  - o The high DSM setting in the LTGRP assumed incentives covering up to 100 percent of incremental costs, or maximum market potential, in order to speed market transition and accelerate retrofits for energy and emission reductions, whereas for this transitional one-year 2023 period the DSM Plan focused more on optimizing the costs of energy savings and maintains an average incentive level which is closer to the historical benchmark of 50 percent of incremental cost for high efficiency equipment […]"**Application pg10**

4.1 Please explain how FEI plans to achieve 2023 energy savings that are only approximately 6% (1.7 million GJ – 1.6 million GJ = 0.1/1.7) less than the LTGRP when the $141 million expenditures in the 2023 DSM plan are approximately 40% ($235 -$141 = $94/$235) less than the LTGRP.

Response:

As the Long Term Gas Resource Plan (LTGRP) is intended to provide a long-term estimate of DSM savings for resource planning purposes, FEI expects there to be differences in expenditures and savings between forecasts in the DSM Plan and the estimates in the 2022 LTGRP DSM analysis, especially in the short term. The LTGRP provides a theoretical model for the long-term DSM programming outlook (an assessment of the energy savings that can be achieved over a 20-year planning horizon). Feeding in the market potential results from the CPR, the model represents a theoretical estimate of DSM uptake in relation to the ratio between incentive levels and incremental costs, whereas the DSM Plan further refines the market potential into a near-term program potential. In particular, the LTGRP model cannot necessarily factor in the shorter-term implications of market conditions and policy environment changes that are considered in DSM program development. As such, FEI did not expect the values to be comparable in the short term.

The table below provides an illustrative comparison between the 2023 DSM Plan outputs and the 2022 LTGRP DSM Analysis for 2023.

Program Area	A	B	C	D	E
	2023 DSM Plan Expenditures	2023 DSM Plan Energy Savings	2023 DSM Plan Expenditures at 100% Incentive Levels	2022 LTGRP Expenditures for 2023	2022 LTGRP Energy Savings for 2023
	($ Millions)	(PJ)	($ Millions)	($ Millions)	(PJ)
Residential	44	0.250	88	164	0.760
Commercial	27	0.564	53	44	0.430
Industrial	7	0.628	14	26	0.530
Low Income	13	0.077	27	N/A	
Conservation Education and Outreach	10	0.081			
Innovative Tech	26				
Enabling Activities	12				
Portfolio Activities	3				
Total	**141**	**1.601**	**181**	**234**	**1.720**

Columns A and B include 2023 DSM Plan expenditures and savings as per the Application. In the DSM Plan, the Residential, Commercial and Industrial Program Area activities are primarily based on a continuation of current program activity where incentives are set on average at approximately 50 percent of incremental costs.

Column C provides a high-level estimate of 2023 DSM Plan expenditures if the Residential, Commercial, Industrial and Low Income Program Area incentives were doubled to approximately 100 percent of incremental costs. Although a more complete analysis would need to be developed to more specifically assign these values, in doubling incentive levels, the 2023 DSM spending more closely aligns with the 2022 LTGRP. Please note the following:

- Higher incentive levels would be expected to drive greater program participation and therefore increased expenditures and savings beyond those outlined in Columns B and C. This effect is not considered in this high-level estimate.
- The 2022 LTGRP DSM analysis cited in the preamble is meant to assess the size of the available DSM resource rather than provide a cost-optimized estimate of program potential. However, the DSM Plan seeks to optimize the costs of energy savings to the extent that there is not a large additional expenditure for a small amount of additional savings (i.e., where moving from an incentive level of 50 percent of incremental cost to 100 percent only attracts a few additional participants).

Columns D and E illustrate 2022 LTGRP Diversified Energy (Planning) - High DSM Setting expenditures and savings as outlined in Section 5 and Appendix C-2 of the 2022 LTGRP. Please note that savings potential is assessed by facility type in the LTGRP DSM analysis. This means that savings associated with the Low Income and Conservation Education and Outreach Program Areas are accounted for in the Residential and Commercial sectors of the LTGRP analysis.

4.2 Please explain the $94 million differential between DSM expenditures in the 2023 DSM plan compared to the LTGRP by providing a high-level breakdown that shows: (1) ramping up new measures/ramping down old measures; and (2) incentives at approximately 50% of incremental cost vs. 100% of incremental cost.

Response:

The differential between DSM expenditures in the 2023 DSM Plan compared to the 2022 Long Term Gas Resource Plan (LTGRP) is primarily explained by incentives at approximately 50 percent of incremental cost versus 100 percent of incremental cost (option (2)). Please refer to the response to BCOAPO IR1 4.1 for further detail.

With respect to option (1), "ramping up new measures/ramping down old measures", while the 2023 DSM Plan covers only one year, 2023 can be considered a "ramping up" year for advanced DSM programming. In particular, expenditures for advanced DSM programming such as gas heat pumps, hybrid gas/electric heating systems and deep energy retrofits, are included at a higher level in the 2023 DSM Plan (as compared to 2022 DSM Plan accepted levels). These increased expenditures are primarily within the Innovative Technologies Program Area.

In the Conservation Potential Review (CPR), and therefore the 2022 LTGRP, these measures were modeled at conservative participation rates through the length of the analysis period to reflect market and policy uncertainties. However, in 2023, modelled DSM expenditures (both per participant and in aggregate) are still somewhat higher for these measures in the CPR and 2022 LTGRP than in the 2023 DSM Plan. Please refer to the response to BCOAPO IR1 4.3 for further detail.

4.3 Please explain why FEI is forecasting $94 million of lesser DSM expenditures given the policy shift away from traditional DSM measures toward advanced DSM activities.

4.3.1 Please explain why a shift toward advanced DSM activities does not result in higher spending compared to the LTGRP.

Response:

FEI notes that the 2023 DSM Plan proposes increased DSM spending by approximately $35 million (33 percent) over accepted 2022 DSM Plan levels. As explained in Section 3.1 of the Application, this increase is primarily driven by a policy shift toward advanced DSM activities as indicated in the CleanBC Roadmap to 2030.

In the response to BCOAPO IR1 4.1, FEI provides an overview of the major differences between the analysis in the 2023 DSM Plan and the DSM analysis in the 2022 Long Term Gas resource Plan (LTGRP). FEI's approach to advanced DSM measures is still being explored for program potential. Although some advanced DSM measures were included in the CPR, and therefore were also included in the 2022 LTGRP, these measures were modeled at conservative participation rates to reflect market and policy uncertainties when the CPR was being developed in 2020-2021. In the 2023 DSM Plan, advanced DSM Programming is primarily reflected in the $26 Million Innovative Technologies budget.

D. 2023 DSM PLAN AND PROPOSED EXPENDITURES

5.0 Reference: FEI 2023 DSM Application

Section 4.1, pages 15-16, lines 20-24 and lines 1-11

Topic: Consultation

Preamble: FEI states:

> "FEI engaged in and documented just under 60 consultation interactions related to the 2023 DSM Plan. Examples of consulted entities include communities, customers, contractors, manufacturers, Indigenous groups, energy advisors, interest groups, partners, program implementers, post-secondary institutions, and the Energy Efficiency and Conservation Advisory Group (EECAG). The forms of consultation included workshops, webinars, surveys, and individual outreach. FEI also provided confidential draft versions of the 2023 DSM Plan to EECAG members for review and input.
>
> Most of the key learnings from these consultations was market data refinement which was then considered and assessed within program plans and included ideas for program design and how to expand programs and program reach. A consistent piece of feedback received from the consultations was general endorsement for how DSM is managed and operated by FEI. Satisfaction appeared to be high for FEI in this area and none of the consultations suggested that any significant change in approach was required.
>
> FEI also received directional feedback from the consultations. This feedback included the following:
>
> - Continue to support Energy Advisors;
> - More education, training and resources for customers, contractors and consultants;
> - Broaden the collaboration within the value chain;
> - Energy concierge and financing support needed for deep energy retrofits;
> - Support hybrid systems and gas heat pump adoption;
> - Expand eligible measure set; and
> - Expand Indigenous specific support.
>
> This feedback was taken into account in the development of the 2023 DSM Plan. Given this consultation process, FEI believes that the 2023 DSM Plan includes a

fair representation of stakeholder and customer interests and is positioned well to achieve the energy savings forecast within." **(Application, pages 15-16)**

5.1 Without disclosing party names, please provide the composition of the DSM stakeholder group (EECAG).

Response:

The Energy Efficiency Conservation Advisory Group includes the following types of members:

- Non-profit and Indigenous housing societies
- Social advocacy groups
- Environment non-governmental organizations
- Customer and industry stakeholders
- Trade associations
- Research groups
- Government entities
- Other utilities

5.2 Please define specifically what FEI means by "market data refinement" as used on page 15 of the Application.

Response:

Market data refinement is the process of reviewing and adjusting the data included in program plans based on stakeholder feedback.

5.3 Please provide examples of the "market data refinement" flowing from the consultation.

Response:

Examples of market data refinement as a result of consultation with advisory and community groups and industry stakeholders within the FEI service area include:

- Addition of high-performance windows and doors under the Home Renovation Program.
- Increased participation to condensing water heater.
- Addition of hybrid Rooftop Units (RTUs) to the Prescriptive program.
- Expansion of the Strategic Energy Manager (SEM) Industrial program. A stream of the program is now proposed to be administered in collaboration with FBC and focus on natural gas and electricity savings in the shared service area.
- Increased support for Indigenous communities through the Community Energy Specialist program.

5.4 For each of the 7 areas of directional feedback received from the consultations, please provide the forecasted incremental DSM funding and related energy savings that flow from each area of the feedback.

Response:

The feedback provided on the following point resulted in incremental proposed expenditures of roughly $1 million over several program initiatives.

- More education, training and resources for customers, contractors and consultants.

While the feedback points below did not result in incremental expenditures and energy savings, they did impact program design and support proposed planned expenditures:

- Continue to support Energy Advisors;
- Broaden the collaboration within the value chain;
- Energy concierge and financing support needed for deep energy retrofits;
- Expand eligible measure set;
- Expand Indigenous specific support; and
- Support hybrid systems and gas heat pump adoption.

5.4.1 Please explain how the consultation feedback has been reflected in the 2023 DSM Plan.

Response:

The process of DSM planning includes consultation at nearly every step and, as such, the 2023 DSM Plan has been shaped by nearly 60 sessions of various consultation engagements from program up to portfolio level, including a variety of stakeholders and organizations. Stakeholder consultation and industry engagement are core tenets of program design as outlined by FEI's DSM Guiding Principles 10 and 11.[1,2] Examples of changes made to programming because of feedback are included in the response to BCOAPO IR1 5.4.

5.4.2 To the extent that no explicit or incremental DSM funding has been reflected in the 2023-2027 DSM Plan as a result of consultation feedback, please discuss how the directional feedback has been reflected in FBC DSM plan or will be reflected in future plans.

Response:

FEI assumes the question is meant to refer to FEI's 2023 DSM Plan and not FBC. Directional feedback provided thus far has been taken into account and funding has been included as described in the responses to BCOAPO IR1 5.4. and 5.4.1. Should further feedback be provided it will be considered for future program development as part of a future DSM expenditure plan.

1 DSM Guiding Principle No. 10 states: Programs will support market transformation by incenting efficient measures through customers and/or trade allies (contractors, equipment manufacturers, distributors, retailers, etc.), developing trade ally capacity, and supporting codes and standards development and implementation. Application Section 4.3, page 20.

2 DSM Guiding Principle No. 11 states: FEI will retain a DSM stakeholder group (EECAG), comprised of government, industry, trades, manufacturers, non-governmental organizations, advocacy groups, other utilities and customers to provide it with strategic advice. Additionally, FEI will undertake program area specific stakeholder consultation(s) on effective program design and implementation. Application Section 4.3, page 20.

6.0 Reference: FEI 2023 DSM Application

Section 3.1, Table 3-1, page 6 and Section 4.2, page 17

Topic: DSM Expenditure Forecast by Program Area

6.1 Please provide the data as per the table below.

		Expenditures ($000s)					Savings (GJ)					RIM				
		2019 (Actual)	2020 Actual	2021 (Actual)	2022 Plan	2023 Plan	2019 (Actual)	2020 Actual	2021 (Actual)	2022 Plan	2023 Plan	2019 (Actual)	2020 Actual	2021 (Actual)	2022 Plan	2023 Plan
	Program Area															
1	Residential															
2	Commercial															
3	Industrial															
4	Low Income															
	Program Subtotal (Programs 1-4)															
5	Conservation Education & Outreach															
6	Innovative Technologies															
7	Enabling Activities															
8	Portfolio Activities															
	Program Subtotal (Programs 5 -8)															
	Total (all programs)															

<u>Response:</u>

Please refer to Attachment 6.1 for a table with the requested information. Please note the following:

- Certain values differ from the 2019-22 DSM Plan and reflect updates accepted in two mid-term applications to the BCUC[3]. These sources have been identified and coded in the attached table.
- Planned cost-effectiveness values are calculated over the plan period which is typically greater than one year in length. In the attached table the 2022 Plan cost-effectiveness values include both 2021 and 2022.

6.2 Please provide the data as per the table below.

[3] FEI's Application for Updated DSM Expenditures for 2021 and 2022 for the Commercial, Industrial and Innovative Technologies Program Areas was filed March 19, 2021 and accepted on May 5, 2021, pursuant to BCUC Order G-135-21. FEI's Application for Updated DSM Expenditures for 2021 and 2022 for the Residential and Low Income Program Areas was filed July 7, 2021, and accepted on October 21, 2021, pursuant to BCUC Order G-301-21.

		TRC					MTRC					Portfolio				
		2019 (Actual)	2020 Actual	2021 (Actual)	2022 Plan	2023 Plan	2019 (Actual)	2020 Actual	2021 (Actual)	2022 Plan	2023 Plan	2019 (Actual)	2020 Actual	2021 (Actual)	2022 Plan	2023 Plan
	Program Area															
1	Residential															
2	Commercial															
3	Industrial															
4	Low Income															
	Program Subtotal (Programs 1-4)															
5	Conservation Education& Outreach															
6	Innovative Technologies															
7	Enabling Activities															
8	Portfolio Activities															
	Program Subtotal (Programs 5 - 8)															
	Total (all programs)															

Response:

Please refer to the response to BCOAPO IR1 6.1.

6.3 Please confirm or otherwise clarify that the Program Subtotal Spending for the 2023 DSM Plan of $90.7 million represents approximately 64% of the total DSM Plan spending of $141.1 million, and that $50.4 million, 36% of the 2023 DSM Plan, relates to non-program spending.

Response:

Confirmed.

6.4 Please confirm or otherwise clarify that, per Table 3-1, the Program Subtotal Spending for the 2022 DSM Plan of $74.1 million represents approximately 70% of the total DSM Plan spending of $106.3 million, and that $32.2 million, or 30% of the 2022 DSM Plan relates to non-program spending.

Response:

Confirmed.

6.5 Please explain whether FEI has any targets or guidelines in terms of the split between the program and non-program spending.

6.5.1 If no targets have been established, please explain why not and how FEI assesses the reasonability of the relative proportion of program vs. non-program spending.

Response:

FEI does not distinguish between program and non-program spending. FEI's DSM Guiding Principle No. 2 provides guidance on how FEI targets the share of incentive and non-incentive expenditures.[4] The 2023 DSM Plan is in line with that principle.

FEI proposes programs to target the market achievable potential of cost-effective measures in each customer sector as guided by its DSM Guiding Principle No. 1,[5] while meeting the requirements of the DSM Regulation. The approach for setting expenditures is a "ground up" exercise, developed program-by-program and sector-by-sector, reflecting stakeholder engagement and program design rather than allocating a fixed percentage of expenditure to each program area.

6.6 Please provide the results of any benchmarking that FEI has undertaken to assess the reasonability of its non-program spending compared to program spending.

6.6.1 If no such benchmarking has been undertaken, please explain why not.

Response:

FEI understands the question to be asking about incentive and non-incentive expenditures.

FEI leverages industry benchmarking on both incentives and non-incentives. A recent study was conducted by the consulting company E Source looking into expenditure metrics of a variety of North American DSM programs. The study found that the average split of incentive and non-

[4] DSM Guiding Principle No. 2 states: C&EM expenditures will have a goal of incentive costs exceeding 50 percent of the expenditures in a given year. (Application Section 4.3, page 20).

[5] DSM Guiding Principle No. 1 states: Programs will have a goal of being universal, offering access to energy efficiency and conservation for all residential, commercial and industrial customers, including low-income customers. (Application, Section 4.3, page 20).

incentive expenditures for those utilities surveyed were 60 and 40 percent respectively.[6] FEI's proposed incentive and non-incentive ratio in the 2023 DSM Plan of 72 percent and 28 percent, respectively, is above this benchmark.

6.7 Please confirm the program area spending of $90.7 million for the 2023 DSM Plan breaks down as follows: Residential $44.0 million (48%), Commercial $26.6 million (29%), Industrial $6.8 million (8%) and Low Income $13.2 million (15%). Please also confirm the program area spending of $74.1 million for the 2022 DSM Plan breaks down as follows: Residential $34.8 million (47%), Commercial $19.8 million (27%), Industrial $8.5 million (11%) and Low Income $10.9 million (15%).

Response:

Confirmed.

6.7.1 Please explain how FEI ensures that the relative spending by customer sector is reasonable for the 2023 DSM plan.

Response:

Please refer to the response to BCOAPO IR1 6.5.1.

6.7.2 Please compare the relative proportions of the 2023 DSM plan (% spending by customer sector) with the LTGRP and the 2019-2022 DSM Plan and provide an explanation of any variances.

[6] E Source, 2020, "DSM Budget Trends Through 2020", Figure 2. https://www.esource.com/429191abpd/dsm-budget-trends-through-2020.

Response:

Please refer to the table below for the requested comparison. Please note that in the 2022 Long Term Gas Resource Plan (LTGRP), low income measures are contained in both the residential and commercial sectors and are not analyzed separately.

Please also refer to the response to BCUC IR1 10.3 for an explanation of the difference between modelled expenditures for the 2022 LTGRP and planned expenditures in the 2023 DSM Plan. The difference in proportional incentive spending between the 2019-2022 DSM Plan and the 2023 DSM Plan is due largely to an increase in planned expenditures in the Innovative Technologies Program Area in order to undertake studies and run pilot projects in preparation for a transition from traditional DSM programming to advanced DSM programming.

Proportional Incentive Spending Comparison Among Program Areas (for DSM Plans) and Sectors (for 2022 LTGRP).

Program Area / Sector	2023 DSM Plan Proposed Expenditures ($000)	2023 DSM Plan Percent of Portfolio	2022 LTGRP: 2023 Modelled Expenditures ($000)	2022 LTGRP: 2023 Percent of Portfolio	2019 – 2022 DSM Plan Expenditures ($000)	2019-2022 DSM Plan percent of portfolio
Residential	43,994	31%	142,000	70%	134,178	37%
Low Income	13251	9%	N/A	N/A	34,732	10%
Commercial	26,570	19%	39,000	19%	71,727	20%
Industrial	6,848	5%	23,000	11%	22,630	6%

7.0 Reference: FEI 2023 DSM Application

DSM Plan, Appendix A, Section 6, pages 35-36

Topic: Low Income Program Area

Preamble:

> "In this DSM plan, the Low-Income Program Area consists of five programs:
>
> - Self Install Program
> - Direct Install Program
> - Prescriptive Program
> - Performance Program
> - Support Program
>
> The **Self Install Program** is a program whereby low-income participants receive Energy Savings Kits (ESK) or re-engagement kits which includes energy saving measures along with an instruction booklet and directions to access online "how to" videos. All measures are easy to install which participants install themselves. The Self Install program is a partnership program with FBC and BC Hydro.
>
> The **Direct Install Program** is a program whereby low-income participants receive an in-home visit from a program contractor to assess their home's energy efficiency, install basic measures (e.g., high efficiency showerheads, faucet aerators, etc.) and provide customized energy efficiency coaching. Additionally, some participants qualify to receive more robust measures such as insulation and high efficiency natural gas furnaces. Partners in the Direct Install Program include FBC and BC Hydro.
>
> The **Prescriptive Program** provides rebates, implementation support, funding for energy studies, and training for housing providers. It also includes rebates for individual low-income customers and Indigenous communities' residential buildings. Prescriptive rebates provide a straightforward path for participants in energy efficiency programs. Prescriptive rebates are available for residential and commercial measures such as furnaces, boilers and water heaters. For Indigenous communities, additional measures for health and safety (e.g., mold or asbestos removal), ventilation, air sealing, insulation and appliance maintenance are included.
>
> The **Performance Program** provides incentives to support charities, non-profit housing providers, co-ops, and Indigenous communities to construct high-performance homes and commercial buildings. For example, participants access

incentives by meeting the BC Energy Step Code standards for Part 3 and Part 9 buildings. The program will be administered jointly with FBC. These activities were formerly allocated to the Prescriptive Program Area.

The **Support Program** seeks to fund training and educational opportunities to enhance energy efficiency retrofit skills for people who experience barriers to employment."

7.1 Please provide the estimated number of FEI's residential customers who are eligible for the Low-Income Program.

Response:

FEI currently serves approximately 1.065 million customers.[7] According to Statistics Canada, the prevalence of low income in all age groups in British Columbia is approximately 14 percent, based on low-income cut-offs (LICO), before tax.[8] As per the DSM Regulation, FEI Low Income programs use income thresholds based on LICO before tax multiplied by a factor of 1.3. Assuming that 14 percent of the population is low income, approximately 150 thousand customers would be eligible to participate in FEI's Low Income programs.

7.2 Please provide a table showing participation in each of the low-income programs over the past three years 2019 – 2022 and the forecast participation in these programs in 2023.

Response:

Please refer to the table below for actual and forecast participation in each of the five Low Income programs for 2019-2022 and planned participation for 2023. Actual participation for some programs is reported at building or home level, as opposed to measure level. As an example, a single participant in the Direct Install program may receive multiple energy saving measures. Further, funding for energy studies, training, and implementation support, which was allocated to the Support Program Area from 2019-2022, has been rolled up into other areas (where applicable) for 2023.

[7] Customer count as of 2021.

[8] Low-income Indicators (4), Individual Low-income Status (6), Age (8) and Sex (3) for the Population in Private Households of Canada, Provinces and Territories, Census Divisions and Census Subdivisions, 2016 Census - 100% Data (statcan.gc.ca).

Low Income Program Area Participation by program:

Program Name	Participation Actual				Participation Planned
	2019	2020	2021	2022*	2023
Self Install	14,734	20,690	14,084	10,159	16,000
Direct Install	3,450	1,391	1,544	3,176	2,000
Prescriptive	506	1,003	1,227	1,153	1,692
Performance	-	-	-	-	60
Support	51	54	50	53	25
Total	**18,741**	**23,138**	**16,905**	**14,541**	**19,777**

**Participation is forecast to the end of 2022 based on actuals as of August 2022.*

7.3 Please provide a specific list of all energy saving measures and equipment included in the Energy Savings Kit (ESK) and their individual associated energy savings as well as the basis upon which those energy savings are estimated.

Response:

Please refer to the table below for an overview of the measures included in an ESK as part of the Self Install Program. Please note that an ESK may include multiple quantities of the measures listed below as well as measures contributing solely to electric energy savings, funded either by BC Hydro or FortisBC Inc. (FBC). Energy saving estimates are informed by evaluations from third-party consultants and equipment assumptions such as nameplate efficiency, intensity of use and rate of installation.

Measure Description	Annual Energy Savings (GJ)
Draft proofing Materials	0.025
Faucet Aerators	0.245
Outlet Gasket Pack	0.015
Showerhead	0.830
Window Film	0.065

7.3.1 Will any items be added to or removed from ESK in 2023 as compared to what was in the ESK kits distributed during the previous DSM Plans?

Response:

In 2023, FEI may consider additional measures which meet program criteria to enhance the kits, including the potential for energy savings as well as the relative ease of installation and delivery. Moreover, FEI will continue to assess existing measures and adjust the kit as needed to ensure it meets customer expectations and aligns with program targets.

7.4 Please provide a list of energy saving measures included in the Direct Install Program. Will any measures be added to or removed from this Program in 2023 as compared to the previous DSM Plans?

Response:

The Direct Install program encompasses the following energy saving measures:

- air sealing;
- attic insulation;
- crawlspace insulation;
- door draft proofing;
- duct sealing (manufactured homes);
- faucet aerators;
- furnaces:
- outlet gaskets;
- programmable thermostats;
- showerheads;
- underbelly insulation (manufactured homes);
- wall insulation;
- water heater pipe wrap; and
- window film.

In 2023, FEI may consider additional measures which meet program criteria. FEI may also assess the inclusion of additional health and safety work which does not contribute directly to energy savings but enables the installation of other energy saving measures.

7.4.1 What are the specific qualifications participants need to meet in order to receive more robust measures such as fridges and insulation?

Response:

Participant qualifications in the Direct Install program are guided by program terms and conditions to ensure that energy savings are realized while staying within the financial scope of the program and maintaining the health and safety of occupants and contractors.

As an example, in addition to the participant income requirements, to proceed with attic insulation, the existing R-value of the current insulation must fall below R-25 and the home must not have a significant health or safety issue such as moisture, mould, asbestos, vermiculite, or structural issues.

Please note that as a gas utility, FEI does not fund refrigerators as part of the Direct Install program.

7.5 Please provide the current average bill savings and energy savings attributed to ESK per participant per year.

7.5.1 Please confirm that the planned bill savings and energy savings attributed to ESK per participant per year in 2023 are the same as the bill savings and energy savings attributed to ESK per participant per year at present. If not so confirmed, please quantify and explain all differences.

Response:

FEI estimates approximately $28 in yearly bill savings ($33 when including the carbon tax) per Self Install program participant receiving an Energy Savings Kit (ESK). This is based on an average of 2.16 GJ saved and billed at a rate of $12.78 per GJ and a carbon tax rate of $2.56 per GJ. The energy savings per measure are largely consistent in 2022 and 2023; however, the average energy savings per participant will vary based on the types of kits distributed that year. In addition, as discussed in the response to BCOAPO IR1 7.3.1, actual energy savings in 2023 may vary if there are any kit modifications. Bill savings may vary as a result and may also change with any natural gas and carbon tax rate changes.

7.6 Please provide the current average bill savings and energy savings attributed to the Direct Install Program per participant per year.

7.6.1 Please confirm the planned bill savings and energy savings attributed to the Direct Install Program per participant per year in 2023 are the same as the bill savings and energy savings attributed to the Direct Install Program per participant per year at present. If not so confirmed, please quantify and explain all differences.

Response:

FEI estimates approximately $100 in yearly bill savings ($120 when including the carbon tax) per Direct Install program participant. This is based on an average of 7.81 GJ saved and billed at a rate of $12.78 per GJ and a carbon tax rate of $2.56 per GJ. The energy savings per measure are largely consistent in 2022 and 2023; however, the average energy savings per participant will vary based on the measures installed as participants can receive different measures depending on the characteristics of their homes. Further, as discussed in the response to BCOAPO IR1 7.4, actual energy savings in 2023 may vary if there are any program modifications. As a result, bill savings may vary and may also change with any natural gas and carbon tax rate changes.

8.0 Reference: FEI 2023 DSM Application

Section 3.1, Table 3-1, page 6, Section 4.3, pages 17-19 and Appendix A, Section 8, pages 55-58

Topic: Innovative Technologies

Preamble: FEI states:

> "The forecast increase in expenditures in the Innovative Technologies program area is primarily due to offers focused on Deep Retrofits, Gas Heat Pumps and additional planned pilots including Residential dual fuel (or hybrid) heating." **(Application, page 17)**

8.1 Please confirm that:

1) the forecasted 2023 DSM expenditures related to Innovative Technologies has increased from $11.9 million in 2022 to $26.0 million in 2023 (a $14.1 million increase);
2) the above noted increase represents $14.1 million or 119% between 2022 and 2023; and
3) the above noted increase represents approximately 40% of the overall increase in DSM expenditures in 2023 of $34.8 million.

Response:

Confirmed. As described in Section 3.1 (page 5) of the Application, there is a shift under the provincial CleanBC Roadmap towards focusing on advanced DSM programming, such as deep energy retrofits, gas heat pumps, and dual fuel hybrid heating systems that can result in significant natural gas savings and related emission reductions. FEI has increased expenditures under the Innovative Technology Program Area to conduct research and pilot projects to address the information gaps that exist prior to launching full scale programs.

8.2 Please expand Exhibit 64 (Appendix A, page 56) to include: 1) a column for total participants; 2) a column for residential customer participants; 3) a column for low-income customer participants.

Response:

The Innovative Technologies Program Area supports the broader DSM program and development teams by investigating innovative pre-commercial and commercially available technologies through a variety of technology screening and pilot study activities. The purpose is to validate manufacturers' claims related to equipment and system performance while assessing energy savings, costing and customer acceptance of new technologies or systems.

FEI provides the requested revised table below which breaks out each Innovative Technology expenditure by activity. Please note that at the time of filing, it is difficult to forecast the number of residential and low income participants respectively enrolling in its 2023 pilot studies. Therefore, FEI has instead included the number of residential and low income customer participants based on FEI's current 2022 participant count that will grow into 2023. For clarity, there are no restrictions that preclude low income customers from enrolling in pilot studies as long as customers meet the base eligibility requirements (as summarized in the response to BCOAPO IR1 8.4).

2022 Pilot Participant Counts						
Program Area	**Incentives**	**Non-Incentives**	**Total Expenditures**	**Residential Participants**	**Low-income Participants**	**Total Participants**
Pilot Projects - Deep Retrofits	11,528	2,256	13,784	24	1	**25**
Pilot Projects - Dual Fuel Hybrid Heating	4,000	1,775	5,775	75	0	**75**
Pilot Projects - Gas Heat Pumps	2,860	492	3,352	20	1	**21**
Pilot Projects - Other Technologies	150	125	275	n/a	n/a	n/a
Technology Screening Studies	300	500	800	n/a	n/a	n/a
Non-Program-Specific Expenses and Labour	n/a	1,974	1,974	n/a	n/a	n/a
Total ($000s)	**$18,838**	**$7,123**	**$25,960**	**119**	**2**	**121**

FEI also notes that the number of total participants in each pilot project is consistent with the nature of such studies; namely, gathering details and results on a small-scale in order to de-risk the technology and assess customer impacts prior to expanding to a larger scale program. Once the pilot project is completed, it will be expanded to the program level, thus reaching a larger base of customers, including low income customers. For example, the Smart Learning Thermostat pilot study completed in 2019 had 159 participants, but since launching as a full-scale incentive program, has driven 18,390 residential customers and 384 low income customers to participate, realizing 48,800 GJ in energy savings to date.

8.3 Please expand Exhibit 64 (Appendix A, page 56) to include, for both the 2022 DSM Plan and the 2021 actuals, the total expenditures for each program area for: 1) the total participants; 2) the total residential customer participants; and 3) the low-income customer participants.

Response:

FEI has assumed the question meant to refer to the 2023 DSM Plan rather than the 2022 DSM Plan.

As referenced in the response to BCOAPO IR1 8.2, although there are no restrictions that preclude low income customers from participating in pilot projects, FEI did not track those characteristics in the 2023 DSM Plan or in the 2021 actual results.

8.4 Please provide the criteria residential and low-income customers must meet in order to participate in Innovative Technologies program.

Response:

Pilot eligibility criteria can vary depending on the scope of each project. Specific factors that determine participant requirements include:

- Technology type;
- Target market;
- Target building archetype;
- Target end use application; and
- Target geographical region.

Residential, low income and commercial customers are all eligible to sign up to be future pilot participants to trial new energy efficient technologies. The online application form is publicly available and can be found on FortisBC's website at www.fortisbc.com/letsgo. Those customers who meet specific pilot eligibility requirements are contacted for specific pilot program offers.

E. COST EFFECTIVENESS APPROACH

9.0 Reference: FEI 2023 DSM Application

Section 5.2, page 24, Table 5-1, page 25

Topic: Cost Effectiveness

Preamble: FEI states:

> "[…].shows the standard test results at the portfolio level and demonstrates that the 2023 DSM Plan is cost effective under the standard TRC test and also under the mTRC, UCT and PCT tests. Although the 2023 DSM Plan does not pass the RIM test, the BCUC may not determine that a proposed DSM measure is not cost effective based on the result of the RIM test." **(Application, page 24)**

> Table 5-1 indicates a total portfolio RIM for the 2023 DSM Plan of 0.4. **(Application, page 25)**

9.1 Please clarify how the 2023 DSM is cost effective under the standard TRC test considering FEI's TRC calculation as per Table 5-1 (Application, page 25) is 0.7%.

<u>Response:</u>

To clarify, FEI's portfolio TRC for the 2023 DSM Plan is 0.7, not 0.7 percent as noted in the question.

FEI further clarifies that the Application should have stated on page 24 that the 2023 DSM Plan is cost-effective using the blended TRC and MTRC per the DSM Regulation.

In accordance with the DSM Regulation, a cost-effective portfolio of natural gas energy efficiency measures may include up to 40 percent of total expenditures that are cost-effective when considering the Modified Total Resource Cost (MTRC) test. FEI is forecasting to have 33 percent of its DSM expenditures using the MTRC (Table 2-4). When considering cost-effectiveness using both the MTRC and the TRC, the blended portfolio cost-effectiveness is 1.4. As the blended portfolio cost-effectiveness is greater than one, the portfolio is cost-effective.

A more detailed explanation of the MTRC is included in Section 5.1.3 of the Application.

9.2 Please calculate, for both the 2023 and the 2022 DSM Plans, DSM spending as a percentage of forecast annual FEI revenues.

Response:

Please refer to the table below for the 2022 and 2023 DSM spending as a percentage of forecast annual FEI revenues.

Particular	2022	2023
Plan DSM Expenditure(1) ($000s)	$111,819	$141,077
Approved/Forecast FEI Annual Revenue (2), (3) ($000s)	$2,025,649	$2,240,553
Percentage of Forecast Annual FEI Revenues	5.52%	6.30%

Notes to Table:

1) Approved 2022 Plan plus 2021 carry over;
2) The 2022 revenue is the 2022 Approved Margin of $1,003,261 from the FEI 2022 Annual Review plus the Projected cost of gas of $1,022,388 identified in Table 4-1 of the FEI 2023 Annual Review. The Projected cost of gas is based on the approved commodity cost recovery rate in effect for 2022, which is $4.503 per GJ as approved by Order G-354-21 for January to June 2022, and $5.907 per GJ as approved by Order G-154-22 for July to December 2022.
3) The 2023 revenue is the forecast revenue from FEI's 2023 Annual Review filed on July 29, 2022

9.3 Please provide, in percentage and dollar values, the annual rate and revenue impacts associated with the 2023 DSM plan and provide the underlying assumptions and comparators.

Response:

Please refer to Table 1, Lines 26 and 29 for the annual rate and revenue impacts associated with the 2023 DSM plan in percentage and dollar values, respectively. FEI notes the 2023 DSM expenditures will begin amortization in 2024, thus the incremental rate impact in 2023 is related to the half-year rate base return and the associated income tax expenses for the DSM rate base deferral account.

Table 1: Annual Rate and Revenue Impact due to FEI 2023 DSM Plan

Line	Particular	Reference	2023	2024
1	**Rate Base DSM Deferral Account**			
2	Opening ($000s)	Prior Year, Line 8	-	43,800
3	Adjustments	Transfer from non-rate base	-	60,801
4	Gross Additions		60,000	-
5	Tax	-Line 4 x 27%	(16,200)	-
6	Net Additions	Line 4 + Line 5	43,800	-
7	Amortization	Amortization Period @ 10 years	-	(10,460)
8	Closing ($000s)	Line 2 + Line 6 + Line 7	43,800	94,141
9				
10	Mid-Year Rate Base ($000s)	(Line 2 + Line 8) / 2	21,900	99,371
11				
12	**Non-Rate Base EEC Incentive Deferral**			
13	Opening Deferral	Prior Year, Line 19	-	60,801
14	Adjustments	Transfer to rate base	-	(60,801)
15	Gross Additions		81,077	-
16	Tax	-Line 15 x 27%	(21,891)	-
17	AFUDC	((Line 15 + Line 16) / 2) x 5.46%	1,614	-
18	Net Additions	Line 15 + Line 16 + Line 17	60,801	-
19	Closing Deferral	Line 13 + Line 14+ Line18	60,801	-
20				
21				
22	**Incremental Revenue Requirement**			
23	Amortization	-Line 7	-	10,460
24	Earned Return	Line 10 x FEI's Rate Base Return @ 6.22% (2023 Proposed)	1,364	6,188
25	Income Tax Expense	(Line 10 x 8.75% x 38.5% + Line 23) / (1 - 27%) x 27%	296	5,107
26	Total ($000s)	Sum of Line 23 to 25	1,660	21,755
27				
28	2023 Proposed Revenue Requirement ($000s)	2023 Annual Review (July 29, 2022)	2,170,241	2,170,241
29	Incremental Rate Impact (%)	Line 26 / Line 28	0.08%	1.00%

9.4 Please provide, in percentage and dollar values, the annual rate and revenue impacts by customer class for the 2023 DSM plan and provide the underlying assumptions and comparators.

Response:

Please refer to Table 1 below for the annual effective rate impacts by customer class and Table 2 below for the revenue impacts by customer class for the 2023 DSM Plan in dollar values and percentage.

The annual effective rate impact shown in Table 1 is the percentage and dollar value change in customer bills inclusive of all applicable rate riders. FEI has excluded transportation customers as FEI does not have insight into the commodity charge portion of their total bills.

FEI also assumes the revenue impact stated in this information request is referring to the total impact to FEI's revenue requirement, which is shown in the response to BCOAPO IR1 9.3, broken down by customer classes. The breakdown of the total impact to FEI's revenue requirement in 2023 and 2024 shown in Table 2 below (except for the transportation customer classes) is based on the existing revenue of each class.

Table 1: Annual Effective Rate Impact by Customer Classes due to FEI 2023 DSM Plan in % and $

	2023 $/GJ	2023 %	2024 $/GJ	2024 %
Residential				
Rate Schedule 1	$ 0.012	0.08%	$ 0.160	1.08%
Commercial				
Rate Schedule 2	$ 0.009	0.07%	$ 0.118	0.92%
Rate Schedule 3	$ 0.007	0.06%	$ 0.091	0.80%
Industrial				
Rate Schedule 4	$ 0.004	0.04%	$ 0.047	0.51%
Rate Schedule 5	$ 0.005	0.05%	$ 0.062	0.63%
Rate Schedule 6	$ 0.007	0.06%	$ 0.088	0.82%
Rate Schedule 7	$ 0.003	0.03%	$ 0.038	0.44%

Table 2: Annual Revenue Impact by Customer Classes due to FEI 2023 DSM Plan in ($000s) and %

	2023 $000s	2023 %	2024 $000s	2024 %
Residential				
Rate Schedule 1	$ 1,024	0.08%	$ 13,420	1.08%
Commercial				
Rate Schedule 2	$ 261	0.07%	$ 3,425	0.92%
Rate Schedule 3	$ 179	0.06%	$ 2,345	0.80%
Industrial				
Rate Schedule 4	$ 1	0.04%	$ 9	0.51%
Rate Schedule 5	$ 52	0.05%	$ 676	0.63%
Rate Schedule 6	$ 0.1	0.06%	$ 2	0.82%
Rate Schedule 7	$ 17	0.03%	$ 229	0.44%

10.0 Reference: FEI 2023 DSM Application

Section 7.1, pages 29-31

Topic: Funding Transfers and Variances

Preamble: FEI states:

> "In cases where a proposed transfer out of an approved program area is greater than twenty five percent of that program area's accepted expenditures for the year in question, BCUC approval is required." **(Application, page 29)**

> FEI is permitted to exceed total accepted expenditures in the final year of a DSM expenditure schedule by no more than five percent without prior approval from the BCUC. **(Application, page 30)**

10.1 Please explain FEI's rationale for removing the requirement of pre-approval of funding transfers.

<u>Response:</u>

FEI is requesting to remove the requirement for BCUC pre-approval of a funding transfer into a program area for the following reasons:

- The need for a funding transfer in excess of 25 percent can materialize quickly, particularly in cases where market uptake of a program is higher than anticipated.
- FEI undertakes an ongoing review of actual expenditures each month and reforecasts expenditures to the end of the year. While FEI may anticipate in advance that a program area could exceed its budget through its reforecasting process, it can never be certain if it will exceed the budget or by how much until it has actually occurred. This presents some challenges for filing an application requesting BCUC approval before the 25 percent threshold is exceeded.
    - If FEI files too early, it is possible that the overspend does not occur at all, meaning the application and review was ultimately not required.
    - If FEI files before it has greater certainty of the overspend amount, the application might request an amount of overspend that is then exceeded again if FEI's forecast was too low. FEI would then need to file again to request approval of this new amount (and may also not have approval prior to the overspend in any event). These timing challenges mean that by the time an application is submitted, the overspend is about to occur or has already occurred.

10.2 Did FBC consider lowering the 25% transfer of funds to compensate for its proposal to remove the pre-approval requirement? In responding, please also provide FEI's views of the pros and cons of such a trade-off.

Response:

No, FEI did not consider lowering the 25 percent threshold for the transfer of funds to compensate for the removal of the pre-approval requirement. As explained in the response to BCOAPO IR1 10.1, the removal of the pre-approval requirement addresses a practical challenge of filing an application and gaining approval before the required transfer needs to occur. It is not related to the 25 percent threshold, but a separate aspect of the existing transfer rules.

10.3 Please explain FEI's current process and timing with respect to DSM reporting of actual results.

Response:

FEI files annual DSM reports with the BCUC by March 31 of each year which provide the actual results of FEI's DSM programs from the year prior.

10.4 Did FBC consider increasing the frequency of reporting to the BCUC as a compensating factor for its proposal for increased flexibility?

Response:

No, FEI did not consider increasing the frequency of reporting to the BCUC, as FEI does not believe that increased reporting (for a time period less than a full year) would add value.

FEI notes that FortisBC Inc. (FBC) previously filed semi-annual DSM reports with the BCUC (the first in October showing results to the end of June and the final report in March showing actual results to year end). FBC requested to remove the mid-year reporting requirement as part of FBC's 2014-2019 Performance Based Ratemaking Plan Application as semi-annual reporting is administratively burdensome without providing additional value to the BCUC.[9] The BCUC

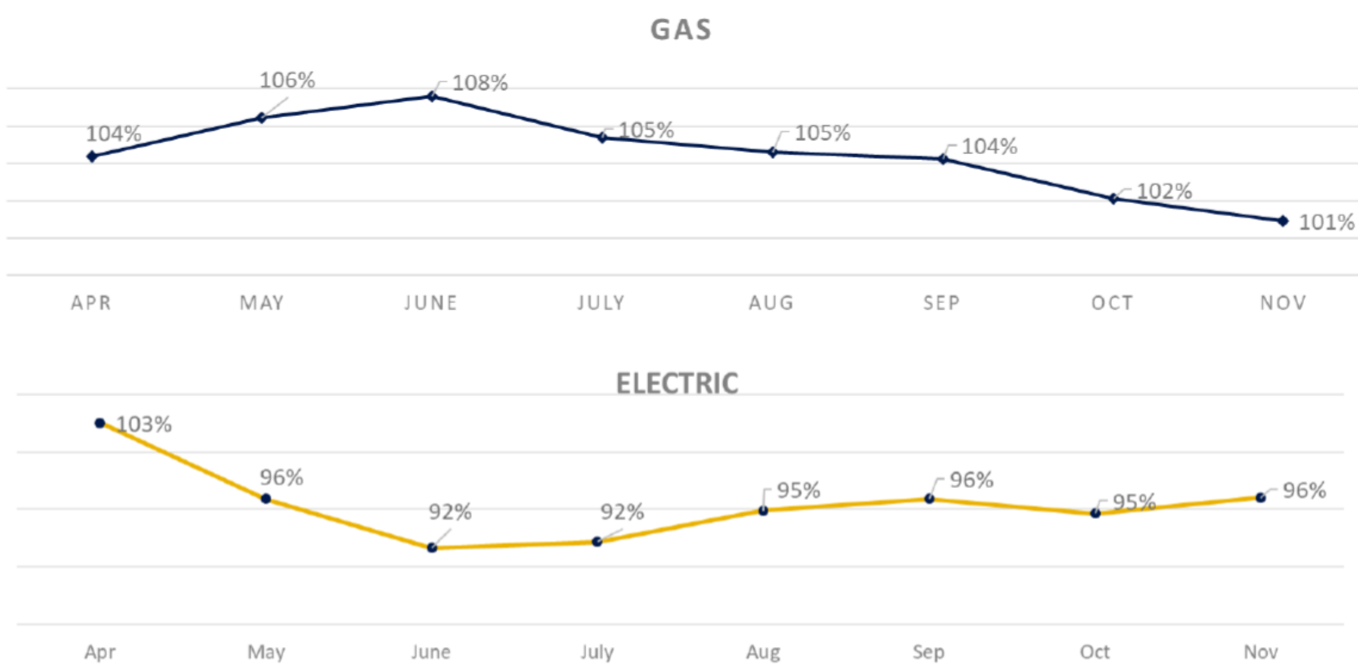
[9] Decision and Order G-139-14, page 244.

approved FBC's request to submit annual rather than semi-annual DSM Reports agreeing that the request was reasonable.

10.5 Please explain, or otherwise clarify, FEI's justification for requesting a 5% variance allowance for 2023 rather than some other percentage.

Response:

The basis for the five percent overspend figure is derived from the average variance in forecasting that FEI and FBC (together FortisBC) have experienced over the past four years, shown month-by-month in the figure below. The forecasting of FBC is relevant as the same teams that forecast FEI expenditures also forecast FBC expenditures. The percentages reflect how close the forecast was in a given month to the actual expenditures at the end of the year as documented in the annual report.



While FortisBC targets expenditures at 100 percent of plan, it is challenging to arrive at a 100 percent level with certainty, especially in the last year of a multi-year plan. While the maximum forecasting variance for DSM programs is 8 percent, 5 percent is a reasonable average.

The 5 percent overspend figure allows FBC to continue to provide programs targeting 100 percent of plan expenditures while reflecting reasonable challenges in forecast accuracy.

Preamble: FEI states:

> "FEI is proposing to increase the amount it includes in in its rate base DSM Deferral account on a forecast basis from the currently approved $30 million to $60 million, effective for 2023." **(Application, page 31)**

> "…FEI expects that at least that level of expenditures to be maintained for the foreseeable future. Aligning the amount forecast in the rate base DSM Deferral account each year more closely with the actual expenditures reduces the financing costs added to the deferral account and reduces overall costs to customers on the non-rate base portion of the DSM Plan expenditures." **(Application, page 31)**

10.6 Given that rate base and the non-rate base deferral account both attract the weighted average cost of capital, please elaborate on how the requested change reduces the financing cost added to the deferral account and reduces the overall cost to customers.

Response:

Some background may be useful to help respond to this question.

FEI originally had just one rate base deferral account for its DSM expenditures, and each year would forecast the additions to the rate base account to include all accepted expenditures. Since, at that time, FEI was at times unable to spend all of the accepted expenditures, the result was that customers were paying a return on rate base on amounts that were ultimately never spent. To avoid this situation, FEI was directed by the BCUC as part of the 2012-2013 Revenue Requirement Application Decision and Order G-44-12 to limit the amount included in the rate base deferral account and to have a separate non-rate base deferral account for any additional amounts that were spent in the year.

FEI's comments above were intended to convey that the requested change will reduce the amount of financing costs that are separately recorded on the non-rate base account (since lower expenditures would be included in that account and more in the rate base account), while still ensuring that customers only pay for what is actually spent (which has the effect of reducing the overall cost to customers).

The specific wording referencing the reduced financing costs being added to the deferral account and the reduced overall cost to customers, was regarding the non-rate base deferral account. By recording a lower amount in the non-rate base account, it will have reduced financing costs and an overall lower cost to customers for this account.

Preamble: FEI states:

> "FEI is also seeking approval within this Application of a rate base deferral account to capture the regulatory costs associated with the review of this Application and proposes to amortize the costs over one-year starting in 2023 to match the time period that the DSM Plan will be in place." **(Application, page 31)**

10.7 Please explain and provide the rationale for how regulatory costs associated with the review of FEI's DSM Plan are currently treated.

Response:

The regulatory costs associated with the reviews of FEI's previous DSM expenditure plan applications have been recorded in deferral accounts. The most recent example is the FEI 2019-2022 Multi-Year DSM Expenditure Schedule Application deferral account, which was approved by Order G-237-18. Please also refer to the responses to the BCUC IR1 17 series.

10.8 Please explain if FEI's proposal is consistent with the practice of other BCUC-regulated utilities such as FBC. If not, please provide FBC's rationale to depart from this norm in its proposed treatment.

Response:

FEI's proposal is consistent with both past and current requests by FEI and FBC. Please also refer to the responses to the BCUC IR1 17 series.

Attachment 6.1

Program Area	Total Expenditures ($000s)					Incremental Annual Gas Savings, Net (GJ)				
	2019	2020	2021	2022	2023	2019	2019	2019	2022	2023
	Actual	Actual	Actual	Plan*	Plan	Actual	Actual	Actual	Plan*	Plan
Residential	$ 22,084	$ 32,880	$ 51,484	$ 34,816	$ 43,994	192,534	336,473	299,709	238,323	250,319
Commercial	$ 11,709	$ 13,571	$ 21,309	$ 19,800	$ 26,570	281,205	334,485	413,589	381,421	563,816
Industrial	$ 6,481	$ 6,124	$ 6,095	$ 8,462	$ 6,848	301,668	269,354	297,760	466,317	628,423
Low Income	$ 6,719	$ 7,176	$ 9,043	$ 10,984	$ 13,251	53,236	76,388	50,660	64,128	77,408
Programs Sub-Total	**$ 46,994**	**$ 59,751**	**$ 87,931**	**$ 74,062**	**$ 90,664**	**828,642**	**1,016,700**	**1,061,717**	**1,150,189**	**1,519,966**
Conservation Education and Outreach	$ 6,059	$ 5,165	$ 4,517	$ 9,433	$ 9,713	1,184	-	58,204	-	81,420
Innovative Technologies	$ 2,027	$ 2,142	$ 3,721	$ 11,871	$ 25,960	-	-	-	-	-
Enabling Activities	$ 8,077	$ 7,761	$ 9,199	$ 8,921	$ 12,010	2,133	16,021	22,612	-	-
Portfolio Level Activities	$ 1,339	$ 1,003	$ 1,477	$ 1,979	$ 2,730	-	-	-	-	-
Programs Sub-Total	**$ 17,501**	**$ 16,070**	**$ 18,913**	**$ 32,204**	**$ 50,413**	**3,317**	**16,021**	**80,816**	**-**	**81,420**
Total Portfolio	**$ 64,495**	**$ 75,821**	**$ 106,844**	**$ 106,266**	**$ 141,077**	**831,959**	**1,032,721**	**1,142,533**	**1,150,189**	**1,601,386**

Program Area	TRC					MRTC					RIM				
	2019	2020	2021	2022	2023	2019	2020	2021	2022	2023	2019	2020	2021	2022	2023
	Actual	Actual	Actual	Plan**	Plan	Actual	Actual	Actual	Plan**	Plan	Actual	Actual	Actual	Plan**	Plan
Residential	0.4	0.7	0.4	0.4	0.4	1.5	1.4	1.4	1.5	1.6	0.4	0.3	0.4	0.3	0.3
Commercial	1.7	1.5	1.3	1.4	1.2	1.8	1.6	1.3	1.5	5.4	0.4	0.4	0.5	0.4	0.7
Industrial	1.5	1.8	2.7	3.1	2.8	1.5	1.8	2.7	3.1	14.2	0.6	0.6	0.8	0.6	1.0
Low Income	3.1	4.5	3.0	3.1	2.1	3.1	4.5	3.0	3.1	2.1	0.3	0.3	0.3	0.2	0.3
Programs Sub-Total															
Conservation Education and Outreach			0.2					1.3					0.2		
Innovative Technologies															
Enabling Activities															
Portfolio Level Activities															
Programs Sub-Total															
Total Portfolio	**0.9**	**1.2**	**0.9**	**1.0**	**0.7**	**1.4**	**1.5**	**1.4**	**1.5**	**1.4*** **	**0.6**	**0.5**	**0.4**	**0.4**	**0.4**

*Planned values are taken from the following:

Order G-138-18 Appendix A

Order G-301-21 Appendix D

Order G-135-21 Appendix C

**Planned Cost effective values are over plan period (2021 to 2022)

***1.4 presents the blended MTRC and TRC value at the Portfolio level unadjusted from Appendix A of the Application