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February 28, 2018

British Columbia Public Interest Advocacy Centre
Suite 208 – 1090 West Pender Street
Vancouver, B.C.
V6E 2N7

Attention: Ms. Leigha Worth, Executive Director

Dear Ms. Worth:

Re: FortisBC Inc. (FBC)

Project No. 1598934

Application for Approval of 2018 Demand-Side Management (DSM) Expenditures (the Application)

Response to the British Columbia Public Interest Advocacy Centre representing the British Columbia Old Age Pensioners' Organization, Disability Alliance BC, Council of Senior Citizens' Organizations of BC, and the Tenant Resource and Advisory Centre *et al.* (BCOAPO) Information Request (IR) No. 1

On November 15, 2017, FBC filed the Application referenced above. In accordance with the British Columbia Utilities Commission Order G-21-18 setting out the Regulatory Timetable for the review of the Application, FBC respectfully submits the attached response to BCOAPO IR No. 1.

If further information is required, please contact Sarah Wagner at (250) 469-6081.

Sincerely,

FORTISBC INC.

Original signed:

Diane Roy

Attachment

cc (email only): Commission Secretary
Registered Parties



FortisBC Inc. (FBC or the Company) Application for Acceptance of 2018 Demand-Side Management (DSM) Expenditures (the Application)	Submission Date: February 28, 2018
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1 **1.0 Reference: Exhibit B-1, page 4**

2 1.1 Please provide a schedule comparing the 2017 approved and actual results
3 (spending and savings) at the same level of detail as Table 1.
4

5 **Response:**

6 The 2017 Approved and Preliminary Actual results are shown, by sector, in the table below. The
7 2017 Preliminary Actuals shown in the table below are still subject to final review before they
8 are finalized for filing in the 2017 Annual DSM Report that will be filed at the end of March 2018.

Sector	2017 Approved		2017 Actual (Preliminary)	
	Savings MWh	Cost (\$000s)	Savings MWh	Cost (\$000s)
Residential	10,493	2,718	10,650	1,891
Commercial	13,666	3,131	16,127	4,023
Industrial	1,556	309	886	206
Subtotal	25,715	6,158	27,663	6,120
Supporting Initiatives		674		595
Portfolio		777		994
Subtotal Total Portfolio	25,715	7,609	27,663	7,709
Partners' Co-funding				400
Net Portfolio	25,715	7,609	27,663	7,309

9

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12

13 1.2 Where the variance between approved and actual is greater than 5% (spending
14 or savings), please provide an explanation.

15

16 **Response:**

17 The Residential programs were within 1.5 percent of 2017 Plan savings and were underspent
18 by 30 percent. This was because the Residential Lighting program, which is the most cost
19 effective program, produced a higher percentage of the savings than was in the Plan. The Low
20 Income program, which is the largest proportion of the Residential program, achieved less than
21 30 percent of its savings targets and spending was less than 50 percent of Plan. The variance
22 is primarily due to the growth budgeted for in the 2017 Plan after the strong performance in
23 2016. However, FBC now believes that the strong 2016 performance was because 2016 was



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1 the first full year of the Energy Conservation Assistance Program (ECAP) and it was received
2 well by an underserved market. In 2017 demand and participation in the program dropped off
3 creating the above stated variance. The 2018 Plan takes these experiences into consideration.

4 The Commercial sector overachieved on both savings (by 18 percent) and costs (by 28
5 percent). The Commercial Lighting Program was the primary reason for this success.

6 The Industrial sector is characterized by large projects undertaken by a small number of high-
7 consuming customers that involve a higher investment by the customer than other projects and
8 by longer periods of time to implement and verify. It is therefore more difficult to forecast the
9 timing and size accurately. This was the cause of the Industrial sector underperforming by
10 43 percent in savings and 33 percent in costs.

11 Expenditures on Supporting Initiatives were 12 percent below Plan because one project, a First
12 Nation energy plan, was delayed and may be cancelled, and a second project, a behavioural
13 campaign, was cancelled by the participant due to internal restructuring.

14 After taking into account the \$208,000 in co-funding provided by project partners for Pilot
15 projects (which is included in the \$400,000 in the Partners' Co-Funding line), the Portfolio
16 expenditure was within one percent of Plan.

17

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1 **2.0 Reference: Exhibit B-2, Attachment 1.1, page14 (line 28) to**
 2 **page 15 (line 11)**

3 **Exhibit B-2, Attachment 1.1, Appendix A, page A5**

4 2.1 With respect to Table A2-1, for those initiatives where the DSM Regulation
 5 requires/provides for the use of an alternative cost-effectiveness test to the TRC,
 6 please provide the 2018 values using the alternative "test".
 7

8 **Response:**

9 Only the Heat Pump and Customer Engagement Tools meet the criteria for the use of the
 10 mTRC ratio (alternative "test"), which are shown in the table below. If the question is also
 11 referring to the Utility Cost Test, all of the programs in the 2018 DSM Plan have a benefit cost
 12 ratio greater than one (see Table A8-1).

Program		2017 Approved		2018 Plan			
		Savings, system MWh	Cost (\$000s)	Savings, system MWh	Cost (\$000s)	TRC, net B/C ratio	mTRC, net B/C ratio
1	Home Renovation						
2	Home Renovation	364	206	1,203	300	1.1	n/a
3	Heat Pumps	781	253	395	167	0.9	1.0
4	Lighting	2,735	153	3,337	202	1.8	n/a
5	Appliances	126	71	215	159	2.1	n/a
6	Water Heating	17	28	38	25	1.8	n/a
7	New Home						
8	New Home	126	52	169	76	1.3	n/a
9	Income Qualified & Rentals						
10	Low Income	3,247	1,265	1,229	731	2.0	n/a
11	Rentals	0	0	306	53	3.4	n/a
12	Customer Engagement Tools	3,097	200	240	165	0.7	0.8
13	Non-program specific expenses		491		610		
14	Total	10,493	2,718	7,132	2,486	1.4	1.5

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1 **3.0 Reference: Exhibit B-1, page 4 (Table 1)**
 2 **Exhibit B-2, Attachment 1.1, page 7**
 3 **Exhibit B-2, Attachment 1.1, Appendix A, pages A5 and A8**
 4 **Preamble:** FBC notes (page A8) that the lower 2018 budget proposed for low income
 5 programs is reflective of the lower participation rates seen in 2017.

6 3.1 Please provide both budgeted/planned and actual low income program
 7 participation rates for 2015, 2016 and 2017. In terms of participation rates, for
 8 each year please provide: i) the number of ESKs distributed, ii) the number low
 9 income dwellings receiving the basic ECAP service and iii) the number of
 10 dwellings where the energy assessment performed under the ECAP program led
 11 to additional DSM measures being implemented.

12
 13 **Response:**

14 The following table shows the budgeted/planned and actual low income program participation
 15 rates for 2015, 2016 and 2017.

Low Income Program	# Participants - Plan			# Participants - Actual		
	2015	2016	2017	2015	2016	2017
ESK	1,000	1,000	750	779	1,362	819
ECAP	-*	2,650	1,862	–	1,062	804
ECAP Additional Measures	–*	150	38	–	15	2

16 *ECAP launched in 2016
 17
 18
 19

20 3.2 In those cases where the ECAP energy assessment identifies that additional
 21 DSM measures that could be undertaken, are there special low income programs
 22 available to assist with the implementation of these measures (over and above
 23 the DSM programs available to all residential customers)?
 24

25 **Response:**

26 The ECAP energy assessment does not have a goal of identifying additional DSM measures
 27 that could be undertaken. Thus, there are no special low income programs available to assist
 28 with the implementation of additional DSM measures over and above the residential DSM
 29 programs. The ECAP energy assessment focuses on searching for opportunities to install the



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1 free measures that are included in that program as well as education on additional savings that
2 are possible through behavioral changes.

3
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3.2.1 If yes, what are they and why is FBC not offering such programs? In
7 responding, please address the cost-effectiveness of such programs
8 within in the context of the DSM Regulation.

9

10 **Response:**

11 Please refer to the response to BCOAPO IR 1.3.2.

12

13

14

15

3.3 Has FBC undertaken any assessment or investigation as to why 2017
16 participation rates were lower than expected?

17

18

Response:

19 Please refer to the response to BCOAPO IR 1.1.2. A formal assessment has not been
20 conducted. The steps that FBC is taking to increase awareness and participation in the
21 program in 2018 are identified in the response to BCSEA IR 1.2.2.

22

23

24

25

3.3.1 If yes, what were the reasons?

26

27

Response:

28 Please refer to the response to BCOAPO IR 1.3.3.

29

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32

3.4 FBC makes specific reference (page A8) to having made past efforts to
33 strengthen its outreach efforts regarding low income programs. Please describe
34 what there initiatives were and how successful they were.



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1

2 **Response:**

3 Past efforts to strengthen outreach for low income programs beyond mass marketing efforts
4 include:

- 5 • Outreach to local governments and MLA's offices to have them recommend ECAP and
6 other FBC low income programs to their stakeholders' organizations (affordable housing
7 committees, local community social service organizations (CSSOs), etc.);
- 8 • Direct marketing (presentations and collateral distribution) to CSSOs and non-profit
9 housing societies; and
- 10 • Funding for Energy Managers for organizations working with non-profit housing societies
11 (BCNPHA, BC Housing).

12

13 In an effort to further improve marketing efficacy, in mid-2017 FBC conducted an honoraria pilot
14 project for CSSOs that provided them with financial support to promote ECAP and assist their
15 clients with the application process. The pilot project was deemed successful and the honoraria
16 program is being expanded beyond the pilot phase in 2018.

17 These efforts resulted in modest increases in program participation in the last quarter of 2017.
18 FBC intends to continue with its outreach with CSSOs and partner and governmental
19 organizations and believes participation rates will further improve over time.

20

21

22

23 3.5 FBC also makes specific reference (page A8) to further strengthening its
24 outreach efforts regarding low income programs. Please describe what new
25 initiatives are planned for 2018.

26

27 **Response:**

28 FBC has a number of initiatives planned to further strengthen its outreach efforts regarding low
29 income programs, including:

- 30 • Expansion of its community social service organizations (CSSOs) honoraria pilot project
31 to provide CSSOs an honorarium to complete the ECAP application on behalf of any
32 clients that face challenges in completing the application independently. The project
33 financially supports CSSOs to market ECAP through their existing marketing channels.
- 34 • Collaborated efforts with local governments to promote ECAP:

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- 1 ○ Marketing through their existing communication channels;
- 2 ○ ECAP program presentations to Affordable Housing and Poverty Prevention
- 3 committees; and
- 4 ○ Introductions to local CSSOs.
- 5 • ECAP and low-income program presentations to additional CSSOs.
- 6 • More and sustained personalized (face-to-face) outreach with First Nations communities
- 7 to promote low-income programs, as well as new customizable, culturally appropriate
- 8 collateral to enhance promotional outreach, including videos, for First Nation audiences.
- 9
- 10

11

12 3.6 Are there additional activities/initiatives that FBC could undertake to increase

13 participation in the low income program?

14

15 **Response:**

16 In 2017, FBC engaged in extensive stakeholder consultation on all aspects of its low income

17 program design, implementation and marketing. It is now acting upon the directions provided

18 from that consultation and engaging in multiple communication and marketing efforts as

19 discussed in the responses to BCSEA IR 1.2.2 and BCOAPO 1.3.5. No additional marketing

20 activities/initiatives have been identified for FBC to undertake in 2018 and the Low Income

21 program TRC cost effectiveness test result is 2.0.

22 FBC will continue to engage stakeholders, as it is an important indicator of what marketing

23 efforts are effective in the marketplace and provides direction for continual evolution of FBC's

24 program offers.

25

26

27

28 3.6.1 If yes, please identify what they are and discuss their cost-effectiveness

29 within the context of the DSM Regulation.

30

31 **Response:**

32 Please refer to the response to BCOAPO IR 1.3.6.

33

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1 **4.0 Reference: Exhibit B-2, Attachment 1.1, Appendix A, pages A5 & A8-A9**

2 4.1 At page A8 FBC states that the Rental Apartment Program will continue to be
 3 offered in collaboration with FEI. However, Table A2-1 on page A5 does not
 4 show any approved spending or savings for Rental Program in 2017. Please
 5 reconcile.

6
 7 **Response:**

8 The 2017 DSM Plan combined “Low Income” with “Rentals”, the total of which is shown in line
 9 10 of Table A2-1. The Low Income and Rental budget and savings are provided separately in
 10 the 2018 DSM Plan. Please refer to the response to BCOAPO IR 1.4.2 for the 2017 preliminary
 11 actual spending and savings for the Rental program.

12
 13

14
 15 4.2 If there was Rental Program activity in 2017 please provide a schedule
 16 comparing the 2017 spending and savings with those planned for 2018.

17
 18 **Response:**

19 The 2017 preliminary results for the Rental Program are shown along with the 2018 Plan, in the
 20 table below:

Program	2018 Plan		2017 Actual (Preliminary)	
	Savings MWh	Cost (\$000s)	Savings MWh	Cost (\$000s)
Rental	306	53	295	77

21
 22 Note: The 2017 Preliminary Actuals are still subject to final review before they are finalized for filing in the
 23 2017 Annual DSM Report that will be filed at the end of March 2018.



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1 **5.0 Reference: Exhibit B-2, Attachment 1.1, Appendix A, pages A5 & A9**

2 5.1 Please explain what the sources of the 2017 approved savings were expected to
3 be from the Customer Engagement Tools.

4
5 **Response:**

6 Please refer to the response to BCUC IR 2.8.3.

7
8

9
10 5.2 Please provide details regarding the actual Customer Engagement Tools
11 employed in 2017 and the results achieved.

12
13 **Response:**

14 Please refer to the response to BCUC IR 2.8.3.

15
16

17
18 5.3 Please explain what specific Customer Engagement Tools are planned for 2018
19 and why the expected savings are significantly less than those approved for
20 2017.

21
22 **Response:**

23 Please refer to the response to BCUC IR 2.8.3.

24
25

26
27 5.4 Are there additional Customer Engagement Tools that could be deployed in 2018
28 that would be cost-effective (per the DSM Regulation)?

29
30 **Response:**

31 FBC did not identify any additional Customer Engagement Tools that could be deployed for the
32 2018 DSM Plan but is considering whether additional cost-effective tools may be available for
33 the 2019 Multi-Year DSM Expenditure Plan.



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5.4.1 If yes, what are they and why is FBC not planning to implement them in 2018?

Response:

Please refer to the response to BCOAPO IR 1.5.4.

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1 **6.0 Reference: Exhibit B-2, Attachment 1.1, Appendix A, pages A5 &**
 2 **A18-A19**

3 6.1 Please provide the 2017 Monitoring and Evaluation Plan (equivalent to Table A6-
 4 2) as submitted for approval.

5
 6 **Response:**

7 The 2017 Monitoring and Evaluation Plan Expenditures were filed in Appendix A of the 2017
 8 DSM Plan application, on page A14. The table is reproduced below.

9 **Table A5-2: Monitoring & Evaluation Expenditures**

Sector/Program	2017	
	Study Type	Plan (\$000s)
<i>Residential</i>		
EnergyStar for New Homes	Process	8
Low Income ECAP	Impact	4
Behavioral	Baseline study	10
Rental	Survey	2
<i>Commercial/Industrial</i>		
Commercial Lighting	Comprehensive	60
New Construction Commercial and Industrial	Process, Impact & Case Study	50
Business Direct install	Process & Impact	35
MURB	Process	10
Allowance for unplanned EM&V		7
Sub-Total		186
EM&V Staffing		189
Total		375

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6.2 Please provide a schedule that sets out the actual M&E studies completed in
 2017 and, if any of the studies planned for 2017 were not undertaken/completed,
 please explain why.

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1 **Response:**

2017 Monitoring & Evaluation Completed Studies	
Sector/Program	Study Type
<i>Residential</i>	
Heat Pumps	Comprehensive
Low Income ECAP	Process and Impact
Low Income ECAP	Quality Assurance reviews
Rental	Process and Impact
<i>Commercial/Industrial</i>	
Custom Commercial/Industrial	Comprehensive

2

3 Two evaluation studies planned for 2016, Residential Heat Pumps and Custom Commercial
 4 Program, were delayed due to increased due-diligence of vendors for privacy policy compliance,
 5 and were completed instead in 2017. This timing shift caused changes in the other studies
 6 undertaken, due to resource constraints.

7 Regarding the 2017 planned monitoring & evaluation expenditures, which are shown in the
 8 response to BCOAPO IR 1.6.1, the New Homes process evaluation was not completed, as past
 9 participation was low and the program is being revamped to align with the British Columbia
 10 Energy Step Code.

11 The Behavioral Baseline study was not completed as the launch of the Customer Engagement
 12 Tool was delayed.

13 The Rental evaluation was a comprehensive evaluation undertaken jointly with FEI, rather than
 14 a survey.

15 The MURB process review was not completed, as there were only two projects completed in
 16 2017.

17 Custom Commercial Lighting was part of the Custom Commercial Program comprehensive
 18 evaluation completed in 2017. The prescriptive lighting portion of Commercial Lighting will be
 19 evaluated in 2018.

20 An evaluation of the Business Direct Install Program was not undertaken, as it was decided to
 21 discontinue the program and roll it into existing programs.