



Doug Slater
Director, Regulatory Affairs

Gas Regulatory Affairs Correspondence
Email: gas.regulatory.affairs@fortisbc.com

Electric Regulatory Affairs Correspondence
Email: electricity.regulatory.affairs@fortisbc.com

FortisBC
16705 Fraser Highway
Surrey, B.C. V4N 0E8
Tel: (778) 578-3874
Cell: (778) 214-3842
Fax: (604) 576-7074
Email: doug.slater@fortisbc.com
www.fortisbc.com

July 18, 2019

British Columbia Utilities Commission
Suite 410, 900 Howe Street
Vancouver, B.C.
V6Z 2N3

Attention: Mr. Patrick Wruck, Commission Secretary and Manager, Regulatory Support

Dear Mr. Wruck:

Re: FortisBC Energy Inc. (FEI)

Natural Gas Demand-Side Management (DSM) – 2018 Annual Report (the Report)

Response to the British Columbia Utilities Commission (BCUC) Staff Information Request (IR) No. 1

On March 29, 2019, FEI filed the Report referenced above. On June 27, 2019, BCUC staff responded by Email with BCUC Staff IR No. 1.

FEI respectfully submits the attached response to BCUC Staff IR No. 1.

If further information is required, please contact Ken Ross, Manager, Integrated Resource Planning and DSM Reporting at 604-576-7343.

Sincerely,

FORTISBC ENERGY INC.

Original signed:

Doug Slater

Attachments

FortisBC Energy Inc. (FEI or the Company) Natural Gas Demand-Side Management (DSM) 2018 Annual Report (the Report)	Submission Date: July 18, 2019
Response to British Columbia Utilities Commission (BCUC) Staff Information Request (IR) No. 1	Page 2

1 less than half of this volume (2.7 percent) would account for captured carbon dioxide when
2 using sodium hydroxide as the capture medium. The amount of carbon captured and by-
3 product produced will also be measured as part of the pilot deliverables.

4 The expenditures and costs associated with the energy efficiency improvements are included in
5 FEI's DSM budget, while the expenditures and costs associated with evaluating the carbon
6 sequestration activities are separate in FEI's O&M. Please see the table below that breaks out
7 the Non-Labour and Labour expenditures for 2018 by DSM and O&M.

Expenditure Type	DSM	O&M
Non-Labour	\$ 123,861	\$ 112,312
Labour	\$ 20,160	\$ 47,496
Total	\$ 144,021	\$ 159,808

8
9

10

11 1.1.1 Please explain what energy conservation opportunities FEI considers
12 could be realized from carbon capture. Please discuss if FEI considers
13 these opportunities to be "significant," if the application of the
14 technology proves to be successful.

15

16 **Response:**

17 Yes, FEI considers carbon capture to have a significant potential energy conservation
18 opportunity if the technology proves to be successful. The manufacturer of the carbon capture
19 device claims energy savings of up to 10 percent associated with recovering heat to preheat the
20 cold-water inlet to the DHW system. The savings estimate depends on factors like the boiler's
21 efficiency and the BTUs needed to heat the building's water consumption. The technology is
22 ideal for buildings with standard to mid-efficient boilers that have year-round DHW load. The
23 manufacturer also claims that the system can work with the optimization of condensing boilers
24 by increasing the return DHW temperature. Once pilot results are available, FEI will review and
25 determine the feasibility for inclusion in the suite of DSM rebate offerings.

26

27

28

29 1.1.1.1 Please provide any high-level analysis of energy savings that
30 FEI estimates could be achievable from the Carbon Capture
31 Pilot Project.

32



FortisBC Energy Inc. (FEI or the Company) Natural Gas Demand-Side Management (DSM) 2018 Annual Report (the Report)	Submission Date: July 18, 2019
Response to British Columbia Utilities Commission (BCUC) Staff Information Request (IR) No. 1	Page 3

1 **Response:**

2 FEI estimates natural gas savings of approximately 167 GJ/yr based on a hot water size of
3 greater than 440,000 btu/hr with an estimated baseline consumption of 2,000 GJ/yr for hot water
4 heating. This translates to a reduction of approximately 8.4 percent attributed to the amount of
5 heat recovered to preheat the DHW system.

6
7

8

9 1.2 Please outline the costs of the Carbon Capture Pilot Project incurred by FEI in
10 2018.

11

12 **Response:**

13 Please refer to the response to BCUC IR 1.1.1.

14
15

16

17 1.3 Please explain why the Carbon Capture Pilot Project is being funded through
18 FEI's DSM budget.

19

20 **Response:**

21 Please refer to the response to BCUC IR 1.1.1.

22