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

**Attention: Erica M. Hamilton,
Commission Secretary**

Dear Sirs/Mesdames:

**Re: Terasen Gas Inc. and Terasen Gas (Vancouver Island) Inc.
Energy Efficiency and Conservation Programs Application**

We enclose the Reply Submissions on behalf of Terasen Gas Inc. and Terasen Gas (Vancouver Island) Inc. in respect of the above mentioned matter. We advise that twenty hard copies of same will follow by courier.

Yours truly,

FASKEN MARTINEAU DuMOULIN LLP

[Original signed by Matthew Ghikas]

Matthew Ghikas

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**IN THE MATTER OF
THE UTILITIES COMMISSION ACT, R.S.B.C. 1996, CHAPTER 473**

AND

**TERASEN GAS INC. AND
TERASEN GAS (VANCOUVER ISLAND) INC.**

ENERGY EFFICIENCY AND CONSERVATION PROGRAMS APPLICATION

REPLY SUBMISSIONS OF

**TERASEN GAS INC. AND
TERASEN GAS (VANCOUVER ISLAND) INC.**

DECEMBER 5, 2008

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1. These Reply Submissions of TGI and TGVI address issues raised by Intervenors in their submissions, generally in the same order as in the November 19, 2008 Submissions of the Companies (the "Initial Submissions"). Defined terms used in the Initial Submissions are also used in these Reply Submissions.

I. CONSERVATION POTENTIAL REVIEW AND PROPOSED FUNDING LEVEL

2. BC Hydro, CEC and BCSEA-SCBC supported the proposed increase in EEC funding.¹ CEC offered its view that the expenditures were not imprudent, and that the Terasen Utilities are disciplined to remain cost competitive against other alternative energy sources.² BCSEA-SCBC expressly agreed with the Companies' observation that the process used to develop the proposed portfolio was thorough and the results comprehensive.³ In addition, approximately 25 commercial and trade organizations and groups, non-governmental agencies and municipalities filed letters of comment supporting the Application.⁴ These organizations and municipalities collectively represent a significant number of residential and commercial

¹ In fact, Mr. Plunkett, in his evidence filed on behalf of the BCSEA-SCBC (Exhibit C5-5, p.4), appeared to suggest that, if anything, the funding could be increased: "Terasen's plan to increase spending and savings on gas DSM is well-intentioned and commendable. While not as ambitious as leading portfolios elsewhere in North America, the scale of the Terasen portfolio's spending and savings is reasonable."

² CEC Submissions, p.2

³ BCSEA-SCBC Submissions, para. 17. Mr. Plunkett's evidence is that the projected GJ savings as a percent of GJ sales compares favourably to other gas utilities in North America. See Exhibit C5-5, p.12

⁴ Exhibit B-3, BCUC IR 2.56.1; 2.56.2. The only letter of comment expressing any opposition to the Application was filed by Cumberland.

customers of the Companies. MEMPR filed a letter of support stating that "The Ministry supports Terasen's application request to increase its demand side management (DSM) activities. The application is aligned with several of the policy action items included in the 2007 British Columbia Energy Plan."⁵

3. BCOAPO expresses support for the expansion of EEC activity and expenditure, but states that the specific funding request included in the Application is a "blank cheque" and that the proposed programs "achieve minimal impact".⁶ This argument, with respect, is without merit. The Companies described in the Initial Submissions⁷ the extensive evidence regarding the process of developing programs "from the ground up" based on the CPR undertaken by Marbek⁸ and the subsequent refinement by Habart. Despite its opposition to the funding proposal as filed, BCOAPO did not identify in its submissions any issues with (a) the CPR methodology or Marbek's conclusion that to reach the achievable potential, "[a] significant increase in annual DSM investment and in program and incentive funding by the Companies and their delivery partners would be required; this increase would be in the range of three to five times current levels";⁹ (b) Habart's Review of Conservation Potential,¹⁰ or (c) the Companies' work to develop the portfolio based on the CPR and Habart's analysis. The evidence regarding how the Conservation Education and Outreach funding was developed based on an advertising plan developed by Wasserman is discussed later in these Reply Submissions. The Commission should give no weight to BCOAPO's argument that the portfolio is a "blank cheque" given BCOAPO's superficial assessment of the Companies' evidence regarding the development of the portfolio.

4. BCOAPO's argument that the proposed funding stands to "achieve minimal impact" appears to be based on evidence from the 2008 Resource Plan process regarding the impact of EEC programs in relation to the *total annual demand for all core customers*. The evidence in this Application, which BCOAPO did not challenge, is that the present value of the

⁵ Exhibit C1-1

⁶ BCOAPO Submissions, paras. 3, 15

⁷ Initial Submissions, paras. 18 to 22

⁸ The CPR is included with the Application, Exhibit B-1, Appendix 1.

⁹ Exhibit B-1, pp.45-46

¹⁰ Habart's Review of Conservation Potential is included with the Application, Exhibit B-1, Appendix 9.

potential energy savings from the EEC programs contemplated in the Application is approximately 7.6 million GJs.¹¹ This translates into potential total resource benefits of \$165.1 million not accounting for free riders and \$139 million accounting for free riders. It would be illogical not to pursue such significant potential demand savings and corresponding total resource benefits, simply because the demand savings are modest when compared to the Companies' very substantial total annual demand.

5. The Terasen Utilities submit that the Commission should approve the overall proposed EEC budget as sought in the Application.

II. FUNDING APPROACH AND COMPOSITION OF THE EEC PORTFOLIO

A. Funding Approach

6. The funding approach is addressed in paragraphs 23 to 25 of the Initial Submissions. BC Hydro supports the Terasen Utilities' proposal for approval of an overall expenditure level, echoing the Companies' evidence that a key benefit of this approach is increased flexibility to adjust programs and initiatives based on their performance.¹² The CEC supported the Application as filed,¹³ as did a number of interested parties that filed letters of comment. BCSEA-SCBC lauds the proposed accountability mechanisms that are "designed to be more effective and efficient than having on-going Commission involvement in decision-making within the portfolio during the Funding Period."¹⁴

B. Program Areas Within EEC Portfolio

7. The majority of the program areas within the overall portfolio were not the subject of intervenor comment in final submissions, and accordingly will not be discussed in these Reply Submissions. Below, the Terasen Utilities address intervenor submissions on the program areas of (i) Fuel Switching, (ii) Joint Initiatives / Low Income Programs, (iii) Energy Efficiency, and (iv) Conservation Education and Outreach.

(i) Fuel Switching

¹¹ Initial Submissions, para. 68

¹² BC Hydro Submissions, para. 16

¹³ CEC Submissions, p.2

¹⁴ BCSEA-SCBC Submissions, para. 20

8. There appears to be no dispute that programs directed at switching customers from oil, propane and wood heating - programs which have historically existed for TGVI - will reduce GHG emissions. The intervenor submissions focussed on fuel switching from electricity. Given the amount of attention garnered by the potential for customers to engage in electricity-to-natural gas fuel switching as a result of the Companies' proposed fuel switching activity, it is easy to lose sight of the fact that such activity represents less than 6.6% of the overall portfolio budget.¹⁵ The Companies respectfully submit that the Commission should, as it has on two previous occasions since mid-2007,¹⁶ acknowledge the potential benefits of fuel switching from electricity. The Companies have presented evidence in this Application, as they had in those prior applications before the Commission, regarding the potential for both customer benefits and reductions in GHG emissions associated with the targeted direct use of natural gas. From a policy perspective, the Commission should support programs that encourage energy consumers to use the most appropriate fuel source for a particular end use in the circumstances.

9. BCSEA-SCBC appropriately recognize that fuel switching from electricity cannot be "always good" or "never good", and observe that fuel switching may be justifiable based on a consideration of an economic benefit-cost analysis, a GHG analysis or other factors such as air pollution consequences.¹⁷ Even BC Hydro, despite its spirited challenge to the Companies' evidence on fuel switching from electricity, is not prepared to state unequivocally that fuel switching from electricity is never appropriate; rather, it insists that this is not the right time for such fuel switching programs.¹⁸ Only BCOAPO appear to be dogmatically opposed to programs directed at fuel switching from electricity in all circumstances. As discussed below, the Companies submit that this is the right time to proceed with cost-effective fuel switching programs.

¹⁵ Exhibit B-1 p.63. Exhibit B-13, BCOAPO IR 2.58.1

¹⁶ See Initial Submissions, paras. 78 and 79

¹⁷ BCSEA-SCBC Submissions, para. 41

¹⁸ BC Hydro Submissions, at para. 47. BC Hydro states in part: "It is important to understand that BC Hydro is not opposing for all time Terasen Utilities' proposals to encourage fuel switching from electricity to natural gas as a means to achieve electricity conservation."

Customer Benefits

10. None of the intervenors challenged the Companies' evidence (summarized in paragraph 35 of the Initial Submissions) that programs directed at fuel switching from electricity would enhance the efficiency of TGVI's system and make its customers better off from a bill impact perspective. BC Hydro's evidence, which was specifically intended to address fuel switching, only discussed GHG implications and did not dispute the Companies' evidence of the customer benefits. The customer benefits associated with the fuel switching programs provided for in this Application are compelling and deserve consideration. From a policy perspective this is significant because "government's energy objectives", which the Commission must consider, include encouraging public utilities to pursue cost-effective DSM.

GHGs

BC Hydro's Arguments

11. BC Hydro suggests that the Companies failed to lead evidence that there is a connection between the fuel switching programs and reductions in regional GHG emissions, and that Mr. Reimann's evidence should be preferred because it is "factual".¹⁹ The logic of the Companies' position is simple, and the evidence is on the record.²⁰ In the shorter term, fuel switching to natural gas will mean more electricity is available to BC Hydro to meet domestic load than would otherwise be the case, thus reducing net imports or increasing net exports. Regardless of whether the result is reduced net imports or increased net exports, the resulting avoided electricity generation in the region will be primarily gas or coal-fired at the margin. In the longer term, to the extent BC Hydro's load requirements are being met, BC's excess clean generation resources could be developed by BC Independent Power Producers ("IPPs") and exported, which will also displace coal and gas-fired electricity as the marginal generation resources in the Western Interconnection. This was the logic and evidence accepted by the Commission in the prior Decisions discussed in the Initial Submissions.

¹⁹ BC Hydro Submissions, paras. 26 and 27

²⁰ The evidence is cited in paras. 70 to 82 of the Initial Submissions and these citations will not be repeated here.

12. The crux of Mr. Reimann's evidence on fuel switching, which is emphasized in BC Hydro's submissions, is that there is no "medium to long term linkage" between fuel switching from electricity to natural gas and a change in BC Hydro's need for importing electric energy or ability to export such energy because BC Hydro would reflect the reduced demand in its load forecast and power acquisition processes. Two notable observations can be made about Mr. Reimann's evidence. First, the clear inference of Mr. Reimann's evidence is that BC Hydro concedes that fuel switching has at least a *near term* impact on BC Hydro's need to import electricity or ability to export. This stands to reason as "self-sufficiency plus insurance" is defined in relation to critical water years, and BC Hydro will export the surplus energy that will be available whenever it is not a critical water year.²¹ In the near term, fuel switching programs from electricity can increase the amount of any surplus. This near term impact should not be disregarded.

13. Second, and more importantly, Mr. Reimann's assessment incorrectly assumes that BC Hydro is the only potential customer for BC clean power in the medium to long term. Regardless of the medium to long term impact on BC Hydro's load forecast, if BC Hydro does not require energy generated by BC IPPs to meet domestic load, IPPs are free to sell clean power to someone else. As BCOAPO points out, BC has an abundance of clean power. While BC Hydro may not have a mandate to build solely for export, IPPs are free to do so. Although Mr. Reimann does not address this possibility in his evidence, BC Hydro has admitted elsewhere that electricity generated in BC that is surplus to domestic load requirements in any one time period will be traded and exported into the Western Interconnection.²² Government appears to be contemplating an export market for BC's clean power. As indicated in paragraph 75 of the Initial Submissions, Minister Neufeld stated in an October 21, 2008 radio interview, among other things, that "[w]e have huge opportunities in this province to build generation for export, also, between jurisdictions south of us, that generate with coal."²³ [Emphasis added.] Moreover, US markets that are currently supplied to a significant extent by coal-fired and natural gas-fired generation appear to be embracing the potential for BC exports of renewable electricity as a potential means of addressing their energy needs. Pacific Gas & Electric has prepared and filed

²¹ Exhibit C2-7, Terasen-BCH IR 1.2.2

²² Exhibit C2-7, Terasen-BCH IR 1.2.2

²³ Initial Submissions, para. 75, citing Exhibit C2-7, Terasen-BCH IR 1.3.0

a report with the California Public Utilities Commission regarding the potential for imports of BC renewable electricity.²⁴ There is a proposed Canada to Northern California transmission line in the initial Western Electricity Coordinating Council path rating process.²⁵ The clear purpose of these initiatives is to capitalize on BC clean power developed for export. British Columbia should not squander its valuable renewable resources by using them in end-use applications where other energy sources can do the job more efficiently.

14. Notably, BC Hydro did not dispute the evidence (cited at paragraphs 38 to 40 of the Initial Submissions) that BC Hydro's CPR had identified significant economic potential for electric-to-gas fuel switching. It similarly took no issue with the implication of that evidence that failing to pursue this economic potential would be unfavourable from a BC Hydro customer perspective. As the CEC observes in its submissions, "...the marginal costs challenge faced by BC Hydro is clearly much more significant than the Terasen Utilities...".²⁶ This suggests that whatever fuel switching identified as having economic potential in BC Hydro's CPR should be pursued.

15. BC Hydro has²⁷ mischaracterized Terasen's position as expressed by the Companies at paragraph 40 of the Initial Submissions. In that paragraph, the Companies stated that the particular conclusion of BC Hydro's CPR that "there is no achievable [vs. economic] fuel switching potential" may no longer be valid in the context of the recently-approved RIB rate. BC Hydro has incorrectly extended that narrow statement to suggest that the Companies challenge the entire basis of BC Hydro's 2007 CPR. The Companies are not challenging the basis of BC Hydro's CPR in this proceeding.

16. BC Hydro advocates a "wait and see" approach pending a further expression of Government policy on the issue of fuel switching from electricity. The Companies respectfully submit that no further policy pronouncement is required. The Energy Plan advocates the "right fuel, for the right activity, at the right time", stating:

²⁴ Exhibit C2-7, Terasen-BCH IR 1.2.2

²⁵ Exhibit C2-7, Terasen-BCH IR 1.4.0

²⁶ CEC Submissions, p.2

²⁷ BC Hydro Submissions, para. 28

It is important for British Columbians to understand the appropriate uses of different forms of energy and utilize the right fuel, for the right activity, at the right time. There is the potential to promote energy efficiency and alternative energy supplemented by natural gas.²⁸

17. In other words, the Government is (to use Mr. Elton's words) "fuel neutral".²⁹ In light of the Energy Plan's reference to "right fuel, for the right activity, at the right time", and the obvious potential benefits associated with different fuels in certain applications, it is unreasonable to expect that government will declare a singular preference for electricity or natural gas in all uses, at all times.

18. The Companies are not asking the Commission to "take sides" and determine that natural gas is always better than electricity for all purposes. The Terasen Utilities are similarly not advocating the abandonment of all electrification initiatives. Rather, the Terasen Utilities have consistently maintained that consumers should be encouraged to use the right fuel for the specific end use in question, as reflected in the Energy Plan. As the Companies stated in the response to BCSEA-SCBC IR 1.18.4:

...British Columbia's valuable electricity resources are best used in end-use applications that reflect that value, such as keeping the lights on and powering computers and household appliances, while natural gas is best used for space and water heating, and for displacing electricity in some end uses such as cooking and clothes drying. The optimal balance of the energy system in the Province would be one where British Columbians are not squandering electricity on end uses that could be provided for by other more efficient energy sources.³⁰

19. Since the 2007 BC Hydro Rate Design Application, in which the Commission endorsed the Terasen Utilities' submissions regarding the potential benefits associated with fuel switching from electricity, additional Government policy direction has been provided in the form of the 2008 amendments to the *Utilities Commission Act* (Bill 15). The legislative amendments introduced "government's energy objectives" including "to encourage public utilities to undertake cost effective DSM" and "to encourage public utilities to reduce greenhouse gas emissions". These objectives, and the notable absence of any objective expressing a singular preference towards mass electrification, suggest that Government still supports the Energy Plan

²⁸ Exhibit B-1, Appendix 6, p.21

²⁹ Initial Submissions, para. 75

³⁰ Exhibit B-7. See also Exhibit B-2, BCUC IRs 1.2.4 and 1.23.4

approach of "the right fuel, for the right activity, at the right time". These objectives also suggest a case by case approach to assessing DSM from the perspective of cost effectiveness and net GHG emissions. As indicated previously, the undisputed evidence in this case is that fuel switching measures are cost effective. Further, there is significant body of evidence, and prior Commission decisions, to support the Companies' position that overall regional GHG emissions can be reduced by appropriate use of fuel switching measures. The Companies respectfully submit that the Commission must, by virtue of "government's energy objectives", consider this evidence in evaluating the Application.

20. BC Hydro's policy evidence was provided by Ms. Rother. She suggests that ambiguity in the *Greenhouse Gas Reduction Targets Act* (GGRTA) as to whether GHG emission reductions outside BC that are the result of fuel switching measures in BC could be credited towards the legislated targets (a) demonstrates the absence of government policy on fuel switching and (b) is therefore a basis to defer implementation of any fuel switching programs. Ms. Rother's evidence also includes examples of electrification schemes, with the implicit suggestion apparently being that Government is in fact "pro-electricity" and "anti-natural gas". There are a number of problems with Ms. Rother's evidence.

21. First, regardless of whether Government obtains credit towards its GHG target under the GGRTA from the export of clean BC electricity to displace coal and natural gas fired generation,³¹ the fact remains that the *Utilities Commission Act* directs the Commission to consider the objective of encouraging public utilities to reduce GHGs. Notably, government's energy objective of "encourag[ing] public utilities to reduce greenhouse gas emissions" is unqualified by any statement that would suggest that the Commission should encourage the reduction in the direct use of fossil fuels within BC at the expense of increasing GHGs on a net basis in the region. BC Hydro, in effect, seeks to re-write the legislated objective to state "encourag[ing] public utilities to reduce greenhouse gas emissions *produced within British Columbia*", so as to require the Commission to ignore emissions that could have been prevented by actions taken within British Columbia simply because the source of the emissions happens to

³¹ To the extent that Government obtains credit towards its GHG target from the export of clean BC electricity to displace coal and natural gas fired generation, the direct use of natural gas for space and water heating in BC could help Government make significant strides towards meeting its targets. Ms. Rother implicitly concedes that fuel switching programs may be consistent with the GHG targets in the Act. Exhibit C2-6, p.3, ll.28-33

be in the US or Alberta. BC Hydro's approach of considering BC in isolation, without regard to the potential impact on GHG emissions immediately on the other side of the political boundary, is inconsistent with the express wording of the legislation and also the approach inherent in "government's energy objectives".

22. Second, it is evident from Minister Neufeld's radio quotation regarding exports and coal-fired generation in the US that Government supports clean electricity exports throughout the Western Interconnection and recognizes the GHG benefits associated with those exports.

23. Third, as Ms. Rother observes,³² British Columbia has joined the Western Climate Initiative, a partnership of seven U.S. states (California, Oregon, Washington State, Montana, Arizona, New Mexico and Utah and the provinces of British Columbia, Manitoba, Quebec and Ontario). The WCI has a *regional aggregate* GHG reduction target. It is abundantly clear that Government recognizes the regional implications of GHGs.

24. Fourth, the explicit pronouncements in the Energy Plan ("the right fuel, for the right activity, at the right time") and Mr. Elton's statement that the province remains "fuel neutral" belie the apparent suggestion in Ms. Rother's evidence regarding current electrification projects that Government is in fact "pro-electricity" and "anti-natural gas". The Terasen Utilities also observe that the ability of BC Hydro to meet the increased electricity load from such electrification initiatives will be assisted (and costs reduced) by the direct use of natural gas for space and water heating.

25. Fifth, the Province has, consistent with the Energy Plan, pursued the development of natural gas in British Columbia. The development of natural gas consumes fossil fuels and results in the production of a fossil fuel. Natural gas production within British Columbia is significant. Land sales for the purposes of gas development have also increased, suggesting that the market is expecting that natural gas production levels in BC will increase from today's levels.³³ Since the Province is prepared to accept an increase in GHG emissions within British Columbia based on the economic benefits associated with that activity, the fact that fuel

³² Exhibit C2-6, p.2

³³ Exhibit B-6, BCOAPO IR 1.23.2

switching from electricity generates GHGs within the provincial boundaries, although resulting in a net reduction on a regional basis, is not an appropriate policy basis to defer cost-effective fuel switching programs. As noted previously, MEMPR filed a letter of support stating that "The Ministry supports Terasen's application request to increase its demand side management (DSM) activities. The application is aligned with several of the policy action items included in the 2007 British Columbia Energy Plan."³⁴

26. The Companies respectfully submit that the factual evidence provided by the Companies is compelling, and Ms. Rother's policy evidence is out of synch with the current policy landscape in British Columbia. No further policy pronouncements are required for the Commission to take the obvious step to recognize the potential benefits associated with cost-effective fuel switching from electricity.

BCOAPO Argument

27. BCOAPO's argument against the inclusion of fuel switching programs is that "a move from electricity generated in a province so rich in clean, renewable resources to any fossil fuel, including natural gas" is undesirable.³⁵ This is an overly simplistic view. Natural gas remains very much a part of the province's energy strategy as illustrated, for example, by the Energy Plan Policy Actions Nos. 44 through 48.³⁶ There is also little prospect that coal and natural gas-fired electricity generation will disappear in the Western Interconnection in the near future. The Commission should, as it did in the previous Decisions cited, adopt a more nuanced view that the use of natural gas in particular applications can have a favourable GHG impact.³⁷

28. BCOAPO expresses scepticism that a natural gas utility can be relied upon to objectively formulate the optimal energy balance between electricity and natural gas. The

³⁴ Exhibit C1-1

³⁵ BCOAPO Submissions para. 30

³⁶ Exhibit B-1, Appendix 6. Policy Action No. 44 is "Pursue regulatory and fiscal competitiveness in support of being among the most competitive oil and gas jurisdictions in North America." Policy Action No. 45 is "Enhance infrastructure to support the development of oil and gas in British Columbia and address impediments to economic development such as transportation and labour shortages." Policy Action No. 46 is "Encourage the development of conventional and unconventional resources." Policy Action No. 47 is "Support the growth of British Columbia's oil and gas service sector." Policy Action No. 48 is Promote exploration and development of the Interior basins with a priority focus on the Nechako Basin."

³⁷ Initial Submissions, paras. 78-79

position outlined in the Initial Submissions with respect to the use of natural gas for particular end-uses such as space and water heating is not an invention of the Companies. As indicated previously, the Energy Plan advocates the "right fuel, for the right activity, at the right time" and expressly refers to the use of natural gas in combination with other fuel sources.³⁸ It is not reasonable to expect that Government will determine that a particular fuel source is "always good" or "never good".

29. BCOAPO "soundly rejects" the Companies' observations in paragraph 37 of the Initial Submissions with respect to the impact of fuel switching on BC Hydro customers as being "self-serving" in the guise of altruism.³⁹ The Companies submit that this type of rhetoric is no substitute for looking at the evidence (which BCOAPO, on this issue, has not done in any meaningful way). The primary focus of the Commission in this Application should be on the impacts on the natural gas customers of the Terasen Utilities. The evidence is that the impact of fuel switching from the perspective of natural gas customers is positive. The Companies, however, recognize that the Commission will likely be interested in the potential effect of the fuel switching programs on electrical utilities. That was the sole purpose served by paragraph 37 of the Initial Submissions.

BCSEA-SCBC

30. BCSEA-SCBC, while prepared to acknowledge the potential benefits associated with fuel switching, urge the Commission to delay any adoption of fuel switching measures until after BC Hydro's LTAP.⁴⁰ While the Companies understand the benefits of coordination among utilities at the implementation stage, the Companies' Application deserves consideration on its own merits, irrespective of BC Hydro's timing. The Terasen Utilities submit that evidentiary record in this proceeding is sufficient to permit the Commission to reaffirm the potential benefit associated with exporting clean electricity, and to endorse the proposed fuel switching funding.

³⁸ Exhibit B-1, Appendix 6, p.21

³⁹ BCOAPO Submissions, paras. 31 and 32

⁴⁰ BCSEA-SCBC Submissions, para. 42

(ii) Joint Initiatives (DSM for Low Income Customers)

31. BCOAPO, in paragraphs 5 to 12 of its submissions, presents the case for additional funding for low income measures being included with the Terasen Utilities' EEC portfolio. As indicated in paragraphs 48 to 50 of the Initial Submissions, the Terasen Utilities are supportive of DSM programs for low income customers. BCOAPO correctly observes that one of the program design principles is universality.

32. BCOAPO suggests that low income proposals are "absent" from the proposed portfolio⁴¹ and that the approval of the Application will therefore "grant Terasen 2.5 years of what will be as of June 1, 2009 [the date the new DSM Regulation comes into effect for the Terasen Utilities] 'illegal' DSM measures".⁴² The statement that low income proposals are "absent" from the proposed portfolio is not supported by the evidence. The proposed portfolio includes Joint Initiative funding that the Companies specifically identified as being available for use for still-to-be-developed low income programs.⁴³ While the Companies understand BCOAPO's desire to further increase the funding budgeted for low income programs, BCOAPO is engaged in hyperbole in suggesting that low income proposals are "absent". The legal argument that the portfolio will become "illegal" as of June 1, 2009 is curious. The DSM Regulation does not apply retroactively to Terasen Utilities Application, and would require express legislative language to have that effect. It applies in the context of an expenditure schedule filed after June 1, 2009. Thus, even if BCOAPO had been correct about the absence of funding for low income programs, the suggestion that DSM measures approved prior to the effective date of the DSM Regulation instantly become illegal on June 1, 2009 is untenable.

33. The Companies acknowledged in the Application that other Joint Initiatives may arise in the future, and stated that if additional funding is warranted for future Joint Initiatives, the Companies "intend to re-allocate funding from another program area that is underspent. Alternatively, if all funds for each program area approved with this Application are expected to be used, the Companies would expect to make separate application to the Commission for

⁴¹ BCOAPO Submissions, para. 34

⁴² Contrary to BCOAPO's assertions at para. 4 of its submissions, the Companies do not suggest that DSM for Affordable Housing is itself a "DSM measure" in the sense employed in the DSM Regulation.

⁴³ For instance, at Exhibit B-1, page 67 the Companies stated "Funding for the Companies participation in a DSM incentive program for the Affordable Housing sector will come from the Joint Initiatives allocation if approved."

approval of additional EEC expenditures for Joint Initiatives.”⁴⁴ The DSM Regulation, which was passed following the close of the evidentiary phase of this proceeding, has provided further policy guidance that was absent at the time the Application was filed. Specifically, the Companies consider that the DSM Regulation confirms the role of public utilities in initiating and designing programs directed at low income customers.⁴⁵ The Terasen Utilities have responded to these developments in the Initial Submissions by indicating an intention to design and pursue further funding for low income programs to form part of the Companies’ overall portfolio.

34. The Terasen Utilities respectfully request that the Commission direct the Terasen Utilities to commence the design of additional programs directed at low income customers and file a proposed budget for those programs to be incorporated in the Companies’ EEC portfolio as approved in this Application. The Terasen Utilities are hopeful that they could undertake this work and file an application for further EEC funding by the end of the second quarter 2009,⁴⁶ but to meet this schedule the Companies will require the assistance and expertise of the DSM for Affordable Housing group (of which BCOAPO is a member), in developing the appropriate programs.

(iii) Residential and Commercial Incentive Programs

35. Mr. Plunkett raises valid points about the importance of capturing opportunities that arise through scheduled replacement or new purchases (vs. early retirement) by existing customers so that these opportunities are not "lost". However, as explained at paragraph 27 of the Initial Submissions, these initiatives are already encompassed within the energy efficiency program area in residential and commercial retrofits. The Terasen Utilities' proposal is to obtain an overall funding increase, with the Companies' having the ability to redirect funds to respond to changing circumstances. In the context of that proposal, the Companies' respectfully submit

⁴⁴ Exhibit B-1, p. 67

⁴⁵ The DSM Regulation does not mandate a particular level of expenditure on programs aimed at low income customers, which is the context for the Companies’ statement that the proposed portfolio would comply with the DSM Regulation were it presently applicable. The fact that the funding for Joint Initiatives is not as expansive as could be the case does not make the proposed portfolio “illegal”, as suggested by BCOAPO.

⁴⁶ The Terasen Utilities do not agree with the BCOAPO’s apparent suggestion at para. 20 of its submissions that preparing such programs is a simple matter that could be completed in a very short period of time.

that there is little to be gained from reclassifying and re-naming certain program areas within the portfolio as is proposed by BCSEA-SCBC;⁴⁷ that is form over substance.

36. In the context of discussing residential and commercial incentive programs, BCOAPO expresses “concerns” about issues of DSM cost allocation.⁴⁸ Issues of cost allocation are best addressed in a future rate design application, and do not represent a basis to abandon well considered DSM programs that were developed based on a comprehensive CPR.

(iv) Conservation Education and Outreach

37. As discussed at paragraphs 43 to 45 of the Initial Submissions, Conservation Education and Outreach funding is intended to assist the development of a conservation culture within British Columbia. In simple terms, the education and outreach activities outlined in the Application help to ensure that customers will be receptive to specific EEC programs when they are presented.

38. BC Hydro expressly endorses the Companies’ proposed spending on Conservation Education and Outreach.⁴⁹ CEC, together with numerous parties that filed letters of comment, endorsed the Application more broadly.

39. BCSEA-SCBC expressly supports spending on Conservation Education and Outreach, but suggests that approximately half of the funds earmarked for that purpose be reallocated.⁵⁰ The amount selected for reallocation by Mr. Plunkett (\$6.8 million) appears to be arbitrary. The annual budget for Conservation Education and Outreach was developed in conjunction with the Companies' advertising agency (Wasserman).⁵¹ The budget recognizes that it is necessary to achieve a certain "critical mass" with advertising in order for the advertising to be effective. The reduction proposed by Mr. Plunkett would impair the effectiveness of the advertising efforts overall.

⁴⁷ BCSEA-SCBC Submissions, para. 38

⁴⁸ BCPOAPO Submissions, paras. 37-39

⁴⁹ BC Hydro Submissions, para. 15

⁵⁰ BCSEA-SCBC Submissions, para. 46

⁵¹ Exhibit B-1, Appendix 8

40. BCOAPO similarly concedes that Conservation Education and Outreach “can certainly be valuable tools to effect social change”⁵² but argues that the budget was too large. BCOAPO did not suggest any specific reduction in the budget amount. BCOAPO's submission was based on the incorrect premise that “no details were given [by the Companies] regarding the specifics” of how the budget for this program area was developed.⁵³ In fact, the Terasen Utilities filed the entire proposal from Wasserman, the advertising agency.⁵⁴

41. BCOAPO also argues that the proposed Conservation Education and Outreach budget was too large given that other “far more important components included in that new DSM Regulation such as low-income targeted DSM are notably absent from this Application.”⁵⁵ The Companies respectfully disagree with the suggestion that there is no low income targeted DSM activity identified in the Application, and submit that it is not useful to engage in a debate about whether Conservation Education and Outreach is of greater or lesser importance than programs directed at low income customers. There is ample evidence on the record to support the budgeted amount for Conservation Education and Outreach.⁵⁶ The Companies have already discussed its willingness to undertake additional analysis in furtherance of adding more programs directed at low income customers to the Companies’ overall EEC portfolio.

C. Industrial Sector

42. BCSEA-SCBC was the only intervenor, apart from MEMPR, to comment on DSM for the industrial sector. The Companies have outlined in the Initial Submissions their position on the potential for future industrial DSM programs and also responded to MEMPR's letter of comment. These Reply Submissions only respond to one statement made by BCSEA-SCBC in its submissions.

43. Specifically, BCSEA-SCBC suggests that the Companies “appear not to take issue with Mr. Plunkett's suggestion” that the potential default rate on extended financing must be addressed in the context of costs the Companies would otherwise incur in the form of higher

⁵² BCOAPO Submissions para. 35

⁵³ BCOAPO Submissions, para. 33

⁵⁴ Exhibit B-1, Appendix 8

⁵⁵ BCOAPO Submissions para. 34

⁵⁶ This would include the Wasserman proposal itself, found at Exhibit B-1, Appendix 8

incentive payments to achieve the same level of participation and cost-effective savings under the TRC. The Companies should not be taken as endorsing Mr. Plunkett's analysis. The Terasen Utilities are leery about extending protracted repayment terms to industrial customers, particularly in difficult economic times. Equally, the Companies suggest that a cautious approach is warranted in considering delivering incentives to industrial customers at a high enough dollar level to spur participation adequate to ensure a positive TRC. Both of these options expose customers to risk. The Terasen Utilities will continue to explore opportunities for industrial DSM and will bring forward a proposal if they regard expenditures as being warranted and in the interests of customers.

III. CUSTOMER BENEFITS AND ADVANCEMENT OF GOVERNMENT'S ENERGY OBJECTIVES

44. None of the intervenors took issue with the Companies' evidence on the benefits to customers associated with a well considered EEC portfolio. The GHG implications of the portfolio were also not disputed, with the exception of fuel switching from electricity (addressed above). As noted previously, MEMPR filed a letter of support stating that "The Ministry supports Terasen's application request to increase its demand side management (DSM) activities. The application is aligned with several of the policy action items included in the 2007 British Columbia Energy Plan."⁵⁷

IV. FINANCIAL TREATMENT

45. BC Hydro explicitly supports the Companies' proposed financial treatment, citing the appropriateness of matching the amortization period to the period over which benefits are obtained.⁵⁸ BCSEA-SCBC also supported the proposal in order that the Companies are indifferent between EEC programs and infrastructure projects.⁵⁹ CEC cited letters of comment from commercial groups that supported the proposed financial treatment.⁶⁰

⁵⁷ Exhibit C1-1

⁵⁸ BC Hydro Submissions, para. 11

⁵⁹ BCSEA-SCBC Submissions, para. 72

⁶⁰ CEC Submissions, p.1, citing the Urban Development Institute, a national organization with over 500 corporate members in the UDI Pacific Region.

46. BCOAPO's only submission on the issue of financial treatment was that the Companies "should not earn a return on all of its advertising, education and outreach", and the amortization period should be shortened, because "the arguable benefits of any such program will quickly dissipate after its cessation."⁶¹ BCOAPO provided no evidence to support this suggestion that program benefits quickly dissipate. BCOAPO did not contest in its submissions that the financial treatment sought by the Companies in this Application is expressly contemplated in the Commission's DSM Accounting Policy, and is consistent with the financial treatment that has been approved by the Commission for use by other BC utilities (in particular FortisBC and BC Hydro).⁶² BCOAPO also did not contest the Companies' submissions regarding the advantages associated with capitalizing EEC expenditures, both in terms of helping to reduce volatility and because customers may be better off when the time value of money is considered. The Conservation Education and Outreach spending is linked to programs with a longer life in the sense that it helps to ensure that customers will be receptive to incentive programs when they are proposed. The proposed treatment is consistent with the CICA Handbook.⁶³

47. With respect to the appropriate amortization period, none of the intervenors challenged the Companies' evidence that program costs and incentive costs in the proposed portfolio fall within the normal write-off category in the Commission's DSM Accounting Policy. This is the correct characterization of these costs because they are of an ongoing nature and are aimed at producing the sustained efficiency and conservation benefits being sought in the Application. The Companies' evidence with respect to the range of measure lives outlined in the Application (range from 10 to 25 years, with a weighted period of 22.5 years) was unchallenged.⁶⁴ Based on this evidence, the proposed 20-year amortization period is a reasonable representation of the benefit received by customers from the EEC expenditures.⁶⁵

⁶¹ BCOAPO Submissions, para. 28 and 43

⁶² Exhibit B-1, p.81; Exhibit B-2, BCUC IR 1.42.1, 1.43.2.4.2, 1.41.3; Order G-55-95, June 29, 1995

⁶³ Exhibit B-2, BCUC IR 1.44.1

⁶⁴ Exhibit B-1, p.80; Exhibit B-3, BCUC IR 2.22.1. In BCUC IR 1.43.1.3 (Exhibit B-2), the Companies expressed the view that its EEC program expenditures would not change from having long term benefits that extend out numerous years.

⁶⁵ Exhibit B-1, pp.80-81; Exhibit B-2, BCUC IR 1.41.3,1.43.2.1; Exhibit B-3, BCUC IR 2.30.1

V. ASSESSMENT CRITERIA AND ACCOUNTABILITY

A. Portfolio Analysis

48. BC Hydro supports the proposed portfolio approach, and the CEC, MEMPR and BCOAPO were silent in that regard.

49. Mr. Plunkett's evidence, cited by BCSEA-SCBC, that the Companies' proposed assessment methodology is "problematic", appears to be based on a mischaracterization of the Companies' proposal. The Companies are not, as Mr. Plunkett suggests, proposing "that economic performance be judged at the portfolio level only".⁶⁶ As indicated at paragraph 99 of the Initial Submissions, the Companies described in the Application a process whereby they would re-assess the performance of the EEC measures on a regular basis and contemplate reassigning funding from underachieving program areas to higher performing program areas. This is designed to maximize the net resource benefits within the overall parameters of the portfolio.

50. The Companies essentially agree with Mr. Plunkett's view that net benefit maximization should be pursued, except in so far as the dogmatic pursuit of that objective would preclude consideration of other valuable policy objectives. Mr. Plunkett concedes that there can be "compelling policy reasons" to depart from his principle of maximization,⁶⁷ but his recommended approach simply requires measures whose costs exceed their benefits to be "either dropped from the analysis, or included only in limited, customized applications where they would be likely to be cost effective."⁶⁸ The Companies submit that it would be short-sighted to focus all DSM investment in only the highest yielding activities, to the exclusion of other program principles such as universality and valuable program areas like education and new technologies. This is discussed in paragraph 103 of the Initial Submissions. The balanced approach inherent in the proposed portfolio is not unique to the Terasen Utilities.⁶⁹

⁶⁶ Exhibit C5-5, p.14

⁶⁷ Exhibit C5-5, p.15

⁶⁸ Exhibit C5-5, p.9

⁶⁹ Exhibit C5-5, p.10, footnote 1. Mr. Plunkett concedes that other jurisdictions, such as Vermont, have tempered the portfolio maximization objective with principles such as equitable distribution of portfolio net benefits.

51. BCSEA-SCBC recognize the benefit of, and expressly support, the Companies' proposal in the area of Innovative Technologies, Natural Gas Vehicles and Measurement Program Area.⁷⁰ As indicated above, these programs would likely not be possible in the absence of a portfolio approach.

52. BCOAPO expressed a preference for the use of the "Societal Test" in evaluating programs.⁷¹ The Terasen Utilities discussed in paragraph 100 of the Initial Submissions how the DSM Regulation emphasizes the use of TRC above all other tests. In creating the proposed portfolio, the Companies have used the TRC approach endorsed in the DSM Regulation.

B. Free Riders

53. BCOAPO and BCSEA-SCBC have made submissions on whether free riders should be accounted for in the determination of net program benefits (i.e. the TRC ratio). The proposed portfolio has a TRC ratio well in excess of 1.0 even accounting for free riders. With respect to the assessment of future portfolios, the Terasen Utilities repeat and rely on the submissions made in paragraphs 106 to 108 of the Initial Submissions. The DSM Regulation does not require consideration of free riders.

C. Attribution of Benefits

54. BCOAPO and BCSEA-SCBC have made submissions on attribution of benefits. This issue is not relevant to the assessment of the proposed portfolio, as the assessment does not include any attribution of benefits. With respect to the assessment of future portfolios, the Terasen Utilities repeat and rely on the submissions made in paragraphs 109 to 111 of the Initial Submissions.

D. Accountability

55. All intervenors supported the proposed accountability mechanisms. CEC also expressed confidence in the Companies' motivation to maintain its competitive position vis a vis

⁷⁰ BCSEA-SCBC Submissions, para. 62

⁷¹ BCOAPO Submissions, para. 10

other fuel sources, and suggested that the Companies' approach in this Application indicated that they are sensitive to that concern.⁷²

56. BCOAPO seeks, in the alternative, a direction that the Companies include an independent audit and an audit sub-committee with ratepayer representatives to address areas of concern such as attribution, free ridership and the redirection of funds within the portfolio.⁷³ The Companies submit that this is unnecessary. The Stakeholder Committee proposed in the Application will provide a forum for stakeholders to engage in a dialogue with the Companies. The Companies should ultimately be responsible for the management of the portfolio.

57. The Companies reiterate that the funding requested in this Application is a budgeted amount, and funds are only added to the regulatory asset deferral account if those funds are spent on the program areas identified in this Application. The TRC for the portfolio is significantly in excess of 1.0.

VI. COORDINATION

58. BCSEA-SCBC argue that there is insufficient coordination among utilities in BC and that the Commission should require the Companies to modify the EEC plan "to integrate electricity savings into the design and delivery of gas efficiency programs".⁷⁴ The Companies and BC Hydro are in agreement that BCSEA-SCBC's assertion that there is insufficient coordination among BC utilities ignores the BC Government's coordination role through LiveSmart BC and the past history of successful coordination between BC Hydro and Terasen Utilities where there exists common interests.⁷⁵ As observed by BC Hydro,⁷⁶ Mr. Plunkett's evidence does not even mention LiveSmart BC.

59. Section 44.2(5) of the Act requires the Commission, in assessing the Application, to consider the interests of those individuals "who receive or who may receive service from the public utility". Requiring the Companies to modify the EEC plan "to integrate electricity savings

⁷² CEC Submissions, p.2

⁷³ BCOAPO Submissions, para. 43

⁷⁴ BCSEA-SCBC Submissions, para. 83

⁷⁵ BC Hydro Submissions, para. 18; Exhibit B-1, p.101

⁷⁶ BC Hydro Submissions, footnote 16

into the design and delivery of gas efficiency programs" goes beyond the statutory mandate of the Commission.

VII. CONCLUSION

60. The Terasen Utilities submit that the enhanced EEC funding sought in this Application will provide greater cost-effective assistance to customers to manage their energy costs, and will support the government's energy objectives as defined in the *Utilities Commission Act* and detailed in the Energy Plan. The need for additional funding is unanimously accepted by intervenors in this proceeding.

All of which is respectfully submitted.

[Original signed by Matthew Ghikas]

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