British Columbia Utilities Commission

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ORDER NUMBER
G-9-17

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

and

FortisBC Inc.
Application for Acceptance of Demand Side Management Expenditures for 2017

BEFORE:
H. G. Harowitz, Panel Chair/Commissioner
D. J. Enns, Commissioner
B. A. Magnan, Commissioner

on January 25, 2017

ORDER

WHEREAS:

A. On August 8, 2016, FortisBC Inc. (FBC) applied to the British Columbia Utilities Commission (Commission) pursuant to section 44.2 of the *Utilities Commission Act* (UCA) for acceptance of demand side management (DSM) expenditures for 2017 (Application);

B. By Order G-135-16 dated August 16, 2016, the Commission established a written hearing process and a regulatory timetable with one round of information requests to review the Application;

C. In this proceeding, British Columbia Hydro and Power Authority (BC Hydro); British Columbia Old Age Pensioners' Organization *et al.* (BCOAPO); BC Sustainable Energy Association and Sierra Club BC (BCSEA-SCBC); Commercial Energy Consumers Association of British Columbia (CEC); Industrial Customers Groups (ICG) and Zellstoff Celgar Partnership Limited (Celgar) registered as interveners;

D. During the course of the proceeding, information requests were submitted to FBC, and FBC responded to one round of information requests;

E. On October 14, 2016, FBC submitted its final argument in which it sought acceptance of the DSM expenditures of up to $7.6 million for 2017, as detailed in the 2017 DSM Plan contained in Appendix A of the Application;

F. By October 26, 2016, BCOAPO, BCSEA-SCBC, CEC, Celgar and ICG submitted their final arguments;

G. On November 2, 2016, FBC submitted its reply argument; and

H. The Commission has reviewed the Application and the evidence submitted through the review process and concludes that acceptance is warranted.

NOW THEREFORE, pursuant to section 44.2(3) of the *Utilities Commission Act*, the British Columbia Utilities Commission, for the reasons attached as Appendix A to this order, accepts the FortisBC Inc. demand side management expenditure schedule in Appendix A of the Application setting out expenditures of up to $7.6 million for 2017.

DATED at the City of Vancouver, in the Province of British Columbia, this 25th day of January 2017.

BY ORDER

Original signed by:

H. G. Harowitz
Commissioner

Attachment

British Columbia Utilities Commission

IN THE MATTER OF

FortisBC Inc.
Application for Acceptance of Demand Side Management Expenditures for 2017

REASONS FOR DECISION

January 25, 2017

Before:
H. G. Harowitz, Panel Chair/Commissioner
D. J. Enns, Commissioner
B. A. Magnan, Commissioner

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1.0 INTRODUCTION

1.1 Proceeding at a glance

FortisBC Inc.
Application for Acceptance of Demand Side Management Expenditures for 2017

Date of application	• August 8, 2016
Approvals sought	• Acceptance of Demand Side Management Expenditures of $7.6 million for 2017
British Columbia Utilities Commission (Commission) Panel	• Doug Enns • Howard Harowitz (Chair) • Bernie Magnan
Registered interveners	• British Columbia Hydro and Power Authority (BC Hydro) • British Columbia Old Age Pensioners' Organization *et al.* (BCOAPO) • B.C. Sustainable Energy Association and Sierra Club B.C.(BCSEA-SCBC) • Commercial Energy Consumers Association of British Columbia (CEC) • Zellstoff Celgar Limited Partnership (Celgar) • Industrial Customers Group (ICG)
Regulatory process	• One round of Information Requests • FBC Final Argument • Interveners' Final Arguments • FBC Reply Argument
Date of Decision	• January 25, 2017

1.2 Background and context

In the Commission's acceptance of FortisBC Inc.'s (FBC) Demand Side Management Expenditures for the Period from 2015 to 2016 (FBC 2015-16 DSM Application) by Decision dated December 3, 2014 and Order G-186-14 (FBC 2015-16 DSM Decision), the Commission encouraged FBC to file its next multi-year DSM expenditure schedule after the Commission's review and decision on the 2016 Long Term Electric Resource Plan (LTRP). The Commission suggested that, in the interim, FBC file a DSM schedule for 2017.[1]

FBC notes in its Application for Acceptance of Demand Side Management (DSM) Expenditures for 2017 (Application) that the provincial dual-fuel Conservation Potential Review (BC CPR or CPR) is currently underway and will inform the next multi-year DSM Plan but no CPR results have been incorporated into development of its 2017 DSM expenditure schedule.[2]

[1] FBC 2015-16 DSM Decision dated December 3, 2014, p. 33.
[2] Exhibit B-1, p. 1.

FBC indicates that its proposed 2017 DSM plan is a continuation of the expenditures and cost-effective programs previously accepted in the 2015-16 DSM plan, and at comparable levels ($7.3 million in 2015, $7.5 million in 2016, and $7.6 million in 2017).[3]

1.3 Decision summary

The Panel accepts FBC's DSM requested expenditure schedule of $7.6 million for 2017, and considers that making the expenditures referred to in the schedule is in the public interest. Despite the acceptance of the proposed expenditure schedule, the Panel is concerned that it falls short of addressing a range of DSM possibilities that could be pursued in the coming year.

Thus, these Reasons for Decision are divided into two key sections. The first sets out our decision to accept the 2017 schedule. The second sets out the Panel's perspectives on where/how this schedule falls short.

2.0 ACCEPTANCE OF THE 2017 DSM EXPENDITURES

FBC notes that the general spending levels and the particular programs in each sector are continuations and/or augmentations where appropriate, of the 2015-16 DSM plan.[4] Table 4.1 in the Application sets out the following summary comparisons between 2016 and 2017.

Table 1: FBC DSM Expenditures & Savings – 2016 Approved/Projected and 2017 Plan[5]

	Program Area	2016 Approved		2016 Projected		2017 Plan		
		Savings MWh	Cost ($000s)	Savings MWh	Cost ($000s)	Savings MWh	Cost ($000s)	TRC B/C ratio
1	**Programs by Sector**							
2	Residential	12,909	3,349	7,098	2,607	10,493	2,718	2.5
3	Commercial	12,695	2,564	11,734	2,547	13,666	3,131	2.2
4	Industrial	1,585	209	2,327	330	1,556	309	1.9
5	**Subtotal Programs**	**27,189**	**6,122**	**21,160**	**5,484**	**25,715**	**6,158**	**2.3**
6	Supporting Initiatives		675		678		674	
7	Planning & Evaluation		737		675		777	
8	Total (including Portfolio spend)		7,534		6,838		7,610	2.0

The Application steps through the requisite tests/criteria that are used to evaluate DSM expenditure schedules (e.g. portfolio-level analysis, total resource cost (TRC) test, avoided cost sensitivity, and modified TRC test. Detailed descriptions of each program, along with the requisite analyses per the noted tests are provided in Appendix A to the Application.

<u>Positions of the parties</u>

BCOAPO states that it is "not generally opposed" to accepting the schedule, and submits "it is likely that a lot of 'low hanging fruit' is being missed."[6]

[3] Exhibit B-1, pp. 1, 8.
[4] Exhibit B-1, p. 9.
[5] Ibid.
[6] BCOAPO Final Argument pp. 8–9.

BCSEA-SCBC argues that the 2017 DSM expenditure schedule should be higher than the proposed $7.6 million, and the Commission should prescribe higher levels of spending, or in the alternative, approve the schedule.[7] ICG limits its arguments to the industrial component of the schedule, and states that the proposed increase in industrial program incentives is inadequate and should have been four times the incentive increase proposed by FBC.[8]

CEC submits that the 2017 DSM Plan contained in the Application is inadequate and recommends the Commission reject the schedule and "direct FBC to file a DSM Plan which more adequately pursues all cost-effective DSM measures," or, if the DSM Plan is accepted, provide strong direction to FBC to seek additional DSM opportunities in the range of "at least a 20% increase in DSM expenditures."[9]

Celgar did not comment on the adequacy of the 2017 DSM Plan.

Commission determination

The Panel accepts the 2017 DSM expenditure schedule, comprising a total of $7.6 million, as more fully articulated in FBC's Application.

The evidence demonstrates that the DSM programs contained in the 2017 DSM expenditure schedule meets the criteria for acceptance under section 44.2 of the UCA, and considers that making the expenditures referred to in the schedule is in the public interest as set out in the UCA. As noted, this expenditure schedule is a continuation of the plans/programs that were scrutinized in detail and accepted in the review of the FBC 2015-16 DSM Application. The Panel has therefore chosen to not reiterate in these Reasons for Decision the detailed discussion that is already set out in the FBC 2015-16 DSM Decision, and considers that the 2017 DSM expenditure schedule is in the public interest for the same reasons as expressed in the FBC 2015-16 DSM Decision.

However, the Panel agrees with the positions expressed by interveners, that this schedule is adequate as far as it goes but that it does not go far enough. Hence, we provide our comments on what we consider to be its shortcomings in the section immediately following.

3.0 PANEL DISCUSSION ON THE SHORTCOMINGS OF THE 2017 DSM EXPENDITURE SCHEDULE

Guidance from the 2012 FBC LTRP

FBC filed its 2012 Integrated System Plan (also referred to as the 2012 LTRP) as part of FBC 2012-2013 Revenue Requirements and Review of 2012 Integrated System Plan Application (FBC 2012 RR & ISP Application). In the 2012 LTRP, FBC considered three DSM options (low, medium and high) which resulted in annual funding levels of $5 million, $9 million and $20 million, respectively. FBC proposed a 'medium' DSM funding option of $9 million/year (TRC benefit/cost ratio of greater than 1.0) with an overall DSM savings target to offset 50 percent of load growth over the planning period.[10]

[7] BCSEA-SCBC Final Argument, pp. 2, 7.
[8] ICG Final Argument, pp. 3–4.
[9] CEC Final Argument, p. 18.
[10] FBC 2015-16 DSM Decision, p. 8; FBC 2012 RR & ISP proceeding, Exhibit B-1-2, 2012 DSM Plan, p. 11.

In the FBC 2015-16 DSM Decision, the Commission noted the increase in TRC results from 1.4 for Plan 2013 to 2.0 for Plan 2015, and the low cost of DSM to the utility (3.4c/kWh for Plan 2015), and stated: "The Panel encourages FBC to make supplemental DSM expenditure requests to the Commission as opportunities arise to bring DSM planned energy savings and expenditures (in particular for the residential and industrial customer class) back up to those levels accepted in the 2012 LTRP."[11]

FBC 2017 DSM proposal

FBC submits that a small increase in planned DSM spending for 2017 compared to 2016 is appropriate given that 2017 is effectively a "bridge" year pending the Commission' review of the Company's 2016 LTRP and associated long-term DSM Plan.[12]

FBC provides the following summary of the proposed 2017 DSM program funding levels, forecast energy savings and forecast cost effectiveness results of its 2017 DSM Plan:

Table 2: 2017 DSM Planned Expenditure – comparison of funding to 2016 and cost-effectiveness results[13]

Portfolio area	2016 Approved	2017 Planned	% change	TRC test	Utility levelized cost (UCT) (c/kWh)
Residential (excl. low income)	2,397	1,351	(44%)	Not calculated	Not calculated
Low income & rental	952	1,367	44%	3.4	5.5
Residential (total)	3,349	2,718	(19%)	2.5	3.2
Commercial	2,564	3,131	22%	2.2	3.4
Industrial	209	309	48%	1.9	2.2
Program total	6,122	6,158	1%	2.3	3.3
Supporting initiatives	675	674	0%	-	-
Planning and evaluation	737	777	5%	-	-
Total	**7,534**	**7,610**	**1%**	**2.0**	**4.4**

The 2017 DSM budget includes a reduction in the following programs:

[11] FBC 2015-16 DSM Decision, p. 11.
[12] FBC Final Argument, p. 7.
[13] Exhibit B-1, Appendix A, pp. A2, A16.

Table 3: 2017 Planned DSM Expenditure for home improvement, new home and commercial building improvement[14]

	Expenditure ($000s)			
Program	**2016 Accepted**	**2016 Projected**	**2017 Planned**	**% Change - 2016 approved to 2017 planned**
Home Improvement	$884	$328	$348	-61%
New Home	$390	$49	$151	-61%
Commercial Building Improvement	$976	n/a	$784	-20%

FBC explains that the reduction in the home improvement program funding results from more stringent participant requirements and a lack of concurrent provincial or federal offers. FBC further submits that new homes that are not ENERGY STAR qualified will likely cost more to retrofit to that standard at a later date, and that the limiting factor to participation in this program is enrolling builders who are reluctant to participate due to the extra effort, e.g. supervising sub-trades to ensure airtightness requirements are met, and the incremental costs involved. Regarding the reduction in funding for the commercial building improvement program, FBC submits that commercial DSM funding has increased overall.[15]

FBC submits that the 2017 planned DSM spend as a percentage of sector revenues is: 1.5% for residential; 3.5% for commercial; and 0.9% for industrial.[16] FBC submits that its proposed 2017 DSM electricity savings is 48% as a percentage of load growth.[17]

FBC provides the following comparison of actual to planned DSM spend:

Table 4: Comparison of actual to planned DSM spending 2011 to 2015[18]

Comparison of Actual to Planned DSM Spending 2011 to 2015						
	2011 ($000s)	2012 ($000s)	2013 ($000s)	2014 ($000s)	2015 ($000s)	5 yr avg ($000s)
DSM Actual	5,918	7,300	6,855	3,473	3,531	5,415
DSM Planned	7,842	7,731	7,878	3,001	7,292	6,749

FBC submits the 2015 DSM underspend was due to:

- the stepped increase in planned DSM spending in 2015 compared to 2014 (an increase from $3 million to $7.3 million) and
- the timing of the 2015-16 DSM Decision. FBC submits that Commission acceptance was received on December 3, 2014 and, as such, there was insufficient lead time to take various necessary steps to increase DSM programming to levels needed to achieve planned spending and savings targets.[19]

[14] Exhibit B-2, BCUC IR 5.3.
[15] Ibid., BCUC IR 5.3.
[16] Ibid., BCUC IR 7.2.1.
[17] Exhibit B-4, BCSEA-SCBC IR 10.5.
[18] Exhibit B-2, BCUC IR 3.2.
[19] FBC Final Argument, p. 5.

Positions of the parties

As noted in section 2.0 of these Reasons for Decision, the majority of interveners expressed reserved support for accepting the DSM schedule, each having identified one or more elements of the schedule that falls short of the potential for use of DSM programs.

In putting forward its position that the current schedule is inadequate, BCOAPO puts forward a number of observations, particularly relating to residential programs, including:

- the total 2017 planned spending and savings are less than the approved spending and savings for either 2015 or 2016;
- the TRC and [UCT] test results for are higher for the 2017 DSM Plan than for 2016 and both are significantly higher than 1.0;
- FBC did not revisit the 2013 [CPR] Update to determine if there were new measures and/or enhancements to existing programs that could be included in the 2017 DSM Plan or if there were enhancements that could be made to the measures included in the 2015-2016 DSM Plan; and
- given that much of the underperformance for 2016 residential sector savings was attributed by FBC to the need to build/rebuild market awareness, that matter should be fully addressed by 2017.[20]

CEC submits that FBC's DSM budget is inadequate for reasons including:

- the proposed spending remains lower than that identified in the 2012 LTRP, and is approximately 85% of the 2012 LTRP 'medium' DSM funding scenario, despite Commission comments in the 2016 Decision that encouraged further efforts in this area;
- a TRC result at 2.0 indicates that not all cost-effective DSM is being pursued by FBC.;
- the status quo DSM plan may be more of a response to containing rate impacts than achieving cost-effective DSM; and
- draft results from the BC CPR study indicate that robust economic potential remains in the FBC service area for residential customers.[21]

BCSEA-SCBC argues that the 2017 spending levels should be substantially higher than the proposed $7.6 million, for reasons including:

- the TRC ratios by program (all 1.9 or higher) mean that the provincial benefits are almost double the costs, and the program specific TRC values also indicate strong positive benefits;
- the estimated average cost of 2017 DSM savings is 4.4 c/kWh compared to the 11.2c/kWh avoided cost;
- the forecasted electricity savings are only 48% of the pre-DSM load growth, which compares unfavourably with the 2012 LTRP objective of 50% reduction in load growth through DSM; and
- they agree with the CEC's position that the 2017 DSM spending should be 20% higher than proposed.[22]

[20] BCOAPO Argument, pp. 5, 7–9.
[21] CEC Final Argument, pp. 1–2, 9–11.
[22] BCSEA-SCBC Argument pp. 1–2, 4, 7, 9.

ICG argues for increased DSM funding for industrial customers for reasons including:

- given the customized nature of the programs in the industrial sector, little or no program design changes are necessary that might justify waiting for the BC CPR before program incentives are increased;
- FBC acknowledges that increase[d] program incentives will increase program savings, and the objective evidence is that such energy savings will be cost-effective; and
- FBC did not consult with industrial customers about the proposed increase in industrial sector program incentives (from 10c/kWh to 15c/kWh). BC Hydro incentives are 20c/kWh, while ICG considers the appropriate level of FBC DSM programs is 30c/kWh.[23]

<u>FBC reply</u>

FBC's response includes:

- a 20% increase in planned DSM spending would be a significant change from FBC's actual and planned spending levels in recent years;[24]
- the Commission has previously held that it cannot under s. 44.2 of the UCA direct FBC to file a DSM Plan which more adequately pursues all cost-effective DSM measures;[25]
- substantially increasing the residential DSM budget for 2017 is not warranted given recent experience and the practical limitations on spending in the residential sector at present; [26]
- planned industrial DSM spending for 2017 has already been increased by 48% compared to the 2016 plan. In addition, the disparity between BC Hydro and FBC industrial incentives is not as substantial as the ICG suggest and, given the dissimilarities between FBC and BC Hydro, it is logical and appropriate that FBC has different DSM programming and spending than BC Hydro;[27]
- the potential for increased conservation potential in FBC's service territory indicated by the draft BC CPR would not necessarily translate into increased DSM expenditures. The finalized BC CPR results must be analyzed and incorporated into the long-term DSM Plan to determine the optimum DSM level. Any attempt to increase 2017 DSM spending on the basis of draft results for the purposes of this proceeding would have been imprecise guess work;[28] and
- FBC is updating its long-run marginal cost (LRMC) as part of the upcoming LTRP filing; however, it was not considered appropriate to revisit the 2013 CPR Update based on a new LRMC that is yet to be finalized or approved.[29]

Panel discussion

The Panel shares the views of the interveners, that the planned expenditures for 2017 fall short of addressing a range of DSM possibilities that could be pursued in the coming year.

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[23] ICG Final Argument, pp. 2–3.
[24] FBC Reply Argument, p. 5.
[25] Ibid., p. 10.
[26] Ibid., p. 13.
[27] Ibid., pp. 15–16.
[28] Ibid., pp. 6–7.
[29] Ibid., p. 20.

FBC argues that 2017 should be viewed as a bridging year. A schedule that extends recent activity levels is appropriate, and significant change makes sense only once the CRP and LTRP are fully reviewed.

The Panel is not persuaded by that line of argument. We agree that the more comprehensive reworking of the DSM initiative is best accomplished in the context of the LTRP as suggested. But that does not preclude FBC from taking advantage of the opportunities already identified. We believe that prior decisions from the Commission and arguments put forward in this proceeding identify a number of opportunities that could be profitably pursued in the immediate term, without the need to wait for the broader analysis.

The Panel is further concerned that the extension of existing programming sits on a foundation of recent activity which in itself can be characterized as having fallen short. In other words, "more of the same" is inherently plagued by underperformance. FBC has provided responses/justifications for many of the challenges laid down by the interveners in terms of past performance shortfalls, but the Panel finds some of these explanations unpersuasive. For example:

- FBC submits that the 2015 underspend arose in part from the timing of the 2015-16 DSM Decision, and, as a result, there was insufficient lead time to take various necessary steps to increase DSM programming to levels needed to achieve planned spending and savings targets. The Panel notes, however, that the 2015-16 DSM Decision was issued only 13 working days after FBC's requested acceptance date.
- FBC submits that substantially increasing the residential DSM budget for 2017 is not warranted given recent experience and the practical limitations on spending in the residential sector at present. FBC submits that the reduction in program funding is in part due to: a lack of concurrent provincial or federal offers;[30] and builder reluctance to participate in programs due to the extra effort and additional costs involved.[31] With regard to the first explanation, the Panel notes that FBC could address this concern by adjusting the incentive level, which would not affect the TRC test result. And regarding the second explanation the Panel notes that these are barriers which FBC could attempt to mitigate through its DSM programs.
- FBC argues that it is logical and appropriate that FBC has lower industrial DSM incentives compared to BC Hydro,[32] and that industrial DSM spending for 2017 has already been increased by 48%.[33] The Panel notes, however, that industrial DSM still only represents 0.9% of sector revenues (compared to 1.5% and 3.5% for residential and commercial sectors), and the industrial DSM cost effectiveness results (TRC of 1.9 and utility cost of 2.2c/kWh) indicate that more could be done.
- FBC submits that any attempt to increase 2017 DSM spending on the basis of the draft BC CPR would have been imprecise guess work.[34] The Panel's view is that the positive ratios presented on many of the individual programs and the portfolio overall, indicate that there is significant room for additional effort that could be justified on the basis of the preliminary results.

The Panel is concerned that FBC has not proposed additional steps to be taken to explore alternatives to better achieve the objectives of DSM.

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[30] Exhibit B-2, BCUC IR 5.3.
[31] Ibid.
[32] FBC Reply Argument, pp. 15–16.
[33] Ibid., p. 12.
[34] FBC Reply Argument, p. 7.