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Our File No.: 05497-0245

November 24, 2017

BY ELECTRONIC FILING

British Columbia Utilities Commission
6th Floor, 900 Howe Street
Vancouver, BC V6Z 2N3

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

Dear Sirs/Mesdames:

Re: FortisBC Inc. 2016 Long Term Electric Resource Plan & Long Term Demand Side Management Plan (BCUC Project No. 3698896)

Please find enclosed for filing the Reply Argument of FortisBC Inc., dated November 24, 2017, with respect to the above-noted matter.

Yours truly,

FARRIS, VAUGHAN, WILLS & MURPHY LLP

Per:

Nicholas T. Hooge

NTH/bd
Enclosure
c.c.: client
All Registered Interveners

BRITISH COLUMBIA UTILITIES COMMISSION

IN THE MATTER OF
the *Utilities Commission Act*, R.S.B.C. 1996, chapter 473

and

FortisBC Inc.'s 2016 Long Term Electric Resource Plan and
2016 Long Term Demand Side Management Plan

REPLY ARGUMENT OF FORTISBC INC. – November 24th, 2017

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Nicholas T. Hooge

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PART 1 - INTRODUCTION

1. FBC sets out below its reply to the Final Argument filed by Interveners to this proceeding pursuant to the amended Regulatory Timetable established in Commission Order G-155-17. Capitalized terms used in this Reply Argument have the same meanings as defined in FBC's Final Argument, dated October 20, 2017.

2. FBC continues to rely on the contents of the LTERP and LT DSM Plan, the evidence submitted in this proceeding, as well as its Final Argument. We have endeavoured to avoid repeating in this Reply Argument submissions that FBC has previously made. To the extent any points made by Interveners in their submissions are not specifically addressed in this Reply Argument, they should not be taken as agreed to by FBC.

3. The following is a summary of what FBC understands to be the interveners' respective positions and the main points made in their submissions:

4. *CEC*.[1] The CEC does not support approval of the LTERP as filed. The CEC submits that the preferred portfolio should not include a self-sufficiency target, which in its view unnecessarily increases costs and is therefore not in the interests of FBC's ratepayers. The CEC's position is that the Commission should deny part of the LTERP and direct FBC to resubmit using Portfolio A1 (which does not include self-sufficiency). The CEC also challenges the accuracy of FBC's reference case load forecast and recommends that the Commission direct FBC to reconsider and resubmit its LTERP load forecast "in a manner that more accurately reflects historical load increases". Otherwise, the CEC supports FBC's selection of the High DSM scenario for the LT DSM Plan.[2] The CEC also agrees with FBC's use of average rather than marginal line losses in DSM cost effectiveness analysis.[3]

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[1] CEC Final Argument, paras. 1-5 (Summary)
[2] CEC Final Argument, para. 103
[3] CEC Final Argument, paras. 106-110

5. *Mr. Andy Shadrack.* Mr. Shadrack's submissions focus on DG and FBC's NM program. His main argument, as FBC understands it, is that small-scale customer DG should be incorporated into the LTERP and a different pricing structure or program be developed rather than the current NM program. Mr. Shadrack also appears to view this proceeding as a means by which the Commission can direct some settlement process of what he regards as an "impasse" between FBC and its NM customers.

6. *BCOAPO.* Overall, BCOAPO recommends that the Commission accept the LTERP, including the LT DSM Plan as being in the public interest. BCOAPO makes certain critiques of the basis upon which FBC has analyzed the cost-effectiveness of the DSM scenarios that were considered, but ultimately, and taking all factors into account, agrees that the High DSM scenario is appropriate.[4] Regarding FBC's portfolio analysis, BCOAPO submits that FBC should be directed to critically assess the cost and risks of continuing to rely on market purchases in conjunction with PPA Tranche 2 energy as an alternative to acquiring new resources as preparation for its next long term plan.[5] Apart from this issue, BCOAPO has no concerns with FBC's exercise of judgment in selecting the preferred portfolio.[6]

7. *ICG.* ICG's Final Argument identifies two primary concerns with the LTERP: first, that FBC's proposed approach to providing DSM incentives to self-generating customers cannot be justified; and, second, that FBC's preferred resource portfolio does not appropriately consider market risk.[7] ICG prefers Portfolio C1 rather than Portfolio A4, which FBC selected.[8] Otherwise, ICG generally supports the Action Plan as FBC proposes.[9]

8. *BCSEA.* BCSEA takes issue with certain of FBC's submissions regarding the proper interpretation of the legal and regulatory framework in which the LTERP is to be assessed. BCSEA's view is that the High DSM scenario in the LT DSM Plan is acceptable and should

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[4] BCOAPO Final Argument, para. 46-48, 52-55
[5] BCOAPO Final Argument, para. 68
[6] BCOAPO Final Argument, para. 71
[7] ICG Final Argument, para. 1
[8] ICG Final Argument, para. 25
[9] ICG Final Argument, para. 27

be accepted by the Commission.[10] BCSEA does not agree with FBC's view of the reliability issues associated with the Max DSM scenario, however.[11] BCSEA also submits that FBC should use marginal, rather than average line losses in analyzing DSM cost effectiveness.[12] BCSEA supports development of electrification measures under the amended *GGRR* and disagrees with FBC's interpretation that prescribed electrification measures do not meet the definition of DSM measure in the *DSM Regulation*.[13] Regarding the resource portfolio selection, BCSEA prefers Portfolio C4 (with 100 percent clean or renewable BC resources) and opposes portfolios that contain gas-fired generation as a new supply resource (i.e. Portfolios C1 and A4) or that do not include electricity self-sufficiency.[14]

9. FBC has addressed the key points and arguments made in the Intervener Written Agreement below according to topic area, following approximately the same organizational structure as in its Final Argument.

PART 2 - LEGAL AND REGULATORY FRAMEWORK

A. The *UCA* Section 44.1(2) Requirements

10. BCSEA argues that FBC's description of the standard by which the Commission reviews a long term resource plan against the requirements under section 44.1(2) of the *UCA* is inappropriate and that the public interest is the overarching lens through which the Commission must view the LTERP in relation to all of the various provisions of section 44.1.[15] BCSEA takes particular issue with FBC's description of the required explanation for why the demand for energy to be served by new supply resources is not planned to be replaced by DSM measures under section 44.1(2)(f).[16]

11. In reply, FBC submits that its overall description of the legal and regulatory requirements is consistent with the approach the Commission has previously approved. In its FEU 2014

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[10] BCSEA Final Argument, para. 9
[11] BCSEA Final Argument, paras. 120-124
[12] BCSEA Final Argument, para. 10
[13] BCSEA Final Argument, paras. 11, 45
[14] BCSEA Final Argument, paras. 88-90
[15] BCSEA Final Argument, para. 14
[16] BCSEA Final Argument, para. 93 and following

LTRP Decision, the Commission provided the following extensive description of this framework:

> As previously outlined in the legislative framework, in addition to compliance with other sections of the UCA, the FEU's application for a Long Term Resource Plan must meet the following criteria:
>
> - **Adequacy**: The Panel must not accept a resource plan without meeting the minimum requirements as listed in section 44.1(2) of the UCA.
>
> - **Public Interest**: A resource plan must meet the test of being in the public interest, as provided in section 44.1(6). [...]
>
> [...]
>
> While providing directions to the FEU for their next resource plan, the Commission, from the FEU 2010 LTRP, discussed adequacy and quality of a long-term resource plan, viewing them as two separate issues. Adequacy refers to compliance with the minimum elements of a resource plan, in accordance with section 44.1(2). Adequacy is an objective measure that suggests all of the basic elements have been filed. Quality of the resource plan is a measure that requires the discretion of the Commission, and is exercised within the legislative framework that allows discretion, such as the public interests aspects of section 44.1(6) of the UCA.
>
> Acceptance of the LTRP requires, among other things, the element of adequacy, a Commission determination that the LTRP is in the public interest, and that the LTRP addresses the directives of the previous LTRP order.[17]

12. FBC did not submit that the public interest was not engaged or not relevant to the Commission's review of the LTERP. FBC did submit, consistent with the above passage, that adequacy under section 44.1(2) is a separate issue concerned with whether the "basic elements" or "minimum requirements" have been met, and is to be determined objectively. The "quality" of those elements of the LTERP, on the other hand, is addressed though the public interest evaluation as set out in section 44.1(6).

[17] FEU 2014 LTRP Decision, p. 9-10 (underlining added)

13. With respect to section 44.1(2)(f), in particular, FBC agrees that the phrase "bare description" used in its Final Argument was perhaps inapt. FBC was of course not suggesting that its explanation could be "inadequate" (as BCSEA suggests at paragraph 98 of its submissions) while at the same time satisfying an "adequacy" requirement. FBC agrees that the explanation for not planning to implement additional DSM measures contained in a long term resource plan cannot be nonsensical, or so circumscribed as to provide no meaningful basis for the resource planning decision, and still satisfy the adequacy test. FBC does not disagree with BCSEA's submission that, "the 'explanation' required by s. 44.1(2)(f) is a statement that makes clear, with a view to mutual understanding and reconciliation, why any unmet energy needs are planned to be met with supply-side resources rather than demand-side resources".[18]

14. FBC's point was that providing (i) an adequate explanation necessary to satisfy section 44.1(2)(f) and (ii) the Commission's acceptance of the explanation as being of sufficient quality and supportive of the public interest are two different issues. In FBC's submission, the LTERP includes an adequate explanation for its decision not to pursue additional levels of DSM that meets the standard BCSEA proposes and, for the reasons provided in FBC's Final Argument at Part 3.D.ii, the Commission should accept that explanation.

15. In FBC's respectful submission, the distinction between the legal and regulatory framework described in its Final Argument and that presented by BCSEA is without any significant difference for the purposes of the Commission's ultimate decision in this process.

B. Electricity Self-Sufficiency

16. As noted above, the CEC disagrees with FBC's inclusion of an electricity self-sufficiency target in the preferred portfolio selected for the LTERP. In terms of the legal and regulatory framework, CEC argues that this planning decision "has unreasonably established a criterion of 'self-sufficiency' ... which is not included in Section 44.1(8) and has prioritized

[18] BCSEA Final Argument, para. 99

this criterion over that of the explicitly established Section 44.1(8)(d) the interests of persons in British Columbia who receive or may receive service from the public utility".[19]

17. FBC addresses the substantive matter of the interests of its current and future ratepayers further below, at paragraphs 128-130. FBC disagrees with CEC's statutory interpretation argument.

18. Section 44.1(8)(a)-(d) of the *UCA* enumerates four matters that the Commission "must consider" in determining whether to except a long term resource plan. As CEC rightfully notes, "the interests of persons in British Columbia who receive or may receive service from the public utility" is one of these matters (s. 44.1(8)(d)). However, contrary to CEC's suggestion, so too is: "the applicable of British Columbia's energy objectives" (s. 44.1(8)(a)). The first of these objectives listed in section 2 of the *CEA* is "(a) to achieve electricity self-sufficiency". This objective does not apply only to BC Hydro.

19. Further, the Commission must also consider, under section 44.1(8)(b) "the extent to which the plan is consistent with the applicable requirements under sections 6 and 19 of the *Clean Energy Act*". Section 6(4) of the *CEA* provides that:

> (4) A public utility, in planning in accordance with section 44.1 of the *Utilities Commission Act* for
>
> (a) the construction or extension of generation facilities, and
>
> (b) energy purchases,
>
> must consider British Columbia's energy objective to achieve electricity self-sufficiency.
>
> [underlining added.]

20. While these provisions do not establish an express legislative requirement for FBC to achieve self-sufficiency, it is also clear that FBC cannot simply ignore self-sufficiency in favour of cost-based objectives. FBC "must consider" the objective of achieving self-

[19] CEC Final Argument, para. 21

sufficiency in its long term planning and the Commission's public interest review of the LTERP includes the extent to which it is consistent with this provincial energy objective.

21. Further, the interests of FBC's ratepayers should not be interpreted in a manner that is inconsistent or incompatible with BC's energy objectives as expressed in the *CEA*. The energy objectives, like all statute law, are an expression of or were enacted to further the public interest.[20] FBC's ratepayers must have an interest in the province's energy objectives being pursued and achieved.

22. For these reasons, FBC submits that its consideration of and decision to pursue a self-sufficiency target date by the end of 2025 in the LTERP is consistent with the applicable legislative and regulatory framework.

C. The Amended DSM Regulation

23. FBC's Final Argument noted that the LTERP was filed before amendments were made to the DSM Regulation and that no IRs had been asked of FBC regarding the amendments.[21] Accordingly, FBC took the position that the Commission should review the LTERP and LT DSM Plan based on the pre-amendment version of the DSM Regulation.

24. Of the Interveners that commented on this issue in their submissions, BCOAPO agrees with FBC's legal position.[22]

25. BCSEA disagrees with FBC's position, although it also submits that the application of the new version of the DSM Regulation "is not fatal to the LTERP".[23]

26. CEC noted points for and against the application of the amended DSM Regulation, but did not expressly state a position on the matter.[24]

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[20] *Thow v. B.C. (Securities Commission)*, 2009 BCCA 46 at para. 42 (citing *Re Royal Canadian Mounted Police Act*, [1991] 1 F.C. 529 (C.A.), "every statute, whatever its content, can be said to be in the public interest or for the public protection.")
[21] FBC Final Argument, paras. 22, 27
[22] BCOAPO Final Argument, para. 10
[23] BCSEA Final Argument, paras. 16-17
[24] CEC Final Argument, paras. 91-94

27. Questions of the temporal application of legislative amendments are notoriously difficult legal issues. Professor Sullivan devotes over 80 pages of her leading Canadian text on the *Construction of Statutes* to this topic.[25] Although FBC maintains the position on this issue stated in its Final Argument, it notes that its resolution has minimal if any practical significance to the LTERP.

28. Even if the Commission determined that the amendments to the DSM Regulation do apply, the LTERP and LT DSM Plan could and should still be accepted on the basis that FBC's "plan shows that [it] intends to pursue adequate, cost-effective demand-side measures" (underlining added). FBC's filings in this proceeding and its Final Argument, as well as its history of pursuing DSM programs that meet the legislative requirements, demonstrate clearly that it does intend to and will pursue DSM measures that meet the new adequacy requirements in the amended DSM Regulation.

29. Further, the adequacy requirements set out in section 3 of the DSM Regulation are in practice met through FBC's DSM expenditure schedule applications. FBC's recently filed 2018 DSM expenditure schedule application, includes new measures to meet the requirement in section 3(e) of the amended DSM Regulation by including funding of $80,000 for Codes and Standards.[26] The 2018 DSM expenditure schedule application also notes that its existing Community Energy Planning program already meets the new requirement in section 3(f) of the amended DSM Regulation.[27]

30. Whichever version of the DSM Regulation does apply, FBC respectfully submits that consideration of section 44.1(8)(c) still supports the Commission's acceptance of the LTERP.

31. In the further alternative, it is possible that the Commission could determine that section 44.1(8)(c) has not technically been satisfied, but still accept the LTERP under section 44.1(6) of the *UCA*. The items in section 44.1(8) are matters the Commission must

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[25] R. Sullivan, *Sullivan on the Construction of Statutes*, 6th ed. (LexisNexis: Markham, 2014)
[26] FBC letter to BCUC, dated November 15, 2017, Re: Application for Acceptance of 2018 DSM Expenditures, p. 4
[27] *Ibid.*

consider, but the result of the consideration of any one of these items is not determinative of a particular result regarding the LTERP. As BCSEA puts it, "this is not fatal to the LTERP".[28]

D. Legislative Intent Regarding DSM

32. BCSEA argues that the legislative intent behind the resource planning provisions in the *UCA* demonstrates that "DSM resources are to be considered the first and best approach to meeting anticipated shortfalls in meeting energy needs, ahead of supply-side resources".[29]

33. FBC does not agree with BCSEA's interpretation. The fact that a long term resource plan must include an explanation for pursuing new supply-side resources instead of additional DSM to meet incremental load requirements, cannot be extrapolated into the legislature's value judgment or preference regarding DSM. In FBC's view, for utilities other than BC Hydro, section 44.1(2)(f) simply reflects a neutral approach in which utilities are required to give adequate consideration of both supply and demand resources to meet gaps in their long term LRB, based on their own unique circumstances, and to provide a reasoned explanation for the decision ultimately made.

34. BC Hydro is subject to a specific DSM savings target in the *CEA*, which does conversely reflect a legislative statement regarding the relative importance of DSM in BC Hydro's specific circumstance. FBC and other public utilities are notably <u>not</u> subject to any such legislated DSM savings target. Beyond pursuing DSM measures that meet the adequacy definition in the *DSM Regulation*, FBC is not subject to any legislated mandate in respect of DSM. The extent to which FBC plans to pursue DSM versus new supply in a long term resource plan is within its own prerogative, subject to the Commission accepting that the plan is in the public interest.

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[28] BCSEA Final Argument, para. 17
[29] BCSEA Final Argument, para. 100

PART 3 - LONG TERM LOAD FORECAST

A. Intervener Submissions

35. Of the Interveners that submitted Final Argument, CEC, BCOAPO, and BCSEA commented upon the long term reference case load forecast provided in the LTERP.

36. BCOAPO considers that overall FBC's load forecast is reasonable for the purposes of section 44.1(2)(a) of the *UCA* and the 2016 LTERP.[30]

37. BCSEA "have chosen not to delve deeply into the accuracy of FBC's gross load forecast in the proceeding because under the 2016 LTERP and LT DSM Plan, FBC requires no new supply-side resources in the next ten years".[31] Regarding FBC's development and consideration of alternative load scenarios, BCSEA "commend[s] FBC for undertaking the scenario approach and involving stakeholders".[32]

38. BCSEA also recommends that FBC should fully implement a non-traditional load driver scenario approach in preparation of the next LTERP.[33] In reply, FBC will continue to monitor the situation and will determine, taking into account input from the RPAG, what level of scenario development is appropriate as the next long term electric resource plan is prepared.

39. As noted above, the CEC challenges the accuracy of FBC's reference case load forecast. The CEC notes the compound annual growth rate (**CAGR**) of 1.1 percent presented in the LTERP and compares this to data on FBC's actual growth rate, which CEC calculates to have averaged 0.14 percent growth for the ten years between 2006 and 2015 and 0.75 percent over the twenty years between 1996 and 2015.[34] Based on this comparison, CEC submits that, "it is likely that FBC's load forecast is over-stated given the significantly lower rates historically".[35]

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[30] BCOAPO Final Argument, para. 31
[31] BCSEA Final Argument, para. 24
[32] BCSEA Final Argument, para. 27
[33] BCSEA Final Argument, para. 29
[34] CEC Final Argument, paras. 65-66
[35] CEC Final Argument, para. 67

B. FBC's Load Forecast is Not Overstated

40. In reply to CEC, FBC notes that the CAGR forecast of 1.1 percent (both gross and net of losses) provided in the LTERP is a before DSM forecast. At Section 3.1, the LTERP states that, "All forecast loads presented in this section are ... before adjustments for incremental DSM, which is discussed in Section 8.1 and the LT DSM Plan".[36] This approach is in compliance with section 44.1(2)(a) of the *UCA*, which requires the LTERP to include an expected load growth forecast "if the public utility does not take new demand-side measures during the period addressed by the plan".

41. Conversely, the historical growth rates on which CEC relies include the effects of DSM savings. FBC made this clear in the IR response CEC cites for its comparison with actual growth rates. FBC stated that, "The information provided in Table 2 below [FBC Actual Growth Rates (%), 1987-2015] is after DSM since savings are embedded in the actual data".[37]

42. CEC's comparison is flawed for this reason and does not demonstrate any inaccuracy in the reference case forecast in the LTERP. As FBC discussed at paragraph 80 of its Final Argument, when the savings associated with the High DSM scenario are applied to the reference case forecast, the reduction in load growth over the 20-year planning horizon reflects a CAGR of 0.26 percent (compared to 1.1 percent without DSM). See also FBC's forecast LRB after DSM at Section 8.1.2 of the LTERP.[38]

43. The above noted growth rate of 0.26 percent, after DSM savings, is the appropriate figure against which to compare FBC's historical load growth data. This growth rate is roughly consistent with the averages CEC calculated for the actual growth rate over the last 10 and 20 year periods.

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[36] Ex. B-1, Vol. 1, p. 53
[37] Response to CEC IR 1.5.1, Ex. B-5, p. 15 (underlining added)
[38] Ex. B-1, Vol. 1, p. 101

44. For these reasons, FBC submits that CEC has not demonstrated any issues or inaccuracies with its long term forecast presented in the LTERP. FBC should not be directed to reconsider, revise or resubmit its load forecast.

PART 4 - LT DSM PLAN

A. Fuel Switching/Electrification

45. In its Final Argument, FBC noted that the gas-to-electricity fuel switching measure investigated for the purposes of the LTERP had failed the TRC cost effectiveness test.[39] FBC also stated it would evaluate the potential for electrification programs under the amended *GGRR*, which would be informed by the on-going CPR additional scope services, but that the nature of possible future applications regarding electrification and FBC's approach to rate recovery had not been developed.[40] FBC took the position that a prescribed electrification program under the *GGRR* no longer meets the legal definition of a DSM measure as set-out in section 1(1) of the *CEA*.[41] Fuel-switching was nonetheless addressed in the LTERP, both pursuant to the above-noted cost-effectiveness evaluation and as a potential future load driver.[42]

46. CEC agrees with FBC's position on these matters.[43]

47. BCSEA takes no issue with FBC's evaluation of the cost-effectiveness of a gas-to-electric fuel switching measure using the TRC for the purposes of the LT DSM Plan.[44] BCSEA submits that FBC should develop, obtain approval for, and implement carbon-reduction electrification measures under the *GGRR*.[45] BCSEA acknowledges that FBC has had limited opportunity to evaluate the potential for electrification that may now be encompassed by the *GGRR*.[46] BCSEA disagrees with FBC's legal interpretation and argues

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[39] FBC Final Argument, para. 71
[40] FBC Final Argument, para. 74
[41] FBC Final Argument, para. 75
[42] *Ibid.*
[43] CEC Final Argument, paras. 135-136
[44] BCSEA Final Argument, para. 41
[45] BCSEA Final Argument, para. 11
[46] BCSEA Final Argument, para. 57

that fuel switching programs can simultaneously be both prescribed electrification measures under the *GGRR* and DSM measures under the *CEA*.[47]

48. Regarding the substance of the matter, FBC submits that continuing to monitor and investigate fuel switching measures and evaluating the potential for electrification programs under the *GGRR* is a reasonable and prudent approach. To the extent BCSEA is suggesting that FBC should commit now to developing and implementing electrification measures, without having had sufficient opportunity to evaluate the potential for such measures and an approach to the new *GGRR* provisions, FBC does not believe this is prudent.

49. FBC does not agree with BCSEA's legal interpretation. Section 4(3) of the *GGRR* provides that, "a public utility's undertaking that is in a class defined in one of the following paragraphs is a prescribed undertaking for the purposes of section 18 of the [*CEA*]". Section 4(3)(a) and (b) then describe different measures that would "encourage the public utility's customers, or persons who may become customers of the public utility, to use electricity, instead of other sources of energy that produce more greenhouse gas emissions". This description, on its face, would include gas-to-electricity fuel switching measures.

50. On this basis, gas-to-electricity fuel switching measures would now be considered "prescribed" pursuant to section 18 of the *CEA* and section 4(3) of the *GGRR*. As such, they are subject to different rate treatment under section 18(2) of the *CEA* compared to DSM expenditures, which are filed and reviewed under s. 44.2(1)(a) of the *UCA*. Notably, such fuel switching measures are subject to a new cost effectiveness methodology under s. 4(1) of the *GGRR*. Accordingly, it is not functionally possible for a fuel switching/electrification measure to be both a DSM measure within the meaning of the *CEA* and a prescribed undertaking under the *GGRR*. If so, they would be subject to two different cost effectiveness tests and utilities would notionally be required to file for rate recovery under both section 44.2 of the *UCA* and section 18 of the *CEA*. This is an absurd result and demonstrates why, in our submission, the definition of "demand-side measure" in section 1(1) of the *CEA* excludes "any rate, measure, action or program prescribed".

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[47] BCSEA Final Argument, paras. 45-48

B. DSM Incentives for Self-Generating Customers

i. ICG's Position

51. ICG does not agree with FBC's proposed approach to providing DSM incentives to self-generating customers on a prorated basis, commensurate with the percentage of the customer's load FBC actually serves.[48]

52. Both BCSEA[49] and CEC[50] agree with and support FBC's proposed approach. The other Interveners did not comment on this issue.

53. ICG makes a procedural objection to FBC's submission in its Final Argument that its proposed approach "is consistent with the scheme of the *UCA* and the *DSM Regulation* under which the cost effectiveness test is based on a utility's avoided costs".[51] ICG argues that this submission is inconsistent with FBC's prior IR response in this process, that its "proposed calculation of financial incentives for self-generation customers" is "to FBC's knowledge ... not specifically addressed" in legislation or regulations.[52]

54. In any event, ICG argues that the cost effectiveness methodology in the *DSM Regulation* and the TRC test are not consistent with FBC's proposed approach. ICG argues that DSM includes conservation and efficiency measures of both utilities and their customers and that FBC's DSM incentives should accordingly compensate self-generating customers' conservation actions even if they do not reduce the load FBC serves.[53] ICG goes on to argue that FBC's prorated incentive approach lacks sufficient certainty and is unduly discriminatory.[54] In addition, ICG again makes its argument that FBC's DSM incentives for industrial customers are too low when compared to BC Hydro's industrial incentives. FBC has already addressed this topic in its Final Argument.[55]

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[48] ICG Final Argument, paras. 2-20
[49] BCSEA Final Argument, paras. 37-39
[50] CEC Final Argument, paras. 138-139
[51] ICG Final Argument, para. 4-5
[52] ICG Final Argument, para. 4
[53] ICG Final Argument, paras. 9-10
[54] ICG Final Argument, paras. 11-14
[55] FBC Final Argument, paras. 68-69

ii. Procedural Objection

55. The Commission should not accept ICG's procedural objection. FBC's above-noted IR response was accurate: there is no legislation or regulation that "specifically addresse[s]" how DSM incentives for self-generating customers are to be calculated. Making such a statement in evidence does not preclude counsel from making legal argument supporting FBC's approach based on general legislative provisions regarding DSM.

56. ICG suggests that it should have been given an opportunity to ask IRs of FBC regarding this legal justification and that it is procedurally unfair for FBC to make submissions based on the legislative framework that applies to the issue. With the greatest of respect, ICG received sufficient notice of FBC's legal position through FBC's Final Argument. That is the appropriate place for legal argument regarding the applicable legislative scheme to be made, not in IR responses. ICG's fulsome substantive response on this issue belies the notion of procedural unfairness. ICG's ability to respond has not been prejudiced in any degree.

iii. Cost Effectiveness and the TRC

57. FBC does not agree with ICG's discussion of the TRC test and how it would or should interact with the proposed prorating of DSM incentives at paragraphs 6-8 of ICG's Final Argument.

58. FBC addressed how the TRC test is affected by customer self-generation as follows in response to BCUC IR 1.52.2:

> The more energy a customer purchases from a third party, or self supplies, the lower the benefits a utility can claim for energy efficiency measure(s). The TRC and UCT both use the present value of the avoided costs from a measure: the energy savings of the measure at the LRMC plus the deferred infrastructure costs using the DCE.
>
> From the utility perspective, the less energy that the customer purchases from the utility the less of the energy savings from the measure the utility realizes, which lowers the benefits of the TRC and UCT. For example, if a customer self-supplies 50% of their electricity from self-generation ... and the remaining 50% from the utility then only 50% of the electricity savings

> from the energy efficiency measure(s) incented by the utility are realized by the utility.[56]

59. In FBC's submission, this accurately summarizes the impact of self-generation on the governing TRC cost effectiveness test.

60. ICG argues that it is "clear ... that the TRC was designed to ensure that the energy savings of both the utility and participants are inputs to the TRC".[57] FBC does not agree that the TRC test includes, as an input, savings in the amount or cost of energy that a customer self-supplies that do not reduce the utility's load. At its core, the TRC measures the utility's "avoided electricity cost", to use the language in section 4 of the *DSM Regulation*. Put simply, FBC does not avoid any electricity costs pursuant to a conservation measure implemented by a self-generating customer that does not actually reduce any of the load served by FBC.

61. ICG seems to be arguing that because part of the definition of "demand-side measure" in the *CEA* speaks broadly of measures "to conserve or promote energy efficiency", this somehow means a self-generating customer's conservation against its own self-generation is DSM and the related benefits are included in the TRC. This interpretation ignores the very term it seeks to define: "demand-side measure". A public utility takes DSM measures to reduce the demand for energy that it serves. A self-generating customer does not have a "demand-side". Further, the cost effectiveness test in section 4 of the *DSM Regulation* only has application in respect of a public utility's long term resource plan filed under section 44.1 of the *UCA* or a public utility's DSM expenditure schedule filed under section 44.2. This necessarily means that the "avoided electricity costs" of a DSM measure are the utility's avoided costs.

iv. The Alleged Lack of Certainty

62. ICG argues that FBC's prorating/sliding-scale proposal is too uncertain to be implemented. ICG cites an FBC IR response where the Company declined to provide an illustrative

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[56] Ex. B-2, p. 187
[57] ICG Final Argument, para. 8

example related to Celgar "due to the smaller magnitude of Celgar's FBC consumption and the inconsistent monthly profile of this consumption".[58] ICG omitted from its Final Argument the next sentence of FBC's IR response: "FBC will review the eligibility of any DSM measures undertaken by Celgar on a case-by-case basis, and similar to Wholesale complex projects the appropriate processes will be undertaken to confirm realized savings".[59]

63. FBC submits that this is an appropriate approach.

v. The Alleged Rate Discrimination

64. ICG argues that FBC's approach is unduly discriminatory against self-generating customers. ICG seems to be suggesting that its reduction in load through self-generation should not be treated differently than the myriad reasons other customers reduce load. ICG gives the example of a commercial customer's load being reduced through loss of business.[60] ICG says the distinction between that and reducing load through self generation is "a distinction without a difference".[61] One important difference is that a commercial customer does not receive DSM incentives when it loses business and its load is reduced as a result.

65. FBC's approach, contrary to ICG's submissions, seeks to establish substantially uniform treatment among customers with respect to DSM measures. Providing DSM incentives to self-generating customers for conservation steps that do not reduce the load served by FBC would actually be a form of rate preference in favour of the very limited number of large customers with self-generating capabilities. Those DSM incentives would be effectively paid for by other customers, while the benefit only accrues to a self-generating customer reducing its own load.

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[58] ICG Final Argument, para. 12
[59] Response to ICG IR 1.4.4; Ex. B-7, p. 7
[60] ICG Final Argument, para. 14
[61] *Ibid.*

C. Average Versus Marginal Line Losses

66. BCSEA argues that FBC should use marginal, rather than average line losses in screening the cost-effectiveness of DSM initiatives.[62] This position is consistent with the evidence of EFG that BCSEA filed during this proceeding. Mr. Shadrack appears to support BCSEA's position, although he references EFG's suggestion as something "the Company needs to [do]" without further explanation.[63] No other Intervener expressed support for the proposal.

67. The CEC does not agree with BCSEA's proposal. The CEC states that it "has reviewed the evidence and agrees with FBC that the evidence does not show that the use of marginal line losses is an industry best practice and that the implementation of this technique would entail unnecessary technical analysis and regulatory burden".[64]

68. FBC's position on this issue remains as stated in its Final Argument at paragraphs 76-79.

PART 5 - RESOURCE OPTIONS

A. Distributed Generation

69. Of the Interveners, CEC, BCEA and Mr. Shadrack made submissions regarding FBC's approach to DG in the LTERP. CEC submits that DG does not qualify as cost-effective supply at this time and, as such, none of the costs associated with DG and/or NM programs should be borne by ratepayers in general.[65] BCSEA comments that much of FBC's "criticism" of DG treats it as "more or less the same as the FBC NM program and then provides reasons why the NM Program is not an adequate supply-side resource".[66] BCSEA submits that the "door should be kept open" to future consideration of DG as a resource option.[67]

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[62] BCSEA Final Argument, paras. 58-59
[63] Shadrack Final Argument, p. 14
[64] CEC Final Argument, para. 109
[65] CEC Final Argument, para. 128
[66] BCSEA Final Argument, para. 73
[67] BCSEA Final Argument, para. 80

70. Mr. Shadrack provides a lengthy submission in opposition to FBC's approach to DG. At least some of his submissions overlap with issues in the Commission's current reconsideration process regarding updates to FBC's NM tariff and program. FBC will not be commenting on those issues here. Mr. Shadrack's main points of relevance to the LTERP seem to be that DG should be regarded as a long term resource option and that FBC should be directed to develop new pricing structures or programs to purchase DG from its customers.

71. To take BCSEA's submission first, FBC agrees that the resource capabilities of DG should continue to be monitored and evaluated in the future. However, FBC disagrees that it has focused solely on NM and "criticized" its potential as a resource option. A criticism is an "expression of disapproval".[68] FBC does not disapprove of resource options in the LTERP, it evaluates them to determine whether their attributes support FBC's resource planning objectives and its customers' long term energy requirements.

72. FBC's evaluation of DG was not limited or restricted to customer generation pursuant to the current NM program. As described at paragraph 96 of FBC's Final Argument, there are a number of resource characteristics associated with DG that make it a less attractive long term option: DG supply is not available on demand when needed or in the appropriate location on FBC's system, is inherently unpredictable and not a secure or firm resource, and with respect to solar PV provides virtually no capacity during winter peak (as Mr. Shadrack's circumstances demonstrate). None of these limitations is specific to the NM program. There is also the fact that FBC currently anticipates that no new sources of supply are required for the next 10 years. DG is clearly not a strong candidate to address energy gaps or capacity reliability concerns later in the planning horizon.

73. These points also provide a complete answer to Mr. Shadrack's position that DG should be incorporated into the LTERP as a long term resource option within a new program or pricing structure.

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[68] *Oxford English Dictionary*, 3rd ed., (2009) p. 213

74. With respect, Mr. Shadrack has not presented evidence or argument demonstrating that DG is a viable long term or cost-effective resource option at this time. His personal household circumstances, on which he relies extensively, do not contradict FBC's valid determination that DG is not a firm or reliable long term resource option at this time. In fact, his personal circumstances contradict the argument that DG supply is cost-effective. At page 2 of this Final Argument, Mr. Shadrack states that:

> Since December 2005 our household has invested an average of $424.15 in each billing period in DSM, energy savings and net metering – offsetting that investment with 36.858 MWh of energy savings. This has resulted in us achieving an estimated dollar ($) value credit ranging from a low of $29.19 per billing period in 2007 to an average of $99.28 so far in 2017, which still results in a payback period of 57 years.

75. Based on these figures, Mr. Shadrack has spent $30,538.80 (72 billing periods x $424.15) in order to save 36,858 kWh, or $0.83 per kWh. By comparison, the current energy charge or the first consumption block under RS1 is $0.10117. FBC questions whether DG installations with similar characteristics, notably a payback period of 57 years as calculated by Mr. Shadrack, would be considered by a substantial number of customers to be cost-effective or would be widely adopted.

76. Mr. Shadrack's position also seems logically to imply that DG supply should be given premium pricing. He asserts, in the opening statement of his Final Argument, that, "Distributed Generation (DG) Customer-Generators (CG) who have Net Excess Generation (NEG) for sale, including Net Metering (NM) ones with a nameplate capacity of 50 kW or less and 750 volts or less, have no program or tariff that can be administered by the Commission through which they can sell their production to FortisBC (FBC)." He also submits that, "this Commission panel should consider either attaching to this hearing a settlement panel process to address the issue of a DG/NM pricing structure, or consider proposing a separate hearing beyond this one".[69]

77. Mr. Shadrack's position is incorrect. FBC already acquires NEG from NM customers through its NM tariff, RS 95. Whether or not the current Reconsideration Application is

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[69] Shadrack Final Argument, p. 2

allowed, NM customers will at least receive retail value for their generation that is credited or banked and then used to offset consumption in subsequent billing periods. Mr. Shadrack also contends that FBC is profiting substantially from the resale of NEG, which he claims yields a rate of $206.36 per MWh to FBC.[70] FBC has addressed a similar argument in the NM Reconsideration process, which will not be repeated here and, leaving aside that this alleged re-sale rate is higher than any published rate in FBC's Electric Tariff, this line of argument signals that the new "pricing structure" Mr. Shadrack is seeking means a program that would allow customers with DG to maximize generation and require FBC to pay premium pricing for this supply. The costs of this program would necessarily be borne by non-DG customers.

78. FBC submits that such a program would be contrary to its present resource requirements, would result in an un-needed source of supply being compensated well above its resource value (indeed, NM customers are currently receiving a subsidy as explained at paragraph 97 of FBC's Final Argument), and would adversely affect its other ratepayers.

79. FBC also disagrees with Mr. Shadrack's views that there is currently an "impasse" between NM customers and the Company that the Commission needs to resolve. Mr. Shadrack is one of two NM customers to participate in the LTERP proceeding and the only NM Intervener to file Final Argument. No other NM customers filed letters of comment in this process. NM customers have had a fair and reasonable opportunity to participate in two recent Commission proceedings specific to the NM program, as well as in this process. The upward trend in customer participation in the NM program, as noted in Section 2.3.3 of the LTERP, is also inconsistent with Mr. Shadrack's views about an impasse being widespread among this customer group.[71] .

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[70] *Ibid.*
[71] Ex. B-1, Vol. 1, p. 27

B. Market Supply

80. The CEC is critical of FBC's approach to market energy in the LTERP and its view that market supply cannot be relied on as a long-term resource option.[72] CEC argues that FBC has "not presented compelling evidence that demonstrates that access to market power will be unreliable over the term of the LTERP".[73] CEC references FBC's Imbalance Agreement with BC Hydro and the CEPSA with Powerex in arguing that uncertainty over access to market power in the LTERP is overstated.[74]

81. First of all, the Imbalance Agreement with BC Hydro is not, as CEC appears to suggest, a contingency resource that can be relied upon as a back-stop against shortfalls in market energy. The terms of the Imbalance Agreement specifically provide that Imbalance Energy from BC Hydro is not a service, that FBC "shall not plan for a transfer of Imbalance Energy ... to occur in any hour for any purpose including to serve load [or] to meet reserve requirements", and that FBC must "use all reasonable efforts to avoid, minimize, and/or end as soon as possible" any transfers of energy from the BC Hydro system.[75]

82. The CEPSA, as CEC acknowledges, is only in effect until 2018 and can be renewed annually on mutual agreement thereafter until 2025. FBC cannot guarantee or assume that Powerex will agree to renewals of the CEPSA to 2025 or that it will enter a new CEPSA on comparable terms thereafter. The planning horizon in the current LTERP is until 2035. Accordingly, FBC's reliability concerns associated with the availability of firm U.S. transmission to support market purchases in the <u>long term</u> are not unreasonable.[76]

83. CEC's argument focuses on reliability of market supply as an energy resource. FBC agrees that the market remains an excellent source of energy to meet FBC customer requirements and could be used to meet the relatively small anticipated energy gaps out to 2035; however, in FBC's view market supply cannot be considered a reliable long term resource to meet

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[72] Ex. B-1, Vol. 1, p. 111-112
[73] CEC Final Argument, para. 58
[74] CEC Final Argument, paras. 52-56
[75] BC Hydro Application for Approval of PPA – RS3808, Ex. B-1, App. A-2, p. 7-8 (Imbalance Agreement, ss. 3.1(b) and 5.1)
[76] Ex. B-1, Vol. 1, p. 79

capacity requirements.[77] Further, PRM requirements limit the extent to which market supply can be relied on as a planning resource to meet load in the long term. Market supply is relied upon as a PRM resource to meet unforeseen increases in demand or forced plant outages in all of the portfolios FBC considered for the preferred portfolio.[78] As explained in the PRM Report at Section 3.3.1, if increased amounts of market supply were also relied upon as a base resource in the preferred portfolio to meet expected gaps, then the PRM test could fail.[79] Therefore, reliance on the market as both a more substantial base resource and a backup resource is not a prudent approach in the long run.[80]

84. In addition to reliability issues, FBC's resource planning decisions must also reflect long term cost considerations. Market supply is certainly a cost-effective short or medium term resource option. On the other hand, FBC believes that relying on market purchases over the long term can be risky in terms of price, given the degree of price volatility and uncertainty in the marketplace.[81] For example, the long term market price forecast presented in the LTERP shows that the Mid-C price could exceed $80 per MWh towards the end of the planning horizon, at the high end of the forecast range.[82] CEC's submissions do not challenge the cost related uncertainties on which FBC's approach to market supply are also based.

85. FBC submits that its approach to market supply in the LTERP is prudent and reasonable. In any event, FBC plans to rely on market energy in at least the short-to-medium term. The long term reliability and cost considerations will be re-evaluated for the next long term resource plan, anticipated in 2021.

C. PPA Tranche 2 Energy

86. Both CEC and BCOAPO make submissions about PPA Tranche 2 energy and the use FBC could and should make of it as an alternative to other long term resource options. BCOAPO

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[77] *Ibid.*; Response to BCUC IR 1.19.2, Ex. B-2, p. 70
[78] Ex. B-1, Vol. 1, p. 128
[79] Ex. B-1, Vol. 1, App. L, p. 16-17
[80] *Ibid.*
[81] Ex. B-1, Vol. 1, p. 111
[82] Ex. B-1, Vol. 1, p. 45 (Fig. 2-9)

argues, in this regard, that "if PPA Tranche 2 energy is included in FBC's resources, new resources are not truly needed for most, if not all, of the planning horizon".[83]

87. CEC references BC Hydro's updated LRMC of $85 per MWh (which sets the PPA Tranche 2 price), as well as the updated version of Figure 7-1 from the LTERP: the LRB including PPA Tranche 2 energy.[84] According to the CEC, the latter LRB figure, which was provided in FBC's response to BCUC IR 1.24.1, "indicates that under the base case scenario, FBC's LRB can be met with PPA Tranche 2 energy through to 2033, and further if the PPA is renewed".[85] On this basis, CEC submits that FBC should maximize the use of firm PPA energy, especially in light of the updated PPA Tranche 2 energy price of $85 per MWh.[86]

88. These submissions are incorrect in their assumptions regarding PPA Tranche 2 energy. In particular, they do not recognize the bundled nature of the PPA product, nor that load is met hour-by-hour (not according to an annual average) and that FBC's resource constraints are predominantly in the winter months.

89. FBC explained in its response to BCUC IR 1.24.2 that the PPA provides a bundled product, meaning that FBC cannot take delivery of PPA energy without capacity or *vice versa*; accordingly, FBC's access to a maximum of 200 MW of capacity in any hour creates a physical limitation on the amount of energy that can be scheduled in any month, regardless of the available energy within the contract year.[87] Reflecting this limitation, FBC's IR response also included a table showing forecast monthly energy gaps in the period of 2026-2035, after the planned savings from the High DSM scenario and after all available PPA energy in each month is fully utilized. This table, which is applicable to all portfolios FBC considered for the preferred portfolio, shows energy gaps in the winter months throughout 2026-2035 period even with PPA Tranche 2 energy available.[88] FBC's IR response sums up the situation as follows:

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[83] BCOAPO Final Argument, para. 64
[84] CEC Final Argument, paras. 76-77
[85] CEC Final Argument, para. 77
[86] CEC Final Argument, para. 81
[87] Ex. B-2, p. 81
[88] *Ibid.*

> When looking at resources available to meet the energy gaps in the winter there is insufficient PPA energy available on a monthly basis regardless of the Tranche 1 or Tranche 2 price. With a self-sufficiency target of 2026, a new resource that is able to meet the winter monthly energy gaps is required. As a new resource is a lumpy investment, once the resource is acquired, energy from the incremental resource is utilized rather than further utilizing PPA energy at the Tranche 2 rates. [...]
>
> On an annual basis it appears FBC has sufficient energy to meet the gaps of the reference case forecast using Tranche 2 energy as the total PPA energy available in the contract year is not being fully utilized (this is shown in the LRB provided in response to BCUC IR 1.24.1). However, on a monthly basis there are remaining energy gaps in the winter months due to the bundled nature of the PPA product.[89]

90. Based on this evidence, the submissions of CEC and BCOAPO regarding PPA Tranche 2 energy must be rejected. PPA Tranche 2 energy cannot be utilized to meet all of FBC's long term load requirements and cannot, therefore, eliminate the need for new resources later in the LTERP's planning horizon.

91. FBC does nonetheless agree with BCOAPO's submission, at paragraph 68 of its Final Argument, that because no new resource acquisition steps are required over the next four years, FBC should "critically assess the cost and risks of relying on market purchases in conjunction with PPA Tranche 2 energy as an alternative to acquiring new resources as preparation for its next long term resource plan". FBC intends to undertake such a planning assessment for its next resource plan, anticipated in 2021.

PART 6 - LT DSM PLAN AND FBC'S EXPLANATION FOR THE HIGH DSM SCENARIO

A. Intervener Positions

92. Each of BCOAPO,[90] BCSEA,[91] and CEC[92] supports FBC's selected High DSM scenario for the LT DSM Plan and LTERP.

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[89] Ex. B-2, p. 82
[90] BCOAPO Final Argument, para. 58
[91] BCSEA Final Argument, para. 35
[92] CEC Final Argument, para. 103

93. BCOAPO provides comments regarding certain aspects of FBC's cost effectiveness analysis. Specifically, BCOAPO suggests that FBC was wrong to include a market component in Portfolio B1, which is used to estimate the cost of clean or renewable resources in BC.[93] BCOAPO states that the appropriate LRMC to determine cost effective DSM measures is $106 per MWh, which is the adjusted LRMC of Portfolio B1 with the market component removed.[94] To derive the adjusted LRMC both the incremental costs and incremental energy of the market were excluded from the portfolio LRMC calculation.[95] BCOAPO also questions the approach of comparing the LRMC derived from Portfolio B1 (approximately $100 per MWh per the LTERP) with the incremental resource cost of each DSM scenario considered.[96]

94. BCSEA, while supporting acceptance of the High DSM scenario for the LT DSM Plan, continues to question FBC's reliability justification for preferring the High scenario to the Max scenario.

B. DSM Cost Issues

i. LRMC for Cost Effective DSM

95. FBC does not agree with BCOAPO's suggestion that the market component must be excluded from Portfolio B1 in order for the LRMC of this portfolio to reflect FBC's LRMC of incremental clean or renewable BC resources.

96. Portfolio B1 was weighted to include 12.63 percent market supply.[97] FBC recognizes that market purchases are not necessarily fully clean or renewable and are typically sourced from the U.S. at the present.[98] Nonetheless, it does not follow that because Portfolio B1 includes a small proportion of market energy, the portfolio's LRMC (including the market component) should not reflect "an amount that the commission is satisfied represents

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[93] BCOAPO Final Argument, paras. 46-47
[94] BCOAPO Final Argument, para. 48
[95] Response to BCUC IR 2.76.2.2, Ex. B-11, p. 88
[96] BCOAPO Final Argument, paras. 54-55
[97] Response to BCUC IR 2.76.2, Ex. B-11, p. 85 (Table 1)
[98] Response to BCUC IR 1.17.1.1, Ex. B-2, p. 61-62

FortisBC Inc.'s long-run marginal cost of acquiring electricity generated from clean or renewable resources in British Columbia" (to use the language of s. 4(1.1)(b)(i) of the *DSM Regulation*).

97. Portfolio B1, as with all of the resource portfolios presented in the LTERP, reflects a realistic collection of resource components that could be feasibly implemented to meet the requirements of FBC's customers. FBC selected the Average Incremental Cost (**AIC**) method for calculating LRMC values in the LTERP for the reasons explained in Appendix K.[99] No Interveners have questioned or criticized FBC's use of the AIC method in the LTERP. Having selected this approach for calculating the LRMC of the various resource portfolios presented in the LTERP, it makes sense that FBC would use the same portfolio based calculation to estimate the LRMC of clean or renewable resources for the purposes of the DSM cost effectiveness test. Doing so ensures that all portfolios and calculations of avoided costs in the LTERP are compared using the same context.

98. In the case of Portfolio B1, the resource components do not include DSM and, other than the 12.6 percent market component, are otherwise entirely BC clean or renewable. This portfolio, like the others FBC reviewed, involves a Mixed Integer Linear Programming optimization model as described at paragraph 111 of FBC's Final Argument. The constraints and variables applied within the optimization routine for Portfolio B1 are consistent with other portfolio scenarios FBC presented (i.e. most likely load forecast, most likely market price forecast, self-sufficiency by the end of 2025, etc.).[100]

99. Portfolio B1 therefore represents, in FBC's submission, the most realistic portfolio and weighting of resources that would be dispatched to meet load requirements given consistent constraints and variables with a portfolio that does not include DSM – and therefore a measure DSM cost effectiveness. The results reflect that some base amount of market supply is necessary in a portfolio that is otherwise limited to a combination of clean or

[99] Ex. B-1, Vol. 1, App. K, p. 5-6
[100] See Ex. B-1, Vol. 1, App. K, p. 6, 9

renewable BC resources in order to "satisfy the forecast requirements at each point in the planning horizon and meet reliability standards".[101]

100. FBC submits that its approach to calculating the LRMC of clean or renewable BC resources in Portfolio B1, including the market component, is reasonable and compatible with the *DSM Regulation*. The amount that "represents" FBC's LRMC of clean or renewable resources in BC for long term planning purposes should reflect actual, realistic operating circumstances. It must be recalled that the LRMC to which section 4(1.1.)(b)(i) of the *DSM Regulation* is directed is part of the "avoided electricity cost" that is an input into the TRC test used to measure DSM cost-effectiveness. Thus, DSM measures are compared against the costs the utility would otherwise incur to acquire clean or renewable BC resources over the long run. Those costs must, in FBC's submissions, reflect actual, realistic costs of resource acquisition. In the context of a portfolio approach using the AIC method to calculate LRMC, those costs include for FBC a certain base amount of market purchases.

101. Simply excluding the market component from Portfolio B1 and adjusting the LRMC, as BCOAPO suggests, does not result in a feasible resource portfolio that would actually satisfy FBC's operating requirements. The Portfolio B1 LRMC, excluding the market component, is an artificial, theoretical construct that would not likely result in sufficient resource acquisition to satisfy FBC's load requirements and applicable reliability standards.

102. For these reasons, FBC submits that the $100 per MWh LRMC presented in the LTERP pursuant to Portfolio B1 should be accepted for the purposes of the cost effectiveness test under the *DSM Regulation*.

103. In the alternative, FBC believes that the majority of its market purchases are from clean sources, based on the generation mix in the Pacific Northwest.[102] Some amount of the market component included in Portfolio B1 is also potentially sourced from BC clean or

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[101] Ex. B-1, Vol. 1, App. K, p. 6
[102] Response to BCUC IR 1.17.1.1, Ex. B-2, p. 61

renewable resources under the CEPSA with Powerex, which is the marketing arm for BC Hydro's surplus energy.

104. Accordingly, if it is necessary to exclude the current market component from the calculation used to determine the LRMC of clean or renewable BC resources, which FBC does not agree with for the reasons stated above, then FBC submits that the appropriate LRMC for these purposes would still not be the $106 per MWh value BCOAPO proposes. FBC submits that the value is potentially closer to the $100 per MWh figure already presented in the LTERP, after accounting for the portion of the market energy that is both clean and generated within BC.

ii. Evaluation of DSM Scenario Costs

105. BCOAPO questions the approach of comparing the incremental costs of each DSM scenario to the $100 per MWh LRMC estimated for DSM cost effectiveness testing under the *DSM Regulation*.[103]

106. FBC recognizes that certain statements made in its filings for this proceeding have referenced the incremental resource costs of the different DSM scenarios in connection with the estimated LRMC of Portfolio B1 ($100 per MWh). To clarify, FBC's intent was not to present these values as directly comparable or to suggest that the DSM scenarios are cost-effective or not on the basis of such a comparison. This is perhaps best illustrated by an example from the pre-Errata LTERP, which noted that, "The incremental cost for ramping up to the High scenario of $104 [corrected to $98] per MWh is similar to the LRMC for clean or renewable B.C. energy of $100 per MWh".[104] Had FBC been attempting to make a direct, apples-to-apples comparison then the pre-Errata incremental cost of the High scenario would not have been cost-effective in relation to the $100 per MWh LRMC for DSM purposes and FBC would not have presented such a comparison in support of the High scenario.

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[103] BCOAPO Final Argument, para. 52
[104] Ex. B-1, Vol. 1, p. 100

107. FBC agrees with BCOAPO's basic point that the "Incremental cost", including program costs, of the DSM scenarios presented in Table 8-2 of the LTERP (among other places) is not directly comparable to the $100 per MWh LRMC estimate for clean or renewable BC resources calculated pursuant to Portfolio B1. The $100 per MWh LRMC is the weighted average incremental cost of a portfolio of resources that represents the avoided cost of procuring DSM resources (as described above at paragraphs 96-99).[105] As FBC explained in Appendix K of the LTERP:

> FBC considers the long run marginal cost to be a price signal and is one of many considerations when assessing the cost-effectiveness of different resource options. FBC does not expect to acquire all available resources up to the LRMC, nor should the LRMC be viewed as a clearing price in isolation from other prudent resource planning considerations, such as energy or capacity profiles or environmental factors.[106]

108. Thus, while BCOAPO may be correct to say that the Max DSM scenario would also be cost-effective on a direct LRMC comparison with Portfolio B1, and FBC does not dispute this post-Errata, this is only one of the factors that go into the analysis as between the different DSM scenarios and does not signify that the Max scenario is appropriate to pursue. When the DSM scenarios are compared against each other, the incremental resource cost is a helpful metric that, as FBC explained in the IR response noted in BCOAPO's submission, "illustrates the increased cost, i.e. declining economics, of obtaining higher load growth offsets".[107] BCOAPO acknowledges that FBC's analysis of the incremental costs of the DSM scenarios in this manner does provide "insight" relevant to the resource planning decision.[108]

109. Ultimately, for BCOAPO nothing turns on its comments regarding FBC's cost analysis of the LT DSM Plan. BCOAPO agrees that the High DSM scenario is an appropriate basis for the LT DSM Plan based on FBC's explanation of its preference for this scenario compared to the Max scenario, and in particular: rate/bill impacts; the voluntary nature of

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[105] Response to BCUC IR 2.76.2, Ex. B-11, p. 85-86 (Table 1)
[106] Ex. B-1, Vol. 1, App. K, p. 10
[107] Response to BCUC IR 1.35.2.1, Ex. B-2, p. 128
[108] BCOAPO Final Argument, para. 54

DSM participation; the non-dispatchable nature of DSM savings; and the inclusion of measures intended to address the adequacy requirement in the *DSM Regulation*.[109]

110. FBC notes as well BCSEA's submission that the "cost component" of FBC's explanation for the High DSM scenario "is adequate at the present time" and that the Commission should accept the High DSM scenario[110]. BCSEA states that its view in this regard "is informed by the understanding that under the proposed long-term electricity resources plan and the LT DSM no new supply-side resources are contemplated before 2021 when FBC's next long term resource plan is anticipated".[111]

111. FBC would add that both the High and Max DSM scenarios involve the same level of contemplated DSM funding and savings targets during the ramp-up period from 2018 to 2022.[112] None of the Interveners challenged FBC's proposed ramp-up approach in the LT DSM Plan. This ramp-up period will also provide FBC the benefit of experience with higher levels of DSM programming and insight regarding the level of customer participation. This experience, along with updated resource cost information and other relevant factors (such as an updated load forecast) will inform FBC's determination of whether additional levels of DSM are appropriate at the time of FBC's next LT DSM Plan, anticipated in 2021. Helpfully, this will be before the contemplated increase to the proposed levels of the High DSM scenario in the current plan is fully implemented.

C. DSM Reliability Issues

112. As noted, BCSEA continues to challenge the reliability component of FBC's explanation for preferring the High DSM scenario to the Max DSM scenario. BCSEA asserts, at paragraph 103 of its Final Argument, that "The Commission should not accept FBC's position that DSM resources are not sufficiently firm and/or reliable to warrant consideration of higher levels of DSM in order to defer acquisition of future supply-side

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[109] BCOAPO Final Argument, paras. 56-58
[110] BCSEA Final Argument, paras. 35, 102
[111] BCSEA Final Argument, para. 35
[112] Response to BCUC IR 1.45.1, Ex. B-2, p. 160

resources". BCSEA submits that the Commission should accept Mr. Grevatt's evidence on this point.[113]

113. First of all, FBC wishes to make clear that it was not intending to "attack" Mr. Grevatt's evidence in its Final Argument nor, in response to BCSEA's paragraph 111, was FBC suggesting or implying any wrong-doing on the part of Mr. Grevatt in the manner he quoted from FBC's evidence. FBC agrees that Mr. Grevatt is a qualified professional who gave his evidence in good faith in this process. FBC does take issue with BCSEA's characterization, at paragraph 115 of its Final Argument, that: "FBC accuses Mr. Grevatt of relying on jurisdictional comparisons without acknowledging their limitations".[114] FBC's Final Argument simply submitted that jurisdictional comparisons of the nature relied upon by Mr. Grevatt should be approached with significant caution, as reflected in the ACEEE report itself.[115] FBC did not accuse Mr. Grevatt of failing to acknowledge this point.

114. BCSEA's approach to this issue appears to be, at least in part, based on a difference of views as to what FBC's position actually is with respect to DSM reliability. For example, FBC does not believe the quotation from paragraph 103 of BCSEA's Final Argument noted above, accurately describes FBC's position. FBC does <u>not</u> make the argument "that DSM resources are not sufficiently firm and/or reliable to warrant consideration of higher levels of DSM". Similarly, BCSEA asks the Commission to endorse the following passage from Mr. Grevatt's evidence:

> Fortis shows reluctance to consider higher levels of DSM than are proposed in the application in part on the grounds that DSM is too risky. This determination on Fortis' part is not well-founded in evidence. The cost effectiveness of increasing the size of the DSM portfolio may remain a limiting factor, but <u>FBC should not arbitrarily limit the size of its DSM portfolio, either now or in the future, based on suppositions about risk that are not strongly supported by evidence</u>.[116]

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[113] BCSEA Final Argument, para. 104
[114] BCSEA Final Argument, para. 115
[115] FBC Final Argument, para. 143
[116] BCSEA Final Argument, para. 104

115. FBC has not "arbitrarily" limited the size of its DSM portfolio based on risk. FBC has made a reasoned determination that levels of DSM in the Max scenario are riskier from a reliability stand-point than the High scenario and that, in combination with cost-related factors and based also on applicable government policy and legislation, the High scenario is preferred to the Max scenario. This position was made clear in the passage from the LT DSM Plan that Mr. Grevatt quoted from incompletely in his evidence and from FBC's Final Argument.[117]

116. BCSEA nonetheless continues to approach the reliability issue as if was a separate, stand-alone factor that FBC is using to justify the High DSM scenario. Paragraph 107 of BCSEA's Final Argument, for instance, quotes from paragraph 141 of FBC's Final Argument and emphasizes the two reasons FBC presents for not selecting the Max scenario, risk and costs, without seeming to credit the statement that the "risks ... when combined with cost-related factors, justify FBC's decision" (underlining added).

117. On a related point, BCSEA does not appear to contest FBC's submission that DSM resources are not dispatchable in the same manner as supply-side resources and are less firm than comparable supply-side resources.[118]

118. FBC used a holistic approach based on a variety of factors in selecting the High DSM scenario rather than the Max scenario. Seen from the correct context, we submit that this approach was reasonable and that consideration of the increased reliability risks associated with the Max scenario, in the particular circumstances of FBC's current resource planning, was appropriate and should be accepted. In any event, BCSEA also ultimately accepted FBC's selection of the High DSM scenario.

PART 7 - PORTFOLIO ANALYSIS AND THE PREFERRED PORTFOLIO

A. Intervener Positions

[117] FBC Final Argument, para. 141; Ex. B-1, Vol. 2, p. 15
[118] FBC Final Argument, para. 151

119. BCOAPO, with one exception, "has no concerns with FBC's assessment of the four selected portfolios".[119] The exception is BCOAPO's concern regarding the self-sufficiency objective, which BCOAPO submits could be met if market purchases can be replaced by PPA Tranche 2 energy.[120] For the reasons explained above, this position is in FBC's respectful view based on the incorrect assumption that PPA Tranche 2 energy can satisfy the gaps in FBC's long term LRB. BCOAPO further submits that, "When it comes to the choice of Portfolio A4, there is substantial judgment involved. Each of the portfolios out ranks the others with respect to at least one attribute. Similarly, with the exception of A4, each of the portfolios ranks lowest on at least one attribute".[121]

120. BCSEA's preference is for Portfolio C4 – 100 percent clean BC resources.[122] BCSEA strongly opposes any new gas-fired generation, which precludes FBC's selected Portfolio A4.[123] BCSEA is also not supportive of Portfolio A1 – No self-sufficiency because market power is more carbon intensive than clean or renewable BC resources.[124] BCSEA considers it significant that FBC will not need to consider whether to build or acquire new generation resources until the time of its next long term resource plan anticipated in 2021.[125]

121. CEC, as noted, does not agree with FBC's plan to become electricity self-sufficient after 2025. CEC submits that the preferred portfolio is Portfolio A1, which is a market based portfolio with no self-sufficiency target and the lowest LRMC of the four portfolios considered for the preferred portfolio ($75 per MWh). CEC recommends that the Commission request FBC to resubmit its LTERP, and alter its Preferred Portfolio to Portfolio A1.[126]

122. ICG does not support FBC's selection of Portfolio A4. ICG prefers Portfolio C1, which meets the at least 93 clean energy target, includes a CCGT, and according to ICG "does not

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[119] BCOAPO Final Argument, para. 71
[120] BCOAPO Final Argument, para. 70
[121] BCOAPO Final Argument, para. 71 (underlining added)
[122] BCSEA Final Argument, para. 88
[123] BCSEA Final Argument, para, 89
[124] BCSEA Final Argument, para. 90
[125] BCSEA Final Argument, para. 91
[126] CEC Final Argument, para. 125

rely on market".[127] FBC notes that 51 percent of the incremental energy within Portfolio C1 is comprised of market supply.[128] ICG's preference for this portfolio is based on a proposed action plan involving FBC entering supply contracts with self-generating customers when "market purchases are no longer economic".[129]

B. FBC Reply

123. FBC submits that it is notable that each of these four Interveners prefers a different resource portfolio for the LTERP.

124. FBC reiterates the Commission's statement from the 2014 FEU LTRP Decision, quoted also by CEC at paragraph 12 of its Final Argument: "While it is possible that the Panel or other stakeholders may disagree with individual assumption and may prefer an alternative action plan, the test is whether the plan as filed meets the public interest" (underlining added).

125. FBC would add that the question for the Commission is not whether a different portfolio configuration is preferred, but whether carrying out the portfolio FBC selected in the LTERP is in the public interest. BCOAPO rightly points out that selecting among various portfolio options involves an exercise of substantial judgment by a utility based on numerous factors. That exercise of judgment should not be overruled unless it is not in the public interest.

126. None of the Interveners, other than CEC, makes any argument that carrying out Portfolio A4 would not be in the public interest. BCOAPO supports the selection of that portfolio; BCSEA and ICG simply state preferences for different resource options based on the particular interests or perspectives of their constituent members. The Interveners preferences also, to some extent, contradict each other. For instance, both BCSEA and ICG advocate, for different reasons, that FBC rely less on market supply in the LTERP. CEC and BCOAPO, on the hand, submit that FBC should maximize its use of market supply.

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[127] ICG Final Argument, para. 25
[128] Ex. B-1-1 (Corrected LTERP), p. 125
[129] ICG Final Argument, para. 25

127. In the end, FBC's submits that its selection of Portfolio A4 reflects a reasonable balance and compromise among differing objectives, such as: cost-effective and reliable supply to meet its customers' energy requirements, consistency with provincial energy objectives (including self-sufficiency, pursuing adequate, cost effective DSM, and providing socio-economic benefits), and geographic resource diversity.[130] The other portfolios that some Interveners prefer all rank lower on important planning objectives compared to Portfolio A4; for example:

- Portfolio A1 (No Self Sufficiency), which is CEC's preference, ranks lowest in terms of socio-economic benefits and geographic resource diversity, in addition to the reliability concerns with over-reliance on market supply and inconsistency with the BC energy objective of achieving electricity self-sufficiency;

- Portfolio C1 (93 percent clean with CCGT), which is ICG's preference, includes the most non-clean resources and produces the most GHG emissions while also generating lower socio-economic benefits and having less geographic resource diversity than Portfolio A4; and

- Portfolio C4 (100 percent clean or renewable), which is BCSEA's preference, has the highest LRMC of the four portfolios, has less geographic resource diversity than Portfolio A4, and its resource composition offers less reliability and flexibility than Portfolio A4 based on the inclusion of the SCGT in that portfolio.

128. With respect to CEC's argument that the selection of Portfolio A4 is not in the interests of FBC's ratepayers, we note that it is premised on incorrect assumptions regarding the applicable legislative framework (see paragraphs 16-22, above) and regarding the resource profile of PPA Tranche 2 energy (see paragraphs 88-90, above).

129. Given the existence of energy gaps later in the planning horizon, even with PPA supply fully utilized to the extent possible after taking into account the physical limitations, FBC does need to plan for new resource acquisition in the LTERP based on the current long term

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[130] See Ex. B-1-1 (Corrected LTERP), p. 126 (Table 9-2) and 127

load forecast. FBC submits that, due to the risks of relying on market access indefinitely into the future, planning to achieve electricity self-sufficiency at some point in the planning horizon is a more prudent approach to resource planning. FBC has chosen a target self-sufficiency date by the end of 2025 in the current LTERP because it provides for more time to plan for new resources and to assess the LRB, as well as market conditions before proceeding.[131] Further, as noted in response to a CEC IR, FBC will consider extending the self-sufficiency target by the end of 2025 if doing so can be accomplished while meeting the objectives of the long term resource plan at the time.[132] For example, if FBC determines that market power can be obtained cost-effectively reliably beyond 2025 at the time it prepares its next long term resource plan, it will reconsider this matter.[133]

130. This approach to self-sufficiency is balanced and reasonable and consistent with current BC energy objectives. The CEC's approach would require FBC to dismiss applicable BC energy policy and place all of its resource planning emphasis on cost. In FBC's submission, its approach and not CEC's is in the interests of present and future ratepayers as well as the public interest.

PART 8 - CONCLUSION

131. For all of these reasons, and for the reasons stated in FBC's Final Argument and the LTERP itself, FBC submits that the Commission should accept the LTERP pursuant to section 44.1(6) of the *UCA.*

ALL OF WHICH IS RESPECTFULLY SUBMITTED.

November 24th, 2017

Nicholas T. Hooge
Counsel for FortisBC Inc.

[131] Ex. B-1-1 (Corrected LTERP), p. 120
[132] Response to CEC IR 1.21.1, Ex. B-5, p. 64
[133] *Ibid.*

BRITISH COLUMBIA UTILITIES COMMISSION

IN THE MATTER OF
the *Utilities Commission Act*, R.S.B.C. 1996, chapter 473

and

FortisBC Inc.'s 2016 Long Term Electric Resource Plan and
2016 Long Term Demand Side Management Plan

BOOK OF AUTHORITIES OF FORTISBC INC. - REPLY ARGUMENT

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TAB CASES

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Date: 2009-02-12
Docket: CA035753
Other citations: 307 DLR (4th) 121; [2009] 6 WWR 21; 90 BCLR (4th) 36; 266 BCAC 140
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Editor's note: Corrigendum released February 16, 2009. Original judgment has been corrected with text of corrigendum appended.

COURT OF APPEAL FOR BRITISH COLUMBIA

Citation: ***Thow v. B.C. (Securities Commission),*** 2009 BCCA 46

Date: 20090212

Docket: CA035753

Between:

Ian Gregory Thow

Appellant

And

British Columbia Securities Commission

Respondent

Before: The Honourable Madam Justice Ryan
The Honourable Madam Justice D. Smith
The Honourable Mr. Justice Groberman

Ronald N. Pelletier — Counsel for the Appellant

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Michael A. Feder — Counsel for the Respondent

Place and Date of Hearing:	Vancouver, British Columbia September 9, 2008
Place and Date of Judgment:	Vancouver, British Columbia 12 February 2009

Written Reasons by:
The Honourable Mr. Justice Groberman

Concurred in by:
The Honourable Madam Justice Ryan
The Honourable Madam Justice D. Smith

Reasons for Judgment of the Honourable Mr. Justice Groberman:

[1] Mr. Thow appeals to this Court from a decision of the British Columbia Securities Commission (indexed as 2007 BCSECCOM 758 (CanLII)) imposing on him an "administrative penalty" of $6 million (the "decision on penalty"). He argues that because his contraventions of the *Securities Act*, R.S.B.C. 1996, c. 418 occurred at a time when it authorized a maximum administrative penalty of only $250,000, any penalty in excess of that amount was outside the jurisdiction of the Commission.

[2] The Commission acknowledges that Mr. Thow's contraventions of the *Securities Act* pre-dated the amendments that increased the maximum administrative penalty. It interprets the amendments as providing it with jurisdiction to impose the increased penalty even for contraventions that occurred before those amendments were enacted. The sole question on this appeal is whether the Commission's interpretation is sustainable. This requires a consideration of the presumption against retroactive or retrospective application of legislation, and of the exceptions to that presumption.

Factual Background

[3] Mr. Thow was licensed to sell mutual funds. On June 29, 2006, the Executive Director of the Securities Commission issued a notice of hearing against him, alleging that he had committed a number of violations of the *Securities Act* and had misappropriated up to $30 million of money that he had been entrusted to invest on behalf of his clients.

[4] The hearing before the Commission took place on six days between late May and early July 2007. Although Mr. Thow had notice of the hearing, he did not attend or take part in it. The Executive Director placed evidence before the Commission in respect of only 26 of Mr. Thow's clients. In the decision on liability, indexed as 2007 BCSECCOM 627 (CanLII), the Commission found that between January 2003 and May 2005, those clients had entrusted Mr. Thow to invest a total of $8.7 million, and that he instead

[36] *Brosseau*, *Asbestos*, and *Cartaway* all concerned the jurisdiction of securities commissions to impose penalties. In each case, the result depended critically on the purpose for which the penalties were imposed. Some of the language used to describe penalties in the three cases is also similar – in particular, the drawing of a distinction between "punitive" sanctions, and penalties which are not "punitive".

[37] Despite the similarity in the language used in the three decisions, it must be recognized that the issues in the cases were somewhat different. *Brosseau*, like the present case, concerned the retroactive application of statutory amendments. In contrast, *Asbestos* and *Cartaway* were concerned with the scope of considerations that a securities commission can take into account in imposing a sanction.

[38] *Asbestos* and *Cartaway* establish that securities commissions, not being criminal courts, may not impose penalties that are "punitive" in the sense of being designed to punish an offender for past transgressions. They may, however, impose penalties that place burdens (even very heavy burdens) on offenders, as long as the penalties are designed to encourage compliance with regulations in the future. In essence, penalties may be directed at general or specific deterrence and at protection of the public; penalties that are purely retributive or denunciatory, however, are not appropriately imposed by administrative tribunals.

[39] *Asbestos* and *Cartaway*, then, are cases about the proper role of administrative tribunals in administering regulatory regimes. They concern the limits of proper administrative sanctions. In defining those limits, the Supreme Court of Canada distinguished between penal orders that function to punish an offender and those that attempt to protect society. The former are the exclusive purview of the courts administering in punishing offences; the latter may be imposed, as well, by administrative bodies.

[40] In discussing retrospectivity in *Brosseau*, the Supreme Court of Canada was not so much concerned with the role of the Securities Commission *per se*, but rather with an assessment of the fair operation of the Rule of Law. While the concept of "punishment" has been used by the courts to analyse both the limits of regulatory sanctions and the appropriateness of retrospective operation of penal statutes, it is not clear to me that the word is used identically in those discussions.

[41] While some of the language used in *Brosseau* may be interpreted as supporting a very broad "protection of the public" exception to the presumption against retrospectivity, I do not think that that was the Court's intention. The Court's reasons in *Brosseau* draw heavily on Driedger and on the cases he cites. The reasons do not suggest any intention to broaden the exception, and there was no need to do so in order to resolve the issues in the *Brosseau* case.

[42] Soon after the decision in *Brosseau*, the Federal Court of Appeal rejected the idea that the "protection of the public" exception to the

presumption against retrospectivity had been broadened. In *Re Royal Canadian Mounted Police Act*, [1991] 1 F.C. 529, at paragraph 34, MacGuigan J.A., for a unanimous court, noted that a broad "protection of the public" exception to the presumption would effectively eliminate the presumption entirely:

> [I]t must at least be recognized that there cannot be any public-interest or public-protection exception, writ large, to the presumption against retrospectivity, for the simple reason that every statute, whatever its content, can be said to be in the public interest or for the public protection. No Parliament ever deliberately legislates against the public interest but always visualizes its legislative innovations as being for the public good.

[43] MacGuigan J.A. characterized the exception to the presumption against retrospectivity much more narrowly, at paragraph 32:

> [T]here is an exception to the presumption against retrospectivity where there is (1) a statutory disqualification, (2) based on past conduct, (3) which demonstrates a continuing unfitness for the privilege in question. To my mind this is quite a narrow exception to the general presumption ....

[44] I agree, generally, with that characterization of the cases underlying the exception. The cases have all involved situations in which a past conduct is used to identify a person as one who poses a particular risk for the future, and ought, therefore, to be disqualified or otherwise restricted from activities for the protection of the public. In other words, the penal sanction imposed is not intended to penalize past conduct at all (though it may, incidentally, have that effect). Instead, it is designed to directly prevent future offending conduct from occurring.

[45] The *Royal Canadian Mounted Police Act* case may be overly restrictive in suggesting that the exception to the presumption against retroactivity extends only to statutory disqualification cases, *per se*. There is no reason in principle, for example, that it would not extend to a requirement that a person who has violated a regulatory regime resume activities in the regulated area only under supervision, after undertaking training, or with special reporting obligations.

[46] The exception does, however, appear to be applicable only where a prejudicial sanction is imposed, not for penal purposes, but as a prophylactic measure to protect society against future wrongdoing by that person. While the imposition of such sanctions may, incidentally, inflict hardship on the wrongdoer, the infliction of such hardship is not the goal.

[47] The concept of "punishment" is an elastic one, and its meaning must be taken in context. In *Cartaway* and *Asbestos*, the Supreme Court of