bcuc
British Columbia
Utilities Commission

Suite 410, 900 Howe Street
Vancouver, BC Canada V6Z 2N3
bcuc.com

P: 604.660.4700
TF: 1.800.663.1385
F: 604.660.1102

March 4, 2019

Sent via email/eFile

Mr. Doug Slater
Director, Regulatory Affairs
FortisBC
16705 Fraser Highway
Surrey, BC V4N 0E8
electricity.regulatory.affairs@fortisbc.com

Re: FortisBC Inc. – Application for Approval of 2019-2022 Demand Side Management Expenditures Plan – Project No. 1598973

Dear Mr. Slater:

Enclosed please find the British Columbia Utilities Commission's Decision and Order G-47-19 on FortisBC Inc.'s 2019-2022 Demand Side Management Expenditures Plan Application.

Sincerely,

Patrick Wruck

/dg
Enclosure

British Columbia Utilities Commission
Suite 410, 900 Howe Street
Vancouver, BC Canada V6Z 2N3
bcuc.com
P: 604.660.4700
TF: 1.800.663.1385
F: 604.660.1102

FortisBC Inc.

2019-2022 Demand Side Management Expenditures Application

Decision
and Order G-47-19

March 4, 2019

Before:
B. A. Magnan, Panel Chair
W. M. Everett, Q.C., Commissioner
H. G. Harowitz, Commissioner

TABLE OF CONTENTS

1.0 Background and context

1.1 Background and regulatory framework

On August 2, 2018, FortisBC Inc. (FBC) filed its application for acceptance of demand-side management (DSM) expenditures for 2019 to 2022 (Application) pursuant to section 44.2 of the *Utilities Commission Act* (UCA). FBC seeks acceptance of its DSM expenditure schedule totalling $44.0 million (inflation adjusted) for the period 2019 through 2022, as set out in Table 5-1 of the Application. The expenditure schedule outlined in the Application shows proposed expenditures at a “program area” (or sector) level, and is supported by the 2019–2022 DSM Plan, found in Appendix A of the Application. The 2019–2022 DSM Plan provides more granular details on the individual programs that make up the expenditure schedule, including program level descriptions, anticipated expenditures, forecasted energy savings, cost-effectiveness results, and summaries of notable changes from previously approved programs.

Pursuant to section 44.2(3) of the UCA, after reviewing an expenditure schedule, the British Columbia Utilities Commission (BCUC) must accept the schedule if it considers that making the expenditures referred to in the schedule is in the public interest, or it must reject the schedule. Pursuant to section 44.2(4), the BCUC may also accept or reject part of an expenditure schedule.

Pursuant to section 44.2(5), in considering whether to accept an expenditure schedule, the BCUC must consider:

(a) the applicabilityof 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.

Section 2 of the *Clean Energy Act* (CEA) outlines BC’s energy objectives, with respect to subsection 44.2(5)(a) of the UCA.

Pursuant to subsection 44.2(5)(b), on November 30, 2016, FBC filed its 2016 Long Term Electric Resource Plan (LTERP) and Long Term Demand Side Management Plan (2016 LT DSM Plan). On June 28, 2018, the BCUC issued its Decision and Order G-117-18 accepting the 2016 LT DSM Plan as being in the public interest.

Subsection 44.2(5)(c) of the UCA is not relevant to this Application, as sections 6 and 19 of the CEA apply only to BC Hydro and “prescribed utilities”.

Section 4 of the Demand-Side Measures Regulation (DSM Regulation)[1] outlines the process by which the BCUC determines cost-effectiveness of demand-side measures for the purposes of section 44.2(5)(d) of the UCA.

[1] B.C. Reg. 117/2017.

1.2 Approvals sought

In its Application, FortisBC Inc. (FBC) seeks acceptance of DSM expenditures of $44 million over the four year term of the 2019–2022 DSM Plan as indicated in the following expenditure schedule:[2]

Table 5-1: 2019-2022 DSM Plan Proposed Expenditures (inflation adjusted)

Program Area (Sector)	2018 Plan	Expenditures ($000s)					Energy savings (GWh)					TRC 2019-2022
	Approved	2019	2020	2021	2022	Total	2019	2020	2021	2022	Total	Ratio
Residential	$1,591	$2,086	$2,304	$2,519	$2,795	$9,703	6.0	5.6	6.0	6.5	24.1	1.8
Low Income	$731	$843	$873	$899	$930	$3,545	1.0	1.0	1.0	1.1	4.1	1.5
Commercial	$3,592	$3,178	$3,031	$3,052	$3,047	$12,308	15.5	15.5	15.3	15.5	61.8	1.7
Industrial	$377	$1,762	$1,788	$1,813	$1,815	$7,178	10.0	10.0	10.1	10.1	40.2	1.7
Program sub-total	*$6,291*	*$7,870*	*$7,995*	*$8,284*	*$8,587*	*$32,735*	*32.6*	*32.1*	*32.4*	*33.1*	*130.3*	*1.7*
Education and Outreach	$165	$566	$497	$595	$666	$2,324						
Supporting Initiatives	$742	$1,218	$838	$1,024	$1,044	$4,124						
Portfolio	$743	$776	$913	$1,019	$956	$3,663						
Demand Response		$477	$324	$130	$133	$1,064						
Total	**$7,940**	**$10,900**	**$10,600**	**$11,100**	**$11,400**	**$44,000**	**32.6**	**32.1**	**32.4**	**33.1**	**130.3**	**1.5**
LT DSM Plan	**$7,900**	**$8,100**	**$8,200**	**$9,400**	**$10,600**	**$36,300**	**26.4**	**26.4**	**28.4**	**30.4**	**111.6**	**1.9**

[3]

In addition, FBC seeks the following:

1. approval to move to a 15-year amortization period for DSM expenditures, from the current 10-year amortization period, as set out in Section 8.1 of the Application; and
2. approval for the transfer of unspent expenditures in a program area to the same program area in the following year, as set out in Section 8.2 of the Application.

By Order G-113-18, the BCUC approved FBC's 2018 DSM expenditures of $7.9 million. In comparison, the expected expenditures in 2019 are $10.9 million. FBC anticipates annual incremental energy savings totalling 130.3 GWh over the course of the 2019 to 2022 DSM Plan.[4]

FBC submits the 2019–2022 DSM Plan continues many of the cost-effective programs previously accepted in the 2018 DSM Plan. The 2019—2022 DSM Plan includes some additions and modifications to simplify DSM offers for customers, align programs with provincial partners, and comply with changes to applicable legislation.[5]

1.3 Regulatory process

By Order G-179-18 dated September 25, 2018, the BCUC established a written hearing process for its review of the Application, with one round of BCUC and intervener information requests (IRs) to FBC, final arguments by FBC and interveners, and reply argument by FBC.

Four parties registered as interveners in this proceeding:

- BC Sustainable Energy Association and Sierra Club BC (BCSEA-SCBC);

[2] Exhibit B-1, p. 1.
[3] Exhibit B-1, p. 14, subsequently amended pursuant to the Errata filed as Exhibit B-1-1.
[4] Exhibit B-1, p. 14.
[5] Exhibit B-1, p. 1.

- Movement of United Professionals (MoveUp);
- Industrial Customers Group (ICG); and
- Commercial Energy Consumer Association of British Columbia (CEC).

Pursuant to the regulatory timetable established by Order G-179-18, the BCUC submitted IRs to FBC on October 11, 2018, and BCSEA-SCBC, MoveUp, ICG and the CEC submitted IRs to FBC on October 16, 2018. FBC provided its responses to BCUC and intervener IRs on October 30, 2018. FBC filed its Final Argument on November 13, 2018. Final Arguments were filed by BCSEA-SCBC, MoveUp, ICG and the CEC by November 27, 2018, and FBC provided its Reply Argument on December 4, 2018.

Letters of comment were filed by the City of Kelowna and Nelson Hydro.

2.0 Acceptance of the 2019-2022 DSM Expenditure Schedule

In reviewing whether the expenditure schedule is in the public interest, the Panel examines the evidence and submissions pertaining to each of the relevant considerations outlined in section 44.2(5) of the UCA in turn below. Following this, the Panel's overall determination on the acceptance of FBC's 2019–2022 DSM expenditure schedule is addressed in Section 2.6.

2.1 The Applicablilty of BC's energy objectives

Pursuant to section 44.2(5)(a) of the UCA, the BCUC must consider the applicablility of BC's energy objectives in its review of the Application. FBC lays out its compliance with the appropriate elements of the CEA in Table 3.1 of its Application.[6] In its Final Argument, FBC summarizes how the expenditure schedule and supporting 2019–2022 DSM Plan meet the following sections of the CEA:

- **2(b) take demand side measures and to conserve energy:** the 2019–2022 DSM Plan includes all identified cost-effective measures;
- **2(d) innovative technologies that support conservation:** the 2019–2022 DSM Plan includes expenditures of $0.5 million on Innovative Technologies, and the Kelowna Area Demand Response Pilot;
- **2(h) fuel switching:** FBC notes that electrification prescribed undertakings now receive regulatory treatment under section 4 of the *Greenhouse Gas* [GHG] *Reduction (Clean Energy) Regulation*; and
- **2(i) encourage communities to reduce GHG and use energy efficiently:** Local government and institutional strategic energy planning, as well as community education and outreach are enabled through FBC's Supporting Initiatives program area.[7]

BCSEA-SCBC does not disagree with FBC's submission of the most relevant BC energy objectives.[8] No other interveners commented on this aspect of the Application.

[6] Exhibit B-1, p. 5.
[7] FBC Final Argument, pp. 15-18.
[8] BCSEA-SCBC Final Argument, p. 4.

Panel Determination

The Panel agrees that FBC has considered the most relevant BC energy objectives for this Application. Further, **the Panel finds that the 2019–2022 DSM Plan will work towards the applicable BC energy objectives.**

2.2 Long Term Electricity Resource Plan

Pursuant to section 44.2(5)(b) of the UCA, the BCUC must consider the utility's most recently filed long-term resource plan. In this regard, the BCUC has typically reviewed the general "consistency" of the DSM expenditure schedule with the resource plan. FBC's Long Term Electricity Resource Plan (LTERP) was filed with the BCUC in November 2016, and the BCUC accepted the Long Term (LT) DSM Plan component of the LTERP in its decision in June 2018.[9] The LTERP targeted an average of 72% load growth offset from DSM for the 2019–2022 period, with pro forma expenditures of $36.3 million.[10]

The $44 million requested in the Application exceeds the amount contemplated in the LTERP as noted in the table below.

Table 1-1: 2019-2022 DSM Plan compared with the LT DSM Plan

Plan	2019	2020	2021	2022	Total
Expenditures ($000s)					
2019-2022 DSM Plan	$10,900	$10,600	$11,100	$11,400	**$44,000**
LT DSM Plan	$8,100	$8,200	$9,400	$10,600	**$36,300**
Difference	*$2,800*	*$2,400*	*$1,700*	*$800*	***$7,700***
Energy savings (GWh)					
2019-2022 DSM Plan	32.6	32.1	32.4	33.1	**130.3**
LT DSM Plan	26.4	26.4	28.4	30.4	**111.6**
Difference	*6.2*	*5.7*	*4.0*	*2.7*	***18.7***

[11]

FBC submits that at the time of preparing the LTERP, the Conservation Potential Review (CPR) was only advanced to the point of contemplating "economic potential", whereas the 2019-2022 DSM Plan was developed using the CPR "market potential" as an input, and uses program level information. The LTERP also included FBC's assessment of the Long Run Marginal Cost (LRMC) of $100/MWh from clean or renewable BC resources for the purposes of cost-effectiveness testing in this Application.[12]

In the Application, FBC submits that the 2019–2022 DSM Plan addresses adequacy requirements 3(a) through (f) of the DSM Regulation with the following: low income program, direct-install program for rental accommodations, education programs for schools and post-secondary institutions, codes and standards under Supporting Initiatives (meeting the minimum requirement of 1% of overall expenditures pursuant to section 3(e) of the DSM Regulation) and funding for Community Energy Planning assistance.[13]

[9] Decision and Order G-117-18.
[10] FBC Final Argument, p. 12.
[11] Exhibit B-1, p. 1.
[12] Exhibit B-1, p. 5.
[13] Exhibit B-1, pp. 7-9.

Intervener Positions

BCSEA-SCBC submits that consideration of the LTERP supports acceptance of the 2019–2022 DSM Plan.[14]

The CEC submits that FBC should not be held to a lower level of DSM spending to 'match' the 2016 LT DSM Plan developed in 2016, and submits that changes to the load should be addressed as they become evident and that new opportunities should be included when they become available.[15]

Panel Determination

Although there are significant differences between the expenditures and energy savings in the LTERP compared to the 2019–2022 expenditure schedule, the Panel is satisfied that FBC has provided appropriate justification for such differences. The Panel recognizes that certain DSM activities that are included in the 2019–2022 DSM Plan could not have been contemplated at the time of preparing the 2016 LTERP. As discussed further in section 5 of this decision, the main additions to FBC's 2019–2022 DSM Plan, notably in the industrial program area and the Demand Response Pilot, have the potential to provide further benefits beyond those that were forecasted in the LTERP. Thus, **the Panel finds that the proposed expenditure schedule is supported by the 2019–2022 DSM Plan.**

2.3 Cost effectiveness of the 2019–2022 DSM Plan

In this Section, the Panel examines three aspects of cost-effectiveness:

- Benefit-cost ratios as expressed by the total resource cost test;
- The extent to which analysis in the Conservation Potential Review supports the cost-effectiveness assumptions; and
- Collaboration with other utilities.

2.3.1 Total Resource Cost

Pursuant to UCA section 44.2(5)(d), the BCUC must consider whether the demand-side measures are cost-effective within the meaning prescribed by regulation. Section 4 of the DSM Regulation sets out the cost-effectiveness criteria; the primary test for DSM being the Total Resource Cost (TRC) test,[16] and up to 10% of the portfolio may use the modified TRC (mTRC) which includes an adder for non-energy benefits. The BCUC may determine cost effectiveness at a program or portfolio level, typically the BCUC has used the portfolio approach. FBC submits the portfolio approach remains appropriate.[17]

The "benefits" of DSM for cost-effectiveness purposes are the LRMC value for BC clean or renewable resources (per section 4(1.1)(b)(i) of the DSM Regulation) of $100/MWh developed in the LTERP, and the Deferred Capital Expenditure value of $79.85/kW-year which has been in place since the 2017 DSM application.[18]

[14] BCSEA-SCBC Final Argument, p. 6.
[15] CEC Final Argument, p. 4.
[16] TRC = avoided energy and capacity costs / incremental cost of measure to customer and utility.
[17] Exhibit B-1, p. 22.
[18] FBC Final Argument, pp. 8, 13.

The portfolio level TRC benefit/ cost ratio is 1.5. All programs for which energy savings are forecasted pass the TRC, and none require the mTRC (See Table 5.1 in Section 2.1 of this decision). FBC submits that the DSM portfolio includes all identified measures that are cost effective under the TRC test; no additional measures that would have passed the mTRC were identified.[19]

2.3.2 Conservation Potential Review – Market Potential

In the FBC 2018 DSM Expenditures Decision, there were no specific directives to FBC for this application, however the BCUC encouraged "FBC to provide a clear explanation of how the CPR and market potential study results have been utilized in the development of the respective DSM plan."[20] Market potential is a subset of economic potential which estimates the rate of adoption, using factors including equipment turnover and customer willingness to adopt.[21] At the time of the FBC 2018 DSM Expenditure proceeding, the market potential element of the CPR had not been completed.

FBC partnered with three other BC utilities to undertake a provincial, dual-fuel, conservation potential review (CPR), and provides relevant analysis of the CPR in Section 5.4 of the Application. [22] FBC submits that it has not introduced new measures or programs solely as a result of the CPR. FBC says it was already aware of the measures included in the CPR and that the primary role of the CPR market potential report is to assess the savings potential for each measure.[23] FBC notes that additional effort is typically undertaken by program designers, using the directional guidance from a market potential study, to develop detailed plans for delivering conservation programs.[24] FBC submits that its program savings forecasts were generally aligned with the market potential, but its forecast for residential lighting was revised and smart thermostats were added to the residential program based on the market potential analysis.[25]

2.3.3 Collaboration

FBC notes that the co-ordination of DSM activities was considered to be a relevant objective in the BCUC's review of the 2015–16 DSM Plan.[26] FBC submits that it continues to work collaboratively with other public utilities on DSM related activities, including the CPR and certain DSM programs that involve partnerships.[27]

Intervener Positions

BCSEA-SCBC submits that the BCUC should conclude that the 2019–2022 DSM Plan is cost-effective.[28]

The CEC submits that the portfolio approach is appropriate because in addition to providing the utility with the opportunity to test out and/or refine programs that may have significant benefits in the long run, the spending can contribute to the knowledge base for DSM programming overall. The CEC notes that the TRC is 1.5 and the

[19] FBC Final Argument, p. 16.
[20] Order and Decision G-113-18, p. 4.
[21] BCUC Order G-113-18, p. 4.
[22] Exhibit B-1, pp. 14-21.
[23] Exhibit B-2, response to BCUC IR 2.5.
[24] Exhibit B-2, response to BCUC IR 2.4.
[25] Exhibit B-2, response to BCUC IR 2.5.
[26] FBC Final Argument, p. 7.
[27] FBC Final Argument, p. 18.
[28] BCSEA-SCBC Final Argument, p. 6.

mTRC is 1.7, and every program is significantly above unity. The CEC submits that FBC should consider undertaking additional DSM to the point that the TRC approaches unity, and could go so far as to reduce the mTRC to approach unity as well. The CEC is satisfied with the use of the LRMC and DCE measure values.[29]

In reply to the CEC, FBC reiterates the BCUC's determination in the 2016 LTERP Decision that, "the UCA does not compel FBC to pursue any and all DSM resources that are cost effective," and that FBC's DSM targets are based on resource needs as determined in the LTERP.[30]

Panel Determination

The Panel is satisfied that the proposed expenditures must meet a minimum TRC benefit/cost ratio of 1.0 or greater to be considered cost-effective. In evaluating this ratio, the Panel does so at the portfolio level. **The Panel finds that the portfolio is cost-effective with an overall TRC ratio of 1.5 thus meeting the requirements of section 4 of the DSM Regulations**.

The Panel is satisfied that the CPR supports FBC's forecasted energy savings, and, in turn, cost-effectiveness calculations. Further, the CPR gives credence to FBC's position that it has identified all measures that are cost-effective.

The Panel also acknowledges that FBC's collaboration with other utilities is likely to have a positive impact on cost-effectiveness.

2.4 Interest of persons in BC who receive or may receive services

FBC submits it has undertaken an in-depth and varied consultation process in its development of the 2019–2022 DSM Plan, and that the 2019–2022 DSM Plan addresses the key end-uses of FBC's principal rate classes.[31] FBC states that it has engaged in and documented over 50 interactions and consultations related to the 2019–2022 DSM Plan, with entities including: communities, customers, contractors, manufacturers, government, First Nations, vendors, interest groups, and the Energy Efficiency and Conservation Advisory Group (EECAG). FBC submits that most of the key learning from these consultations was market data refinement, and included ideas for program design and how to expand programs and program reach. FBC submits that a consistent piece of feedback from the consultations was general endorsement for how FBC manages and operates its DSM.[32]

Intervener Positions

The CEC commends FBC on its collaborations and submits that FBC's collaboration is highly beneficial to the ongoing development of DSM and maximizing the benefits/costs of demand-side measures for ratepayers and other stakeholders.[33] The CEC recommends that the BCUC find that FBC has provided adequate consultation with its stakeholders in its 2019–2022 DSM Plan. The CEC submits FBC has met interests of persons who receive or may receive service, but could go further in doing so.[34]

[29] CEC Final Argument, pp. 7-9.
[30] FBC Reply Argument, p. 4.
[31] FBC Final Argument, p. 19.
[32] Exhibit B-1, p. 13.
[33] CEC Final Argument, p. 5.
[34] CEC Final Argument, pp. 2, 6.

BCSEA-SCBC acknowledges and support FBC's cooperation and collaboration with FEI and BC Hydro in developing and implementing the 2019–2022 DSM Plan. Over the years, BCSEA-SCBC have consistently encouraged cooperation and collaboration between the BC public utilities in developing and implementing demand-side measures.[35] BCSEA-SCBC considers that the 2019-2022 DSM Plan is in the interests of present and future ratepayers.[36]

Panel Determination

The Panel finds that the expenditure schedule and supporting 2019-2022 DSM Plan are in the interests of present and future ratepayers. The Panel is encouraged that FBC's consultation efforts in the development of the 2019-2022 DSM Plan appear to have been broad reaching, and generally received positively.

2.5 Overall Intervener positions on whether to accept the expenditure schedule

The following comments were made by the interveners in this matter:

BCSEA-SCBC supports acceptance of the expenditure schedule.[37]

The CEC recommends that the BCUC accept FBC's proposed DSM schedule. However, The CEC's view is that the utility should be pursuing all cost-effective DSM for the benefit of ratepayers and other stakeholders, and could go significantly further than it has provided in this Plan.[38]

MoveUP recommends that the BCUC find the DSM expenditure schedule to be in the public interest and issue the approvals sought.[39]

Letters of support for acceptance of FBC's DSM expenditure schedule were also filed by the City of Kelowna[40] and Nelson Hydro.[41]

2.6 Panel Determination on whether the expenditure schedule is in the public interest

Pursuant to section 44.2(3) of the UCA, the Panel accepts the DSM expenditure schedule for the period 2019 through 2022 submitted by FBC in Table 5.1 of the Application. The Panel finds that the expenditure schedule, as supported by the 2019–2022 DSM Plan, is in the public interest. In making this determination, the Panel has examined each of the relevant considerations set out in section 44.2(5) of the UCA, as outlined in the subsections above, and finds that these considerations support acceptance of the expenditure schedule. The Panel also notes the overall support for acceptance from interveners and interested parties.

[35] BCSEA-SCBC Final Argument, p. 7.
[36] BCSEA-SCBC Final Argument, p. 8.
[37] BCSEA-SCBC Final Argument, p. 23.
[38] CEC Final Argument, pp. 1, 4.
[39] MoveUp Final Argument, p. 1.
[40] Exhibit E-1.
[41] Exhibit E-2.

3.0 Amortization period

FBC is seeking approval to move from the current 10-year to a 15-year amortization period for its DSM expenditures. FBC has undertaken the analysis for an amortization period that is in line with the average weighted measure life of all the measures in the 2019–2022 DSM Plan, which FBC submits is more appropriate from a cost/benefits matching perspective. FBC has estimated that the average measure life (weighted by incentives) is 15.6 years, which FBC submits means that customers benefit from FBC's DSM measures for an average time period of approximately fifteen years.[42]

FBC provides evidence regarding the calculation of average measure life and the rate impacts of its proposal, which are examined further in the following subsections.

3.1 Average measure life analysis

FBC explains that a measure life value for a program can be determined as a weighted average of the measure life of the individual measures, based on participation for each measure as weighting.[43] The table below shows the average measure life by program, sector and at the portfolio level, weighted by incentives.

Table 8-1: Average measure life weighted by incentives, 2019-2022 DSM Plan

Sector	Incentives $(000s)	Measure life (years)
Residential	**$8,829**	**19.0**
Home Renovation	$5,243	18.7
Lighting	$481	10.7
Low Income	$1,966	19.6
New Home	$1,013	23.8
Rental Apartment	$126	11.9
Commercial	**$8,101**	**14.3**
Commercial Custom	$3,503	15.8
Commercial Prescriptive	$4,599	13.2
Industrial	**$5,841**	**12.4**
Industrial Custom	$4,950	12.3
Industrial Prescriptive	$891	13.5
Total	**$22,771**	**15.6**

[44]

FBC's weighted average measure life is weighted by incentives. An alternative approach is to weight by the level of projected energy savings, which would result in an average measure life of 14.0 years. FBC submits that it weights by expenditures primarily because there is more certainty with measure and program costs, which are reflected in FBC's accounts in the year they are incurred. In comparison, the benefits streams are not visibly shown in FBC's accounts and furthermore can be impacted by changes in the avoided costs, measure retention, obsolescence, etc.[45]

[42] Exhibit B-1, p. 28.
[43] Exhibit B-5, response to ICG IR 7.1.
[44] Exhibit B-1, p. 28.
[45] Exhibit B-2, response to BCUC IR 8.2.

FBC does not undertake analysis of the actual life of measures but relies on a number of sources for the estimated life of a DSM measure.[46] FBC submits that measure life reference values from similar utility programs are typically found in Technical Resource Manuals (TRMs), measure life studies, Conservation Potential Reviews, and Industry standards are sourced for equipment life such as ASHRAE (American Society of Heating, Refrigerating and Air-Conditioning Engineers). FBC notes that in some cases, data collected through program delivery, such as contractor feedback, help in confirming or adjusting measure life assumptions.[47]

FBC submits that the main factor that affects measure life is the hours of use. The more the measure is used the shorter its life will be. FBC updates assumptions about measure life and operating hours on an ongoing basis to use the best available information. FBC believes that the risk of redundancy presented by new technologies is greatest in lighting but lower in areas with larger capital expenditures. FBC has observed a rapid uptake in LED bulbs and luminaires that may be replacing other technologies, such as T8 fluorescent luminaires, before the end of their useful life. FBC performs program evaluations and updates baselines to assess the impact of new technologies, such as LEDs. In contrast, FBC has observed that other pieces of equipment, such as air compressors or chillers, can remain in service well beyond their expected lifetime.[48]

3.2 Rate impacts

FBC provides analysis to show the comparative rate impacts of its proposed DSM expenditures under the existing 10 year and its proposed 15-year amortization periods. The table below shows the cumulative rate change for the period 2019 to 2037.

FBC notes that, based on spending levels consistent with 2018, changing to a 15-year amortization period results in a cumulative rate impact that is lower by 0.45% over the four year period of the 2019–2022 DSM Plan.[49] However, the table also indicates that longer term, a 10-year amortization period results in a lower overall impact upon rates, with a peak cumulative rate impact of 1.95%, compared to 2.22% for a 15-year amortization period.

Cumulative Rate Change Difference between 10 and 15 year Amortization Periods

	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Current Treatment: Amortizing DSM Expenditures over 10 years	0.28%	0.55%	0.78%	0.96%	1.09%	1.23%	1.45%	1.65%	1.77%	1.86%
Proposed Treatment: Amortizing DSM Expenditures over 15 years	-0.22%	0.05%	0.30%	0.51%	0.73%	0.93%	1.06%	1.23%	1.40%	1.56%
Difference	0.51%	0.50%	0.48%	0.45%	0.36%	0.30%	0.39%	0.42%	0.36%	0.30%

	2029	2030	2031	2032	2033	2034	2035	2036	2037
Current Treatment: Amortizing DSM Expenditures over 10 years	1.93%	1.93%	1.95%	1.95%	1.95%	1.94%	1.94%	1.93%	1.92%
Proposed Treatment: Amortizing DSM Expenditures over 15 years	1.73%	1.89%	1.96%	2.08%	2.18%	2.22%	2.21%	2.22%	2.21%
Difference	0.20%	0.05%	-0.02%	-0.13%	-0.23%	-0.28%	-0.28%	-0.28%	-0.29%

[50]

3.3 Intervener submissions

BCSEA-SCBC submits the amortization period should match the benefits period and agree with weighting by incentives, but that an amortization period of 14-16 years would be supportable.[51]

---

46 Exhibit B-2, response to BCUC IR 8.5.
47 Exhibit B-5, response to ICG IR 7.1.
48 Exhibit B-2, response to BCUC IR 8.5.
49 FBC Final Argument, p. 26.
50 Exhibit B-2, BCUC IR 8.3.
51 BCSEA-SCBC Final Argument, p. 14.

ICG supports the proposal to increase the amortization period to 15 years.[52]

The CEC agrees that it is appropriate to match the costs with the benefits of the program but that the calculation should be weighted by savings rather than expenditures. The CEC notes FBC's citation of other utilities with longer amortization periods.[53]

3.4 Panel Determination

The Panel denies FBC's request to increase the amortization period from 10 years to 15 years for DSM Expenditures. Having considered the evidence, the Panel has identified two broad areas of concern with respect to FBC's proposal: the methodology for calculating weighted average measure life; and balancing benefits matching with rate impacts.

Calculation of the aggregate measure life

The Panel is not persuaded that FBC's measure life analysis supports the case that 15 years represents an appropriate amortization period in the context of "benefits matching". Most importantly, FBC's analysis of average measure life is undertaken only for Residential, Commercial and Industrial programs, but excludes Conservation Education and Outreach, Supporting Initiatives, Portfolio and the Demand Response Pilot. In aggregate, these excluded expenditures account for $11.3 million of the $44 million that will be included in the amortization schedule (i.e. just over 25% of the total). FBC does not forecast any energy savings resulting directly from these excluded program areas, and while the Panel acknowledges that such expenditures may in some instances support the achievement of energy savings in FBC's "core" DSM programs, we consider these expenditures more akin to operating expenses than expenditures with a 15 year benefit life.

Furthermore, the Panel has concerns with respect to certain assumptions that underpin the average measure life analysis. The Panel notes DSM measures are implemented on the customer side of the meter. Consequently, usage patterns and replacement of technology are subject to the decisions and behaviour of customers, beyond the control of the utility. This adds uncertainty regarding the actual persistence of measures (i.e. a customer may retire the equipment before the end of its useful life). Additionally, the Panel notes that future changes to the "baseline" against which energy savings are benchmarked may result in a measure no longer providing energy savings, even if the equipment itself continues to be operational. The Panel recognizes that predicting customer behaviour or future redundancy is extremely challenging, however it is these very uncertainties that call into question the extent to which FBC's measure life analysis can be relied upon as a proxy for DSM benefits at this time.

Balancing benefits matching with rate impacts

While the Panel does not disagree that the principle of matching costs to benefits is a relevant consideration with respect to addressing issues of intergenerational equity, the Panel does not believe that this is the sole consideration with respect to determining the appropriate amortization period. In previous decisions regarding the amortization, the BCUC has identified rate concerns as a relevant factor to consider with respect to determining appropriate DSM amortization periods. In the Decision for the FBC Multi-year Performance Based

[52] ICG Final Argument, p. 10.
[53] CEC Final Argument, pp. 30-31.

Ratemaking Plan 2014–2018, the BCUC denied FBC's request to increase the DSM amortization period and amortization of its "On-Bill Financing Pilot Program" from 10 years to 15 years. The decision stated that:

> …a 10-year amortization period provides a fair and reasonable return to the utility based on the existing level of DSM spending, and that an increase in the amortization period would place upward pressure on rates over the long term.[54]

Additionally, in the Decision for the FortisBC Energy Inc. Multi-year Performance Based Ratemaking Plan 2014–2018, the BCUC accepted an amortization period of 10 years, "primarily on the basis of rate impact concerns." The BCUC noted:

> The length of the amortization period should be determined based on criteria such as rate impact and matching the benefits of EEC with the costs.[55]

The Panel agrees with previous panels that rate impacts should weigh into its decision on the amortization period. The evidence provided by FBC demonstrates that FBC's proposal to move to a 15-year amortization period would, overall, result in a greater burden to ratepayers than a 10-year amortization period.

In summary, we are not persuaded that the Application supports a conclusion that a 15-year horizon accurately reflects a matching of benefits realized against total portfolio expenditures. Further, we place importance on finding a balance between the matching principle and rate impacts. For these reasons, **we find that the current 10-year amortization period remains appropriate for the proposed DSM Expenditures.**

4.0 Funding transfers

This proceeding addressed two aspects to funding transfers within the DSM portfolio: transfers within a program area from one year to the next: and transfers between program areas within the same year.

- In its Application, FBC requests approval to transfer unspent expenditures in a program area to the same program area in the following year[56] ("Inter-Year Transfers").
- Following the filing of FBC's 2017 DSM Annual Report, the BCUC's Compliance Department raised an issue concerning funding transfer rules between DSM programs in the same year ("Inter-Program Transfers"), and recommended that this issue be explored in this proceeding.

These related but distinct aspects of funding transfers are dealt with sequentially in the following two subsections. Prior to those discussions, the Panel provides comments on the general context in which funding transfers operate. More specifically, we comment on the latitude FBC has for Inter-Year Transfers and/or Inter-Program Transfers in the absence of any explicit approvals from the BCUC.

For reasons set out immediately below, **the Panel finds that in the absence of explicit approval from the BCUC, BCUC acceptance of FBC's 2019–2022 DSM as set out in detail in Table 5.1 of the Application does not provide acceptance of any Inter-Year Transfers or Inter-Program Transfers.** For greater clarity**,** this finding is not directed at fettering FBC's ability to spend DSM funds as it sees fit. Rather, it provides clarity on what

---

[54] FBC 2014-2018 PBR Decision, p. 244 https://www.ordersdecisions.bcuc.com/bcuc/decisions/en/111635/1/document.do
[55] FEI 2014-2018 PBR Decision, p. 279. https://www.bcuc.com/Documents/Proceedings/2014/DOC_42181_09-15-2014-FEI-2014-18-DecisionWEB.pdf
[56] Exhibit B-1, p. 29.

expenditures are included in the accepted expenditure schedule for the purpose of recovering those expenditures in rates.

Section 44.2.4 of the UCA gives the BCUC latitude to accept or reject part of a schedule. In short, the individual rows (programs) and columns (years) of the schedule are subject to scrutiny and acceptance. Therefore, acceptance of the entire schedule implies that the contents of each row and column are also accepted as filed, and a substantive deviation from those values cannot be assumed to have been implicitly accepted.

As more fully discussed in Section 2 of this Decision, several criteria must be satisfied for the BCUC to accept a DSM expenditure schedule. Therefore, the detailed breakdowns by year and program (provided in the Application and IRs) factor critically in the Panel's determination that the elements of the proposed expenditure schedule aggregate to a portfolio that is in the public interest and therefore accepted. A substantive deviation from that breakdown would not necessarily result in the same Panel assessment. By way of example, if all or a substantive amount of the proposed funding for the programs that FBC has identified as meeting the adequacy requirements were subsequently transferred out of those programs, the resulting DSM portfolio (i.e. as opposed to what is proposed in the Application) may no longer satisfy the adequacy requirement. Similarly, a large transfer of funds across programs may change the portfolio TRC value, with no guarantee that the resulting allocations would maintain a TRC greater than unity.

Finally, the Panel takes note of FBC's positions. The Panel observes that FBC has explicitly acknowledged that BCUC approval is needed for transfers from one year to the next by virtue of including a request for that approval in its Application. The Panel also notes that FBC argues that the BCUC should not require approval for funding transfers into or out of approved program areas because it considers the existing requirements and processes provide sufficient oversight.[57] As discussed in the immediately preceding paragraph, the Panel disagrees with this latter position put forward by FBC as such unrestricted transferability has the potential to substantively change our assessment of the adequacy and effectiveness of the portfolio.

4.1 Inter-Year Transfers

FBC requests approval to transfer unspent accepted expenditures in a program area to the same program area in the following year. FBC's proposal is for a cumulative expenditure rollover, year-to-year, such that by the end of the four year period covered by the 2019–2022 DSM Plan, total actual DSM expenditures would be up to the $44.0 million total for the 2019–2022 DSM Plan as a whole. FBC submits that the funding transfer proposal would give FBC flexibility to adjust its DSM spending to new information, program results, and other opportunities without the need for BCUC review, which is particularly important given the length of time the DSM Plan covers. FBC submits the mechanism will give FBC an opportunity to catch up spending if market conditions, customer response, or other external factors impact the planned timing of expenditures, thus increasing the likelihood of achieving the overall planned expenditure.[58]

[57] FBC Final Argument, para. 100.
[58] FBC Final Argument, p. 27.

FBC comments that if this request is approved, FBC plans to add information regarding unspent rollover values to its DSM program annual reports so that all amounts transferred within a program area are transparently accounted for in the DSM program annual reports.[59]

Intervener Comments

BCSEA-SCBC supports the proposed Inter-Year Transfers, noting that the exact timing of the expenditure would not change whether the 2019–2022 DSM Plan is still in the public interest, and that approval would reduce the risk of underspending, which has been a concern of BCSEA-SCBC in the past.[60]

ICG supports FBC's proposal, provided that all rollovers are to the same program area.[61]

The CEC supports FBC's proposal, but submits that it could be reasonable for the BCUC to apply a maximum of 15% for total expenditure underspending on FBC's DSM without FBC supporting the underspending with an appropriate justification.[62] The CEC does not provide any further explanation on this position. In reply, FBC submits this proposal would presumably require BCUC approval and add time and regulatory burden that could negate the purpose of the rollover mechanism. FBC submits the information it intends to add to its DSM annual reports provides transparency and sufficient oversight.[63]

Panel Determination

The Panel approves transfers of unspent accepted DSM expenditures in a program area to the same program area in the following year, on the condition that FBC adds information regarding unspent rollover values to its DSM annual reports so that all amounts transferred within a program area are transparently accounted for in the DSM annual reports.

The Panel is persuaded that, given the length of time this DSM expenditure schedule covers, it is difficult to provide precision on the timing of uptake of any specific measure(s). Inter-Year Transfers provide useful flexibility in adjusting expenditures based on any number of issues that may affect proposed spending in a given program over the four-year life of the accepted DSM expenditures.

4.2 Inter-Program Transfers

In the 2012-2013 FBC Revenue Requirements Decision that included a proposed DSM expenditure schedule, the BCUC established funding transfer rules with respect to Inter-Program Transfers:

> The Commission Panel is of the view that a more formal policy regarding fund transfers among sectors/ program areas is appropriate at this time, given the substantial increase in the budget for DSM programs. The Commission Panel is also of the view that a threshold of 25 percent is most appropriate. **The Commission Panel therefore approves FortisBC's transfer of a maximum of 25 percent of the budget amount from one existing program area or sector to another**

[59] Exhibit B-2, response to BCUC IR 9.1.2.
[60] BCSEA Final Argument, p. 14.
[61] ICG Final Argument, p. 10.
[62] CEC Final Argument, p. 32.
[63] FBC reply Argument, p. 9.

existing program area or sector without prior approval of the Commission. In cases where a proposed transfer into or out of an approved Sector is greater than 25 percent of that sector, prior Commission approval is required.[64]

In the FBC 2014–2018 Performance Based Ratemaking proceeding, FBC initially filed for acceptance of DSM expenditures for the full five-year period, including a request to continue the transfer rules established in the 2012–2013 Revenue Requirements Decision. Partway through the proceeding, FBC withdrew its request for acceptance of its proposed multi-year DSM expenditures through 2018, instead seeking approval for the 2014 schedule only.[65] In September 2014, the BCUC issued its decision on the application, including the following comments on DSM funding transfers:

> FBC made the following additional requests: … 3. Approval of changes to the DSM funding transfer rules set by the Commission for the 2012–2013 test period. <u>Specifically, FBC requests that it be permitted to launch new programs without pre-approval from the Commission</u> provided funds are transferred within the same approved Program Area, the new program meets with the DSM Regulations and has not been previously rejected by the Commission[66].
>
> The Commission Panel declines to rule on FBC's proposed DSM funding transfer rules as they are not applicable to the 2014 DSM funding application.[67] [Emphasis added]

That 2014 decision provided no further commentary on why the BCUC considered the proposed transfer rules were not applicable to the application.

Since then, FBC has not proposed funding transfer rules as part of its subsequent DSM expenditure schedule applications and the BCUC has not set out funding transfer rules in its decisions on any of those applications. FBC argues that as a result of the 2014 decision in which the BCUC declined to approve FBC's proposed funding transfer policy, no funding transfer rules have been in place since then.[68]

FBC further argues that BCUC approval for Inter-Program Transfers is not necessary for its 2019–2022 DSM Plan. The existing regulatory requirements and processes, including BCUC acceptance of DSM expenditure schedules, the prescribed cost effectiveness tests, the Energy Efficiency and Conservation Advisory Group (EECAG) and FBC's annual DSM reporting provide sufficient regulatory oversight of its DSM spending.[69]

None of the interveners provided comments specific to this issue.

Panel Determination

The Panel approves transfers of up to twenty five percent of accepted DSM expenditures from one existing program area to another existing program area without prior approval of the BCUC on the condition that FBC adds information regarding such transfers so that all amounts transferred from one existing program area to another existing program area are transparently accounted for in the DSM annual reports. In cases where a

[64] FBC 2012-2013 Revenue Requirements Decision, p. 140.
[65] Exhibit B-2, BCUC IR 1.9.3.
[66] (Exhibit B-1-1, Appendix H, p. 11)
[67] Decision Multi-Year Performance Based Ratemaking Plan For 2014 Through 2018, September 15, 2014, pp. 243-244.
[68] Exhibit B-2, response to BCUC IR 1.9.3.
[69] Exhibit B-2, response to BCUC IR 1.9.3.1.

proposed transfer into or out of an approved program area is greater than twenty five percent of that program area's accepted expenditures for the year in question, prior BCUC approval is required.

The Panel makes no determination on whether the Inter-Program Transfer rules set out in the 2012-2013 FBC Revenue Requirements Decision do or do not automatically carry over to subsequent DSM expenditure schedules. Our singular observation in this regard is that if they do not automatically carry over, then in keeping with the Panel's determination above, FBC would have no discretion to transfer funds between programs in the accepted 2019-2022 DSM expenditure schedule, unless specifically granted in this Decision.

The Panel agrees that some discretion is in the public interest and should be provided in this Decision. At the same time, as discussed more fully above, unrestricted freedom has the potential to produce outcomes that may no longer align with the reasons why the current portfolio is deemed to be in the public interest.

The Panel agrees with the sentiments expressed in the 2012-2013 FBC Revenue Requirements Decision, that a balance is appropriate, achieved by granting discretion but within defined limits.

5.0 Program level discussion

Having noted that the proposed DSM Expenditures are largely in line with the pro-forma expenditures outlined in the 2016 LT DSM Plan, there are two programs where there is a notable increase in expenditures, where further discussion is warranted: the Industrial program area, and the Demand Response pilot.

5.1 Industrial program area

FBC's 2019-2022 DSM Plan includes an Industrial program area budget totalling $7.2 million over four years, and targets energy savings totalling 40.2 GWh. This represents a significant increase compared with the 2018 DSM Plan which FEI submits is largely attributable to lighting measures in relation to the new cannabis production facilities being constructed in FBC's service territory.[70] As of October 15, 2018, FBC is aware of 17 planned cannabis facilities that are complete or currently under construction. FBC's forecast in the 2019-2022 DSM Plan assumes two additional cannabis facilities begin construction annually in its service area.[71]

FBC submits that for some customers in the cannabis sector, no degree of FBC incentive at the new construction phase would encourage them to install LED grow lights, due to the importance of the known quality of high-intensity discharge grow lighting.[72] Therefore, FBC views it can be inferred that cannabis production facilities would not pursue more efficient LED lighting in the absence of DSM incentives from FBC.[73] FBC has applied the same free-ridership rate applied to other industrial programs.[74] FBC acknowledges that there exists a reasonable degree of uncertainty to the extent of industrial program area expenditures necessary to support efficient industrial load growth, given that DSM opportunities are neither well-understood nor mature in such emerging markets.[75]

[70] FBC Final Argument, p. 22.
[71] Exhibit B-2, response to BCUC IR 13.5.
[72] Exhibit B-2, response to BCUC 13.3.
[73] FBC Final Argument, p. 22.
[74] Exhibit B-2, response to BCUC 13.4.1.
[75] Exhibit B-2, response to BCUC 13.5.1.1.

In the absence of expenditures to support energy efficiency in new cannabis production facilities, FBC submits that the 2019-2022 DSM Plan still represents additional planned expenditures to encourage industrial retrofits by increasing both the energy study and capital incentives, representing an increase of approximately $0.3 million per annum compared to planned 2018 DSM expenditures.[76]

Intervener Positions

The CEC submits that it is a step in the right direction that industrial expenditures will increase to address the opportunities provided by cannabis production. The CEC also submits that aside from forecasted DSM expenditures on cannabis facilities, the proposed increases in industrial incentive spending are relatively low. The CEC recommends that the BCUC approve FBC proposed industrial spending, but encourage FBC to increase its spending in areas other than the cannabis production, which should include the Kraft Pulp and Paper sector.[77]

ICG submits that following “bridging years,” FBC has not introduced new measures or programs in the 2019-2022 DSM Plan based on the findings of the Conservation Potential Review. ICG submits that it advocates enhancements to program design in the industrial sector, including increases to program incentives and funding for efficiency studies.[78] In reply, FBC notes the increase in planned spending compared to 2018. FBC submits that savings and incentive expenditures in the Industrial sector are highly variable due to the relatively low number of Industrial class customers in FBC’s service territory, and that the planned increase in expenditures is reflects anticipated activity in the Industrial Custom program, which is an appropriate basis to plan DSM spending.[79]

Panel Discussion

The Panel recognizes that the nascent nature of the cannabis industry means that it is challenging to forecast the level of uptake for FBC’s DSM programs at this time. However, the Panel considers that the substantial increase in expenditures in the industrial area to target new DSM opportunities is warranted and should allow FBC to achieve additional electricity savings compared to the levels contemplated in the 2016 LTERP, which could not have been reasonably forecasted at that time. The Panel is also satisfied that FBC has provided sufficient justification that there is not likely to be a significant free-rider problem in this sector due to the specific lighting needs of cannabis producers.

5.2 Demand Response pilot

FBC’s DSM expenditure schedule includes a budget for the Kelowna Area Demand Response (DR) pilot totalling $1.0 million over four years. DR initiatives target reductions or shifts in peak period energy consumption using technology or incentives. The DR pilot is a proof-of-concept initiative that will provide an opportunity for FBC to gain experience with DR technology and an understanding of its capabilities and benefits. FBC anticipates the proposed DR pilot will inform a business case on whether to pursue larger scale DR, including targeting both Kelowna and other constrained areas for summer and/or winter capacity relief. FBC has completed the first

[76] FBC Final Argument, p. 22.
[77] CEC Final Argument, p. 22.
[78] ICG Final Argument, p. 3.
[79] FBC Reply Argument, pp. 15-16.

phase of the DR Pilot in the form of the Enbala Screening Study,[80] which indicates that there is sufficient DR capacity in the Kelowna area that could defer capital infrastructure investments. The second phase will simulate customers' DR potential against the system load profile for the Kelowna area in the last 3 years and the final phase, subject to Request For Proposal, would validate proof-of-concept through a pilot study of DR's ability to defer capital.[81]

FBC submits that the initial expenditures to implement the Kelowna area DR pilot project include customer recruitment, demand control apparatus, licensing and configuration costs. The additional costs ($125 thousand per year) are FBC's estimate to sustain the DR capacity.[82]

If the pilot is successful, FBC explains that the next steps involve using the DR pilot findings to inform a business case, including use-cases and benefits, to determine the potential for cost-effective DR. The pilot findings could also potentially inform the resource options considered as part of FBC's next long term electricity resource plan. Depending on the outcome of the pilot, DR could be used to defer future capacity upgrades on FBC's system; specifically, FBC notes that DR may be a potential option to defer the addition of a second transformer at the DG Bell Terminal, which currently has an in-service date of December 2025.[83]

Intervener Positions

BCSEA-SCBC supports FBC's exploration and development of demand response opportunities, but recommends that FBC should also assess the DR potential of residential and small commercial customers in the Kelowna area.[84]

The CEC is of the view that DR studies are important in developing options for large customers to reduce their electricity bills and in planning for future reductions in investments that would otherwise be expected to occur in the electric system. The CEC recommends that BCUC approve the DR expenditures as proposed by FBC.[85]

Panel Discussion

The Panel is supportive of FBC's exploration of the potential for DR, which represents an aspect of DSM that as of yet has not been realized by the Company. Additionally, the Panel also considers that the pilot program supports the BC energy objective of fostering the development of innovative technologies that support energy conservation.[86] The Panel is satisfied that the Enbala Screening Study demonstrates the rationale for progressing to a pilot program and that the requested expenditures to test proof-of-concept are reasonable.

If the pilot is successful, the Panel encourages FBC to continue to pursue further initiatives that could result in the cost-effective deferral of infrastructure investments, and looks forward to a consideration of demand side alternatives in FBC's next long term electricity resource plan.

---

[80] Exhibit B-1, Appendix A-1.
[81] FBC Final Argument, p. 24.
[82] Exhibit B-1, p. 20.
[83] FBC Final Argument, p. 25.
[84] BCSEA-SCBC Final Argument, pp. 10-11.
[85] CEC Final Argument, p. 28.
[86] Clean Energy Act, Section 2(d).

6.0 Reporting

FBC's 2019-2022 DSM Plan spans a four year period, which follows several years of one-year or two-year DSM plans. The Panel recognizes the regulatory efficiency of a multi-year plan. With such a plan, the importance of annual reporting in the interim years is magnified to ensure that the BCUC and other parties are apprised of FBC's progress, and any notable changes, in the rolling out of its 2019-2022 DSM Plan. In this Decision, the Panel has approved FBC's request to rollover unspent funds in a program area to the same program area in the following year, and determined that FBC can transfer approved funds between program areas within the constraints set out in Section 4.1 of this Decision.

FBC has filed annual DSM reports with the BCUC since 2013, and prior to that filed semi-annual reports. **The Panel directs FBC to continue filing DSM annual reports with the BCUC in the manner and form of previous years, but to also include information that clearly identifies all funding transfers that occur between program areas within a year, and the amounts to be rolled over to the following year for each program area.**

With respect to FBC's next DSM expenditure schedule filing, the BCUC expects that this will be informed by FBC's next long term electricity resource plan, which is due to be filed with the BCUC no later than December 1, 2021.

DATED at the City of Vancouver, in the Province of British Columbia, this 4th day of March 2019.

B. A. Magnan
Panel Chair / Commissioner

W. M. Everett, Q.C.
Commissioner

H. G. Harowitz
Commissioner

bcuc
British Columbia
Utilities Commission

Suite 410, 900 Howe Street
Vancouver, BC Canada V6Z 2N3
bcuc.com

P: 604.660.4700
TF: 1.800.663.1385
F: 604.660.1102

ORDER NUMBER
G-47-19

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

and

FortisBC Inc.
Application for Approval of 2019–2022 Demand Side Management Expenditures Plan

BEFORE:
B. A. Magnan, Panel Chair / Commissioner
W. M. Everett, Q.C., Commissioner
H. G. Harowitz, Commissioner

on March 4, 2019

ORDER

WHEREAS:

A. FortisBC Inc. (FBC) seeks acceptance, pursuant to section 44.2 of the *Utilities Commission Act* (UCA), of its Demand-Side Management (DSM) expenditure schedule as set out in Table 5-1 of the Application, for a total of $44.0 million (inflation adjusted) for 2019 through 2022, by application filed with the British Columbia Utilities Commission (BCUC) on August 2, 2018 (Application);

B. FBC also seeks the following:

   1. approval to move to a 15-year amortization period for DSM expenditures, as set out in Section 8.1 of the Application; and

   2. approval for flexibility in the timing of expenditures within the proposed program areas, as set out in Section 8.2 of the Application;

C. By Order G-179-18 dated September 25, 2018, the BCUC established a written public hearing process for the review of the Application;

D. The BC Sustainable Energy Association and Sierra Club BC (BCSEA-SCBC), Movement of United Professionals (MoveUp); Industrial Customers Group (ICG) and the Commercial Energy Consumer Association of British Columbia (CEC) registered as interveners in the proceeding;

E. The BCUC submitted Information Requests (IRs) to FBC on October 11, 2018, and BCSEA-SCBC, MoveUp, ICG and the CEC submitted IRs to FBC on October 16, 2018. FBC provided its responses to BCUC and intervener IRs on October 30, 2018. FBC filed its Final Argument on November 13, 2018. Final Arguments were filed by BCSEA-SCBC, MoveUp, ICG and the CEC by November 27, 2018, and FBC provided its Reply Argument on December 4, 2018;

F. The BCUC has reviewed the evidence and considers that FBC's 2019–2022 DSM expenditure schedule should be accepted on the terms and conditions set out in this order.

NOW THEREFORE the BCUC orders as follows:

1. The FBC DSM expenditure schedule, outlined in Table 5-1 of the Application and setting out expenditures of $44.0 million for 2019 through 2022, is accepted.

2. FBC's request to move from a 10-year to a 15-year amortization period for DSM expenditures as set out in Section 8.1 of the Application is denied.

3. FBC's request for funding transfers as outlined in Section 8.2 of the Application is approved, subject to the terms and conditions set out in Section 4 of the accompanying Decision to this order.

4. FBC is directed to comply with the reporting requirements set out in Section 6 of the accompanying Decision to this order.

DATED at the City of Vancouver, in the Province of British Columbia, this 4th day of March 2019.

BY ORDER

B. A. Magnan
Commissioner