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May 18, 2017

Via email:
dscarlett@kaslo.org

Attention: Mr. Don Scarlett

Dear Mr. Scarlett

**Re: FortisBC Inc. (FBC)
Project No. 3698896
2016 Long Term Electric Resource Plan (LTERP) and Long Term Demand Side
Management Plan (LT DSM Plan)
Response to Mr. Don Scarlett (Scarlett) Information Request (IR) No. 2**

On November 30, 2016, FBC filed the Application referenced above. In accordance with Commission Order G-197-16 setting out the Regulatory Timetable for the review of the Application, FBC respectfully submits the attached response to Scarlett IR No. 2.

If further information is required, please contact Joyce Martin at 250-368-0319.

Sincerely,

FORTISBC INC.

Original signed:

Diane Roy

Attachments

cc (email only): Commission Secretary
Registered Parties

FortisBC Inc. (FBC or the Company) 2016 Long Term Electric Resource Plan (LTERP) and Long Term Demand Side Management Plan (LT DSM Plan) (the Application)	Submission Date: May 18, 2017
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1 **1. In response to BCUC IR1.11.4, FBC stated:**

2 “...customers with DG, including net metered customers, pay lower variable
3 consumption charges, and, since some of the Company’s fixed costs are
4 collected through the variable (energy and demand) charges, fixed charges are
5 under-recovered. In the case of net metered customers, the compensation for
6 net excess generation during a billing period may reduce the contribution toward
7 fixed costs to zero or negative. While the avoidance of energy charges is fair
8 because the customers did not use the power, it is problematic that they also
9 avoid paying for all of the fixed costs of the grid that delivers power when they
10 need it and/or takes the excess power they sell back to the utility. The costs are
11 ultimately borne by other customers through higher rates.”

12 **And in response to Scarlett IR1.1.d, FBC stated:**

13 “...customers with low consumption, whether as a result of consumption habits or
14 participation in DSM, still make a standard contribution towards the fixed costs of
15 the system through the Customer Charge. Only customers with DG that have the
16 ability to reduce bills to zero (or negative) can avoid this contribution completely.
17 This means that DG customers, who still rely on and benefit from connection to
18 the electric grid, are being subsidized by other non-DG customers.”

- 19
- 20 a) Do all NM customers, including those who produce NEG, receive bimonthly bills
21 which include the “Basic Customer Charge,” which is then subtracted—along
22 with GST—from whatever credit or debit balance the customer would otherwise
23 have on that bill?

24

25 **Response:**

26 All customers receive a bill that contains a line item for the Customer Charge. Whether this
27 charge appears on the bill and is effectively erased through the credit for excess generation, or
28 does not appear at all, has the same result in terms of impact on other customers.

29 Rates are designed such that all customers within a given rate class make a similar contribution
30 to the fixed costs of the utility. For residential customers, this contribution is collected through
31 the Customer Charge and is the same for all customers charged under a given rate. Though
32 the Customer Charge does not collect 100% of the costs as determined during the Cost of
33 Service Analysis (COSA), it is set at the same level for all customers.

34 Prior to the advent of the Net Metering Program the cost allocation could be done under the
35 assumption that the Customer Charge was effectively a minimum billing amount that ensured
36 some fixed cost recovery from all customers.



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1 Customers with small-scale generation, such as those on the Net Metering Program, can avoid
2 even the minimum contribution to fixed charges if their bill is less than the Customer Charge. A
3 customer that reduces their bill to zero, or less, is still using the FBC system, and still driving a
4 system cost which in the absence of a sufficient recovery will fall to the account of the remaining
5 customers.

6

7

8 b) Does the Company maintain that NM customers who produce NEG cause other
9 customers to pay higher rates primarily because customers with NEG may avoid
10 paying “all of the fixed costs of the grid,” or because the Company loses sales for
11 which it is not compensated (unlike DSM for which it is compensated through
12 return on investment)?

13

14 **Response:**

15 It is the former – that customers with NEG may avoid paying any fixed costs, as described in
16 response to Scarlett IR 2.1a). The lack of recovery of a fixed cost from NM customers who
17 produce NEG does not affect FBC’s regulated return.

18

19

20 c) How much revenue normally collected through the Basic Customer Charge has
21 been lost to FBC due to NM customers producing sufficient NEG to avoid paying
22 that charge?

23

24 **Response:**

25 In calendar year 2016, there were 145 non-TOU residential NM customers that were collectively
26 issued 596 bills. Of these, 141, or 24%, were in an amount less than the otherwise applicable
27 Customer Charge. This represents customer charges not collected in the amount of
28 approximately \$3,800.¹ As noted in the response to Scarlett IR 1b) above, this revenue is not
29 “lost to FBC” but will be recovered from rates of all customers in subsequent years.

30

¹ This analysis assumes that bills are calculated in accordance with the billing methodology confirmed by Order G-199-16, at 2017 rates.

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1 **2. In response to Scarlett IR1.2.a, FBC stated:**

2 “Expected peak load for a new subdivision is calculated based on the number and type
3 of planned dwellings. This calculation of expected peak load typically incorporates a
4 diversity factor, which captures the differences in timing of customers’ individual peak
5 loads referenced in the question.”

6 a) In its use for calculation of peak load is “diversity factor” a well enough
7 understood and reliable phenomenon to justify planning and sizing of FBC
8 distribution infrastructure?
9

10 **Response:**

11 The use of a diversity factor is a commonly-applied utility methodology that allows for calculation
12 of expected peak load for new subdivision development. However, FBC’s distribution
13 infrastructure is planned and sized such that it will be able to safely and reliably supply more
14 than the expected peak load as discussed in Section 6.2.1 of the LTERP.

15
16

17
18 b) Why is a similar diversity factor calculation not used to evaluate the capacity
19 benefit to the utility from large numbers of NM customers who use different sizes
20 and types of generation?
21

22 **Response:**

23 At this time, more than 95 percent of FBC’s NM customers have PV generation installed. The
24 FBC system peak occurs in the winter, and it typically occurs before sunrise or after sunset. As
25 such, the capacity benefit at times of peak demand on the FBC system is minimal.

26

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1 **3. In response to Scarlett IR1.5.a, FBC stated:**

2 “For DG that periodically injects power into the local system, the benefit may be similar
3 to DG generally, but if the scale is sufficient, flows of power may have the same effect of
4 straining the local system that would be experienced for an increase in customer load.”

5 a) Given the 50kW maximum generation restriction for NM (which is close to the
6 theoretical demand of a 200 amp residential service) and in view of the fact that
7 any generation greater than the NM customer’s instantaneous load travels only
8 to neighbours’ services until it is absorbed, does FBC maintain that NM could
9 strain the local distribution system as would be experienced by an increase in
10 customer load?

11
12 **Response:**

13 It is possible for a NM customer’s peak net generation to be higher than their peak net
14 consumption. This could result in a higher peak load on infrastructure locally serving the NM
15 customer, such as the secondary network and pole top or pad mount transformers.

16