

REQUESTOR NAME: **BCOAPO**  
INFORMATION REQUEST ROUND NO: **1**  
TO: **FortisBC**  
DATE: **March 7, 2017**  
APPLICATION NAME: **FortisBC Inc. – 2016 Long Term  
Electric Resource Plan and  
Long Term Demand Side  
Management Plan**

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**1.0 Reference: Exhibit B-1, Volume 1, page ES1 and page ES8**

- 1.1 At page ES1 (lines 23 and 35) and page ES8 (line 21) FBC uses the term “cost-effective”. Please indicate how cost-effectiveness is defined in this context and, in particular, what “costs” are included/excluded in this determination.

**2.0 Reference: Exhibit B-1, Volume 1, page ES7 and page 53**

- 2.1 Please clarify (line 10) what is meant by incremental demand-side resources.
- 2.2 Please indicate what years’ DSM program impacts (e.g., does the reference load forecast include the impacts of programs implemented in and before 2015 or 2016 or what year?).
- 2.3 Does the reference load forecast account for a loss in the persisting effects of these programs in future years?

**3.0 Reference: Exhibit B-1, Volume 1, page ES9**

- 3.1 There is no Section 9.4.1 in FBC’s 2016 LTERP Application. Please clarify the reference provided at line 25.

**4.0 Reference: Exhibit B-1, Volume 1, page ES9 and pages 97-100**

**Preamble:** The Application states (page ES9) that the High DSM Scenario “includes the majority of cost effective DSM from an LRMC perspective”. The Application also states that the incremental cost of the High Scenario is \$104 / MWh (page 100).

- 4.1 With respect to Figure 8-2 in Volume 1 (and Figure 3-2 in Volume 2), for each of the DSM Scenarios please explain what each of the following represent: i) the grey shaded area and ii) each of the two horizontal bars. Also, why in some cases does the colored bar exceed the grey shaded area and in other cases it does not?
- 4.2 Please clarify what is meant by the term “incremental cost” (page 100). Does the \$104 represent: i) the average cost of the High Scenario portfolio of DSM programs; ii) the average cost of the additional DSM

measures included in the High Scenario versus the Base Scenario; or iii) the “cost” of the higher cost DSM measure included in the High Scenario?

- 4.3 Given that the \$104 LRM C for High DSM scenario exceeds the LRM C used to evaluate potential DSM programs (\$100 per Exhibit B-1, Volume 2, page 8) why doesn't the High DSM scenario include all cost effective DSM from an LRM C perspective?
- 4.4 Does the High DSM scenario include any DSM programs that are not cost-effective (i.e., Program LRM C exceeds \$100).
  - 4.4.1 If so, what are they and what percentage of the savings in 2023 and 2035 are associated with these programs?

**5.0 Reference: Exhibit B-1, Volume 1, pages 23, 32-36 and 40-45**

- 5.1 The Application states (page 23) that uncertainty existed at that time “over the future of climate change action including the CPP rule in the U.S. as a result of the upcoming change in administration”. Given the new administration is now in place and has indicated some of its policy direction, what changes, if any, are required to the outlooks as described in Sections 2.2.4.2; 2.2.5; 2.4.1; 2.4.2; 2.5.1; and 2.5.2?

**6.0 Reference: Exhibit B-1, Volume 1, pages 25-26 (Section 2.3.2)**

- 6.1 Was the spending on the EV-related initiatives undertaken to date part of FBC's DSM expenditures? If not, under what program/business area was it funded?
- 6.2 Are potential new initiatives discussed here to be funded as part of FBC's DSM expenditures?

**7.0 Reference: Exhibit B-1, Volume 1, page 40**

- 7.1 Does FBC currently have any long-term capacity reservations (i.e., purchases LT transmission capacity access) for transmission linking it to either the U.S. or Alberta?
  - 7.1.1 If so, how much capacity is reserved and when do the current reservations expire?
  - 7.1.2 What consideration was given to making any such reservations as part of the current LTERP?

**8.0 Reference: Exhibit B-1, Volume 1, page 47**

- 8.1 FBC states (line 13-14) that it believes its assumptions regarding future Tranche 1 PPA prices are reasonable given the recent historic rate increases by BC Hydro and the target increases to F2024. Please explain further how these historical and target increases have informed the forecast of Tranche 1 prices.

**9.0 Reference: Exhibit B-1, Volume 1, pages 48-50  
BCUC Decision re: BCH 2015 RDA, pages 10-11**

- 9.1 Why did FBC use \$129.70 / MWh as the Base Case value for PPA Tranche 2 energy when BC Hydro had already shifted its LRMC value towards \$85 per MWh?
- 9.2 Given that the BCUC has now determined that “for the purpose of providing a basis for the Step 2 rate for RIB and TSR, either a range (\$85/MWh to \$100/MWh) or a point (less than \$85/MWh) can be used as a reference for both the TSR and the RIB rate” would it not be reasonable to use a value of no more than \$100 as the appropriate cost of Tranche 2 energy? If not, why not?
- 9.3 Are the values in Figure 2-11 expressed in nominal \$, real 2015 \$ or in some other form?
- 9.3.1 If necessary, please re-do Figure 2-11 such that the values are expressed in real 2015 \$.
- 9.4 Are the values in Figure 2-13 expressed in nominal \$, real 2015 \$ or in some other form?
- 9.4.1 If necessary, please re-do Figure 2-13 such that the values are expressed in real 2015 \$.

**10.0 Reference: Exhibit B-1, Volume 1, pages 53-55**

- 10.1 Are the load and peak demand forecasts based on normal weather conditions? If so, what is the definition of weather normal and is the definition assumed to change over the 20 year period?
- 10.2 Please provide a schedule that compares FBC’s load and peak demand forecast (prior to DSM) as filed in the current Application with that filed for the 2012 LTRP, and comment on the reasons for any material (5%) variances as of 2035.

**11.0 Reference: Exhibit B-1, Volume 1, page 55 and Appendix F, page 11**

- 11.1 Please clarify what the winter peak forecast values in Figure 3-3 represent (i.e., are they the winter peak value for customer demand, are they the winter peak values for required generation to serve customer peak demand after allowance for losses, or are they some other value?).
- 11.2 Similarly, what do the monthly “System Peak” values set out in Table 2.10 of Appendix F represent?
- 11.3 With respect to Table 2.10 in Appendix F, please explain why the winter peak value is higher than the system peak reported for any of the winter months in the same year.

**12.0 Reference: Exhibit B-1, Volume 1, pages 56-58**

- 12.1 Please provide a schedule setting out the annual growth rates in BC GDP forecast by the CBOC as used in the 2012 LTRP.
- 12.2 In the same schedule please include the actual BC GDP growth rates up to 2015 (2016 if available) and the forecast growth rates now projected by the CBOC and used in the 2016 LTRP.
- 12.3 Please provide a schedule setting out the annual growth rates in population forecast by the BCStats as used in the 2012 LTRP.
- 12.4 In the same schedule please include the actual population growth rates up to 2015 (2016 if available) and the forecast growth rates now projected by the BCStats and used in the 2016 LTRP.
- 12.5 At the bottom of page 58 it states, "Customer usage is forecast by averaging the most recent three years' usage rates and then assuming the average rate remains constant over the planning horizon". What is the rationale for assuming residential customer usage will remain constant, rather than factoring in depressive effects from, for example, DSM efforts and increased Building Code energy efficiency requirements?

**13.0 Reference: Exhibit B-1, Volume 1, Appendix E, page 2**

- 13.1 Please provide a schedule setting out the actual values underlying Figure E-1.
- 13.2 It appears from a Figure E-1 that the only values which are growing over the 2016-2035 period are those for CIP and AMI. Please confirm whether or not this is correct.
  - 13.2.1 If so, please explain why the Rate-Driven impacts are not increasing. Is FBC assuming that its rates will increase at the rate of inflation over the period to 2035?
- 13.3 Please indicate how the RCR values were determined and what underlying assumptions have been made about the future design of Residential rates.
- 13.4 Please indicate how the AMI values were determined.
- 13.5 Please confirm that the AMI savings shown are just those related to increased sales.
- 13.6 Please indicate how the CIP values were derived.

**14.0 Reference: Volume 1, Appendix E, pages 6-8**

- 14.1 Please provide a Table similar to Table E-1 setting out the results of the Residential regression as used in the 2012 LTRP.
- 14.2 With respect to page 8 (lines 4-5), how has FBC determined that there is no long term trend in the "normalized" UPC value?

- 14.3 The text at lines 6-8 suggests that the UPC values were adjusted for “savings”. However, the text at line 15 suggests that savings were also subtracted from the forecast derived using the UPC. Please clarify what, if any, specific adjustments for saving were made to the UPC values as opposed to what adjustments for savings were made to the forecast derived using the UPC values.
- 14.4 Please provide a schedule that sets out the annual residential load values (2016-2035) resulting from the calculation described at lines 13-14 and the subsequent adjustments for savings (itemized) that produces the values shown in Figure E-8.

**15.0 Reference: Volume 1, Appendix E, pages 9-10**

- 15.1 Please provide a Table similar to Table E-2 setting out the results of the Commercial regression as used in the 2012 LTRP.

**16.0 Reference: Volume 1, Appendix E, pages 11-12**

- 16.1 Please provide a schedule that sets out the Wholesale Energy Forecast from the 2012 LTRP and that contrasts it with the actual values up to 2015 (or 2016 if available), plus the forecast values as used in the current 2016 LTRP.
- 16.2 The Application states that after the first five years an average of each individual customer’s forecasted growth rate is used to project the long term. Given that Pentiction represents over ½ the total load, is a simple or weighted average used?
- 16.3 Has FBC assessed the reasonableness of using the 5-year growth rates provided by these customers to project their long term growth rates? If so, how and what were the results?

**17.0 Reference: Volume 1, page 57 and Appendix E, page 13**

- 17.1 Please provide a schedule that sets out the Industrial Energy Forecast from the 2012 LTRP and that contrasts it with the actual values up to 2015 (or 2016 if available), plus the forecast values as used in the current 2016 LTRP.
- 17.2 Please indicate the specific industrial sectors for which the CBOC provides GDP forecasts.
- 17.3 Please provide a breakdown of FBC’s 2015 industrial sales by these industrial sectors.
- 17.4 For which industrial sectors is the growth rate for the first five years based predominantly on survey results, as opposed to the CBOC GDP forecast?
- 17.5 The Application states on page 57 that the GDP composite rate is used to forecast industrial long term load. Does this rate differ from the overall GDP rate discussed on page 56?

17.5.1 If yes, how and what is the forecast for the first 5 years and over the full 20 years?

**18.0 Reference: Exhibit B-1, Volume 1, Appendix E, page 14**

18.1 With respect to page 14 (line 5), how has FBC determined that there is no long term trend in the use by the Irrigation class?

**19.0 Reference: Exhibit B-1, Volume 1, Appendix E, page 15**

19.1 With respect to page 15 (lines 5-6), how has FBC determined that there is no long term trend in the use by the Lighting class?

19.2 In many jurisdiction there have been conversion to more efficient street lighting, to date what activity has there been in this regard in the FBC service area?

19.3 Has FBC consulted with BC Hydro regarding any potential plans to move to more efficient street lighting that might impact the forecast of a constant load for the lighting class? If not, why not?

**20.0 Reference: Exhibit B-1, Volume 1, page 54; Appendix E, page 16 and Appendix F, page 10**

20.1 The discussion on page 54 suggests that the loss values used to derive gross load (from net load) are assumed to be 8% for the period. However, the discussion in Appendix E suggests that the loss values have been adjusted for reductions in theft. Please clarify and indicate the assumptions used to determine the energy loss values set out Figure E-15 and Appendix F, Table 2.9.

**21.0 Reference: Exhibit B-1, Volume 1, Appendix E, page 17**

21.1 Please provide a schedule that clearly sets out the calculations described in lines 2-9.

21.2 How are the historic peak demand values (line 4) defined (e.g., is it the coincident peak demand delivered to customers, is it the coincident peak demand at point of generation, or some other value)?

21.3 What was the historic self-generating customer load that was removed and what is the basis for the 16 MW of load added for the self-generation customers?

21.4 Does the use of the gross energy growth rate mean the FBC is assuming that there will be no change in overall system load factor over the planning period?

21.4.1 If yes, why is this assumption reasonable?

21.4.2 If no, what change is anticipated and how has it been factored into the forecast?

**22.0 Reference: Exhibit B-1, Volume 1, pages 68-70**

- 22.1 Are the energy impacts set out in Figure 4-1 based on Net or Gross Load?
- 22.2 Are the peak demand impacts set out in Figure 4-2 based on the Winter Peak forecast (per Figure 3-3) or some other reference forecast?

**23.0 Reference: Exhibit B-1, Volume 1, Appendix G, page 2**

- 23.1 What other potential load drivers were in the “broader list” considered by Navigant and FBC staff?

**24.0 Reference: Exhibit B-1, Volume 1, page 78**

- 24.1 Please demonstrate, with an example, the benefits of the EEA as described at lines 13-22.
- 24.2 Has the EEA had any impact on FBC’s 2016 LTERP?

**25.0 Reference: Exhibit B-1, Volume 1, page 79**

- 25.1 Please provide more details regarding FBC’s transmission rights on Teck’s 71 Line in terms of the associated energy and capacity capability.
- 25.2 Please explain why “additional firm transmission cannot be reliably obtained on the U.S. side of the border”.

**26.0 Reference: Exhibit B-1, Volume 1, page 84**

- 26.1 Is there an FBC (or BCUC) policy statement that specifies that the resource planning requirement is to acquire energy resources to meet energy and peak demand requirements under “normal” or “expected” weather conditions? If so, please provide.

**27.0 Reference: Exhibit B-1, Volume 1, pages 92-93**

**Preamble:** At page 49 the Application states that for the base case the BCH PPA Tranche 2 is \$129.70 per MWh and that \$85 is used as a rate scenario.

- 27.1 Where in the Application are the implications of a \$85 Tranche 2 rate scenario examined?
- 27.2 How would the Energy Load Resource Balance (i.e. Figure 7-1) change if BC Hydro Tranche 2 PPA energy was available at \$85/MWh?
- 27.3 How would the Energy Load Resource Balance (i.e. Figure 7-1) change if BC Hydro Tranche 2 PPA energy was available at \$100/MWh?

**28.0 Reference: Exhibit B-1, Volume 1, pages 94, 102 & 103 and Appendix E, page 17**

- 28.1 Appendix E indicates that the PRM is not included in the Load Forecast. Is any allowance for the PRM included in Figures 7-2, 8-4 and 8-5?

28.1.1 If not, please re-do Figures 8-4 and 8-5 to include the PRM in the peak forecast.

**29.0 Reference: Exhibit B-1, Volume 1, pages 97-100  
Exhibit B-1, Volume 2, pages 12-14**

- 29.1 Please outline the principles/basis for the Low DSM Scenario.
- 29.2 For Resource Cost attributed to each of the scenarios set out in Volume 1, Table 8-2, does the value represent the average (or overall) cost of the DSM Scenario or the cost of the most expensive DSM measure in the portfolio?
- 29.2.1 If the value represents the average cost of the portfolio of measures, what is the highest cost measure included in each DSM scenario and what is the associated cost?
- 29.2.2 If the values represent the cost of the most expensive measure, what is the average overall cost of each DSM Scenario?
- 29.2.3 For each of the Base, High and Max DSM Scenarios, what is the average cost of the additional DSM measures added (relative to the next lowest DSM Scenario)?
- 29.3 With respect to page 100, please explain more fully “the opportunity cost of offsetting the relatively inexpensive PPA in the near term” and how it is offset by the High DSM Scenario.

**30.0 Reference: Exhibit B-1, Volume 1, pages 107 & 109 and  
Appendix J, page 6**

- 30.1 Please confirm that the UEC and UCC values are each based on the total cost of the resource?

**31.0 Reference: Exhibit B-1, Volume 1, page 111**

- 31.1 Does the levelized cost of market purchases vary depending upon whether one is looking at purchases to be made in the short (next five years), medium (5-10 years out) or long (more than 10 years out) term? If so, what are the relative values?

**32.0 Reference: Exhibit B-1, Volume 1, Appendix J, pages 15 and 22**

- 32.1 Please explain more fully why biomass is considered as producing “carbon neutral air emissions from combustion” and therefore “clean”.
- 32.2 Does the assessment of biomass as “clean” include the transportation impacts required to deliver the fuel to the generation plant?
- 32.3 Please also explain why, in contrast, the combustion of municipal solid waste is viewed as producing air contaminants and not 100% clean.



**33.0 Reference: Exhibit B-1, Volume 1, Appendix J, pages 26-27**

33.1 Figure J3-14 suggests that there are diseconomies of scale associated with CCGTs (i.e., large unit sizes have a higher cost per MWh). Please confirm that this is the case and, if so, explain why.

**34.0 Reference: Exhibit B-1, Volume 1, Appendix J, pages 28-29**

34.1 Figure J3-15 suggests that there are also diseconomies of scale associated with SCGTs (i.e., large unit sizes have a higher cost per MWh). Please confirm that this is the case and, if so, explain why.

**35.0 Reference: Exhibit B-1, Volume 1, Appendix J, pages 43-44**

35.1 Given that the generation of electricity is not the primary business of industrial customers that would provide self-generation, are there not also risks related to the primary business of the self-generator that could impact the reliability of supply over the long-term?

**36.0 Reference: Exhibit B-1, Volume 1, pages 98 and 116**

36.1 What is the difference, if any, between the Low DSM Scenario (page 98) and the No DSM case (page 116)?

**37.0 Reference: Exhibit B-1, Volume 1, Appendix K**

37.1 With respect to page 2, please clarify what year's real dollars FBC's previous LRMCM of \$112 was expressed in.

37.2 With respect to page 3 (lines 26-28), would it be reasonable to conclude that BCH's LRMCM (including both capacity and energy) is in the order of \$100/MWh when expressed in 2015 real \$ (the basis on which FBC has expressed its LRMCMs – per Figure 9-1)?

37.3 How are losses treated in the determination of the LRMCMs for FBC and BCH?

37.3.1 If not treated the same, please express FBC's LRMCM in real 2015\$ using the same treatment of losses as BCH.

**38.0 Reference: Exhibit B-1, Volume 1, page 119**

38.1 For each of the four Portfolios (B1, B2, A4 and B4), to what extent is BCH PPA Tranche 2 energy relied upon?

38.2 For each of the four Portfolios, please provide a schedule setting out the cost for each incremental resource (including BCH PPA Tranche 2 energy) included.

38.3 For each of the four Portfolios, please provide an Energy Load Resource Balance (similar to Figure 7-1) that includes the additional resources identified (including DSM) and that breaks out the contributions from Tranches 1 and 2 of BCH's PPA.

- 38.4 What was the cost of BCH PPA Tranche 2 used in determining the LRM C for the various Portfolios?
- 38.4.1 How would the response to parts 1-3 of this question change if the cost of PPA Tranche 2 energy was \$100 / MWh (real 2015 \$)?
- 38.4.2 How would the LRM C for each Portfolio change if the cost of PPA Tranche 2 energy was \$85 / MWh (real 2015 \$)?

**39.0 Reference: Exhibit B-1, Volume 1, page 120**

- 39.1 For each of the three Portfolios (A1, A2, A3), to what extent is BCH PPA Tranche 2 energy relied upon?
- 39.2 For each of these three Portfolios, please provide a schedule setting out the cost for each incremental resource (including BCH PPA Tranche 2 energy) included.
- 39.3 For each of these three Portfolios, please provide an Energy Load Resource Balance (similar to Figure 7-1) that includes the additional resources (including DSM) identified and that breaks out the contributions from Tranches 1 and 2 of BCH's PPA.
- 39.4 What was the cost of BCH PPA Tranche 2 used in determining the LRM C for the various Portfolios?
- 39.4.1 How would the response to parts 1-3 of this question change if the cost of PPA Tranche 2 energy was \$100 / MWh (real 2015 \$)?
- 39.4.2 How would the LRM C for each Portfolio change if the cost of PPA Tranche 2 energy was \$85 / MWh (real 2015 \$)?

**40.0 Reference: Exhibit B-1, Volume 1, page 121**

- 40.1 For each of the three Portfolios (C1, C3, C4), to what extent is BCH PPA Tranche 2 energy relied upon?
- 40.2 For each of these three Portfolios, please provide a schedule setting out the cost for each incremental resource (including BCH PPA Tranche 2 energy) included.
- 40.3 For each of these three Portfolios, please provide an Energy Load Resource Balance (similar to Figure 7-1) that includes the additional resources identified (including DSM) and that breaks out the contributions from Tranches 1 and 2 of BCH's PPA.
- 40.4 What was the cost of BCH PPA Tranche 2 used in determining the LRM C for the various Portfolios?
- 40.4.1 How would the response to parts 1-3 of this question change if the cost of PPA Tranche 2 energy was \$100 / MWh (real 2015 \$)?
- 40.4.2 How would the LRM C for each Portfolio change if the cost of PPA Tranche 2 energy was \$85 / MWh (real 2015 \$)?

**41.0 Reference: Exhibit B-1, Volume 1, page 122**

- 41.1 For each of the two Portfolios (D2 and D4), to what extent is BCH PPA Tranche 2 energy relied upon?
- 41.2 For each of these two Portfolios, please provide a schedule setting out the cost for each incremental resources (including BCH PPA Tranche 2 energy) included.
- 41.3 For each of these two Portfolios, please provide an Energy Load Resource Balance (similar to Figure 7-1) that includes the additional resources identified (including DSM) and that breaks out the contributions from Tranches 1 and 2 of BCH's PPA.
- 41.4 What was the cost of BCH PPA Tranche 2 used in determining the LRM for the various Portfolios?
  - 41.4.1 How would the response to parts 1-3 of this question change if the cost of PPA Tranche 2 energy was \$100 / MWh (real 2015 \$)?
  - 41.4.2 How would the LRM for each Portfolio change if the cost of PPA Tranche 2 energy was \$85 / MWh (real 2015 \$)?

**42.0 Reference: Exhibit B-1, Volume 1, pages 125-127**

- 42.1 How would the four portfolios and their subsequent evaluation change if the cost of BCH PPA Tranche 2 energy was \$100/MWh (real 2015\$)?
- 42.2 How would the four portfolios and their subsequent evaluation change if the cost of BCH PPA Tranche 2 energy was \$85/MWh (real 2015\$)?

**43.0 Reference: Exhibit B-1, Volume 1, pages 126-127**

- 43.1 Please explain why none of the preferred portfolios include run-of-the-river resources, as this resource has similar characteristics to onshore wind (per Table 8-3) and has opportunities with lower cost (per Table 8-4).
- 43.2 Please explain why Portfolios A4 and C4 both have a greater reliance on wind than biogas when the later has a lower cost (per Table 8-4).
- 43.3 For each of Portfolios C1 and A4 please explain how the balance between the various incremental resources was determined.

**44.0 Reference: Exhibit B-1, Volume 1, pages 127-128**

- 44.1 For Portfolio C4 was any additional capacity added to meet the PRM requirements or was the resource mix simply changed? If the former, how much additional capacity was added and when?
- 44.2 For Portfolios C1 and A4 please provide a Capacity Load Balance Graph similar to Figure 7-2 but:

- Include the incremental resources of each of the preferred portfolio (including DSM), and
- Revise the Peak Forecast to include the PRM.

**45.0 Reference: Exhibit B-1, Volume 1, page 128**

45.1 At lines 26 and 34 references are made to sections 9.4.3 and 9.4.4 respectively. However, the Application does not contain these sections. Please indicate where the referenced issues are discussed in the Application.

**46.0 Reference: Exhibit B-1, Volume 1, pages 140-141**

46.1 Assuming new supply-side resources are not required until 2026, when would activities for supply procurement have to start in order to meet this requirement?

46.2 Would any material action, commitments or expenditures be required prior to the filing of FBC's next LTERP in approximately 5 years?

46.2.1 If yes, what are they?

**47.0 Reference: Exhibit B-1, Volume 2, pages 11-15**

47.1 What would be the effect (per Figure 3-1 and Table 3-1) of a DSM scenario that only included DSM measures with an LRMC of \$100/MWh or less? As with the High and Max scenarios please assume any required ramp up starts in 2021.

47.2 Please revise Figure 3-2 to include the results of the DSM scenario described in part 1.

47.3 Please provide revised versions of Figure 8-3, Figure 8-4 and Table 9-2 assuming DSM consistent with that in part 1.

47.4 What specific DSM measures would be included in the High scenario proposed by FBC and the scenario as specified in part 1?

47.5 Does the High Scenario include all DSM measures identified by the CPR with a cost of \$100/MWh or less? If not, which ones are excluded and why?

**48.0 Reference: Exhibit B-1, Volume 2, page 16**

48.1 Please provide a revised version of Table 3-2 that includes:

- The TRC value for each year.
- The year by year cumulative DSM savings, accounting for loss of persistence.

**49.0 Reference: Exhibit B-1, Volume 2, pages 17-23**

- 49.1 What specific DSM measures (programs) are included in the High scenario that were not included in the 2017 DSM Plan?
- 49.2 Are there any DSM measures that were included in the 2017 DSM Plan but are not in the High scenario?
  - 49.2.1 If yes, what are they and why were they excluded?

**50.0 Reference: Exhibit B-1, Volume 2, page 22**

- 50.0 Does FBC intend to employ specific measures aimed at increasing public awareness of DSM programs for low-income customers?
  - 50.0.1 If yes, what are these measures?