# **FASKEN**

**Fasken Martineau DuMoulin LLP**Barristers and Solicitors
Patent and Trade-mark Agents

550 Burrard Street, Suite 2900 Vancouver, British Columbia V6C 0A3 Canada T +1 604 631 3131 +1 866 635 3131 F +1 604 631 3232

fasken.com

October 3, 2023

File No.: 240148.01116

Christopher R. Bystrom
Direct +1 604 631 4715
Facsimile +1 604 632 4715
cbystrom@fasken.com

### **Electronic Filing**

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

Attention: Patrick Wruck, Commission Secretary

Dear Sirs/Mesdames:

Re: FortisBC Energy Inc. 2024-2027 Demand-Side Management (DSM) Expenditures Plan Application ~ Final Argument

In accordance with the regulatory timetable in the above proceeding, we enclose for filing the Final Argument of FortisBC Energy Inc., dated October 3, 2023.

Yours truly,

#### FASKEN MARTINEAU DUMOULIN LLP

[Original signed by]

Christopher Bystrom\*
\*Law Corporation

Encl.

# **BRITISH COLUMBIA UTILITIES COMMISSION**

# **FORTISBC ENERGY INC.**

# APPLICATION FOR ACCEPTANCE OF DEMAND SIDE MANAGEMENT EXPENDITURES PLAN FOR 2024 TO 2027

**FINAL ARGUMENT** 

**OF** 

**FORTISBC ENERGY INC.** 

**OCTOBER 3, 2023** 

Prepared by: Fasken Martineau DuMoulin LLP - Christopher Bystrom and Niall Rand

# **TABLE OF CONTENTS**

PART	ONE: INTRODUCTION AND OVERVIEW	1
PART	TWO: REPLY TO BCUC REQUESTS	5
A.	The BCUC Has Jurisdiction to Reject Part of an Expenditure Schedule	5
В.	Moving Pilot DSM Measures Out of the Innovative Technologies Program Area  Does Not Require Additional Process	6
PART	THREE: FEI'S 2024-2027 DSM PLAN IS IN THE PUBLIC INTEREST	9
A.	2024-2027 DSM Plan is Supported by Considerations of British Columbia's Energy Objectives	9
В.	2024-2027 DSM Plan is Informed by FEI's Most Recent Long-Term Gas Resource Plan and FEI Has Reasonably Explained the Differences Between the Two Plans	11
C.	2024-2027 DSM Plan is Cost-Effective Pursuant to the Amended DSM Regulation	15
	(a) "Class B Demand-Side Measures" are Phased Out	16
	(b) Legacy DSM Expenditures are Cost-Effective	20
	(c) Non-Legacy DSM Expenditures are Cost-Effective	22
D.	2024-2027 DSM Plan is in the Interests of Persons in BC Who Receive or May Receive Service from FEI	25
	FOUR: FUNDING TRANSFER AND CARRYOVER RULES AND VARIANCE WANCE REMAIN REASONABLE	30
A.	Funding Transfer Rules Remain Reasonable and Appropriate	30
В.	Carryover of Unspent and Overspent Expenditures Is Reasonable and Appropriate	31
C.	Continuation of Total Portfolio Variance Allowance is Reasonable and Appropriate	32
WITH	FIVE: CONTINUATION OF DSM DEFERRAL ACCOUNT TREATMENT IS CONSISTENT I HISTORICAL SPENDING	
PΔRT	SIX. CONCLUSION	24

#### PART ONE: INTRODUCTION AND OVERVIEW

- 1. As set out in its Application for Acceptance of Demand-Side Management Expenditures for 2024-2027 (Application), FortisBC Energy Inc. (FEI) is requesting acceptance from the British Columbia Utilities Commission (BCUC) pursuant to section 44.2 of the *Utilities Commission Act* (UCA) of its demand-side management (DSM) expenditure schedule for 2024-2027 (2024-2027 DSM Plan or DSM Plan).
- 2. FEI's 2024-2027 DSM Plan is the first of FEI's DSM plans to be filed since the *Demand-Side Measures Regulation* (DSM Regulation) was amended on June 27, 2023. Consistent with the goals of the 2021 CleanBC Roadmap to 2030 (Roadmap), the amended DSM Regulation phases out support for conventional gas space and water heating equipment with efficiencies less than 100 percent. Also consistent with the Roadmap, the DSM Regulation increases support for advanced DSM measures, including by requiring the BCUC to make determinations of cost-effectiveness using the Utility Cost Test (UCT) and the avoided cost of renewable natural gas (RNG), hydrogen, synthesis gas and lignin (together referred to as renewable and low-carbon gas). FEI has designed its DSM Plan to meet these new requirements.<sup>1</sup>
- 3. As required by the DSM Regulation, the DSM Plan phases out many of the expenditures for conventional high-efficiency gas space and water heating equipment, and transitions to advanced DSM programming, such as gas heat pumps, dual fuel hybrid heating systems and deeper retrofits.<sup>2</sup> Also consistent with the DSM Regulation, the DSM Plan includes two new program areas:
  - The Indigenous Program Area: The Indigenous Program Area brings all Indigenous DSM expenditures as defined in section 3 of the amended DSM Regulation together in one program area.<sup>3</sup>

<sup>&</sup>lt;sup>1</sup> Exhibit B-2, Application, p. 2.

Exhibit B-2, Application, p. 4.

Exhibit B-2, Application, p. 4.

- The Legacy Expenditures Program Area: The Legacy Expenditures Program Area includes previously committed expenditures for conventional high-efficiency gas space and water heating equipment, as permitted by section 5 of the amended DSM Regulation. These legacy expenditures support customer commitments for purchases of eligible high-efficiency gas equipment made prior to 2024. This includes committed expenditures in residential, commercial and low-income sectors, as well as Indigenous communities.<sup>4</sup>
- 4. In total, the expenditures for the 2024 to 2027 DSM Plan total \$626.7 million, resulting in an estimated 3,897,028 GJ in energy savings.<sup>5</sup> The DSM Plan includes initially higher expenditures in 2024, followed by a levelling out of expenditures in 2025 and 2026, before increasing again in 2027. A key driver of the expenditure levels is the amount of support necessary to accelerate the adoption of advanced DSM measures that currently have low rates of market adoption.<sup>6</sup>
- 5. Each of FEI's DSM program areas and individual DSM programs, including cost-effectiveness test results, are described in the FEI 2024-2027 DSM Expenditures Plan Report (the 2024-27 DSM Plan Report) in Appendix A to the Application. The 2024-27 DSM Plan Report was developed with the help of information gathered through consultation with various program stakeholders and interested parties, including FortisBC's Energy Efficiency and Conservation Advisory Group (EECAG). As with previous plans, FEI undertook an in-depth and varied consultation process to ensure that the plan includes a fair representation of stakeholder and customer interests. FEI considered and assessed key learnings from these consultations as part of its program planning, including ideas for program design and how to evolve and expand program reach. The feedback received from these consultations suggest general endorsement for how DSM is managed and operated by FEI.<sup>7</sup>

<sup>&</sup>lt;sup>4</sup> Exhibit B-2, Application, p. 4.

Exhibit B-2, Application, p. 5.

<sup>&</sup>lt;sup>6</sup> Exhibit B-2, Application, p. 15.

<sup>&</sup>lt;sup>7</sup> Exhibit B-2, Application, p. 6.

- 6. Overall, FEI's 2024-2027 DSM Plan is consistent with British Columbia's energy objectives and FEI's 2022 LTGRP, meets the adequacy and cost-effectiveness requirements of the amended DSM Regulation, reflects significant input from stakeholders, many of which have expressed their support for the plan,8 and responds to government policy encouraging an increase in DSM to support GHG emission reduction targets. FEI therefore submits that its 2024-2027 DSM Plan is in the public interest and should be accepted as filed.
- 7. To assist FEI in managing its DSM Plan, FEI is also seeking the BCUC's approval to continue the previously approved funding transfer, carryover and variance rules, with one adjustment to allow for carryover of overspent amounts. These rules are consistent with those approved by the BCUC for FortisBC Inc.'s (FBC's) 2023-2027 DSM Plan in Decision and Order G-371-22. FEI submits that the proposed rules should be approved.
- 8. Finally, FEI submits that the continuance of the \$60 million forecast rate base additions accounting treatment, as set out in Section 8.2 of the Application, is supported by historical spending levels and is a just and reasonable approach that should be approved.
- 9. A Draft Order is attached as Appendix C to the Application.
- 10. The remainder of this Final Argument is organized around the following points:
  - In response to the questions posed by the BCUC in its cover letter to Order G-251-23 dated September 21, 2023, FEI considers that "part" of an expenditure schedule includes expenditures associated with certain financial years, programs or measures, and submits that no additional regulatory or other process is required when moving pilot DSM measures from the Innovative Technologies Program Area into a program.
  - FEI's 2024-2027 DSM Plan is in the public interest, as it is consistent with British Columbia's energy objectives and FEI's 2022 LTGRP, is informed by stakeholder

Exhibits D-1 to D-25.

Exhibit B-2, Section 8.

input, meets the cost-effectiveness and adequacy requirements of the amended DSM Regulation, and is in the interests of FEI's current and future customers.

- FEI's proposed continuation of the previously approved funding transfer and carryover rules and the total portfolio variance rule, with the addition of allowing for the carryover of overspent expenditures, is reasonable and will provide FEI with the flexibility to manage its DSM portfolio.
- The continued inclusion of \$60 million in the rate base DSM Deferral account is supported by historical expenditure amounts well above this amount, and is a just and reasonable approach.

#### PART TWO: REPLY TO BCUC REQUESTS

- 11. In the cover letter to Order G-251-23 dated September 21, 2023, the BCUC requested that the parties respond to the following specific matters as part of their final submissions:
  - 1. Section 44.2(4) of the *Utilities Commission Act* (UCA) states: (4) The commission may accept or reject, under subsection (3), a part of a schedule. Please discuss the jurisdiction of the BCUC with respect to rejecting part of an expenditure schedule, and what may constitute a "part" of an expenditure schedule for the purposes of subsection 44.2(4), including, but not limited to rejecting FEI's proposed expenditures associated with certain:
    - a. financial years;
    - b. programs; and/or
    - c. measures;
  - In circumstances where FEI wishes to move pilot DSM measures from the Innovative Technologies Program Area into a program that has expenditures and defined cost-effectiveness requirements, whether any regulatory or other process would be required.
- 12. FEI responds to these two matters below.

#### A. The BCUC Has Jurisdiction to Reject Part of an Expenditure Schedule

- 13. In response to the first question from the BCUC, FEI interprets "part" of an expenditure schedule to include expenditures associated with certain financial years, programs or measures.
- 14. The word "part" is not defined in the UCA or the *Interpretation Act*. Therefore, the ordinary definition of the term can be looked to for guidance. Dictionary definitions of "part" include: "some but not all of a thing".<sup>10</sup>
- 15. Further guidance may be taken from past BCUC decisions. The BCUC commented on the breadth of its jurisdiction to accept or reject a part of an expenditure in the context of accepting specific programs in the FBC 2019-2022 DSM Expenditures Application proceeding. In its

https://dictionary.cambridge.org/dictionary/english/part.

Decision, the BCUC noted that both the programs and years of the schedule are subject to review, as follows (at page 13):<sup>11</sup>

Section 44.2.4 of the UCA gives the BCUC latitude to accept or reject part of a schedule. In short, the individual rows (programs) and columns (years) of the schedule are subject to scrutiny and acceptance.

16. While FEI considers that a part of an expenditure schedule includes the expenditures for a particular year, program, or measure, FEI submits that each year, program and measure in its 2024-2027 DSM Plan is justified. FEI submits that the 2024-2027 DSM Plan as a whole is in the public interest and should be accepted.

# B. Moving Pilot DSM Measures Out of the Innovative Technologies Program Area Does Not Require Additional Process

- 17. In response to the second question from the BCUC, FEI submits that no additional regulatory or other process is required when moving pilot DSM measures from the Innovative Technologies Program Area into a program with expenditure and defined cost-effectiveness requirements. Rather, FEI submits that its forecast DSM program expenditures, including those that are a result of measures that have transitioned from the pilot phase, can be reviewed and accepted through this proceeding. FEI submits that this is the most reasonable, efficient and effective approach for the reasons set out below.
- 18. First, the UCA does not contemplate or impose any specific approval or other process when transitioning a pilot DSM measure to a program.
- 19. Second, FEI has included in the 2024-2027 DSM Plan both its forecast Pilot DSM measures in the Innovative Technologies Program Area and the forecast expenditures for DSM measure expenditures that have transitioned from the pilot stage. As such, both are subject to BCUC review and acceptance pursuant to subsections 44.2 of the UCA in this proceeding.

https://docs.bcuc.com/documents/proceedings/2019/doc\_53517\_g-47-19%20-decision-fbc-2019-2022-dsm%20expenditures%20plan%20.pdf.

- 20. Third, the relatively minor differences between pilots and programs do not support the need for additional regulatory or other process. Pilot programs are like regular DSM programs except that they tend to have more limited eligibility requirements and timeframes to participate than programs.<sup>12</sup> Therefore, the substance of a proposed pilot DSM measure reviewed by the BCUC in this proceeding will not substantively change if it is ultimately moved to a program.
- 21. Fourth, FEI will only move pilot DSM measures in the Innovative Technologies Program Area into a permanent program if the results of the pilot are successful and the program is forecast to be cost-effective and achieve reasonable market adoption. The completion of a pilot provides a decision-point for the utility to determine whether to move the measure forward into a permanent program and what changes, if any, are required to support a successful program. Indeed, FEI has developed a rigorous Innovative Technology Selection & Implementation Process, as described in detail in the response to BCUC IR1 11.4, to identify new measures for inclusion in FEI's DSM programs.
- 22. Fifth, investment in innovative technology to increase efficiency and reduce GHG emissions is supported by a BC energy objective<sup>13</sup> and is a key policy consideration in CleanBC given the need for innovation in technology to meet GHG reduction targets. These objectives are manifest in the amended DSM Regulation's support for advanced DSM measures. In FEI's view, imposing additional regulatory hurdles to advance innovative technologies runs counter to these objectives and risks delaying their promotion to full-fledged programs for the benefit of customers.
- 23. Sixth, the BCUC will have ample visibility into FEI's proposed pilot DSM measures in the Innovative Technologies Program Area and their transition to DSM programs through FEI's annual reporting to the BCUC. These annual reports ensure transparency and create accountability for FEI as it implements its DSM plans. All DSM programs, whether newly transitioned from a pilot or not, are subject to design changes to optimize the DSM offerings to customers. FEI has always committed, and has an established track record, of implementing its DSM programs in a way that

Exhibit B-2, Application, Appendix G, p. 11.

<sup>&</sup>lt;sup>13</sup> Clean Energy Act, section 2(d).

maintains compliance with the requirements of the DSM Regulation, including cost effectiveness results, and the expenditure schedules accepted by the BCUC. The BCUC can therefore accept FEI's 2024-2027 DSM Plan with the assurance that it will have ongoing oversight over the plan's implementation.

- 24. Finally, FEI will have additional opportunities to review pilot DSM measures that have transitioned to DSM programs through the review of future DSM expenditure plans. The iterative nature of DSM plans provides ongoing opportunities for the BCUC to exercise oversight over FEI's DSM programming.
- 25. For all of the above reasons, FEI submits that adding additional regulatory or other processes to review the transition of a DSM measure from the pilot to program stage is not necessary and would likely be duplicative of the existing processes, and would potentially unduly delay the implementation of DSM measures that have successfully passed through the pilot stage.

#### PART THREE: FEI'S 2024-2027 DSM PLAN IS IN THE PUBLIC INTEREST

- 26. FEI submits that a consideration of the relevant factors required by the UCA shows that its 2024-2027 DSM Plan is in the public interest and should be accepted. Section 44.2(5) of the UCA states that, in considering whether to accept an expenditure schedule filed by a public utility other than the British Columbia Hydro & Power Authority, the BCUC must consider:
  - a) the applicable of British Columbia's energy objectives;
  - b) the most recent long-term resource plan filed by the public utility under section 44.1 of the UCA, if any;
  - the extent to which the schedule is consistent with the applicable requirements under sections 6 and 19 of the *Clean Energy Act;*<sup>14</sup>
  - d) if the schedule includes expenditures on demand-side measures, whether the demand-side measures are cost-effective within the meaning prescribed by regulation, if any, and
  - e) the interests of persons in British Columbia who receive or may receive service from the public utility.
- 27. FEI discusses below how these considerations support the conclusion that the 2024-2027 DSM Plan is in the public interest.

# A. 2024-2027 DSM Plan is Supported by Considerations of British Columbia's Energy Objectives

28. A consideration of British Columbia's energy objectives, as set out in section 2 of the *Clean Energy Act*, supports acceptance of the 2024-2027 DSM Plan. Specifically, the DSM Plan aligns with five British Columbia energy objectives, as described in Table 5-1 of the Application and reproduced below.

Sections 6 and 9 of the *Clean Energy Act* relate to electricity self-sufficiency and BC Hydro domestic long-term sales contracts, respectively, and are not applicable to FEI or this Application.

Table 5-1: BC's Energy Objectives Met by FEI DSM Activity

Energy Objective	FEI DSM Portfolio
(b) to take demand-side measures and to conserve energy, including the objective of the authority reducing its expected increase in demand for electricity by the year 2020 by at least 66%;	As described in Appendix A to the Application, the DSM Plan will implement demand-side measures as defined in the <i>Clean Energy Act</i> .
(d) to use and foster the development in British Columbia of innovative technologies that support energy conservation and efficiency and the use of clean or renewable resources;	The DSM Plan includes expenditures on Innovative Technology projects, such as development and adoption of gas heat pumps. See Appendix A, Section 9.
(g) to reduce BC greenhouse gas emissions (i) by 2012 and for each subsequent calendar year to at least 6% less than the level of those emissions in 2007, (ii) by 2016 and for each subsequent calendar year to at least 18% less than the level of those emissions in 2007, (iii) by 2020 and for each subsequent calendar year to at least 33% less than the level of those emissions in 2007, (iv) by 2050 and for each subsequent calendar year to at least 80% less than the level of those emissions in 2007, and (v) by such other amounts as determined under the <i>Greenhouse Gas Reduction Targets Act</i> ;	The DSM Plan programs will result in gas savings and commensurate reductions in greenhouse gas emissions of 201,087 tonnes CO2e, which will contribute to the Province's efforts to achieve its GHG reduction targets.
(i) to encourage communities to reduce greenhouse gas emissions and use energy efficiently;	All of FEI's DSM programs encourage communities to reduce greenhouse gas emissions and use energy efficiently.
	Local government and institutional strategic energy planning are supported through Community Education and Outreach and Enabling Activities. See Appendix A, Sections 8 and 10.  Expenditures to support and further develop the BC
	Energy Step Code are included within the Residential, Commercial, Low Income and Indigenous Program Areas and the Community Energy Specialists program. See Appendix A, Sections 3, 4, 6, 7, and 10.
(k) to encourage economic development and the creation and retention of jobs;	FEI's DSM Programs have a broad impact on the provincial economy through improving the productivity of businesses. FEI programs also create new opportunities for investment and employment to support energy efficiency in BC. See Appendix D, Section 7.3.

# B. 2024-2027 DSM Plan is Informed by FEI's Most Recent Long-Term Gas Resource Plan and FEI Has Reasonably Explained the Differences Between the Two Plans

29. The 2024-2027 DSM Plan is broadly informed by both FEI's most recent long-term resource plan (2022 LTGRP) and the 2021 Conservation Potential Review (CPR).<sup>15</sup> While there are a number of differences between the DSM Plan and the 2022 LTGRP, these differences have been explained and there remains alignment between the two plans in a number of important respects.

# The DSM Regulation Now Phases Out Incentives for Conventional Gas Space and Water Heating Systems

30. First, there is an obvious difference between the 2024-2027 DSM Plan and the 2022 LTGRP given that the DSM Regulation was amended well after the 2022 LTGRP was produced and filed. In the 2022 LTGRP, FEI selected the High DSM Setting based on the availability of cost-effective demand-side measures, the objectives of FEI's Clean Growth Pathway, and the need for FEI to reduce GHG emissions in alignment with the Roadmap. However, the 2022 LTGRP and CPR scenarios were prepared and filed before the amended DSM Regulation was finalized, and thus included savings related to conventional gas space and water heating systems, which will now be phased out beginning in 2024. Therefore, FEI is no longer forecasting expenditures and energy savings in line with the "High DSM Setting" in the 2022 LTGRP's Diversified Energy (Planning) Scenario. 18

#### FEI Is Now Transitioning to Advanced DSM

31. Second, the DSM Plan includes more advanced DSM than the 2022 LTGRP. Since the CPR and the 2022 LTGRP analysis were completed, information regarding advanced DSM measures has evolved.<sup>19</sup> For example, additional information has emerged regarding key advanced energy efficiency technologies (e.g., deep energy retrofits, gas heat pumps and hybrid heating systems)

Exhibit B-2, Application, pp. 23-24.

<sup>&</sup>lt;sup>16</sup> Exhibit B-2, Application, p. 23.

Exhibit B-2, Application, p. 23.

Exhibit B-2, Application, p. 24.

Exhibit B-2, Application, p. 24.

that were not modelled in the 2021 CPR. Moreover, the amended DSM Regulation has signaled the transition to advanced DSM, as well as enabling this transition by requiring the use of the UCT with the avoided cost of renewable and low-carbon gas stipulated in the *Greenhouse Gas Reduction (Clean Energy) Regulation* (GGRR).<sup>20</sup> As such, FEI has included these important technologies as part of 2024-2027 DSM Plan, which were not contemplated in the 2022 LTGRP, to realize energy savings and reduce GHG emissions over the planning horizon.<sup>21</sup>

# Expenditures Are Relatively Consistent, With Lower Incremental Energy Savings Due to the Amended DSM Regulation and Other Factors

32. Third, the 2024-2027 DSM Plan expenditures remain relatively consistent with the 2022 LTGRP, while incremental energy savings are lower than the 2022 LTGRP scenarios. These lower savings can be readily explained. Table 5-2 of the Application, reproduced below, provides a comparison of the savings proposed in the DSM Plan against the 2022 LTGRP DSM scenarios by sector.

Table 5-2: Comparison of 2024-2027 DSM Plan and LTGRP Diversified Energy Planning DSM Settings

Forecast Scenario	Incremental Energy Savings (PJ/yr)				Expenditures, Including Inflation (\$Ms)
	Residential <sup>1</sup>	Commercial	Industrial	Total	Total
2024-2027 DSM Plan	1.4	0.8	1.8	3.9	\$626.7
2022 LTGRP Low DSM Setting	0.7	0.9	0.6	2.1	\$57.3
2022 LTGRP Med DSM Setting	2.6	1.0	0.9	4.3	\$365.1
2022 LTGRP High DSM Setting	1.8	2.7	1.3	5.8	\$887.2

33. As shown above, the overall expenditures proposed in the DSM Plan generally fall between the 2022 LTGRP Medium and High DSM Settings, while the energy savings continue to meet and align with the 2022 LTGRP Medium DSM Setting.<sup>22</sup> The DSM Plan expenditures and

21 Exhibit B-2, Application, p. 23.

Exhibit B-5, RCIA IR1 15.2; Exhibit B-6, BCOAPO IR1 2.5.

Exhibit B-2, Application, p. 23.

savings are less than the High DSM Setting in the 2022 LTGRP, between 2024 and 2027, for the following reasons:<sup>23</sup>

- The CleanBC Roadmap, which signaled a policy shift towards advanced DSM activities, was released after FEI's 2022 LTGRP analysis was completed;
- The DSM Plan includes a faster transition to advanced DSM measures as a direct consequence of the amended DSM Regulation; and
- The 2022 LTGRP analysis provides a long-term outlook of DSM potential, using 2019 as a base year for its analysis and, as such, does not address the design of DSM programs (e.g., ramp up requirements for new measures and ramp down of old measures).

While the savings are lower due to the above reasons, the 2024-2027 DSM Plan continues to incentivize activities to achieve long-term gas savings, including by fostering market adoption of advanced DSM measures, the cost-effectiveness of which is enabled by the DSM Regulation.

# Average Cost of Incremental Savings is Higher Due to Transition to Advanced DSM and Inflation

34. Fourth, FEI has explained why the average cost of incremental energy savings (in \$/GJ) for the DSM Plan is higher than the savings contemplated in the three scenarios in the 2022 LTGRP.<sup>24</sup> The difference is shown in Table 1 below. There are several key reasons for the higher average cost of incremental energy savings, all of which are beyond FEI's control and reflect the need to conform to provincial policy direction or market conditions.

Table 1: Average Cost of Incremental Energy Savings (\$/GJ)

Forecast Scenario	\$/GJ
2024-2027 DSM Plan	\$159
2022 LTGRP Low DSM Setting	\$27
2022 LTGRP Med DSM Setting	\$85
2022 LTGRP High DSM Setting	\$153

Non-space and non-water heating measures (including the Industrial sector) in the DSM Plan also remain consistent with the savings and expenditures assumptions of the High DSM Scenario: Exhibit B-2, Application, pp. 24-25.

<sup>&</sup>lt;sup>24</sup> Exhibit B-3, BCUC IR1 7.1.

- 35. First, conventional space and water heating equipment achieved higher energy savings with lower program expenditures than advanced DSM measures. Conventional equipment had higher market adoption and had been in the market for several years, resulting in lower incremental costs (e.g., required less marketing and trade ally support for sustained momentum). With the introduction of the amended DSM Regulation, incentives for conventional space and water heating equipment are being phased out, thus removing these lower per unit costs from the 2024-2027 DSM Plan.<sup>25</sup>
- 36. Second, advanced DSM measures require significant supports, such as marketing, trade ally support and higher customer incentives, to encourage early market adoption. This is consistent with FEI's experience incenting prior technologies that are in an early phase of adoption, including condensing gas equipment.<sup>26</sup> As the market for advanced DSM measures matures over time, as was the case with high-efficiency conventional space and water heating equipment, the unit costs per energy savings will generally improve.<sup>27</sup>
- 37. Third, based on feedback from FEI's customers, inflationary pressures have increased costs for projects resulting in delay and cancellations. Additional incentive support ensures the continued viability of projects that would otherwise be viable but for these inflationary pressures and encourage the adoption of all measures.<sup>28</sup>

### DSM Plan Continues to Align with 2022 LTGRP in Many Respects

38. Despite the above differences, the 2024-2027 DSM Plan and 2022 LTGRP nonetheless continue to align in a number of respects. FEI developed the DSM Plan considering the inputs and results of the 2022 LTGRP, and the measures in the DSM Plan not impacted by changes to the DSM Regulation remain generally aligned with the LTGRP.<sup>29</sup> Overall, consistent with the LTGRP, the DSM Plan continues to reflect a portfolio of DSM initiatives that are cost-effective and

FBC had a similar need for supports to encourage adopted with its incentives for LED lighting: Exhibit B-3, BCUC IR1 7.2.

Exhibit B-3, BCUC IR1 7.2.

Exhibit B-3, BCUC IR1 7.2.

<sup>&</sup>lt;sup>28</sup> Exhibit B-3, BCUC IR1 7.2.

Exhibit B-2, Application, p. 24.

adequate pursuant to the DSM Regulation, consisting of residential, commercial, industrial, low income, Indigenous, innovative technologies, conservation education and outreach, as well as enabling DSM activities. The 2022 LTGRP contemplates that FEI will implement this long-term plan via successive DSM plans that consider the prevailing market, regulatory and end-use technology conditions. As described above, many of the differences between the two plans are directly attributable to the changing conditions of this kind, including significant changes to the DSM Regulation and development of advanced DSM technologies.<sup>30</sup>

- 39. Ultimately, the DSM Plan continues to be a cost-effective and adequate portfolio that includes many of the initiatives presented in the 2022 LTGRP and reflects a consistent level of expenditures when compared to prior years.
- 40. In summary, FEI submits that it has reasonably explained the differences between the DSM Plan and the 2022 LTGRP and that the two plans remain reasonably aligned when considering the significant changes that have occurred since the 2022 LTGRP was produced and filed.

### C. 2024-2027 DSM Plan is Cost-Effective Pursuant to the Amended DSM Regulation

41. FEI's 2024-2027 DSM Plan is designed to be cost-effective under the amended DSM Regulation. First, class B demand-side measures, which are deemed to be not cost-effective as of January 1, 2024, are phased out as per the DSM Regulation.<sup>31</sup> Second, pursuant to the transitional provisions of the DSM Regulation, FEI's Legacy DSM expenditures are cost-effective under the terms of the DSM Regulation prior to the recent amendments. Third, the non-legacy expenditures in the DSM Plan are cost-effective using the UCT as required by the amended DSM Regulation. These three components are addressed below.

Exhibit B-2, Application, p. 25.

The BCUC must compare the costs and benefits of these measures individually (i.e., not as part of the portfolio) and cannot determine that such measures are cost-effective unless they have a UCT of 50 or greater: see DSM Regulation, s. 2.1.

### (a) "Class B Demand-Side Measures" are Phased Out

42. As discussed above, the 2024-2027 DSM Plan phases out incentives for conventional high-efficiency gas space and water heating equipment in accordance with the DSM Regulation. The DSM Regulation defines DSM measures that directly or indirectly encourage the acquisition or installation of gas-fired space or domestic water heating equipment as a "class B demand-side measure".<sup>32</sup> Section 2.1 of the DSM Regulation requires the BCUC to compare the costs and benefits of these measures individually (i.e., not as part of the portfolio) and such measures are cost-effective only if they have a UCT of 50 or greater. Given these cost-effectiveness requirements,<sup>33</sup> any measures falling within the definition of class B demand-side measures are not cost-effective.

#### DSM Plan Does Not Include Class B Demand Side Measures

43. Given the requirements noted above, FEI has not included class B demand-side measures in the 2024-2027 DSM Plan. FEI's existing marketing and education initiatives that are focused on promoting efficient conventional gas-fired equipment and communicating offer end-dates will wrap up before the end of 2023. FEI does not plan to promote conventional gas-fired space and water equipment through its DSM programs after 2023, with the potential exception of audience-targeted messaging for equipment that continues to be allowed under the amended DSM Regulation, such as for conventional water heaters to low income customers and Indigenous communities.<sup>34</sup>

# DSM Plan Includes Measures Excluded from Definition of Class B Demand Side Measures

44. The DSM Plan includes incentives for measures that are excluded from the definition of a "class B demand-side measure," including, for example, incentives for gas-fired heat pumps, gas-fired radiant tube or unit heaters, dual fuel heat pump systems, as well as for conventional high-

<sup>32</sup> DSM Regulation, s. 1.1.(1).

The BCUC must compare the costs and benefits of these measures individually (i.e., not as part of the portfolio) and cannot determine that such measures are cost-effective unless they have a UCT of 50 or greater: see DSM Regulation, s. 2.1.

Exhibit B-3, BCUC IR1 4.2.

efficiency equipment specific to the Low-Income and Indigenous program areas. As these measures are excluded from the definition of a class B demand-side measure, their inclusion in the 2024-2027 DSM Plan remains compliant with the amended DSM Regulation. Table 5-4 of the Application provides a summary of all of the non-legacy measures in the DSM Plan that are excluded from the definition of a class B demand-side measure, including dual fuel hybrid systems and gas heat pumps which, as discussed below, include a Seasonal Coefficient of Performance (SCOP) requirement to qualify for exclusion.<sup>35</sup>

# FEI Has Provided the Necessary Information for the BCUC to Determine that Proposed Measures Meet the Seasonal Coefficient of Performance (SCOP) Requirement

- 45. FEI's proposed non-legacy measures meet the SCOP requirement in the amended DSM Regulation and are properly exempted from the definition of a class B demand-side measure.<sup>36</sup>
- 46. As part of the 2024-2027 DSM Plan and across several programs, FEI has proposed two integrated dual-fuel space heating systems (residential and commercial), as well as commercial gas heat pumps with conventional gas backup, with SCOP requirements.<sup>37</sup> As shown in the table below, the SCOP results for each proposed measure meet the associated SCOP requirement:<sup>38</sup>

TECHNOLOGY	AMENDED DSM REGULATION SCOP REQUIREMENT	SCOP RESULT
Residential dual-fuel hybrid systems	Section 1.1(2)(i)  Equal to or greater than 1.5	Climate Zone 4: 2.07 Climate Zone 5: 1.12
		Aggregate: <sup>39</sup> 1.60
Commercial dual-fuel roof top units	Section 1.1(2)(i)	Climate Zone 4: 2.86
	Equal to or greater than 1.5	Climate Zone 5: 2.34

Exhibit B-2, Application, pp. 28-30.

Exhibit B-2, Application, p. 3.

Exhibit B-3, BCUC IR1 8.6.

Exhibit B-3, BCUC IR1 8.6.

Assumes 50% participation in Climate Zone 4 and 50% in Climate Zone 5.

TECHNOLOGY	AMENDED DSM REGULATION SCOP REQUIREMENT	SCOP RESULT
		Aggregate: <sup>40</sup> 2.60
Gas heat pumps with conventional gas backup	Section 1.1(2)(f)	Domestic hot water: 1.20
Conventional gas backup	Equal to or greater than 1.0	Space heating priority with domestic hot water: 1.18
		Ventilation priority with domestic hot water: 1.25
		Aggregate: <sup>41</sup> 1.21

- 47. In order to enable the BCUC to assess the likely annual SCOP for the proposed measures, please refer to the response to BCUC IR1 8.6 in which FEI provides a more detailed breakdown of: (1) each integrated dual-fuel system technology; (2) proposed program and measures; and (3) the aggregate SCOP and associated data sources.
- 48. Importantly, the amended DSM Regulation requires that dual fuel hybrids meet the SCOP requirement <u>in aggregate</u> across both Climate Zone 4 and 5 (i.e., no SCOP requirements in Climate Zone 6 and above) and that gas heat pumps meet the incentive requirements <u>in aggregate</u> across all climate zones. Based on its current assumptions, FEI expects that the proposed incentives will meet these requirements in aggregate across all climate zones. Therefore, FEI does not currently intend to limit the offer of incentives in specific climate zones. If it were ultimately not feasible to meet the SCOP requirements after the pilot or program evaluation using current assumptions, FEI would evaluate amending the qualifying criteria to lower the setback temperature (for dual fuel hybrid systems) or increasing the equipment efficiency requirements before considering not offering a measure in a specific climate zone. 44

<sup>40</sup> Assumes 50% participation in Climate Zone 4 and 50% in Climate Zone 5.

Assumes majority participation in Climate Zone 4 with 50% being for domestic hot water, 25% for space heating and 25% for ventilation.

Exhibit B-3, BCUC IR1 8.4.

<sup>&</sup>lt;sup>43</sup> Exhibit B-3, BCUC IR1 8.4.

Exhibit B-3, BCUC IR1 8.4.

- 49. FEI will use a source hierarchy to ensure the best available data is used in estimating the SCOP for these technologies. Depending on the availability of data, FEI will use the following data sources in the following order of priority: (1) desktop modelling; (2) third-party studies; (3) FEI pilot data; and (4) FEI program evaluation. In particular, because dual fuel hybrid systems and gas heat pump measures will be introduced as new measures in existing programs, those programs will continue to be evaluated in accordance with the evaluation strategy noted in Section 7 of the 2024-2027 DSM Plan. The evaluations will include representative measurement and verification as part of the impact evaluation to determine an average evaluated SCOP across Climate Zones 4 and 5 for dual fuel hybrids and all Climate Zones for gas heat pumps, in addition to the regular impact evaluation parameters. FEI intends to submit its sources for SCOP assumptions each year as part of its annual DSM reporting, thus enabling the BCUC to confirm that FEI is meeting section 1.1(2) of the amended DSM Regulation.
- 50. Finally, in direct response to stakeholder feedback, FEI is also proposing to support Hybrid Dual Fuel Hydronic Systems in the Commercial Prescriptive Program. As program design is in the early stages, and unlike the measures outlined above, FEI does not have measure data available to assess the SCOP at this time. However, consistent with FEI's practice of maintaining compliance with the DSM Regulation in the implementation of its DSM Plan, FEI will only proceed with support for Hybrid Dual Fuel Hydronic if it can design a program that meets the SCOP requirements. Assuming FEI can do so, and is therefore able to proceed with the measure as planned, FEI will submit SCOP data to show compliance with the SCOP requirements of the amended DSM Regulation in its annual DSM reports. If FEI is unable to design a program that meets the SCOP requirements and is not able to proceed with the measure, FEI will report on this variance from plan in its annual DSM reports. <sup>48</sup> FEI submits that its commitment to only proceed

Exhibit B-3, BCUC IR1 8.2.

For example, at this time, FEI is relying on a pre-feasibility study that used desktop modeling for its residential dual-fuel hybrid system SCOP assumptions. However, FEI is currently conducting a pilot on residential dual-fuel hybrid systems and intends to use that data for SCOP assumptions once the pilot evaluation is completed in 2024. The commercial gas heat pump SCOP assumptions use evaluated results from the gas heat pump pilot, with the most recent phase completed in 2021: Exhibit B-3, BCUC IR1 8.2.

Exhibit B-3, BCUC IR1 8.2.

Exhibit B-3, BCUC IR1 8.6.

with Hybrid Dual Fuel Hydronic Systems if it can meet the SCOP requirements, and FEI's accountability to the BCUC in its Annual Reports, should provide the requisite confidence to the BCUC that all of the integrated dual-energy space heating systems acquired or installed, when considered in aggregate, will likely have an annual average seasonal coefficient of performance equal to or greater than 1.5.

### (b) Legacy DSM Expenditures are Cost-Effective

- 51. FEI's Legacy Expenditures Program Area is cost-effective based on section 5 of the amended DSM Regulation, which requires that these expenditures be evaluated for cost-effectiveness under the terms of the DSM Regulation as it existed prior to the recent amendments.
- 52. Section 5 of the amended DSM Regulation includes transitional provisions enabling FEI to fulfil commitments to residential, low income, Indigenous and commercial customers for incentives made under the 2023 DSM Plan period for class B demand-side measures (i.e., conventional high-efficiency gas space and water heating equipment).<sup>49</sup> Consistent with section 5 of the amended DSM Regulation, the 2024-2027 DSM Plan's Legacy Expenditures Program Area supports the following subset of customers in the context of both retrofits and new construction:<sup>50</sup>
  - Customers with written commitments from FEI for class B demand-side measures made prior to December 31, 2023 (i.e., customers that have a written commitment to an incentive for 2024 onwards).
  - Customers without written commitments but who meet the program terms and conditions and purchase and/or install a class B demand-side measure before December 31, 2023 (i.e., eligible purchases from 2023 that are applied for by the end of 2024).

Exhibit B-2, Application, Table 5-5 (p. 31).

<sup>&</sup>lt;sup>50</sup> Exhibit B-2, Application, Table 5-5 (p. 31); Exhibit B-3, BCUC IR1 10.2 and 10.3.

- 53. FEI's Legacy Expenditures Program Area is transitional only, with legacy expenditures making up a relatively small percentage of the overall DSM Plan portfolio.<sup>51</sup> FEI expects that the overall volume of applications under the Legacy Expenditures Program Area will decrease between 2024-2027 as projects conclude.<sup>52</sup> For example, FEI only expects one measure will incur expenditures after the end of 2027, reflecting its unique terms and conditions which enable projects to be completed up to 5 years after initial commitment.<sup>53</sup> FEI has not included marketing and advertising as part of the legacy expenditures in the 2024-2027 DSM Plan, and has instead shifted its focus to advising customers that incentives for these measures will be discontinued in 2023 so that they can incorporate the information into their budgeting and planning processes.<sup>54</sup>
- 54. Appendix E to the Application sets out the cost-effectiveness methodology FEI used for legacy expenditures, which mirrors that of the 2023 DSM Plan accepted by the BCUC. 55 Measures falling within the Legacy Expenditures Program Area are subject to the cost-effectiveness provisions of the pre-June 30, 2023 DSM Regulation, using the total resource cost (TRC) and modified TRC (mTRC) tests, and have already been assessed by the BCUC to be cost-effective as part of the 2023 DSM portfolio. 56 The amended DSM Regulation does not permit the BCUC to use the Ratepayer Impact Measure (RIM) to assess cost-effectiveness of legacy measures or the overall public interest of the DSM Plan. 57
- 55. The Legacy Expenditures Program Area is cost-effective as it has a blended TRC and mTRC value of 1.5.<sup>58</sup> In order to calculate the mTRC, representing the vast majority of the Legacy Expenditures Program Area budget, FEI used a zero-emission energy alternative (ZEEA) value of

For example, mTRC legacy expenditures make up less than 10 percent of the overall DSM Plan portfolio: Exhibit B-3, BCUC IR1 11.3.

<sup>&</sup>lt;sup>52</sup> Exhibit B-3, BCUC IR1 10.2.

For example, customers who apply to the Performance Program - New Buildings in 2023 would have until 2028 to complete their project and apply for an incentive: Exhibit B-3, BCUC IR1 10.4.

Advertising began in late August 2023 to inform customers of the application deadlines for measures that will no longer be available pursuant to the amended DSM Regulation and is planned to end by December 2023: Exhibit B-2, BCUC IR1 10.1.

<sup>&</sup>lt;sup>55</sup> Exhibit B-2, Application, Appendix E.

Exhibit B-2, Application, Table 5-5 (p. 31).

<sup>&</sup>lt;sup>57</sup> Exhibit B-3, BCUC IR1 14.2; see also Exhibit A2-2, slide 24.

Exhibit B-2, Application, p. 36.

- 22 -

\$106/MWh, as this is the ZEEA value FEI used in its 2023 DSM Plan Application. However, the Legacy Expenditures Program Area continues to be cost-effective using the lower ZEEA of \$70/MWh based on BC Hydro's most recent long-run marginal cost filed in the ongoing 2021 Integrated Resource Plan proceeding.<sup>59</sup>

56. In short, the Legacy Expenditures Program Area enables FEI to honour existing commitments to its customers from the prior DSM Plan, thus preventing undesirable consequences to customers and FEI, as well as continuing to support provincial GHG reduction targets. In addition to the loss of trust and likely future participation from customers and trade allies, FEI expects that not honouring legacy DSM commitments would have a direct financial impact on customers who have paid for legacy energy efficiency projects assuming an incentive was available. FEI has identified additional consequences in the response to BCUC IR1 11.5.60

57. The Legacy Expenditures Program Area is, therefore, an important component of the 2024-2027 DSM Plan and is consistent with the amended DSM Regulation.

## (c) Non-Legacy DSM Expenditures are Cost-Effective

- 58. Consistent with the amended DSM Regulation, the non-legacy expenditures in the DSM Plan are cost-effective using the UCT calculated at the portfolio level for the 2024-2027 plan period.<sup>61</sup>
- 59. According to section 4 (1.1) of the amended DSM Regulation, the BCUC must make determinations of cost-effectiveness:
  - by applying the UCT; and

٠

<sup>&</sup>lt;sup>59</sup> Exhibit B-3, BCUC IR1 11.2 and 11.4.

<sup>60</sup> Exhibit B-3.

Exhibit B-2, Application, Section 6.

- using the avoided cost of natural gas equal to the avoided cost of distribution plus \$34.07 per GJ,<sup>62</sup> escalating by the All-items Consumer Price Index<sup>63</sup> (equal to the maximum purchase cost of renewable and low-carbon gas outlined in section 9 of the GGRR).<sup>64</sup>
- 60. Consistent with the above requirements, the 2024-2027 DSM Plan is cost-effective using the UCT, with a portfolio UCT cost-effectiveness result of 2.1.<sup>65</sup> This score passes the threshold of 1.0 at the portfolio level, meaning that the benefits from DSM exceed FEI's incentive and administration cost for the proposed DSM portfolio of programs and, therefore, the DSM portfolio is cost-effective.<sup>66</sup>
- 61. The BCUC's consistent practice has been to evaluate cost-effectiveness at the portfolio level. This has been the BCUC's practice for DSM expenditure schedules filed by FEI, FBC, BC Hydro and Pacific Northern Gas.<sup>67</sup>
- 62. Assessing cost-effectiveness at the portfolio level is a beneficial approach, as it:
  - provides flexibility for FEI to implement programs;
  - allows for a more equitable balance of expenditures and savings across sectors;
  - enables increasing levels of efficiency (e.g., absorbing advanced DSM measures that are relatively new to the market); and
  - is consistent with the treatment of class A demand-side measures and public awareness programs, which the BCUC must assess at the portfolio level.<sup>68</sup>

As explained in the response to BCUC IR1 12.3 (Exhibit B-3), the avoided cost of distribution is a per gigajoule cost and is a proxy for the avoided incremental system improvement costs associated with adding additional load. The calculation for the avoided cost of distribution is consistent with the System Improvement (SI) factor in FEI's Main Extension (MX) Test.

<sup>&</sup>lt;sup>63</sup> Exhibit B-3, BCUC IR1 12.1 and 12.2.

<sup>&</sup>lt;sup>64</sup> Exhibit B-2, Application, p. 33 and Appendix A, p. 7.

<sup>&</sup>lt;sup>65</sup> Exhibit B-2, Application, p. 36; Exhibit B-6, BCOAPO IR1 2.5.

As shown in Table 1 of the response to BCUC IR1 12.7 (Exhibit B-3), the UCT results at the Program Area level are all above 1.0, including when advanced DSM measures are considered independently.

Exhibit B-2, Application, p. 35.

<sup>&</sup>lt;sup>68</sup> Exhibit B-2, Application, p. 35.

- 63. To ensure that the portfolio meets a UCT of 1.0 on an annual basis, FEI will continue its practice of monitoring DSM programs on a monthly basis<sup>69</sup> and continue to report on individual DSM program cost-effectiveness results in its DSM Annual Reports, along with the individual program cost-effectiveness projections provided in the DSM Plan.<sup>70</sup>
- 64. The UCT is the only prescribed test under the amended DSM Regulation.<sup>71</sup> However, FEI provided additional cost-effectiveness calculations for information purposes, just as it has done with prior DSM plans.
- Despite being a purely economic screen that only considers incentives payable from FEI to participants, the PCT can inform program design by providing insight into energy bill impact on participants. The PCT, however, cannot be relied on as the sole indicator of whether incenting a measure is in the customer's best interest.<sup>73</sup> PCT measures with a score below 1.0 can still be a net benefit to customers,<sup>74</sup> and FEI has included such measures in programs as part of the 2023 and 2024-2027 DSM plans.<sup>75</sup> While the PCT may be a useful tool for program design, it cannot be used by the BCUC to assess the cost-effectiveness of the 2024-2027 DSM Plan.
- 66. FEI has also provided RIM values, which it has corrected in response to BCUC IR1 14.1. RIM values using the avoided cost of conventional gas can be considered an evaluation of how the rates are impacted in the short-term, while RIM using the avoided cost of RNG can be considered an evaluation of how the rates may be impacted in the long-term as FEI transitions its energy supply to be predominantly renewable and low-carbon gases. This latter RIM value is consistent with the approach to the UCT in the amended DSM Regulation. When using the

<sup>&</sup>lt;sup>69</sup> Please refer to Exhibit B-3, BCUC IR1 6 series for further information regarding how FEI sets incentive levels.

Exhibit B-2, Application, p. 36.

<sup>&</sup>lt;sup>71</sup> Exhibit A2-2, slide 24.

Exhibit B-2-1, Errata, Appendix B, p. 1.

<sup>&</sup>lt;sup>73</sup> Exhibit B-3, BCUC IR1 13.1 and 13.2.

For example, the PCT does not take into consideration non-economic factors such as comfort, resilience, environmental benefits, benefits of adding space cooling and other customer preferences – all of which provide value but are difficult to quantify. See Exhibit B-3, BCUC IR1 13.2 which identifies additional considerations.

<sup>&</sup>lt;sup>75</sup> Exhibit B-3, BCUC IR1 13.4 and 13.5.

avoided cost of RNG, the DSM Plan has a positive RIM at the portfolio and at the residential, commercial and industrial sector levels.<sup>76</sup>

67. In summary, FEI submits that its 2024-2027 DSM Plan is cost-effective in accordance with the amended DSM Regulation.

# D. 2024-2027 DSM Plan is in the Interests of Persons in BC Who Receive or May Receive Service from FEI

68. FEI submits that its 2024-2027 DSM Plan is in the interests of customers and potential customers, as it will encourage energy efficiency and conservation, reduce GHG emissions, benefit the economy, and is cost-effective in accordance with the amended DSM Regulation. Individual customers that avail themselves of DSM measures will also reduce their gas consumption and GHG emissions.<sup>77</sup> FEI describes some of the key benefits of the 2024-2027 DSM Plan in further detail below.

#### **DSM Plan Will Reduce GHG Emissions**

69. First, consistent with the goals of the amended DSM Regulation, FEI's 2024-2027 DSM Plan supports GHG emissions reductions through both the market transformation of higher efficiency natural gas equipment and investment in the acceleration of advanced DSM adoption. As shown in Table 1-3 of the Application, the 2024-2027 DSM Plan will result in an estimated 201,087 t CO2e/yr in net incremental GHG reductions, or a total of 744,762 t CO2e of lifetime<sup>78</sup> GHG reductions. Reducing GHG emissions has both a local and global benefit to participating customers and non-participating customers. Energy efficiency is also typically a lower cost per tonne GHG reduction tool compared to other methods, such as carbon capture and fuel-switching.<sup>80</sup>

Exhibit B-2, Application, p. 32.

<sup>&</sup>lt;sup>76</sup> Exhibit B-3, BCUC IR1 14.1.

Lifetime in this context (and in the context of annual gas savings) refers to including the entire stream of savings from measures supported between 2024 and 2027 into the future (by measure life) and annualizing that to present time to show the total value of the stream of savings.

<sup>&</sup>lt;sup>79</sup> Exhibit B-2, Application, p. 6.

Exhibit B-3, BCUC IR1 7.2.

### DSM Plan Will Accelerate Transition to Advanced DSM

- 70. The DSM Plan will accelerate the transition towards advanced DSM measures, which has a number of advantages beyond GHG reductions, including:<sup>81</sup>
  - Market transformation reliant on the adoption of advanced DSM measures is achieved in a shorter duration;
  - Better preparing the market for anticipated higher equipment energy efficiency standards and code changes;
  - Better supporting Provincial and municipal greenhouse gas reduction policies and strategies; and
  - Maintaining hard-developed momentum of trade allies towards promoting an energy efficient marketplace by keeping DSM programs and a focus on higher efficiency in market.

Moreover, as equipment replacement is often done on a 10-to-20-year cycle, with early replacement rarely happening until equipment is at least five years old, a non-participant as part of this DSM Plan may be interested in future incentives and will ultimately derive value from funding the programs transforming the market as part of the 2024-2027 DSM Plan.<sup>82</sup>

#### DSM Plan Will Result in Gas Savings

71. As shown in Table 1-3 of the Application, the 2024-2027 DSM Plan will result in an estimated 3,897,028 GJ/year in net incremental annual gas savings, or a total of 14,433,377 GJ in lifetime net gas savings.<sup>83</sup> This will benefit customers directly, through reduced bills, as well as accelerating market transformation for measures that will comply with more stringent future efficiency requirements, which is a value to both participating and non-participating ratepayers.<sup>84</sup>

Exhibit B-3, BCUC IR1 7.3.

Exhibit B-3, BCUC IR1 7.2.

Exhibit B-2, Application, p. 6.

Exhibit B-3, BCUC IR1 7.2.

# DSM Plan Reflects a Fair Representation of Stakeholder Interests

- 72. Based on the in-depth and varied consultation process described in Section 4.1 of the Application, FEI considers that the 2024-2027 DSM Plan includes a fair representation of stakeholder and customer interests. <sup>85</sup> FEI's DSM planning process includes consultation at nearly every step, and the 2024-2027 DSM Plan has been shaped by approximately 80 consultation interactions from program up to portfolio level. <sup>86</sup> FEI consulted with various parties, including communities, customers, contractors, manufacturers, Indigenous groups, energy advisors, interest groups, partners, program implementers and the EECAG. The forms of consultation included workshops, webinars, surveys and individual outreach.
- 73. Like past DSM plans, a consistent piece of feedback received from the consultations was general endorsement for how DSM is managed and operated by FEI. None of the consultations suggested that any significant change in approach was required.<sup>87</sup>
- 74. Directional feedback from the consultations, which FEI took into account in the development of the 2023 DSM Plan, included:<sup>88</sup>
  - Expanding Indigenous-specific supports;
  - Further support for energy efficient opportunities in the Industrial sector;
  - Support for hybrid systems and gas heat pump adoption;
  - Dedicated assistance for customers throughout life-cycle of project across all sectors;
  - Providing strong incentives to encourage complex retrofits;
  - More education, training and resources for customers, contractors and consultants;
  - Supporting trades outside of mechanical contractors;
  - Continuing to support specific offers for rental apartments;
  - Maintaining simplicity in program offers and reducing barriers wherever possible;

Exhibit B-2, Application, p. 12.

<sup>85</sup> Exhibit B-2, Application, pp. 16-17.

<sup>86</sup> Exhibit B-2, Application, p. 16.

<sup>88</sup> Exhibit B-2, Application, pp. 15-16.

- Reviewing the Evaluation, Measurement and Verification best practice; and
- Aligning with BC Hydro and provincial program offers.
- 75. FEI outlines the actions it took to incorporate this feedback into the 2024-2027 DSM Plan in Table 4-1 of the Application. For example, to provide strong incentives to encourage complex retrofits, FEI has proposed a new residential offer to encourage deeper retrofits and increasing commercial and industrial performance incentives to encourage more building envelope, comprehensive retrofits.<sup>89</sup>
- 76. Given this consultation process, the expenditures, savings, and cost-effectiveness forecast for the DSM Plan is a direct outcome of the sum of individual program development and stakeholder engagement activities.<sup>90</sup>

### **Substantial Letters of Support**

77. Consistent with the above, as of the time of filing this submission, 25 diverse stakeholders have filed substantial letters of support for FEI's 2024-2027 DSM Plan:<sup>91</sup>

Entities that have Filed Letters of Support for the 2024-2027 DSM Plan

Aboriginal Housing Management Association	Base6	BC Lions Football LP	BC Non-Profit Housing Association
British Columbia Housing Association	Canadian Home Builders Association	City of Kamloops	City of Kelowna
City of Nelson	City of Penticton	Clearesult Consulting, Inc.	Ecolighten Energy Solutions
First Nations Housing and Infrastructure Council of BC	First Nations Energy and Mining Council	Fraser Basin Council	Green Construction Research and Training Centre
GreenStep Solutions	Home Performance Stakeholder Council	Landlord BC	Musqueam Housing Department
Regional District of Central Kootenay	Regional District of Kootenay Boundary	Thompson Okanagan Tourism Association	Tsleil-Waututh Nation
UBC Okanagan			

<sup>89</sup> Exhibit B-2, Application, pp. 12-13.

<sup>&</sup>lt;sup>90</sup> Exhibit B-4, CEC IR1 4.2.

<sup>91</sup> Exhibits D-1 to D-25.

- 78. Each of the above entities has explained the basis of their support and how acceptance of FEI's 2024-2027 DSM Plan will help them achieve their goals. FEI submits that these letters demonstrate that there is wide and substantial support for the DSM Plan.
- 79. In summary, FEI submits that its proposed 2024-2027 DSM Plan is in the interests of customers and should be accepted as filed.

# PART FOUR: FUNDING TRANSFER AND CARRYOVER RULES AND VARIANCE ALLOWANCE REMAIN REASONABLE

80. As described in Section 8.1 of the Application, FEI is requesting to continue the funding transfer and carryover rules and the allowed percentage variance within the DSM portfolio, with one proposed change to the funding carryover rules consistent with the rules approved for FBC. FEI addresses these requests below.

### A. Funding Transfer Rules Remain Reasonable and Appropriate

- 81. FEI proposes to continue the funding transfer rules approved by Decision and Order G-45-23, as follows:
  - FEI does not require approval to transfer funds into an approved program area;
  - FEI requires approval to transfer funds greater than 25 percent out of a program area;
  - There are no limits on how much one program area can gain;
  - FEI is required to report on any transfers into and out of program areas in its DSM annual report to the BCUC; and
  - The Innovative Technologies program area is included in the funding transfer rules for FEI.
- 82. These rules will continue to provide FEI with flexibility to manage its DSM portfolio more effectively as noted by the BCUC in Decision and Order G-45-23.<sup>92</sup> These rules are also consistent with those approved for FBC in Decision and Order G-371-22 regarding FBC's 2023-2027 DSM Plan Application.
- 83. FEI will continue to report on funding transfers in its annual reporting on DSM to the BCUC. As noted by the BCUC when approving these rules, FEI acknowledges that the BCUC retains

<sup>&</sup>lt;sup>92</sup> Exhibit B-2, Application, p. 39; Decision and Order G-45-23, p. 22.

its ability to determine that a transfer is not in the public interest, thus disallowing recovery through rates.<sup>93</sup>

### B. Carryover of Unspent and Overspent Expenditures Is Reasonable and Appropriate

84. FEI is seeking approval to carryover unspent <u>and</u> overspent expenditures in a program area to the same program area in the following year. Specifically, FEI requests the following funding carryover rule:<sup>94</sup>

FEI is permitted to carryover unspent and overspent expenditures in a Program Area to the same Program Area in the following year.

The above rule is a continuation of the funding carryover rules that were previously approved as part of FEI's 2019-2022 DSM Plan,<sup>95</sup> with the addition of the ability to carryover overspent (i.e., negative amounts) into the following year. Consistent with the primary purpose of the funding carryover rules – to help FEI achieve the four-year total expenditures for the plan, this proposed change will assist FEI in managing the timing of expenditures and decrease the likelihood of underspending during the 2024-2027 DSM Plan period. Specifically, while spending may be higher than planned in one year, it could equally be lower than planned in the following year.<sup>96</sup>

85. The same funding carryover rule was approved by the BCUC in Decision and Order G-371-22 regarding FBC's 2023-2027 DSM Plan Application, in which the Panel recognized that the proposed changed (including this rule) strikes a "reasonable balance between BCUC oversight and administrative efficiency, without disrupting FBC's efforts to manage its DSM programs" and "is consistent with the intent of the existing funding carryover rule" while providing additional flexibility to the utility.<sup>97</sup>

86. In effect, FEI is requesting that the BCUC accept the total expenditures per program area over the time period of the expenditure schedule, thus providing FEI with the flexibility to

<sup>96</sup> Exhibit B-2, Application, p. 40.

<sup>&</sup>lt;sup>93</sup> Decision and Order G-45-23, p. 22.

<sup>&</sup>lt;sup>94</sup> Exhibit B-2, Application, pp. 39-40.

<sup>&</sup>lt;sup>95</sup> Decision and Order G-10-19.

<sup>&</sup>lt;sup>97</sup> Decision and Order G-371-22, p. 18.

manage both positive and negative carry over amounts during a DSM plan period.<sup>98</sup> FEI submits that this carryover rule is reasonable and should be approved.

### C. Continuation of Total Portfolio Variance Allowance is Reasonable and Appropriate

87. FEI is seeking approval to continue the allowed variance of no more than five percent above the accepted DSM expenditures amount in the final year of the 2024-2027 DSM Plan without prior approval from the BCUC. Specifically, FEI requests the continuation of the following variance allowance rule:

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.

88. Approval of this variance amount will provide FEI with necessary flexibility to respond to conditions that might require additional spending of up to \$8.2 million above 2027 approved expenditures (i.e., 5 percent of the 2027 forecast expenditures of \$164.8 million).<sup>99</sup> This proposed total variance allowance was previously approved by the BCUC for FEI's 2023 DSM Plan and for FBC's 2023-2027 DSM Plan Application. FEI submits that the rule remains reasonable and its continuation for FEI's 2024-2027 DSM Plan should be approved.

# PART FIVE: CONTINUATION OF DSM DEFERRAL ACCOUNT TREATMENT IS CONSISTENT WITH HISTORICAL SPENDING

- 89. FEI submits that its proposal to continue to include \$60 million on a forecast basis in the rate base DSM deferral account should be approved.
- 90. The BCUC approved the \$60 million rate base account limit for FEI's 2023 DSM Plan Application, on the basis that FEI's DSM expenditures have been consistently greater than \$60 million per year from 2019 to 2023. 100 FEI's DSM Plan continues to include expenditures well above \$60 million per year and FEI has a strong track record of achieving its planned

exhibit B-2-1, Errata to the Application, p. 40; Exhibit B-3, BCUC IR1 16.1.

Exhibit B-2, Application, p. 40.

Exhibit B-2, Application, p. 41; Exhibit B-3, BCUC IR1 17.1.

expenditures.<sup>101</sup> As such, the risk of FEI not achieving DSM expenditures of at least \$60 million per year is low, and FEI continues to expect to maintain at least \$60 million per year of DSM expenditures for the foreseeable future.<sup>102</sup>

- 91. FEI's proposal provides a benefit to customers, as aligning the amount forecast in the rate base DSM deferral account each year more closely with the actual expenditures ultimately reduces the financing costs added to the DSM deferral account, as well as the overall costs to customers on the non-rate base portion of the DSM Plan expenditures.<sup>103</sup>
- 92. Finally, there is no risk to FEI's customers in terms of rate impact in the unlikely event that FEI does not spend over \$60 million per year. FEI will continue to account for the difference between the proposed rate base account limit of \$60 million and actual/projected expenditure levels in FEI's non-rate base DSM deferral account, attracting a weighted average cost of capital (WACC) return. FEI's non-rate base DSM deferral account, attracting a weighted average cost of capital (WACC) return.

Exhibit B-3, BCUC IR1 2.2.

<sup>&</sup>lt;sup>102</sup> Exhibit B-3, BCUC IR1 17.1.

Exhibit B-2, Application, p. 41.

<sup>&</sup>lt;sup>104</sup> Exhibit B-3, BCUC IR1 17.1

Exhibit B-2, Application, p. 41.

### **PART SIX: CONCLUSION**

93. FEI submits that the 2024-2027 DSM Plan is in the public interest and should be accepted by the BCUC pursuant to section 44.2 of the UCA. FEI also submits that the proposed funding transfer, carryover and variance allowance rules, and continuation of \$60 million to be included in its rate base DSM deferral account on a forecast basis, are reasonable and should be approved.

### ALL OF WHICH IS RESPECTFULLY SUBMITTED

Dated:	October 3, 2023	[original signed by Chris Bystrom]
		Christopher R. Bystrom
		Counsel for FortisBC Energy Inc.
	October 3, 2023	[original signed by Niall Rand]
		Niall Rand
		Counsel for FortisBC Energy Inc.