



**bcuc**  
British Columbia  
Utilities Commission

Suite 410, 900 Howe Street  
Vancouver, BC Canada V6Z 2N3  
[bcuc.com](http://bcuc.com)

**P:** 604.660.4700  
**TF:** 1.800.663.1385  
**F:** 604.660.1102

FortisBC Energy Inc.

Application for Acceptance of Demand-Side Management  
Expenditures Plan for 2023

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Decision  
and Order G-45-23

March 6, 2023

Before:

B. A. Magnan, Panel Chair  
W. M. Everett, KC, Commissioner  
A. Pape Salmon, Commissioner

## TABLE OF CONTENTS

Page no.

<b>Executive summary</b> .....	<b>i</b>
<b>1.0 Introduction</b> .....	<b>1</b>
1.1 Background and Approvals Sought in the Application.....	1
1.2 Regulatory Process .....	1
1.3 Legislative and Regulatory Context .....	2
1.4 Structure of the Decision.....	3
<b>2.0 Is the DSM Expenditure Schedule in the Public Interest?</b> .....	<b>3</b>
2.1 Expenditure Schedule Summary .....	4
2.2 British Columbia's Energy Objectives .....	5
2.3 Long-Term Gas Resource Plan .....	8
2.4 Cost-Effectiveness of the DSM Expenditure Schedule.....	10
2.4.1 Residential Program Area.....	12
2.5 The Interests of Persons in British Columbia .....	17
2.6 Panel Determination on the Expenditure Schedule.....	19
<b>3.0 Additional Approvals Sought</b> .....	<b>19</b>
3.1 Funding Transfer Rules .....	20
3.2 Variance Allowance .....	22
3.3 Accounting Treatment for the Rate Base DSM Deferral Account .....	23
3.4 Rate Base Deferral Account for Regulatory Costs.....	25
3.5 Recommendations for Future Applications .....	25

### BCUC COMMISSION ORDER G-45-23

### APPENDIX A – EXHIBIT LIST

## Executive summary

On July 5, 2022, FortisBC Energy Inc. (FEI) filed its Application for Acceptance of Demand-Side Management (DSM) Expenditures for 2023 (Application) with the British Columbia Utilities Commission (BCUC) pursuant to section 44.2 of the *Utilities Commission Act* (UCA). FEI seeks acceptance of its proposed 2023 DSM expenditure schedule of \$141.077 million for the year 2023 (DSM Expenditure Schedule). FEI also seeks:

- proposed changes to the funding transfer rules within the DSM portfolio that were previously approved as part of its 2019-2022 DSM Expenditure Schedule Application;
- an additional allowed percentage variance to the total portfolio expenditures in the final year of the DSM Expenditure Schedule, of no more than 5%;
- an increase in the amount included in its rate base DSM deferral account on a forecast basis from the currently approved \$30 million to \$60 million, effective for 2023; and
- a rate base deferral account to capture the regulatory costs associated with the review of this Application that FEI proposes to amortize over one-year starting in 2023 to match the time period that the DSM Expenditure Schedule will be in place.<sup>1</sup>

On August 10, 2022, the BCUC established a written public hearing process to review FEI's Application. Six interveners registered in the proceeding. In addition, 19 letters of comment were received from municipalities and other organizations in support of the Application.

The regulatory review process included one round of BCUC and intervener written information requests followed by written final and reply arguments.

Having considered all the applicable provisions in section 44.2 of the UCA, the Panel accepts the DSM Expenditure Schedule outlined in Table 3-1 of the Application, for expenditures in 2023 of \$141.077 million as being in the public interest.

In reaching its decision the Panel considers that FEI's proposed 2023 DSM Expenditure Schedule aligns with BC's energy objectives by taking demand-side measures, fostering the development of innovative technologies, implementing initiatives to encourage communities to reduce greenhouse gas initiatives and encouraging job creation. The Panel considers the 2023 DSM Expenditure Schedule to be in alignment with FEI's 2022 LTGRP.

The Panel considers the 2023 DSM Expenditure Schedule to be cost-effective and supports the use of a portfolio-wide assessment of cost-effectiveness. The Panel's consideration of the cost-effectiveness of FEI's 2023 Expenditure Schedule included a review of the Total Resource Cost (TRC) and Modified Total Resource Cost (mTRC) tests through which FEI applied approximately 67% and 33% of the total DSM portfolio expenditures respectively, and which comply with the requirements of the DSM Regulation. The Panel considers the residential New Home and Home Renovation Rebate programs to be cost-effective based on the mTRC, despite their failure to pass the Utility Cost Test (UCT). The Panel is satisfied that the FEI evidence supports these programs.

The Panel also approves FEI's proposed changes to the funding transfer rules: an additional allowed percentage variance to the total portfolio expenditures only for the 2023 DSM Expenditure Schedule; the increase in the amount included in the rate-base DSM Deferral account from \$30 million to \$60 million, effective for 2023; and

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<sup>1</sup> Exhibit B-1, p. 3.

a rate base deferral account to capture the regulatory costs associated with the review of this Application with a one-year amortization period starting in 2023.

Finally, the Panel makes recommendations regarding information to be filed in future FEI funding transfer applications to facilitate greater regulatory efficiency, along with the provision of information on the avoided cost of gas used in the calculation of DSM cost-effectiveness in future DSM expenditure schedule applications.

## 1.0 Introduction

### 1.1 Background and Approvals Sought in the Application

On July 5, 2022, FortisBC Energy Inc. (FEI) filed its Application for Acceptance of Demand-Side Management (DSM) Expenditures for 2023 (Application) with the British Columbia Utilities Commission (BCUC). In the Application, FEI seeks acceptance of the DSM Expenditure Schedule for the year 2023 as outlined in Table 3-1 of the Application, pursuant to section 44.2 of the *Utilities Commission Act* (UCA). In total, FEI requests acceptance of DSM expenditures of \$141.077 million.<sup>2</sup>

On October 3, 2022, FEI submitted an erratum to Exhibit 34 of Appendix A to the Application, correcting the incremental cost for the Technology Implementation measure under the Industrial Performance Program Area.

FEI's Application reflects FEI's 2023 DSM Expenditure Schedule, included as Appendix A to the Application, which provides details on each of FEI's DSM program areas and individual programs, including cost-effectiveness test results.

FEI is also seeking approval of the following:

1. Proposed changes to existing funding transfer rules as set out in Section 7.1.1 of the Application;
2. A new variance allowance rule on total portfolio expenditures, as set out in Section 7.1.2 of the Application;
3. A forecast rate base additions accounting treatment as set out in Section 7.2 of the Application; and
4. A rate base deferral account to capture the regulatory costs associated with the review of this Application, as set out in Section 7.3 of the Application.

### 1.2 Regulatory Process

By Orders G-219-22 and G-283-22, the BCUC established a written public hearing process for its review of the Application with one round of BCUC and intervener information requests (IRs) to FEI, final arguments by FEI and interveners, and reply argument by FEI.

The following parties registered as interveners in this proceeding:

- British Columbia Sustainable Energy Association (BCSEA);
- Residential Consumer Intervener Association (RCIA);
- Movement Of United Professionals (MoveUp);
- Commercial Energy Consumers Association of British Columbia (CEC);
- British Columbia Hydro and Power Authority (BC Hydro); and
- British Columbia Old Age Pensioners' Organization et al. (BCOAPO).

FEI submitted its final argument on November 1, 2022. The interveners submitted their final arguments by November 21, 2022. FEI submitted its reply argument on November 30, 2022.

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<sup>2</sup> Exhibit B-1, p. 6.

Additionally, 19 letters of comment were filed by the following parties:

- City of Vancouver (COV);
- Aboriginal Housing Management Association (AHMA);
- British Columbia Hotel Association (BCHA);
- City of Kelowna (Kelowna);
- City of Nelson and Nelson Hydro (Nelson);
- City of Penticton (Penticton);
- Musqueam Housing Department (Musqueam-HD);
- Regional District of Okanagan-Similkameen (RDOS);
- Thompson Okanagan Tourism Association (TOTA);
- Tsleil-Waututh Nation (TWN);
- GreenStep Solutions (GreenStep);
- Green Construction Research & Training Centre (GCRTC);
- Canadian Home Builders Association – Central Okanagan (CHBA-CO);
- Fraser Basin Council;
- BC First Nations Energy and Mining Council (FNEMC);
- Canadian Association of Consulting Energy Advisors (CACEA);
- BC Non-Profit Housing Association (BCNPHA);
- City of Kamloops (Kamloops); and
- Health Patio and BBQ Association of Canada (HPBAC).

### **1.3 Legislative and Regulatory Context**

Pursuant to section 44.2(3) of the UCA, after reviewing an expenditure schedule, the BCUC, subject to subsection (5), must (a) accept the schedule if the BCUC considers that making the expenditures referred to in the schedule is in the public interest, or (b) reject the schedule.

The BCUC may also accept or reject part of an expenditure schedule, pursuant to section 44.2(4) of the UCA.

Section 44.2(5) of the UCA provides:

In considering whether to accept an expenditure schedule filed by a public utility other than the authority, the commission must consider:

- a) the applicability of British Columbia's energy objectives;
- b) the most recent long-term resource plan filed by the public utility under section 44.1, if any;
- c) the extent to which the schedule is consistent with the applicable requirements under sections 6 and 19 of the Clean Energy Act;
- 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.

The provision under Section 44.2(5)(c) of the UCA, that the BCUC must consider the extent to which the expenditure schedule is consistent with the applicable requirements under sections 6 and 19 of the *Clean Energy Act* (CEA), is not relevant to this Application. Section 6 of the CEA (electricity self-sufficiency) applies only to BC Hydro or to applications made by public utilities under section 44.1 of the UCA, neither of which applies to FEI's Application. Section 19 of the CEA also does not apply to FEI's Application because no regulations have been passed under section 37 (h) of the CEA prescribing public utilities for the purposes of section 19.<sup>3</sup>

Section 3 of the Demand-Side Measures Regulation (DSM Regulation)<sup>4</sup> defines the requirements that need to be addressed for a utility's DSM portfolio to be deemed adequate for the purposes of section 44.1 (8) (c) of the UCA.

Section 4 of the DSM Regulation defines the process for determining cost-effectiveness of the demand-side measures for the purposes of section 44.2(5)(d) of the UCA.

In 2021, the Province of BC released the CleanBC Roadmap to 2030 (Roadmap). The Roadmap introduced the concept of "a GHG [Greenhouse Gas] emissions cap that will require gas utilities to undertake activities and invest in technologies to further lower GHG emissions from the fossil natural gas used to heat homes and buildings and power some of our industries" and noted that "the B.C. Utilities Commission will have a mandate to review gas utilities' plans, investments and expenditures to ensure they're aligned with the GHG emissions cap and cost effective". The emission cap on natural gas utilities will be set at approximately 6 Mt of CO<sub>2</sub>e, a 47% reduction in GHG emissions compared to 2007 levels.<sup>5</sup>

At the time of the Application, supporting legislation to the Roadmap has not been introduced, although it is anticipated such legislation will include a Greenhouse Gas Reduction Standard (GHGRS) that will define emissions caps and compliance mechanisms. The GHGRS is an overarching policy that encompasses other related, enabling policies including the DSM Regulation. The Province envisions natural gas utilities, including FEI, as having the obligation to meet this cap.<sup>6</sup>

## **1.4 Structure of the Decision**

Section 2 of this decision addresses the matters the BCUC must consider, pursuant to Section 44.2(5) of the UCA, in determining whether to accept FEI's proposed DSM Expenditure Schedule as being in the public interest.

Section 3 of this decision addresses the additional approvals sought by FEI regarding proposed changes to existing funding transfer rules, a new variance allowance rule on total portfolio expenditures, an increase in the amount included in FEI's rate base DSM Deferral account on a forecast basis, and a rate base deferral account to capture the regulatory costs associated with the review of this Application.

## **2.0 Is the DSM Expenditure Schedule in the Public Interest?**

Pursuant to Section 44.2(5) of the UCA, in determining whether to accept FEI's DSM Expenditure Schedule as being in the public interest, the Panel addresses the relevant matters it must consider as set out in the applicable legislation described in section 1.3 above.

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<sup>3</sup> Clean Energy Act, SBC 2010.

<sup>4</sup> B.C. Reg. 117/2017.

<sup>5</sup> [CleanBC Roadmap to 2030](#), p. 29.

<sup>6</sup> Exhibit B-1, pp. 4-5.

## 2.1 Expenditure Schedule Summary

Pursuant to section 44.2 of the UCA, FEI seeks BCUC acceptance of the following 2023 Expenditure Schedule:

**Table 1: Comparison of 2023 Proposed DSM Expenditures to 2022 Accepted DSM Expenditures<sup>7</sup>**

Program Area	Total Utility Expenditure (000's)		
	2023	2022	Variance
Residential	\$43,994	\$34,816	26%
Commercial	\$26,570	\$19,800	34%
Industrial	\$6,848	\$8,462	-19%
Low Income	\$13,251	\$10,984	21%
Conservation Education and Outreach	\$9,713	\$9,433	3%
Innovative Technologies	\$25,960	\$11,871	119%
Enabling Activities	\$12,010	\$8,921	35%
Portfolio Activities	\$2,730	\$1,979	38%
ALL Programs	\$141,077	\$106,266	33%

Accepted expenditures pursuant to Order G-138-18, Order G-135-21 and Order G-301-21

Based upon these expenditures, FEI forecasts the following natural gas savings and GHG emission reductions from its proposed DSM activities:

**Table 2: 2023 DSM Expenditure Schedule Energy Savings & GHG Emission Reductions<sup>8</sup>**

Indicator	Year	Total Natural Gas Savings	GHG Emission Reductions
<b>Net Incremental Annual Gas Savings (GJ/yr) and GHG Reductions (t CO<sub>2</sub>e/yr)<sup>1</sup></b>	2023	1,601,386	82,632
<b>NPV of Net Gas Savings (GJ/yr) and GHG Reductions (t CO<sub>2</sub>e)<sup>2</sup></b>		14,433,377	744,762

*Notes to Table:*

<sup>1</sup> Net incremental gas savings are after consideration of free ridership and spill over. GHG reductions are based on long run combustion emission factor of 0.0516 t CO<sub>2</sub>e/GJ for natural gas from Ministry of Environment & Climate Change Strategy.

<sup>2</sup> NPV in this context refers to including the entire stream of savings into the future (by measure life) and annualizing that to present time to show the total value of the stream of savings.

FEI presented a one-year DSM Expenditure Schedule for 2023 to allow time for the Roadmap-related legislative and regulatory processes to develop. FEI's 2023 DSM Expenditure Schedule includes activities that support the transition to advanced DSM programming, in line with the policy direction in the Roadmap.<sup>9</sup> It also includes

<sup>7</sup> Exhibit B-1, p. 6.

<sup>8</sup> Exhibit B-1, p. 6.

<sup>9</sup> Exhibit B-1, p. 5.



incentives for highest efficiency gas equipment, as significant opportunities still exist in the market to advance GHG emission reductions through customer adoption of these measures.<sup>10</sup>

FEI views its 2023 DSM Expenditure Schedule as year one of a five-year overall DSM vision and, assuming applicable legislation is enacted in time, intends to follow this one-year plan with a four-year DSM Expenditure Schedule which it intends to align with the FortisBC Inc. (FBC) 2023-2027 DSM plan.<sup>11</sup> This overall five-year DSM vision, in alignment with the Roadmap, requires significant investment in the newer advanced DSM program areas, resulting in the increased expenditures being proposed in the 2023 DSM Expenditure Schedule.

Much of this proposed increase in expenditures in newer advanced DSM program areas falls within the Innovative Technologies program area that require investigation and testing to prove out these newer advanced DSM technologies.<sup>12</sup>

## 2.2 British Columbia's Energy Objectives

Pursuant to section 44.2(5)(a) of the UCA, the Panel must consider the applicable of British Columbia's Energy Objectives, which are set out in section 2 of the CEA.

Table 3-3 in the Application outlines FEI's submissions as to how its DSM Expenditure Schedule meets the following applicable BC energy objectives,<sup>13</sup> as set out in the CEA.

**Table 3: 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%;	FEI's DSM proposals are designed to implement cost-effective (as defined by the DSM Regulation) demand-side measures. See Section 3.5 of this Application.
(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;	FEI's 2023 DSM Plan includes provision for Innovative Technology projects. See Appendix A, Section 8.

<sup>10</sup> Exhibit B-1, p. 5.

<sup>11</sup> Exhibit B-1, p. 5.

<sup>12</sup> Exhibit B-1, p. 5.

<sup>13</sup> Exhibit B-1, p. 8.

<p>(g) to reduce BC greenhouse gas emissions</p> <p>(i) by 2012 and for each subsequent calendar year to at least 6% less than the level of those emissions in 2007,</p> <p>(ii) by 2016 and for each subsequent calendar year to at least 18% less than the level of those emissions in 2007,</p> <p>(iii) by 2020 and for each subsequent calendar year to at least 33% less than the level of those emissions in 2007,</p> <p>(iv) by 2050 and for each subsequent calendar year to at least 80% less than the level of those emissions in 2007, and</p> <p>(v) by such other amounts as determined under the Greenhouse Gas Reduction Targets Act;</p>	<p>FEI's DSM programs will result in substantial natural gas savings and commensurate reductions in greenhouse gas emissions of 82,632 annual tonnes CO<sub>2</sub>e.</p>
<p>(i) to encourage communities to reduce greenhouse gas emissions and use energy efficiently;</p>	<p>All of FEI's DSM programs encourage communities to reduce greenhouse gas emissions and use energy efficiently.</p>
	<p>Local government and institutional strategic energy planning, and Community Education and Outreach, are enabled through Supporting Initiatives.</p> <p>See Appendix A Section 7 and 9.</p> <p>Provisions for, and further development of, the BC Energy Step Code are included within Program areas and the Community Energy Specialists program.</p> <p>See Section 3 and Appendix A, Sections 3,4,6,9, and 9.</p>
<p>(k) to encourage economic development and the creation and retention of jobs;</p>	<p>FEI's DSM Programs have a broad impact on the provincial economy as measured through employment impacts. See Appendix D, Section 7.3.</p>

In relation to the GHG reduction targets in objective (g), FEI filed the 2023 DSM Evaluation Plan in the Application that is based on the 2018 Evaluation, Measurement and Verification Framework. One of the five objectives for conducting evaluation is to determine if program design targets are being met, such as the amount of energy savings, the number and nature of participants, emission reductions and other targets. The 2023 DSM Evaluation Plan presents the studies and timing for FEI's Evaluation, Measurement & Verification activities for 2023.<sup>14</sup>

### *Positions of the Parties*

BCSEA and the CEC agree with FEI that the DSM Expenditure Schedule furthers the BC Energy Objectives.<sup>15</sup>

BCOAPO takes no position on the matter.<sup>16</sup>

<sup>14</sup> Exhibit B-1, Appendix E and Appendix F.

<sup>15</sup> BCSEA Final Argument, p. 4; CEC Final Argument, p. 9.

<sup>16</sup> BCOAPO Final Argument, p. 3.

RCIA agrees that FEI's 2023 DSM Expenditure Schedule is consistent with BC Energy Objectives (b), (d), (i), and (k).<sup>17</sup>

Regarding Energy Objective (g), RCIA submits that to determine whether GHG emission reductions from DSM activities are consistent with the CEA energy objectives, a comparison of DSM expenditure schedules actual results vis a vis the targets established in Energy Objective (g) is required and states that FEI declined to provide this information in IRs on the basis that the request was out of scope.<sup>18</sup> RCIA does not oppose BCUC accepting Energy Objective (g) as met, due to the following: a) the 2023 DSM Expenditure Schedule emissions reductions are higher than those in FEI's 2019-2022 DSM Expenditure Schedule; b) in FEI's 2019-2022 DSM Plan proceeding,<sup>19</sup> the BCUC found that that plan met BC Energy Objectives; and c) the BCUC in 2019 did not request a comparison of the DSM Expenditure Schedule trajectory of GHG savings vis a vis the target stated in Energy Objective (g).<sup>20</sup>

In response to RCIA, FEI submits the IRs indicated that the Application includes a one-year DSM expenditure schedule, that DSM is only one of FEI's initiatives that will contribute to GHG emission reductions, and that GHG emission reductions related to the gas supplied by FEI for the purpose of reducing provincial GHG emissions are beyond the scope of the proceeding.<sup>21</sup> FEI further submits that it has also provided projections from its 2022 Long-Term Gas Resource Plan (LTGRP) with respect to the contribution of its DSM activities towards GHG emissions under different DSM expenditure settings and that this supports FEI's view that its 2023 DSM Plan is consistent with BC energy objective (g).<sup>22</sup>

### *Panel Discussion*

The Panel considers that FEI's proposed 2023 DSM Expenditure Schedule is aligned with BC's energy objectives and will allow for the implementation of demand-side measures, foster the development of innovative technologies through an estimated expenditure of almost \$26 million, implement initiatives to encourage communities to reduce GHG emissions and use energy efficiently, and broadly encourage economic development and the creation and retention of jobs. Finally, the Panel considers that the remaining objectives listed in Section 2 of the CEA do not apply in this case. Therefore, the Panel finds that FEI's DSM Expenditure Schedule supports the applicable BC Energy Objectives.

Intervenors in this Application did not challenge FEI's analysis regarding BC's Energy Objectives with the one exception raised by RCIA. RCIA considers more information should have been provided to compare the contribution of GHG emission reductions from DSM to BC's provincial GHG emission reduction targets. The Panel acknowledges the value of RCIA's submission of considering actual results of DSM Expenditure Schedules vis a vis the targets established in Energy Objective (g). The Panel observes that planning for GHG emission reduction targets is a subject for the LTGRP, as it provides a long-term perspective and as FEI confirms, includes the contribution of DSM activities. The DSM Expenditure Schedule includes a plan for evaluation, measurement and verification of previous DSM measures with respect to energy savings and GHG reduction targets.

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<sup>17</sup> RCIA Final Argument, p. 8.

<sup>18</sup> RCIA Final Argument, p. 7.

<sup>19</sup> BCUC Order G-10-19.

<sup>20</sup> RCIA Final Argument, p. 7.

<sup>21</sup> FEI Reply Argument, p. 3.

<sup>22</sup> FEI Reply Argument, p. 3.

### 2.3 Long-Term Gas Resource Plan

Pursuant to section 44.2(5)(b) of the UCA, the Panel must also consider the most recent long-term resource plan filed by FEI under section 44.1 of the UCA. FEI filed its most recent Long Term Gas Resource Plan on May 9, 2022 (2022 LTGRP) and the BCUC review of that plan is still ongoing.

FEI states that the forecasted 2023 energy savings in the LTGRP and the DSM Expenditure Schedule are closely aligned, being 1.7 and 1.6 million incremental GJs respectively, a 6% difference. The 2023 expenditures in the LTGRP and the proposed DSM Expenditure Schedule are \$235 million and \$141 million, respectively, a 40% difference.<sup>23</sup>

FEI states that the 2023 DSM Expenditure Schedule and the 2022 LTGRP are fundamentally aligned in that they are both informed by the 2021 Conservation Potential Review (CPR).<sup>24</sup> The 2023 DSM Expenditure Schedule is in line with the “High DSM setting” selected in the 2022 LTGRP Plan. The High DSM setting maximizes the energy savings potential, and therefore, the potential to reduce GHG emissions by accelerating building retrofits, high performance new construction, and energy efficiency in commercial and industrial processes. The 2023 DSM Expenditure Schedule continues FEI’s trajectory of increasing investments in DSM that have taken place since the 2017 LTGRP and exemplifies FEI’s long-term commitment to obtaining energy savings in line with the High DSM setting in the 2022 LTGRP.<sup>25</sup>

However, FEI notes the 2022 LTGRP and the 2023 DSM Expenditure Schedule apply different methodologies and assumptions. The 2022 LTGRP provides a theoretical model for the long-term DSM outlook; it does not consider program design that incorporates ramp up and/or ramp down requirements at a measure level; and assumes incentives that cover 100% of the incremental costs to speed market transition.<sup>26</sup> The DSM Expenditure Schedule refines the market potential into a near-term program potential; takes into account the shorter-term implications of market conditions and policy environment changes that are considered in DSM program development; and maintains an average incentive level closer to the historical benchmark of 50% of incremental cost for high efficiency equipment.<sup>27</sup> In addition, the 2023 DSM Expenditure Schedule addresses policy and technology advancements that have evolved since the 2021 CPR and the 2022 LTGRP analysis were completed, such as those resulting from the Clean BC Roadmap. The DSM Expenditure Schedule incorporates a faster transition toward more advanced gas DSM measures through higher expenditures for pilot projects and related innovative technologies associated with advanced DSM measures.<sup>28</sup>

FEI also states that the 2022 LTGRP projects that FEI will continue a portfolio of DSM initiatives that is cost-effective and adequate, pursuant to the DSM Regulation, consisting of residential, commercial, industrial, low income, innovative technologies, conservation education and outreach, as well as enabling DSM activities. Within this framework, FEI submits its proposed DSM Expenditure Schedule is consistent with the 2022 LTGRP, noting the 2023 DSM Expenditures Schedule reflects a cost effective and adequate portfolio that includes the initiatives presented in the 2022 LTGRP.<sup>29</sup> In the Application, FEI provided a table outlining the programs in the 2023 DSM Expenditure Schedule that address each of the adequacy requirements outlined in section 3 of the DSM Regulation.<sup>30</sup>

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<sup>23</sup> Exhibit B-1, p. 10.

<sup>24</sup> The 2021 Conservation Potential Review included in Appendix D of the Application, identifies the energy efficiency opportunities available among FortisBC’s residential, commercial, and industrial natural gas customers.

<sup>25</sup> FEI Final Argument, p. 6-7.

<sup>26</sup> Exhibit B-1, p. 10.

<sup>27</sup> FEI Final Argument, p. 7.

<sup>28</sup> Exhibit B-1, pp. 10-11.

<sup>29</sup> Exhibit B-1, p. 11

<sup>30</sup> Exhibit B-1, p. 12, Table 3-4

## *Positions of the Parties*

RCIA, BCSEA and the CEC considered FEI's perspectives on the alignment of the proposed 2023 DSM Expenditure Schedule and the 2022 LTGRP and submit the 2023 DSM Expenditure Schedule is aligned with the LTGRP.<sup>31</sup>

BCOAPO does not agree that FEI has reasonably explained the alignment between the FEI LTGRP and the current Application. In particular, BCOAPO submits that: a) FEI has not reasonably explained the difference in projected expenditures between the 2023 DSM Expenditure Schedule and the 2022 LTGRP beyond the incentive levels of 100% and 50% respectively; and b) there is insufficient information to compare savings by customer segment or program areas, or cost-effectiveness measures such as the blended TRC or RIM. BCOAPO observes that of the \$93 million lower forecast expenditures in the 2023 DSM Expenditure Schedule compared to the LTGRP, approximately \$40 million or 43% of the difference is explained by incentives levels of 50% in the 2023 DSM Expenditure Schedule as compared to 100% in the LTGRP. BCOAPO also invites FEI to address its concerns with what it says is a lack of quantitative data explaining the difference between the 2023 DSM Expenditure Schedule and the 2022 LTGRP.<sup>32</sup>

FEI replies that it continues to rely on its final argument which discusses the differences in expenditures between the 2022 LTGRP and its proposed 2023 DSM Expenditure Schedule. Furthermore, FEI states that it was not able to address quantitative data differences in its final argument, as suggested by BCOAPO, as it would have been procedurally improper.<sup>33</sup> FEI observes that the root of BCOAPO's position appears to be its view that FEI should be spending more on DSM in 2023 to align with the DSM spending for 2023 in the 2022 LTGRP. However, FEI's proposed spending in the 2023 DSM Expenditure Schedule is already approximately 33 percent greater than FEI's accepted spending levels in 2022.<sup>34</sup>

## *Panel Discussion*

The Panel considers the 2023 DSM Expenditure Schedule to be in harmony with FEI's 2022 LTGRP. FEI based its analysis for the 2022 LTGRP and its proposed 2023 DSM Expenditure Schedule on the 2021 CPR, demonstrating analytical consistency between them. Moreover, the 2023 DSM Expenditure Schedule aligns with the "High DSM setting" selected in the 2022 LTGRP. While the proposed 2023 DSM expenditures are 40% lower than the planned expenditures for 2023 in the 2022 LTGRP, the energy savings are comparable, with only a 6% difference.<sup>35</sup>

FEI's explanation of the reduced spending in the 2023 DSM Expenditure Schedule, as compared to the 2022 LTGRP, stems from different methodologies and assumptions such as 100% coverage of incremental capital costs in the "High DSM setting" in the 2022 LTGRP, as compared to the average 50% coverage in 2023 DSM Expenditure Schedule. The Panel acknowledges BCOAPO's observation that the incremental cost difference only accounts for 43% of the reduced expenditures in the 2023 DSM Expenditure Schedule. FEI's argument also explains differences such as program design that incorporates ramp up and/or ramp down requirements at a measure level, refining the market potential into a near-term program potential and taking into account the shorter-term implications of market conditions and policy environment changes that are considered in DSM program development.<sup>36</sup> The Panel considers this explanation as being reasonable and notes that the proposed energy savings indicated in the LTGRP and the DSM Expenditure Schedule are very close.

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<sup>31</sup> RCIA Final Argument, p. 9, BCSEA Final Argument, pp. 6-7, CEC Final Argument, pp. 9-10.

<sup>32</sup> BCOAPO Final Argument, pp. 3-4.

<sup>33</sup> FEI Reply Argument, p. 5.

<sup>34</sup> FEI Reply Argument, p. 5.

<sup>35</sup> Exhibit B-1, p. 10.

<sup>36</sup> FEI Final Argument, p. 8.

The 2023 DSM Expenditure Schedule Application includes documentation of programs to meet the adequacy requirements of UCA section 44.1(8)(c) and the specific components outlined in section 3 of the DSM Regulation. Compliance with the adequacy requirements is in the domain of the 2022 LTGRP, a separate application to the BCUC. The Panel is satisfied that this 2023 DSM Expenditure Schedule includes programs to address adequacy requirements in a manner that is consistent with the LTGRP.

The Panel agrees with FEI that to accede to BCOAPO's request in Reply submissions to address quantitative data differences in its final argument would be improper. FEI has adequately explained the data differences qualitatively in its reply argument as noted above. A quantitative explanation is akin to providing new evidence which the Panel considers unnecessary to render its decision.

## 2.4 Cost-Effectiveness of the DSM Expenditure Schedule

Pursuant to section 44.2(5)(d) of the UCA, the Panel must also consider whether the proposed 2023 DSM Expenditure Schedule measures are cost-effective within the meaning prescribed by the DSM Regulation.

Section 4 of the DSM Regulation sets out the tests for measuring the cost-effectiveness criteria. The primary test for DSM expenditure schedules is the Total Resource Cost (TRC) test. The TRC is the ratio that results when the value of the benefits of DSM activity, as measured by avoided energy and capacity costs as applicable, is divided by the sum of the utility and customer costs for that DSM activity. A TRC ratio of 1.0 or more indicates that a DSM activity equals or exceeds its total costs.

Section 4(1) of the DSM Regulation stipulates that the BCUC may evaluate cost-effectiveness of DSM measures individually, for multiple measures or at a portfolio level. FEI argues the portfolio-level analysis remains the appropriate method for testing the cost-effectiveness of the 2023 DSM Expenditure Schedule and that such approach is consistent with past BCUC decisions in respect of DSM expenditure schedules filed by FEI, FBC, BC Hydro and Pacific Northern Gas.<sup>37</sup> FEI notes that at a minimum, the BCUC must use the portfolio approach for "specified demand-side measures" and "public awareness programs" pursuant to sections 4(4) and 4(5) of the DSM Regulation.<sup>38</sup>

FEI also submits that a portfolio approach promotes DSM accessibility to all customers and that residential and low-income programs are often challenged to meet cost-effectiveness tests.<sup>39</sup> FEI adds that a portfolio approach allows FEI to encourage increasing levels of efficiency in natural gas equipment that may have higher costs in the near-term due to lack of economies of scale, but that could provide long term prospects of benefits to customers.<sup>40</sup>

Pursuant to sections 4 (1.1) and 4(1.5)(b)(ii) of the DSM Regulation, FEI may use the modified Total Resource Cost (mTRC) test for up to 40 percent of its portfolio expenditures. The mTRC uses an alternative avoided cost of energy and includes an adder for non-energy benefits.<sup>41</sup>

The calculation of mTRC uses a Zero-Emission Energy Supply Alternative (ZEEA)<sup>42</sup> to determine the avoided cost of energy which is applied to the energy savings to determine the overall customer benefits. Section 4(1.1)(a) of the DSM Regulation, describes the ZEEA as the amount the BCUC "is satisfied represents [BC Hydro's] long-run

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<sup>37</sup> FEI Final Argument, p.9.

<sup>38</sup> Exhibit B-1, p. 22.

<sup>39</sup> Exhibit B-1, p. 22.

<sup>40</sup> Exhibit B-1, p. 22.

<sup>41</sup> Exhibit B-1, p. 23.

<sup>42</sup> Guide to the DSM Regulation, p. 5. Retrieved from [https://www2.gov.bc.ca/assets/gov/farming-natural-resources-and-industry/electricity-alternative-energy/energy-efficiency/guide\\_to\\_the\\_dsm\\_regulation\\_july\\_2014\\_c2.pdf](https://www2.gov.bc.ca/assets/gov/farming-natural-resources-and-industry/electricity-alternative-energy/energy-efficiency/guide_to_the_dsm_regulation_july_2014_c2.pdf)

marginal cost of acquiring electricity generated from clean or renewable resources in British Columbia.”<sup>43</sup> For the calculation of ZEEA, FEI used a reference Long Run Marginal Cost (LRMC) of \$106/ MWh (in F2018\$) or \$29.45/GJ, from the BC Hydro Waneta 2017 Transaction Application (Waneta Application). This value was also used to calculate the mTRC in FEI’s DSM 2021 Annual Report. Low Income programs use the ZEEA to calculate the TRC.<sup>44</sup>

The table below summarizes the TRC and mTRC benefit/cost ratios of the program areas comprising FEI’s proposed 2023 DSM Expenditure Schedule. A benefit/cost ratio of 1.0 or above indicates that the program/portfolio is cost-effective. FEI submits that all individual programs for which gas savings have been estimated have a TRC benefit/cost ratio (or where applicable, mTRC) of 1.0 or above. FEI forecasts to have 33% of its DSM expenditure use the mTRC.<sup>45</sup>

**Table 4: DSM Expenditure Schedule TRC and mTRC Benefit/Cost Ratios<sup>46</sup>**

Program Area	TRC	mTRC and blended mTRC/TRC
Residential	0.4	1.6 (mTRC)
Commercial	1.2	Not applicable (N/A)
Industrial	2.8	N/A
Low Income	2.1 <sup>47</sup>	N/A
Conservation Education and Outreach	Partial estimate of energy savings; only those corresponding to the Customer Engagement Tool and applicable to the Portfolio overall.	N/A
Enabling Activities	N/A	N/A
Innovative Technologies	N/A	N/A
Portfolio Level Activities	N/A	N/A
<b>Total (Portfolio cost-effectiveness)</b>	<b>0.7</b>	<b>1.4</b> (blended mTRC/TRC)

Through information requests, the BCUC asked FEI to calculate the mTRC for the portfolio, program areas and measures assuming alternate ZEEA values of \$54/MWh and \$65/MWh.<sup>48</sup> The BC Hydro Fiscal 2022 Revenue Requirement Application, Decision G-187-21, provides a preliminary range of the cost of new wind resources of between \$54 and \$80/MWh. BC Hydro also indicated that such value was outdated, and an update would be provided in the IRP.<sup>49</sup> The BC Hydro 2021 IRP, currently under review, presents an LRMC of \$65/MWh (F2022\$).<sup>50</sup>

FEI provided the recalculation of mTRC using ZEEA values of \$54/MWh and \$65/MWh by program area, program, measure, and portfolio, except for the Low-Income Program. Using ZEEA values of \$106/MWh and

<sup>43</sup> DSM Regulation, Section 4(1.1)(a).

<sup>44</sup> Exhibit B-1, p. 24.

<sup>45</sup> FEI Final Argument, p. 10.

<sup>46</sup> Exhibit B-1, Appendix A, pp. 6-7.

<sup>47</sup> Section 4 of the BC Demand-Side Measures Regulation, as amended in March 2017, requires the use of the Zero Emission Energy Alternative and a 40 percent benefit adder in calculating the TRC for Low Income programs.

<sup>48</sup> Exhibit B-2, BCUC IR 3 (series).

<sup>49</sup> BC Hydro F2022 Revenue Requirement Application, p. 10-20.

<sup>50</sup> BC Hydro 2021 Integrated Resource Plan, Exhibit B-1, Appendix L, p. 13.

\$65/MWh, both the Portfolio and Residential Programs pass the mTRC test. Neither pass the mTRC test if the ZEEA value is \$54/MWh.<sup>51</sup>

Regarding the selection of the ZEEA value, FEI submits that BCUC should set the ZEEA based on \$106/MWh as this is the only value approved by the BCUC and thus constitutes an amount the BCUC is “satisfied by”.<sup>52</sup> FEI submits that \$54/MWh is not appropriate as a LRMC value because BC Hydro stated that the value is not its estimated LRMC, but the low end of a preliminary range of the cost of new wind resources, which was \$54-80/MWh. The mid-range of wind resources is \$67/MWh.<sup>53</sup> FEI states that \$54/MWh was neither presented by BC Hydro nor approved by BCUC as an actual LRMC and, if anything, the entire range rather than the low end would be more indicative.<sup>54</sup> FEI notes the 2021 IRP proposed LRMC value of \$65/MWh is still under review. Therefore, FEI concludes the best LRMC remains the one presented in the Application; namely, \$106/MWh.<sup>55</sup> However, FEI notes the BCUC can be assured that the portfolio and all program areas remain cost-effective using a LRMC of \$106/MWh, \$65/MWh, and similarly, \$67/MWh.<sup>56</sup>

FEI states that to ensure that the portfolio meets a combined TRC/mTRC of 1 on an annual basis, it will continue its practice of monitoring DSM programs on a monthly basis. This practice will allow FEI to identify trends in cost-effectiveness related to program and portfolio expenditures and make adjustments as needed. For information purposes, FEI submits it will 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 proposed 2023 DSM Expenditure Schedule included as Appendix A of the Application.<sup>57</sup>

### 2.4.1 Residential Program Area

Pursuant to section 4 (1.8) of the DSM Regulation, the BCUC may determine that a measure that requires the mTRC, and does not fall within a list of excepted measures,<sup>58</sup> is not cost-effective if the measure would not be considered cost-effective under the Utility Cost Test (UCT). The UCT measures the net cost to the utility of undertaking DSM activities. Under the UCT, the benefits of a DSM measure(s) to the utility are the avoided costs of energy and capacity; same as in the regular TRC test.

The Decision regarding the FEI Multi-Year Performance Based Ratemaking Plan for 2014 through 2018 (PBR Decision), provided a series of considerations that may be relevant when evaluating programs that do not pass the UCT, such as the identification of unquantified benefits.<sup>59</sup>

The DSM Expenditure Schedule portfolio, the Residential program area, as well as the two programs within, the New Home and the Home Renovation Rebate programs, require the mTRC to demonstrate their cost-effectiveness; and none of them pass the UCT. The table below includes the TRC, the UCT and the mTRC ratios using ZEEA values of \$106/MWh, \$65/MWh and \$54/MWh for the Residential Program Area, its constituent programs, and for the 2023 DSM portfolio. The Residential Program Area and Home Renovation Rebate program remain cost effective with mTRC tests that use ZEEA values of \$106 /MWh and \$65/MWh. The New Home program does not pass the mTRC test with a ZEEA value of \$65/MWh. None of the programs pass the UCT, as shown in the table below.

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<sup>51</sup> Exhibit B-2, BCUC IR 3.1.

<sup>52</sup> FEI Reply Argument, p.10.

<sup>53</sup> FEI Reply Argument, p.10.

<sup>54</sup> FEI Final Argument, pp. 10-11.

<sup>55</sup> FEI Final Argument, p. 11.

<sup>56</sup> FEI Reply Argument, p.10.

<sup>57</sup> Exhibit B-1, p. 22.

<sup>58</sup> Effectively, measures covered by the adequacy requirements, and innovative technology programs.

<sup>59</sup> FEI Multi-Year Performance Based Ratemaking Plan for 2014 through 2018, Decision pp. 257-258.



**Table 5: 2023 Residential DSM Program Area – Cost Test Ratios<sup>60,61</sup>**

Program Area	TRC	mTRC ZEEA= 106\$MWh	mTRC ZEEA= 65\$MWh	mTRC ZEEA= 54\$MWh	UCT
Home Renovation Rebate	0.4	1.7	1.0	0.9	0.6
New Home	0.3	1.3	0.8	0.7	0.3
<b>Total Residential Program</b>	<b>0.4</b>	<b>1.6</b>	<b>1.0</b>	<b>0.8</b>	<b>0.5</b>
<b>Total 2023 Portfolio</b>	<b>0.7</b>	<b>1.4</b>	<b>1.0</b>	<b>0.9</b>	<b>0.7</b>

\* ZEEA: Zero emission energy supply alternative.

FEI describes the alignment of its residential programs with respect to the considerations outlined in the FEI PBR Decision:<sup>62</sup> unquantified benefits; hard to measure savings; providing broad opportunities for customers to participate; addressing lost opportunities; and retaining a significant level of customer and trades engagement.<sup>63</sup>

FEI states that the Home Renovation Rebate and the New Home Programs are critical to promoting BC’s culture of conservation and fostering market transformation to higher efficiency solutions in the residential sector<sup>64</sup> and contain FEI’s most popular energy saving measures.<sup>65</sup> Without these programs, significant opportunities for gas savings and GHG reductions in the home renovation and new home markets would be lost.<sup>66</sup>

FEI states that the New Home and the Home Renovation Rebate programs in the current Application have not changed compared to information provided in the 2021 Annual Report.<sup>67</sup> The changes in expenditures in these programs from 2022 to 2023 respond to higher program participation and the inclusion of Step 5 of BC Energy Step Code<sup>68</sup> homes in the Residential Program area, which were previously supported in Innovative Technologies.<sup>69</sup> FEI submits that the Home Renovation and the New Home programs enable FEI customers to reduce their consumption and support industry to improve overall home performance.<sup>70</sup>

FEI submits that the New Home Program, which is run in partnership with FortisBC Inc., supports local governments in their adoption of the BC Energy Step Code, as part of an ongoing initiative for market transformation to high performance homes.<sup>71</sup> FEI and its program partners<sup>72</sup> support this adoption through builder and trades outreach, training, and customer education. Rebates for ENERGY STAR appliances in new homes are available for additional energy savings.<sup>73</sup>

FEI states that the Home Renovation Program encourages customers to take a whole home approach to their energy efficiency upgrades by consolidating space heating, water heating and building envelope measures into

<sup>60</sup> Exhibit B-1, Appendix A, p. 10; Exhibit B-2, BCUC IR 3.1.

<sup>61</sup> Exhibit B-1, p. 25; Exhibit B-2, BCUC IR 3.1.

<sup>62</sup> Exhibit B-2, BCUC IR 4.2

<sup>63</sup> Exhibit B-2, BCUC IR 4.2

<sup>64</sup> Exhibit B-1, Appendix A, p. 8

<sup>65</sup> FEI Final Argument, p. 13.

<sup>66</sup> FEI Final Argument, p. 13.

<sup>67</sup> Exhibit B-1, p. 18.

<sup>68</sup> The BC Energy Step Code is a voluntary provincial standard within the BC Building Code that provides a consistent approach to achieve higher energy-efficiency in buildings that go beyond the requirements of the base BC Building Code. It does so by establishing a series of measurable, performance-based energy-efficiency requirements for construction that builders can choose to build to, and communities may voluntarily choose to adopt in bylaws and policies.

<sup>69</sup> FEI Reply Argument, p. 6.

<sup>70</sup> Exhibit B-1, Appendix A, p.8.

<sup>71</sup> Exhibit B-1, Appendix A, p. 8.

<sup>72</sup> These initiatives may be partially co-funded by program partners FortisBC Electric (FBC), BC Hydro, the BC Ministry of Energy, Mines and Low Carbon Innovation (EMLI) and BC Housing.

<sup>73</sup> Exhibit B-1, Appendix A, p. 8.

one overarching program. This program is a collaboration between FEI, other BC utilities and the Ministry of Energy, Mines and Low Carbon Innovation's (EMLI) CleanBC Better Homes program. The program includes retail offers for the home renovation segment and point-of-sale incentives on several low-cost and easy to install measures in collaboration with BC Hydro, retailers, and distributors.<sup>74</sup>

### *Positions of the Parties*

BCSEA submits that FEI's Application has applied the cost-effectiveness methodology consistent with current regulation and supports the use of a ZEEA value of \$106/MWh as reasonable. BCSEA does not consider \$54 or 65/MWh are reasonable ZEEA values.<sup>75</sup> BCSEA did not provide any substantive reasoning in support of this argument and FEI did not reply.

The CEC accepts FEI's analysis of the ZEEA criterion and finds that an appropriate value for this proceeding could be \$106/MWh and/or \$67/MWh (the median value in the indicated range of \$54 to \$80/MWh), without formally assessing it as the LRMC. The CEC recommends that the BCUC give customer affordability significant weighting in determining ZEEA valuations in the future and that in this proceeding the BCUC avoid pressing LRMC values to the point of curtailing DSM advancement.<sup>76</sup>

BCOAPO submits that the calculation and evaluation of an appropriate LRMC value is a complex undertaking involving considerable expertise and judgement. However, BCOAPO states it is difficult to accept FEI's rationalization to use the LRMC from the Waneta Application in light of more current information. BCOAPO also submits its understanding of FEI's hesitancy to rely solely on the value stemming from the BC Hydro IRP that is still being reviewed. Therefore, on balance, BCOAPO submits it supports a ZEEA value of \$67/MWh as a midpoint between \$54-80/MWh.

With respect to the ZEEA value, FEI replies that the BCUC can conclude that FEI's portfolio is cost-effective based on a ZEEA of \$106/MWh or \$67/MWh or \$65/MWh.<sup>77</sup>

BCOAPO notes that FEI plans on ramping up innovative technologies, resulting in additional costs and benefits that are less certain than proven technologies, as well as considering significantly higher levels of incentives. BCOAPO submits the 2023 DSM Expenditure Schedule just barely meets cost-effectiveness tests and there is lack of visibility into how the potential acceptance of the 2023 DSM Expenditure Schedule impacts future multi-year DSM expenditure schedules.<sup>78</sup> FEI replies that expenditures in innovative technologies programs are consistent with provincial policy shifts, that they benefit customers including residential and low-income, and that FEI did not include projected savings in the DSM Expenditure Schedule because it is challenging to forecast energy savings from pilot projects, but that DSM Annual Reports will include this information when results become available.<sup>79</sup>

RCIA submits it supports the continuing evaluation of the cost-effectiveness of the DSM expenditures at a portfolio level.<sup>80</sup>

With respect to the interveners' position regarding the Residential program area cost effectiveness, BCSEA and the CEC support the continuation of the Home Renovation Rebate and New Home programs in the current

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<sup>74</sup> Exhibit B-1, Appendix A, p. 8.

<sup>75</sup> BCSEA Final Argument, p. 8

<sup>76</sup> CEC Final Argument, pp. 11-12.

<sup>77</sup> FEI Reply Argument, p. 11.

<sup>78</sup> BCOAPO Final Argument, pp. 8-9.

<sup>79</sup> FEI Reply Argument, p. 11.

<sup>80</sup> RCIA Final Argument, pp. 10-11.

Application.<sup>81,82</sup> RCIA considers it is important for FEI to offer DSM programs which are accessible to all customer groups and that the approach to cost-effectiveness evaluation be continued as it has been done in the past, in light of the expected update of the DSM Regulation. RCIA also submits that FEI should continue to evaluate individual programs and measures for cost effectiveness and should only include programs and measures that are not cost effective if there are other compelling reasons to include them in the portfolio.<sup>83</sup> BCOAPO did not comment on this matter.

BCOAPO states that FEI's estimates of the projected yearly bill savings for the Self Install and Direct Install programs, \$28 and \$100 respectively, are quite low and more can be done to achieve deeper retrofits and deeper savings for residential, and particularly low-income, ratepayers.<sup>84</sup> FEI replies that BCOAPO has not provided any basis for its view and has mischaracterized FEI's information; that in response to BCOAPO IRs, FEI has indicated the projected yearly savings are \$33 for the Self-Install program and \$120 for the Direct Install program when including the carbon tax.<sup>85</sup> FEI replies that the projected bill savings are reasonable, the 2022 and 2023 projections are consistent, and that it may consider additional measures that may result in further energy savings.<sup>86</sup>

The CEC recommends that the BCUC request FEI to present a comparative year-over-year GJ savings by program area in future DSM Expenditure Schedule Applications so that the progress from year to year in cost-effectiveness by program area can be more easily assessed from a benefit/cost perspective.<sup>87</sup> FEI replies that it is amenable to providing this information.<sup>88</sup>

The CEC submits it does not consider TRC to be the best measure of cost-effectiveness. The CEC considers the cost per GJ of benefit to be a better indicator. The CEC views cost-effectiveness as benefits exceeding costs on a present value basis and views the varying levels of TRC to be return on investment performance, which so long as it is positive is contributing to increased cost-effectiveness.<sup>89</sup> The CEC submits that FEI's 2023 DSM Expenditure Schedule represents an improvement in cost-effectiveness in total, as savings (benefits) have grown faster than expenditures (costs) providing greater net benefit totals to customers versus the FEI 2022 DSM Expenditure Schedule. The CEC recommends that the BCUC assess the FEI 2023 DSM Expenditure Schedule as having significantly improved its cost-effectiveness over its 2022 DSM Expenditure Schedule by delivering greater net benefits savings in total, and also lowering the cost per GJ of benefit.<sup>90</sup> The CEC notes there has been an improvement in this indicator in 2023 compared to the previous year.<sup>91</sup>

### *Panel Discussion*

The Panel considers the overall 2023 DSM Expenditure Schedule to be cost-effective for the purposes of the UCA s.44.2(5)(d).

The Panel supports the use of a portfolio-wide assessment of cost-effectiveness, aligned with the DSM Regulation s.4(1)(c). The interveners support this approach. The Panel encourages FEI to continue evaluating cost-effectiveness for sectors (e.g., residential, commercial, industrial, low-income) and individual measures, as

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<sup>81</sup> BCSEA Final Argument, pp. 8-9

<sup>82</sup> CEC Final Argument, p.12.

<sup>83</sup> RCIA Final Argument, pp. 10-11.

<sup>84</sup> BCOAPO Final Argument, p. 7.

<sup>85</sup> FEI Reply Argument, p. 7.

<sup>86</sup> FEI Reply Argument, pp. 7-8.

<sup>87</sup> CEC Final Argument, pp.15-16.

<sup>88</sup> FEI Reply Argument, p. 4.

<sup>89</sup> CEC Final Argument, p.13.

<sup>90</sup> CEC Final Argument, p.14.

<sup>91</sup> CEC Final Argument, pp. 13-14.

suggested by RCIA. This provides additional assurance of the financial merits of measures, albeit not as the sole basis of rejecting measures.

In this Application the basis of the Panel's consideration of the cost-effectiveness of FEI's 2023 Expenditure Schedule is the TRC and mTRC tests. FEI applied these tests to approximately 67% and 33% of the total DSM portfolio expenditures for the TRC and mTRC respectively. The 33% ratio for the mTRC is correctly lower than the specified limit of 40% in DSM Regulation s.4(1.5)(b)(iii).

The Panel rejects the CEC's submission to consider the cost per GJ of benefit as a better indicator of cost-effectiveness than the TRC, along with an assessment of benefits exceeding costs on a present value basis. While FEI did not reply to this submission, the Panel notes that the DSM Regulation defines the cost-effectiveness methodology and thus, the CEC has raised a comment that pertains to government policy which is outside of the scope of this proceeding. Moreover, an NPV analysis, as submitted by the CEC, is simply another way of presenting the same data that FEI included in its Application informing the three benefit-to-cost ratio indicators: the TRC, mTRC and UCT, as included in the DSM Regulation.

One of the most ambiguous aspects of the cost-effectiveness assessment is to consider the appropriate avoided cost of energy for the mTRC and low-income program area (the ZEEA) representing BC Hydro's long-run marginal cost of acquiring electricity generated from clean or renewable resources in British Columbia. The variation of values among options presented is substantial – ranging from \$106/MWh from the Waneta Application on the upper end and between \$54/MWh and \$80/MWh for certain wind power resources on the lower. The most recent estimate of the ZEEA in the 2021 IRP Application is \$65/MWh. Different ZEEA assumptions lead to shifting cost-effectiveness outcomes, as illustrated in the table above that compares the impact on mTRC benefit: cost ratios and shows the residential program declining from 1.6 to 0.8 with a declining ZEEA.

The Panel does not consider that the \$54/MWh lower cost point of marginal cost is a reasonable value for the purposes of the ZEEA, as that figure was provided as a range of \$54 to \$80/MWh in BC Hydro F2022 Revenue Requirement Application. The Panel prefers to consider the more recent ZEEA estimate of \$65/MWh in the IRP Application. Regardless, we consider that the DSM Portfolio is cost-effective under the three options put forward in this proceeding – the FEI value in the Application of \$106/MWh, the \$67/MWh mid-value of the range of values from the BC Hydro F2022 Revenue Requirement Application, and the value in the most recent BC Hydro 2021 IRP of \$65/MWh.

The overall cost-effectiveness is also shaped by the DSM expenditures themselves and the associated natural gas savings forecast in the 2023 DSM Expenditure Schedule. The Panel observes that an estimate for avoided cost of natural gas was not included, but that the methodology used to estimate cost-effectiveness is consistent with previous applications. The Panel is satisfied with the evidence provided by FEI in the Application and none of the parties disputed the estimates. However, the Panel has provided a direction later in this decision regarding the filing of avoided natural gas costs for future DSM expenditure schedule applications.

A final consideration is that of the UCT calculations for those measures that pass the mTRC, yet fail the TRC; namely, the residential program measures that have a UCT of 0.5. The PBR Decision provided a series of considerations that may be relevant when evaluating programs that do not pass the UCT. The Panel considers that it is appropriate to follow this approach for the review of the 2023 DSM Expenditure Schedule.

The Panel considers the residential New Home and Home Renovation Rebate programs to be cost-effective based on the mTRC, despite their failure to pass the UCT test. The Panel is satisfied that the FEI evidence supports these programs, as reinforced by intervenor argument, and that without them, significant opportunities for gas savings and GHG reductions in the home renovation and new home markets would be lost. The Panel is of the view that the unquantified benefits and hard to measure savings of market transformation partnerships between FEI, electric utilities, the Province, local governments and Indigenous communities on residential sector programs provide a rationale for their maintenance. Furthermore, the programs provide broad opportunities for customer participation, as supported by RCIA and BCOAPO. Finally, the Panel is of the view that the programs retain customer and trades engagement which is aligned with the BC Energy Objective (k) to encourage retention of jobs.

## 2.5 The Interests of Persons in British Columbia

Pursuant to section 44.2(5)(e), the Panel must consider the interests of persons in British Columbia who receive or may receive service from the public utility.

FEI submits that the proposed DSM Expenditure Schedule is in the interests of customers and potential customers as it encourages energy efficiency and conservation, reduces GHG emissions, is beneficial to the economy and is cost-effective. Individual customers that avail themselves of DSM measures will reduce their natural gas consumption and, all else equal, their natural gas bills.<sup>92</sup> FEI states that some of the key benefits of the proposed DSM Expenditure Schedule are the following:

- a) in line with evolving government policy, FEI's 2023 DSM Expenditure Schedule supports GHG emissions reductions through both, the market transformation of higher efficiency natural gas equipment and investment in the acceleration of the adoption of advanced DSM. Furthermore, it will support FEI's transition towards advanced DSM programming, such as deep energy retrofits, gas heat pumps, and dual-fuel hybrid heating systems;<sup>93</sup>
- b) the 2023 DSM Expenditure Schedule will result in an estimated 1,601,386 GJ/year in gas savings. FEI expects that, on average, a participating residential customer will save 4 % on their bill, while participating commercial customers will save 18%;<sup>94</sup>
- c) FEI conducted an in-depth consultation process and the proposed DSM Expenditure Schedule has been shaped by nearly 60 consultation engagement sessions from program up to portfolio level. The consultation included various parties, such as 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 Expenditure Schedule to EECAG members for review and input. FEI submits that a consistent piece of feedback was general endorsement for how DSM is managed and operated by FEI. FEI does not consider that there were any gaps in its consultation activities. FEI described the input from the consultation with stakeholders and the way this input influenced the content of the DSM Expenditure Schedule.<sup>95</sup>

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<sup>92</sup> Exhibit B-1, p. 13.

<sup>93</sup> FEI Final Argument, p. 15.

<sup>94</sup> FEI Final Argument, p. 15.

<sup>95</sup> FEI Final Argument, pp. 15-17.

In addition to the interveners participating in this proceeding, 19 entities<sup>96</sup> submitted letters of comment in support of the DSM Expenditure Schedule. FEI submits these letters demonstrate that there is wide and substantial support for the 2023 DSM Expenditure Schedule.<sup>97</sup>

### *Positions of the Parties*

BCSEA supports the 2023 DSM Expenditure Schedule as being in the interest of persons in BC who receive or may receive service from the public utility. BCSEA agrees with FEI that the Expenditure Schedule will result in numerous benefits including cost-effectively encouraging energy efficiency and conservation, reducing GHG emissions, benefiting the economy, and reducing the natural gas bills of customers that avail themselves of DSM measures.<sup>98</sup>

BCOAPO supports the acceptance of the Application subject to concerns regarding the alignment of the Application and the FEI's 2022 LTGRP, and recommendations outlined in its final argument.<sup>99</sup>

The CEC submits that it participates in FEI's stakeholder processes and recommends the BCUC consider FEI's consultation as robust and effective in meeting the criterium of being in the interests of existing and future customers receiving services from FEI. The CEC also recommends that the BCUC accept and approve the expenditure program increases and the priority program emphasis as being in the public interest.<sup>100</sup>

With respect to affordability, the CEC notes that in response to IRs, FEI states it is strongly committed to maintaining affordability of energy services for its customers and that DSM programming will help moderate overall bill impacts to participating customers.<sup>101</sup> The CEC recommends that the BCUC ask FEI to provide this affordability information as part of the FEI annual review statistics.<sup>102</sup> FEI submits that it is not clear what affordability information the CEC is requesting or how this would be incorporated into FEI's annual reviews. FEI suggests that, if the information is not already provided, the CEC request this information through FEI's future consultation process or in the IR process in FEI's future annual reviews or revenue requirements applications.<sup>103</sup>

RCIA supports the approval of FEI's 2023 DSM Expenditure Schedule.<sup>104</sup> RCIA is concerned about the rate impacts on customers of this Application as well as other FEI proceedings. RCIA submits that when considering the impact to ratepayers, the Rate Impact Measure (RIM) is useful, even though the RIM is often too restrictive to be used as a screening measure, and the DSM Regulation proscribes its use as a screening measure.<sup>105</sup> RCIA states it asked FEI through information requests how it considered the rate impacts on non-participants in DSM programming when designing the DSM portfolio and did not find the response satisfactory. RCIA recommends the BCUC direct FEI to provide additional information in the next DSM expenditure schedule application with respect to how FEI takes into account the interests of non-participants, and in particular the rate impacts resulting from the DSM expenditures, in the design of its DSM expenditure schedule.<sup>106</sup> FEI does not consider this information is required as RCIA agrees the DSM Expenditure Schedule is consistent with FEI LTGRP and benefits of the DSM Expenditure Schedule outweigh the associated rate impacts.<sup>107</sup>

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<sup>96</sup> Exhibits E-1 to E-19.

<sup>97</sup> FEI Final Argument, p. 17.

<sup>98</sup> BCSEA Final Argument, p. 10.

<sup>99</sup> BCOAPO Final Argument, pp. 4, 5, 10.

<sup>100</sup> CEC Final Argument, p. 2.

<sup>101</sup> Exhibit B-5, CEC IR 10.2.

<sup>102</sup> CEC Final Argument, p. 20.

<sup>103</sup> FEI Reply Argument, p. 4.

<sup>104</sup> RCIA Final Argument, p. 5.

<sup>105</sup> RCIA Final Argument, p. 12.

<sup>106</sup> RCIA Final Argument, p.13.

<sup>107</sup> FEI Reply Argument, pp. 3-4.

## Panel Discussion

The Panel considers that the DSM Expenditure Schedule is in the interests of persons in British Columbia and hence existing and potential FEI customers. We observe that the proposed DSM programs will provide participating customers with a broad range of opportunities to reduce bills and GHG emissions, by continuing and expanding upon FEI's historical DSM offerings and the associated labour force. Furthermore, FEI's investments in innovative technologies will provide a platform for future DSM programs that can support FEI's continued investment in energy and GHG reductions in a manner aligning with the direction of government policy.

We also note that FEI's consultation activities prior to the filing of the Application have ensured that the needs of a range of parties were considered in the development of FEI's proposed DSM portfolio. The Panel acknowledges there was general support from interveners for acceptance of the 2023 Expenditure Schedule, and further support from many other parties that filed letters of comment in this proceeding.

Regarding the CEC's submissions on affordability information, the Panel agrees that CEC has not specified the nature of the information it submits FEI should include in its annual DSM reports, and therefore we decline to make any recommendations on this submission. With respect to RCIA's recommendation for additional information on how FEI considers the interests of non-participants, we similarly note that RCIA has failed to specify the nature of the information that it submits should be filed in future applications, and how such information would provide more value than the Ratepayer Impact Measure. Therefore, we decline to make any recommendation on this matter. Finally, we note that to the extent RCIA has potential concerns regarding cumulative delivery rate increases, such issues may more appropriately be raised in FEI's rates application.

### 2.6 Panel Determination on the Expenditure Schedule

**Having considered all the applicable provisions in Section 44.2 of the UCA and for the reasons set out in sections 2.2 to 2.5, the Panel considers that the DSM Expenditure Schedule is in the public interest and accepts the FEI 2023 DSM Expenditure Schedule of \$ 141.077 million, as outlined in the application and in Section 2.1 of this Decision.**

### 3.0 Additional Approvals Sought

In addition to acceptance of the DSM Expenditure Schedule, FEI seeks BCUC approval of the following related matters, which the Panel addresses in this section:

- a) FEI's proposed changes to the funding transfer rules within the DSM portfolio that were previously approved as part of its 2019-2022 DSM Expenditure Schedule Application;<sup>108</sup>
- b) FEI's proposal for an additional 5% variance allowance rule to the total portfolio expenditures in the final year of the DSM Expenditure Schedule;
- c) FEI's proposed changes in the accounting treatment of some of the DSM funding, specifically an increase in the amount included in its rate base DSM Deferral account on a forecast basis from the currently approved \$30 million to \$60 million, effective for 2023; and
- d) FEI's proposal for a rate base deferral account for the regulatory costs associated with the review of this Application, that is proposed to be amortized over one-year starting in 2023 to match the time period that the DSM Expenditure Schedule will be in place.

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<sup>108</sup> The Order G-10-19 introduced changes to the original transfer rules that were initially formalized in the proceeding FortisBC Energy Utilities (FEU) 2012 and 2013 Revenue Requirements and Natural Gas Rates Decision (RRA).

### 3.1 Funding Transfer Rules

In its Application, FEI seeks changes to the current funding transfer rules that apply to FEI's ability to transfer funding accepted by the BCUC under a DSM expenditure plan.

The current transfer rules were established by Order G-44-12 in the FortisBC Energy Utilities (FEU) 2012 and 2013 Revenue Requirements and Natural Gas Rates Decision<sup>109</sup> (RRA Decision) and Order G-10-19 in FEI's 2019-2022 DSM Expenditures Plan proceeding.<sup>110</sup>

In summary, the current transfer rules that apply within an approved DSM expenditure schedule provide as follows:

- a) movement of funding to a maximum of 25 percent from one approved Program Area to another approved Program Area without prior approval of the BCUC;
- b) in cases where a proposed transfer into an approved Program Area is greater than 25 percent of that approved Program Area, prior BCUC approval is required;
- c) the transfer of funds to Innovative Technologies requires prior BCUC approval;
- d) rollover of unspent funds from one program area to the same program area in the following year;
- e) FEI files a DSM Annual Report as a compliance filing.<sup>111</sup> The DSM Annual Report includes information about DSM actual results, activities and expenditures; funding transfers; the Energy Efficiency and Conservation Advisory Group activities, including their views on "funding transfers, new programs and any other material the Stakeholder Group deems appropriate and wished to provide".<sup>112</sup>

FEI seeks the following changes to the current funding transfer rules:<sup>113</sup>

- a) **Removal of the requirement for approval of transferred funds into a program area:** FEI is proposing that only the transfer of funds greater than 25 percent **out of** a program area should require BCUC approval. FEI states this proposed change ensures that the limits on the amount that any one program area can lose funding are still in place but eliminates the limits on how much one program area can gain.<sup>114</sup> FEI further submits that the greater concern in managing the portfolio is ensuring that no program area is reduced significantly to the benefit of another program area.<sup>115</sup> FEI would still report on transfers into and out of program areas in its annual reporting to the BCUC.<sup>116</sup>
- b) **Removal of the requirement of prior approval:** FEI states it will endeavor to file for approval as soon as it is aware that a transfer above 25 percent is required; however, often it is not known for certain until it is about to occur or already occurring. Additionally, it is difficult to forecast the exact amount of the transfer above 25 percent ahead of its occurrence, and time is required to draft and submit an application to the BCUC.<sup>117</sup>
- c) **Inclusion of the Innovative Technologies program area in the transfer rules:** The Innovative Technologies program area was originally excluded from the funding transfer rules in the RRA Decision because the technologies in this program area were being separately reviewed in the BCUC's Alternative

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<sup>109</sup> BCUC Decision G-44-12.

<sup>110</sup> BCUC Order G-10-19.

<sup>111</sup> BCUC Decision G-44-12, p.173; Exhibit B-1, Appendix B, p. 2.

<sup>112</sup> Decision G-44-12, p. 176.

<sup>113</sup> Exhibit B-1, pp. 28-30.

<sup>114</sup> Exhibit B-1, p. 29.

<sup>115</sup> Exhibit B-1, p. 29.

<sup>116</sup> Exhibit B-1, p. 29.

<sup>117</sup> Exhibit B-1, p. 29.



Energy Services Inquiry (AES Inquiry). FEI states that now it is appropriate to include the Innovative Technologies program area in the funding rules because the reasons for its exclusion are no longer present. There are no programs or technologies within this program area that are being reviewed in separate regulatory processes as was the case for FEI's 2012 and 2013 DSM expenditure applications; and the programs within the Innovative Technologies Program Area do not contain expenditures for programs or technologies that are also FortisBC Alternative Energy Services projects.<sup>118</sup> In addition, due to the rapid developments within the Innovative Technologies program area, funding flexibility is important to nimbly adjust to support new opportunities as they emerge or to be able to transfer funding to other program areas should funding requirements become lower than anticipated.<sup>119</sup>

### *Positions of the Parties*

BCSEA and the CEC support all of FEI's proposed changes to the current funding transfer Rules.<sup>120,121</sup>

BCOAPO supports the removal of BCUC approval for transfer of funds into programs that are over 25% of the program budget,<sup>122</sup> but does not support the removal of the requirement of prior approval. BCOAPO considers transfers of over 25% of the budget out of the Low Income and Residential Programs would have material impact<sup>123</sup> on the sectors they represent. FEI submits BCOAPO's concerns are misplaced because funding will be maintained to meet forecast activity in each program area in each year; and transfers will happen only if funds are not needed in that program area due to lower than forecast activity in that year.<sup>124</sup>

RCIA is concerned that the removal of the requirement of approval for any amount over 25% of a budget will eliminate FEI's need to communicate its proposed changes with the Energy Efficiency and Conservation Advisory Group, in practice affecting the third-party review that the BCUC intended when establishing the 25% transfer guardrails, both "into" and "out of"<sup>125</sup> program areas. As a compromise, RCIA proposes that prior approval only be required if the program receiving the funds is less cost-effective than the program sourcing the funds. The intent is that the portfolio remains as cost-effective as the one approved.<sup>126</sup> RCIA indicates that this recommendation would extend to transfers into the Innovative Technologies program that exceed 25% of that program area's budget.<sup>127</sup> In reply, FEI states it has committed to continue communicating with the Energy Efficiency and Conservation Advisory Group members as it does under the current transfer rules.<sup>128</sup> FEI disagrees with RCIA request of limiting transfers only to more cost-effective areas, and states that such measure would disadvantage low income and residential program areas, and, to a lesser extent, commercial programs, which tend to be more challenged with respect to cost effectiveness.<sup>129</sup>

RCIA submits it would agree with the proposed change to the transfer rules that FEI not be required to obtain prior approvals on transfers out of a program greater than 25% if there was an appropriate mechanism for disallowance or non-acceptance.<sup>130</sup> FEI confirms that the BCUC retains its ability to determine that a transfer is not in the public interest, thus disallowing recovery through rates.<sup>131</sup>

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<sup>118</sup> Exhibit B-1, p. 30.

<sup>119</sup> Exhibit B-1, p. 30.

<sup>120</sup> BCSEA Final Argument, p. 3.

<sup>121</sup> CEC Final Argument, p.26.

<sup>122</sup> BCOAPO Final Argument, p. 10.

<sup>123</sup> BCOAPO Final Argument, p. 10.

<sup>124</sup> FEI Reply Argument, p. 12-13.

<sup>125</sup> RCIA Final Argument, pp.18-19.

<sup>126</sup> RCIA Final Argument, pp.18-19.

<sup>127</sup> RCIA Final Argument, p. 19.

<sup>128</sup> FEI Reply Argument, p. 13.

<sup>129</sup> FEI Reply Argument, pp.13-14.

<sup>130</sup> RCIA Final Argument, p. 20.

<sup>131</sup> FEI Reply Argument, p. 14.

BCSEA,<sup>132</sup> RCIA,<sup>133</sup> and the CEC<sup>134</sup> support the inclusion of the Innovative Technologies Program Area in the funding transfer rules, while BCOAPO did not take a position.

### *Panel Determination*

In order to provide more flexibility, and to more effectively manage the DSM portfolio as related to the 2023 DSM Expenditure Schedule, **the Panel approves the following changes to FEI's funding transfer rules:**

- **FEI does not require approval to transfer funds into an approved program area;**
- **FEI requires approval to transfer funds greater than 25% 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.**

However, as pointed out by FEI in its reply argument, the BCUC retains its ability to determine that a transfer is not in the public interest, thus disallowing recovery through rates.

The Panel considered RCIA's recommendation and proposed compromise, that prior approval for transfer of funds over 25% **into** a program area be required if the program area receiving the funds is less cost-effective than the program sourcing the funds. The Panel infers that RCIA has concerns that the additional flexibility of funding transfer rules may provide opportunities for FEI to make material changes in the profile of the expenditure schedules resulting in a portfolio of DSM programs that is less cost-effective than the portfolio outlined in the Application. The Panel agrees with FEI that the BCUC's continuing ability to determine that a transfer is not in the public interest, thus disallowing recovery through rates, addresses RCIA's concern.

## **3.2 Variance Allowance**

FEI is seeking approval of an allowed variance from the accepted DSM Expenditure Schedule and, generally, for the final year of DSM expenditure schedules. FEI's request is that it be 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.<sup>135</sup>

In the case of the 2023 DSM Expenditure Schedule, FEI is proposing that actual DSM expenditures may exceed 2023 accepted DSM expenditures by no more than five percent without prior approval from the BCUC. This means that FEI has additional flexibility to overspend the 2023 DSM approved expenditure schedule by \$7.1 million.<sup>136</sup>

FEI notes that actual DSM expenditures are determined by many factors outside FEI's control, including changes in market conditions and customer responses to programs. Therefore, a variance allowance of five percent provides flexibility in the final year of an approved expenditure schedule.<sup>137</sup>

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<sup>132</sup> BCSEA Final Argument, p. 11.

<sup>133</sup> RCIA Final Argument, pp. 18-19.

<sup>134</sup> CEC Final Argument, p.23.

<sup>135</sup> Exhibit B-1, p. 30.

<sup>136</sup> Exhibit B-1, p. 30.

<sup>137</sup> Exhibit B-1, p. 30.

FEI confirms this amount could theoretically be applied to a single program, but believes this is more likely to be the result of several programs exceeding their respective DSM planned expenditures in the final year of the approved expenditures.<sup>138</sup>

FEI provides an analysis showing the average monthly variances in forecasting experienced by FBC and FEI over the last 4 years, noting the maximum variance was 8%, but 5% is considered by FEI to be a reasonable average.<sup>139</sup>

In the event that FEI exceeds the approved expenditures by the full 5 percent, FEI states the average bill impact for a typical residential customer would be 70 cents in 2024.<sup>140</sup> FEI did not consider raising the expenditure amount in the last year by an equivalent amount, as an alternative approach.<sup>141</sup>

### *Positions of the Parties*

All interveners, BCSEA, RCIA, BCOAPO and the CEC, are in support of the approval of a variance allowance account.<sup>142</sup> BCOAPO considers the request is reasonable given that climate change and DSM policies and technologies are evolving at a fairly fast pace, and FEI, in the context of a single year DSM expenditure schedule, does not have the ability to carry over variances to the following year.<sup>143</sup>

### *Panel Determination*

**FEI is approved to exceed total accepted expenditures, in respect of the final year of the 2023 DSM Expenditure Schedule *only*, by no more than five percent without prior approval from the BCUC.**

Given that this application is for a one-year period, the request for a variance allowance is different from the other changes sought to the transfer rules in that it may have more of an impact on programs than if it was for a multi-year expenditure schedule. FEI, in this Application, is seeking the BCUC's *general* approval for creation of a total portfolio variance of not more than five percent in the final year of a DSM expenditure schedule. However, this Application is limited to acceptance of only a one-year DSM expenditure schedule. While the Panel approves the variance sought in the context this Application, it is not comfortable with approving the variance on a *general* basis as applying to DSM expenditure schedules which are for longer than a one-year term. Such a *general* variance, should, in the Panel's view, be determined in the context of the evidence and submissions made on an application for a multi-year DSM expenditure schedule. This approval for one year will also provide a trial period for considering the impact of such a variance.

## **3.3 Accounting Treatment for the Rate Base DSM Deferral Account**

FEI proposes to increase the amount it includes in its rate base DSM Deferral account on a forecast basis from the currently approved \$30 million to \$60 million, effective for 2023-<sup>144</sup>

Under the current approved treatment, \$30 million of expenditures are forecast in the rate base DSM Deferral account each year and the difference between the \$30 million forecast and actual/projected expenditure levels, up to the approved amount, is accounted for in FEI's non-rate base DSM Deferral account, attracting a weighted

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<sup>138</sup> Exhibit B-2, BCUC IR 16.3.

<sup>139</sup> Exhibit B-3, BCOAPO IR 10.5

<sup>140</sup> Exhibit B-2, BCUC IR 16.1.

<sup>141</sup> Exhibit B-2, BCUC IR 16.4.

<sup>142</sup> BCSEA Final Argument, p. 3; RCIA Final Argument, p. 21; BCOAPO Final Argument, p. 10; CEC Final Argument, p. 23.

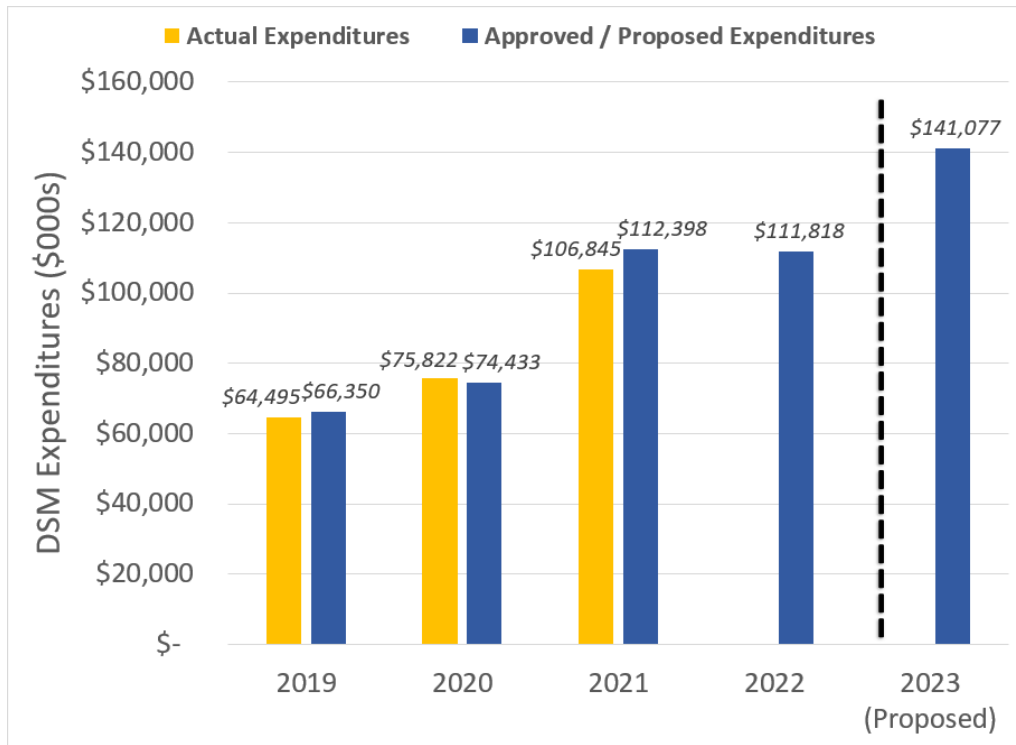
<sup>143</sup> BCOAPO Final Argument, p. 10.

<sup>144</sup> Exhibit B-1, p.31.

average cost of capital (WACC) return. The closing balance of the non-rate base DSM Deferral account is then transferred to FEI’s rate base DSM Deferral account at the beginning of the following year.

FEI states that its DSM expenditures have exceeded \$60M in the last 3 years (2019-2021), and FEI forecasts to spend over \$100M in years 2022 and 2023. 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 reduces financing costs added to the deferral account and reduces overall costs to customers.<sup>145</sup>

**Table 6: FEI Annual Total DSM Expenditures 2019 to 2022<sup>146</sup>**



*Positions of the Parties*

None of the interveners objected to this request.

*Panel Determination*

Recognizing the increase in DSM expenditures and their potential impact on the ongoing finance costs which could be added to the non-rate base deferral account, **the Panel accepts the proposed increase in the amount FEI includes in its rate base DSM Deferral account on a forecast basis from the currently approved \$30 million to \$60 million, effective for 2023, as being in the public interest.** The Panel notes FEI’s argument that by aligning the amount forecast in the rate base DSM Deferral account each year with FEI’s actual DSM expenditures, it will reduce the financing costs that are separately recorded in the non-rate base deferral account while ensuring that customers continue to pay only for DSM Plan expenditures that are ultimately spent.

<sup>145</sup> Exhibit B-1, p.31

<sup>146</sup> Exhibit B-1, p.14

### 3.4 Rate Base Deferral Account for Regulatory Costs

FEI is 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 Expenditure Schedule will be in place.<sup>147</sup> FEI states that this request is consistent with requests and approvals for other similar regulatory proceedings and for past DSM application proceedings.<sup>148</sup>

#### *Positions of the Parties*

All interveners support the establishment of a rate base deferral account to capture the regulatory costs associated with the review of this Application.

#### *Panel Determination*

**The Panel approves FEI's request to establish a rate-base deferral account to capture the regulatory costs associated with this Application. The deferral account will be amortized over a period of one year to match the duration of the 2023 DSM Expenditure Schedule.** The Panel notes this approach is consistent with the accounting treatment of regulatory costs in other FEI proceedings.

### 3.5 Recommendations for Future Applications

In the past DSM funding cycle (2019-2022), the BCUC reviewed several funding transfer application requests from both FEI and FBC (whose funding transfer rules are similar to FEI's). In an effort to assist in streamlining the process for the review of these applications, the BCUC in the FBC Decision and Order (G-371-22) provided a series of recommendations to assist in the regulatory review of DSM funding transfer applications from these two entities.<sup>149</sup>

The Panel agrees with the recommendations for information to be filed in future FEI funding transfer applications, as set out in Decision and Order G-371-22. We consider this approach would facilitate greater regulatory efficiency by providing future BCUC panels with key information which would assist in supporting their decisions and thereby reducing the number of procedural steps in the review of such applications.

In follow-up to the Panel Discussion on cost-effectiveness, **the Panel directs FEI to provide information on the avoided cost of gas used in the calculation of DSM cost-effectiveness in future DSM expenditure schedule applications.**

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<sup>147</sup> Exhibit B-1, p. 31.

<sup>148</sup> Exhibit B-2, BCUC IR 17.1

<sup>149</sup> Order G-371-22, p. 18.

**DATED** at the City of Vancouver, in the Province of British Columbia, this 6<sup>th</sup> day of March 2023.

*Original signed by:*

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B. A. Magnan  
Panel Chair/Commissioner

*Original signed by:*

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W. M. Everett, KC  
Commissioner

*Original signed by:*

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A. Pape-Salmon  
Commissioner



**ORDER NUMBER**  
**G-45-23**

IN THE MATTER OF  
the *Utilities Commission Act*, RSBC 1996, Chapter 473

and

FortisBC Energy Inc.  
2023 Demand Side Management Expenditures Plan

**BEFORE:**

B. A. Magnan, Panel Chair  
W. M. Everett KC, Commissioner  
A. Pape-Salmon, Commissioner

on March 6, 2023

**ORDER**

**WHEREAS:**

- A. On July 5, 2022, FortisBC Energy Inc. (FEI) filed with the British Columbia Utilities Commission (BCUC) its Application for Acceptance of Demand-Side Management (DSM) Expenditures Plan for 2023 (Application), pursuant to section 44.2 of the *Utilities Commission Act* (UCA), seeking acceptance of DSM total expenditures of \$141.077 million for 2023;
- B. FEI also sought approvals of:
  - 1. Proposed changes to its existing funding transfer rules;
  - 2. A new variance allowance rule on total portfolio expenditures in the final year of the DSM expenditure schedule;
  - 3. An increase in the amount included in its rate base DSM Deferral account on a forecast basis from the currently approved \$30 million to \$60 million, effective for 2023; and
  - 4. A rate base deferral account to capture the regulatory costs associated with the review of this Application.
- C. By Orders G-219-22 and G-283-22, the BCUC established a written public hearing process and regulatory timetable including intervener registration, one round of information requests, and final and reply arguments;

- D. The British Columbia Sustainable Energy Association (BCSEA), British Columbia Old Age Pensioners' Organization et al. (BCOAPO), Commercial Energy Consumers Association of British Columbia (CEC), Residential Consumer Intervener Association (RCIA), Movement Of United Professionals (MoveUp), and British Columbia Hydro and Power Authority (BC Hydro) registered as interveners in the proceeding;
- E. FEI filed its Final Argument on November 1, 2022. The interveners submitted their Final Arguments by November 21, 2022. FEI submitted its Reply Argument on November 30, 2022; and
- F. The Panel has reviewed the evidence and arguments in the proceeding and considers the following determinations are warranted.

**NOW THEREFORE**, pursuant to section 44.2 of the UCA, the BCUC orders as follows:

1. The FEI DSM expenditure schedule, as outlined in Table 3-1 of the Application and setting out expenditures of \$141,077 million for 2023, is accepted;
2. FEI's requested changes to the funding transfer rules for the DSM expenditure schedule are approved, as outlined in section 3.1 of the decision accompanying this order;
3. FEI is approved to exceed total accepted expenditures by no more than 5% without prior approval from the BCUC for the final year of the 2023 DSM Expenditure Schedule only;
4. FEI is approved to increase the amount included in its rate base DSM Deferral account on a forecast basis from \$30 million to \$60 million, effective for 2023, as outlined in section 3.3 of the decision accompanying this order; and
5. FEI is approved to establish a rate base deferral account to capture the regulatory costs associated with the review of the Application.

**DATED** at the City of Vancouver, in the Province of British Columbia, this 6<sup>th</sup> day of March 2023.

BY ORDER

*Original signed by:*

B. A. Magnan  
Commissioner



IN THE MATTER OF  
the *Utilities Commission Act*, RSBC 1996, Chapter 473

and

FortisBC Energy Inc.  
2023 Demand Side Management Expenditures Plan

**EXHIBIT LIST**

<b>Exhibit No.</b>	<b>Description</b>
<i>COMMISSION DOCUMENTS</i>	
A-1	Letter dated July 25, 2022 – Appointing the Panel for the review of FortisBC Energy Inc.’s 2023 Demand-Side Management (DSM) Expenditures Plan Application dated July 5, 2022
A-2	Letter dated August 10, 2022 – BCUC Order G-219-22 establishing a regulatory timetable
A-3	Letter dated September 1, 2022 – BCUC Information Request No. 1 to FEI
A-4	Letter dated September 12, 2022 – BCUC response to CEC extension request to file Information Request No. 1
A-5	Letter dated October 11, 2022 – BCUC Order G-283-22 with further regulatory timetable
A-6	Letter dated November 16, 2022 – BCUC response to CEC extension request to file final argument

*APPLICANT DOCUMENTS*

- B-1        **FORTISBC ENERGY INC. (FEI)** – 2023 Demand-Side Management (DSM) Expenditures Plan Application dated July 5, 2022
- B-1-1      Letter October 3, 2022 – FEI submitting erratum to Appendix A to the Application
- B-2        Letter dated October 3, 2022 – FEI Response to BCUC Information Request No. 1
- B-3        Letter dated October 3, 2022 – FEI Response to BCOAPO Information Request No. 1
- B-4        Letter dated October 3, 2022 – FEI Response to BCSEA Information Request No. 1
- B-5        Letter dated October 3, 2022 – FEI Response to CEC Information Request No. 1
- B-6        Letter dated October 3, 2022 – FEI Response to RCIA Information Request No. 1

*INTERVENER DOCUMENTS*

- C1-1        **BC SUSTAINABLE ENERGY ASSOCIATION (BCSEA)** - Letter dated July 29, 2022 Request to Intervene by Thomas Hackney and William J. Andrews
- C1-2        Letter dated September 12, 2022 – BCSEA submitting Information Request No. 1 to FEI
- C2-1        **RESIDENTIAL CONSUMER INTERVENER ASSOCIATION (RCIA)** – Letter dated August 11, 2022 Request to intervene by Samuel Mason
- C2-2        Letter dated September 12, 2022 – RCIA submitting Information Request No. 1 to FEI
- C3-1        **MOVEMENT OF UNITED PROFESSIONALS (MOVEUP)** – Letter dated August 23, 2022 Request to intervene by Jim Quail
- C4-1        **COMMERCIAL ENERGY CONSUMERS ASSOCIATION OF BC (CEC)** – Letter dated August 30, 2022 Request to intervene by Chris Weafer
- C4-2        Letter dated September 12, 2022 – CEC submitting extension request to file Information Request No. 1
- C4-3        Letter dated September 13, 2022 – CEC submitting Information Request No. 1 to FEI
- C4-4        Letter dated November 16, 2022 – CEC submitting extension request to file Final Argument
- C5-1        **BRITISH COLUMBIA HYDRO AND POWER AUTHORITY (BC HYDRO)** – Letter dated September 1, 2022 Request to intervene by Chris Sandve

- C6-1 **BC OLD AGE PENSIONERS' ORGANIZATION ET AL. (BCOAPO)** – Letter dated September 2, 2022  
Request to intervene by Leigha Worth
- C6-2 Letter dated September 12, 2022 – BCOAPO submitting Information Request No. 1 to FEI

*LETTERS OF COMMENT*

- E-1 CITY OF VANCOUVER (COV) – Letter of Comment dated August 19, 2022
- E-2 ABORIGINAL HOUSING MANAGEMENT ASSOCIATION (AHMA) – Letter of Comment dated August 5, 2022 received August 25, 2022
- E-3 BRITISH COLUMBIA HOTEL ASSOCIATION (BCHA) – Letter of Comment dated August 17, 2022 received August 25, 2022
- E-4 CITY OF KELOWNA (KELOWNA) – Letter of Comment dated August 11, 2022 received August 25, 2022
- E-5 CITY OF NELSON (NELSON) – Letter of Comment dated August 17, 2022 received August 25, 2022
- E-6 CITY OF PENTICTON (PENTICTON) – Letter of Comment dated August 19, 2022 received August 25, 2022
- E-7 MUSQUEAM HOUSING DEPARTMENT (MUSQUEAM-HD) – Letter of Comment dated July 28, 2022 received August 25, 2022
- E-8 REGIONAL DISTRICT OF OKANAGAN-SIMILKAMEEN (RDOS) – Letter of Comment dated August 18, 2022 received August 25, 2022
- E-9 THOMPSON OKANAGAN TOURISM ASSOCIATION (TOTA) – Letter of Comment dated August 15, 2022 received August 25, 2022
- E-10 TSLEIL-WAUTUTH NATION (TWN) – Letter of Comment dated August 16, 2022 received August 25, 2022
- E-11 GREENSTEP SOLUTIONS (GREENSTEP) – Letter of Comment dated August 25, 2022
- E-12 GREEN CONSTRUCTION RESEARCH & TRAINING CENTRE (GCRTC) – Letter of Comment dated August 29, 2022
- E-13 CANADIAN HOME BUILDERS ASSOCIATION – CENTRAL OKANAGAN (CHBA-CO) – Letter of Comment dated August 30, 2022
- E-14 FRASER BASIN COUNCIL – Letter of Comment dated August 30, 2022

- E-15 BC FIRST NATIONS ENERGY AND MINING COUNCIL SUPPORT (FNEMC) – Letter of Comment dated August 30, 2022
- E-16 CANADIAN ASSOCIATION OF CONSULTING ENERGY ADVISORS (CACEA) – Letter of Comment dated August 31, 2022
- E-17 BC NON-PROFIT HOUSING ASSOCIATION (BCNPHA) – Letter of Comment dated September 13, 2022
- E-18 CITY OF KAMLOOPS (KAMLOOPS) – Letter of Comment dated September 12, 2022
- E-19 HEALTH PATIO AND BARBEQUE ASSOCIATION OF CANADA (HPBAC) – Letter of Comment dated September 19, 2022