

REQUESTOR NAME: **BC Sustainable Energy Association and Sierra Club BC**

INFORMATION REQUEST ROUND NO: **2**

TO: **FortisBC Inc.**

DATE: **April 27, 2017**

PROJECT NO: **3698896**

APPLICATION NAME: **FortisBC Inc. 2016 Long Term Electric Resource Plan (LTERP) and Long Term Demand Side Management Plan (LT DSM Plan)**

VOLUME 2 – LONG-TERM DEMAND-SIDE MANAGEMENT PLAN

23.0 Topic: Long Term DSM Plan

Reference: Exhibit B-4, FBC Response to BCSEA-SCBC IR 1.15.1

In its response to BCSEA-SCBC IR 1.15.1, FBC explains that average line losses are used in calculating the cost-effectiveness of DSM. BCSEA-SCBC understands that geographically-specific line loss rates are not used in determining DSM cost-effectiveness. However, FBC may not have understood the intent of this question. Presumably, line losses are higher at times of peak demand than they are on average across the full range of loads.

23.1 Please explain whether FBC agrees that line losses are greater at times of peak demand than they are at times of average demand.

23.2 Does FBC's estimate of average line losses refer both to average geographically, as explained in its response to BCSEA-SCBC IR 1.15.1, and average relative to the range of line losses experienced at different levels of demand?

23.3 Please confirm that FBC's estimate of line loss rates is based on line losses at average demand. If not confirmed, please explain.

23.4 Does FBC agree that DSM reduces the requirement for energy and capacity at the margin?

24.0 Topic: Long Term DSM Plan

Reference: Exhibit B-2, FBC Response to BCSEA-SCBC IR 1.16.4

BCSEA-SCBC IR 1.16.4 asks FBC to "describe and provide anticipated costs and savings values for a scenario that includes all the cost-effective DSM from an LRMC perspective."

FBC's response is: "Please refer to the response to BCUC IR 1.33.1 for a hypothetical scenario where DSM activities offset 100 percent of load growth, which is approximately equivalent to the total interim estimate of market potential." [underline added]

24.1 Is it a coincidence that "100 percent of load growth" is approximately equivalent to the "total interim estimate of market potential"? If not, please explain the linkage.

25.0 Topic: Long Term DSM Plan

Reference: Exhibit B-2, FBC Response to BCUC IR 1.23.2.1

In its response to BCUC IR 1.23.2.1, FBC states that:

“Targeted regional [DSM] offers introduce disparate incentive offers, which are inequitable to customers outside of the target region.

FBC considers DSM savings to be reliable but non-firm resources, and thus cannot be counted on to defer network system reinforcements that are predicated on peak load requirements.”

25.1 Is it FBC’s position that providing “disparate incentive offers” to encourage DSM participation that would reduce the overall cost of service would violate a policy or regulation?

25.1.1 If the answer is yes, please explain, and cite the policy(ies) or regulation[s].

25.2 Please provide evidence to support the assertion that “DSM savings cannot be counted on to defer network system reinforcements.”

25.3 To FBC’s knowledge, are any other jurisdictions in North America considering or using DSM as a tool to “defer network system reinforcements”?

26.0 Topic: Long Term DSM Plan

Reference: Exhibit B-4, FBC Response to BCSEA-SCBC IR 1.18.9

In its response, FBC states that “FBC considers itself to be long on capacity over the planning horizon, as is illustrated in LTERP 20 Figure 8-4: Capacity-Load Resource Balance after DSM at page 102 of the LTERP (see Exhibit 21 B-1, p. 102), and thus there is no requirement for capacity-focused DSM measures.”

26.1 Are there any regions in FBC’s distribution service territory where system reinforcements are planned or contemplated to address capacity constraints?

26.1.1 If yes, please list the projects, when they need to be completed to meet capacity requirements, and the estimated cost for each.

27.0 Topic: Long Term DSM Plan

Reference: Exhibit B-4, FBC Response to BCSEA-SCBC IR 1.20.5

In its response, FBC states that “No early retirement measures were explored because they are more costly than replace on burnout measures.”

27.1 Would the savings for early retirement measures be greater than for replace on burnout measures? Please explain.

27.2 If the answer to the previous question is yes, how would FBC know that early retirement measures would not be worth pursuing unless it does the analysis?

28.0 Topic: Long Term DSM Plan

Reference: Exhibit B-4, FBC Response to BCSEA-SCBC IR 1.20.8.1

In its response, FBC states “Please refer to the response to BCSEA IR 1.20.8” in which it explains that “...the incremental savings from the increased cooling efficiency are minimal...”

- 28.1 Regardless of the level of cooling savings, in analyzing the fuel-switching measure did FBC assume that the existing cooling unit would remain operational when the furnace “burned out” or did it assume that the both the cooling unit and furnace would have been replaced in the scenario that it compared the heat pump fuel switch against?
- 28.2 If FBC assumed that the existing cooling unit was not replaced, explain why it made that assumption.
- 28.3 If FBC assumed that the existing cooling unit was replaced along with the furnace, were the costs of the cooling unit included in the analysis?

VOLUME 1 – LONG TERM ELECTRICITY RESOURCE PLAN

29.0 Topic: Low-carbon electrification

Reference: Exhibit B-4, FBC Response to BCSEA-SCBC IR 1.20.9; *Clean Energy Act*, ss.18(1), (2) and (3); OIC 101/207, amendment of the Greenhouse Gas Reduction (Clean Energy) Regulation, B.C. Reg 102/2012.

FBC was asked about opportunities for low carbon fuel switching from non-transportation fossil fuels other than natural gas to electricity within FBC’s service territory. FBC responds:

“FBC considers fuel switching to be load building, and as such is not within the scope of the LT DSM Plan.”

Clean Energy Act, subsections 18(1), (2) and (3) state:

Greenhouse gas reduction

- 18** (1) In this section, "**prescribed undertaking**" means a project, program, contract or expenditure that is in a class of projects, programs, contracts or expenditures prescribed for the purpose of reducing greenhouse gas emissions in British Columbia.
- (2) In setting rates under the *Utilities Commission Act* for a public utility carrying out a prescribed undertaking, the commission must set rates that allow the public utility to collect sufficient revenue in each fiscal year to enable it to recover its costs incurred with respect to the prescribed undertaking.
- (3) The commission must not exercise a power under the *Utilities Commission Act* in a way that would directly or indirectly prevent a public utility referred to in subsection (2) from carrying out a prescribed undertaking.

On March 1, 2017, the Lieutenant Governor in Council approved OIC 101/2017, amending the Greenhouse Gas Reduction (Clean Energy) Regulation, B.C. Reg

102/2012. OIC 101/2017 defines prescribed undertakings for reducing greenhouse gas emissions in British Columbia that can be carried out by a public utility. Section 18 of the CEA requires the Commission to allow the public utility to recover in rates its costs incurred with respect to the prescribed undertaking.

- 29.1 For convenience, please file a copy of OIC 101/2017.
- 29.2 In FBC's view, does OIC 101/2017 apply to FBC (electric)? If not, why not?
- 29.3 Does FBC agree that the amended subsection 4(3) of the Regulation prescribes a class of undertaking that could include an FBC low-carbon fuel switching electrification program, where pursuant to s.4(4) the program was "cost-effective" as defined in s.4(1)? If not, why not?
- 29.3.1 Does FBC agree that in principle FBC would be entitled to recover in rates its costs of such a program pursuant to CEA s.18? If not, why not?
- 29.4 Does FBC agree that in principle, i.e., apart from timing considerations, low-carbon fuel switching electrification measures are appropriate for inclusion in its long-term electricity resource plan under s.44.2 of the UCA?
- 29.5 On the assumption that FBC low-carbon fuel switching electrification measures would not be demand-side measures as defined in the CEA, does FBC agree that OIC 101/2017 nevertheless provides an opportunity for FBC to pursue low-carbon electrification, a limited form of load building? If not, why not?
- 29.6 Does FBC intend to examine and develop low-carbon electrification measures and propose them if they would be cost-effective? If so, please describe the timeframe. If not, why not?
- 29.7 Please provide FBC's understanding of the cost-effectiveness methodology in the new section 4 the GHG Reduction (Clean Energy) Regulation and how it would apply to low-carbon electrification measures by FBC.
- 29.8 Does FBC agree that the cost-effectiveness methodology for low-carbon electrification measures under section 4 of the GHG Reduction (Clean Energy) Regulation is significantly different that the cost-effectiveness methodology for demand-side measures set out in the DSM Regulation?

"A more comprehensive review of fuel switching potential will be undertaken as part of the BC CPR additional scope services now underway." [Exhibit B-4, BCSEA-SCBC IR 21.2, pdf p.51]

- 29.9 Will the more comprehensive review of fuel switching potential that will be undertaken as part of the BC CPR additional scope services be adequate and sufficient for FBC to develop and implement (if cost-effective) low-

carbon electrification measures under OIC 101/2017? If additional analysis will be required, how will FBC obtain it?

- 29.10 Noting that FBC made an extensive list of information requests to BC Hydro regarding low-carbon electrification potential in the Commission's proceeding regarding BC Hydro's F2017-F2019 Revenue Requirements Application [Exhibit C8-3 in that proceeding], does FBC intend to work together with BC Hydro in developing low-carbon electrification measures that are suitable for both utilities' service territories?

30.0

31.0

32.0

33.0