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**BY ELECTRONIC FILING**

British Columbia Utilities Commission  
6th floor, 900 Howe Street  
Vancouver, B.C. V6Z 2N3

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

Dear Sirs/Mesdames:

**Re: The Terasen Utilities (Terasen Gas Inc., Terasen Gas (Vancouver Island)  
Inc. and Terasen Gas (Whistler) Inc.)  
2010 Long Term Resource Plan**

We enclose the electronic copy of The Terasen Utilities' Final Submission with respect to the above application.

The requisite 20 hard copies of same will follow by courier.

Yours truly,

**FASKEN MARTINEAU DuMOULIN LLP**

*[Original signed by Christopher Bystrom]*

Christopher Bystrom

CRB/ccm

Encl.

**THE TERASEN UTILITIES**  
**(TERASEN GAS INC., TERASEN GAS (VANCOUVER ISLAND) INC., AND**  
**TERASEN GAS (WHISTLER) INC.)**

**2010 LONG TERM RESOURCE PLAN**

**FINAL SUBMISSION OF THE TERASEN UTILITIES**

**NOVEMBER 16, 2010**

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## **2010 LONG TERM RESOURCE PLAN – FINAL SUBMISSIONS OF THE TERASEN UTILITIES**

### **I. INTRODUCTION**

1. Terasen Gas Inc. (“TGI”), Terasen Gas (Vancouver Island) Inc. (“TGVI”) and Terasen Gas (Whistler) Inc. (“TGW”) (together, the “Terasen Utilities”) respectfully request that the Commission accept the Terasen Utilities 2010 Long Term Resource Plan (“2010 LTRP”) filed July 15, 2010, pursuant to section 44.1(6) of the *Utilities Commission Act* (the “UCA”).

2. This submission will discuss the following:

- (a) The Regulatory Context;
- (b) The Demand Forecast;
- (c) Demand-Side Measures;
- (d) Facilities and Energy Purchases
- (e) The Three Low or No-Carbon Initiatives;
- (f) The British Columbia Energy Objectives and the *Clean Energy Act* (“CEA”); and
- (g) The Public Interest.

3. For the reasons expressed below, the Terasen Utilities submit that the 2010 LTRP has met the requirements of the UCA and is in the public interest. It should therefore be accepted as filed.

### **II. SUBMISSIONS ON 2010 LTRP COMPONENTS**

#### **A. Regulatory Context**

4. The Terasen Utilities are seeking acceptance that carrying out the 2010 LTRP is in the public interest pursuant to section 44.1(6) of the UCA. The review of a long-term resource plan under section 44.1 of the UCA provides an opportunity for the Commission to ensure that public utilities engage in appropriate resource planning including demand-side measures. The Commission’s public interest determination under subsection 44.1(6) must be

informed by the criteria identified in subsection 44.1(8), including the consideration of British Columbia's energy objectives, "whether the plan shows that the public utility intends to pursue adequate, cost-effective demand-side measures", and the interests of persons in British Columbia who receive or may receive service from the Terasen Utilities.

5. The 2010 LTRP describes a point in time in the Terasen Utilities high-level, dynamic and ongoing planning process. It is a contextual document that considers the planning environment, including B.C.'s energy objectives, input from customers and other stakeholders and provides stakeholders with insight into the future needs of the utility and the issues the Terasen Utilities must continue to monitor in order to continue serving customers in the most cost-effective, safe and reliable manner. The 2010 LTRP has resulted in the 8-point Action Plan presented in Section 8 of Exhibit B-1.

6. The existence of other regulatory processes directly related to resource planning have influenced the scope of what can be efficiently addressed in the 2010 LTRP. In addition to the LTRP process, the Terasen Utilities have separate processes directly related to its resource planning, including seeking Commission approval for Annual Contracting Plans, the filing of individual gas supply contracts, the Gas Supply Mitigation Incentive Plan and applications for Energy Efficiency and Conservation funding. In short, the 2010 LTRP provides the Commission and stakeholders with an overall indication of where the Company is headed, leaving the details to be addressed in other processes.

7. As section 44.1 filings are a higher-level planning document, there is a need for further Commission consideration of key matters described in the 2010 LTRP, including the Action Plan. For instance, the Terasen Utilities can generally only proceed with significant capital projects once a CPCN has been obtained. Similarly, the low- or no-carbon initiatives require Commission approval and the Terasen Utilities have planned separate processes to permit a more in-depth assessment of these initiatives. Approval of a long-term resource plan pursuant to subsection 44.1(6) by itself does not ensure cost recovery for initiatives and projects described in it. It is noted that in some cases additional approvals are sought in conjunction with acceptance of a long-term resource plan, but that, in the present case, the Terasen Utilities are only seeking acceptance of the long-term resource plan.

## **B. Demand Forecast**

8. The Terasen Utilities traditional natural gas demand forecast is presented in Section 4 of the 2010 LTRP. The reference forecast takes into account forecasted EEC savings based on current approved funding levels, but no additional EEC funding.<sup>1</sup> A demand forecast prior to any EEC savings is presented in Attachment 15.1.1 to Exhibit B-5.

9. There were relatively few information requests on the demand forecast, and those information requests were predominantly in the first round.<sup>2</sup> The Terasen Utilities provided the requested information and submit that no material issues were raised with the forecast. The Terasen Utilities demand forecast method has regularly been scrutinized in Commission proceedings and has been accepted as reasonable on numerous occasions.

10. The Terasen Utilities also presented their new forecasting initiatives in section 4 of the 2010 LTRP, including an end use natural gas demand forecasting methodology. Although still under development and not yet ready for planning purposes, these new forecasting methods are important initiatives that will allow Terasen Utilities to continue plan to meet customer demand in the future in light of changing energy use patterns and energy policy.<sup>3</sup>

## **C. Demand-Side Measures**

11. The Terasen Utilities plan of how they intend to reduce the demand by taking cost-effective demand-side measures is to continue to make use of the approved EEC funding for 2010 and 2011, to complete the required analytical and planning work for a full EEC funding request and to apply for specific levels of expanded and ongoing EEC funding post 2011, which will include measures for low income housing, rental accommodations and student education.<sup>4</sup>

12. Section 5 of the 2010 LTRP provides information on the existing EEC programs and future programs. Programs that are planned to begin in late 2010 include programs for interruptible industrial customers and innovative technologies.<sup>5</sup> The Terasen Utilities propose to create programs that support a holistic approach to energy efficiency, the end goal of which is

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<sup>1</sup> Exhibit B-1, page 91, section 4.2.6.2. Exhibit B-5, BCUC IR 1.15.1.1.

<sup>2</sup> E.g., Exhibit B-5, BCUC IRs 1.14 to 1.19; Exhibit B-3, BCOAPO 1.5.1 and 1.6.1.

<sup>3</sup> Exhibit B-1, Section 4.3, page 95 ff.

<sup>4</sup> Exhibit B-1, section 5; Exhibit B-10, BCUC IR 2.4.1; Exhibit B-5, BCUC IR 1.38.1.

<sup>5</sup> Exhibit B-1, page 119.

market transformation.<sup>6</sup> The Terasen Utilities will continue to develop initiatives intended to assist low-income households in reducing energy consumption, making rental accommodations more energy efficient, as well as developing programs for students in the Utilities' service areas.<sup>7</sup> While EEC programs have not been initiated in the TGW service area in the past, TGW plans to include funding for EEC activity in its RRA for 2012.<sup>8</sup>

13. As the analytic and planning work that is necessary for a full EEC funding request has not yet been completed, the Terasen Utilities have presented three EEC scenarios in section 5.5 of the LTRP as illustrations of the range of energy savings that may be realized from continued EEC funding.<sup>9</sup> The energy savings predicted by EEC Scenarios B or C can be combined with the demand forecast presented in the 2010 LTRP<sup>10</sup> to calculate estimates of the demand for energy that the Terasen Utilities expect to serve after it has taken cost-effective demand-side measures.

14. The Terasen Utilities responded to numerous information requests on its plan for future EEC programs and its three EEC scenarios.<sup>11</sup> The various issues with creating an EEC portfolio and the details of the Terasen Utilities EEC funding request will be more fully canvassed in the Terasen Utilities' next revenue requirements applications, where an EEC funding request will be made for continued and expanded EEC funding.

15. The Terasen Utilities submit that they have met the requirement of the Act applicable to the 2010 LTRP by demonstrating that they intend to pursue adequate, cost-effective demand-side measures.<sup>12</sup>

#### **D. Facilities and Energy Purchases**

16. Section 6.1 of the 2010 LTRP examines the facilities that the Terasen Utilities will or may need to construct to serve the estimated natural gas demand over the long term. Appendix D of the 2010 LTRP provides the Terasen Utilities' capital plans which describe the facilities intended to be constructed or extended in the short term in order to serve the estimated

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<sup>6</sup> Exhibit B-1, pages 118 and 127.

<sup>7</sup> Exhibit B-1, page 119.

<sup>8</sup> Exhibit B-1, page 119.

<sup>9</sup> Exhibit B-5, BCUC IR 1.38.1.

<sup>10</sup> See Exhibit B-1, Appendices B-2 and B-3. Also see Exhibit B-5, Attachment 15.1 for a fully functional spreadsheet.

<sup>11</sup> E.g., Exhibit B-5, BCUC IRs 1.32 to 1.56 and Exhibit B-10, BCUC IR 2.3 to 2.4.

<sup>12</sup> Exhibit B-5, BCUC IR 1.38.1 and Exhibit B-10, BCUC IR 2.3.1.3 and 2.1.4.1.

demand. This Section of the 2010 LTRP also describes the Terasen Utilities' efforts and plans to enhance their asset management strategy and develop a long-term system sustainment plan to address aging infrastructure and manage other asset performance parameters. The Terasen Utilities are not seeking approval of these expenditures in this Application. Approvals of capital expenditures will be sought in the ordinary course in the Terasen Utilities' revenue requirements and CPCN applications, as has been done in the past.

17. The Terasen Utilities' gas supply planning to meet the demand forecast is provided in section 6.2 of the 2010 LTRP. The fundamental objective of the plan is to secure gas supply over the long term while minimizing the cost of the annual portfolio. The Terasen Utilities buy their gas supply resources from third parties, which is overseen by the Commission through the filing of the Annual Contracting Plan<sup>13</sup> and individual gas supply contracts. The resource plan in the 2010 LTRP is therefore at a higher level than these other more specific filings. The Terasen Utilities action plan for gas supply is to continue to protect and promote the needs of its customers and the market place by:<sup>14</sup>

- (a) Relationship building with new producers active in the Horn River and Montney plays including establishing contractual agreements in order to acquire B.C. unconventional supply in the portfolios.
- (b) Facilitating the increase of gas flow to Station 2 and on T-South in order to increase market liquidity within B.C. which in turn would reduce the likelihood of stranding capacity on the T-South system.
- (c) Entering into multi-year contracts with producers at Station 2 and upstream at the Ft. Nelson plant's outlet in order to ensure long term access to supply.
- (d) Representing customers' interests in NGTL and other regulatory proceedings due to their direct affect on the supply and pricing of gas in the B.C. market.
- (e) Pursuing the T-South Enhanced Service pilot with Westcoast in order to promote southbound gas supply in and through the province.

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<sup>13</sup> Exhibit B-1, page 160.

<sup>14</sup> Exhibit B-1, page 179 and Page 187, Action Plan Item 8.



- (f) Conducting a preliminary feasibility study to determine how best to address regional constraints including constraints on the Terasen Utilities' own systems. The T-South Enhanced Service pilot project sets the foundation for TGI to evaluate the feasibility of expanding the system between Kingsvale and Oliver and between Yahk and Kingsgate. TGI has begun conducting Stage 1 preliminary assessment activities in accordance with Commission approvals. Based on the results of Stage 1 activities, TGI will assess the timing and support for proceeding with Stage 2 activities leading to a potential CPCN.
- (g) Continuously monitor the developments related to B.C. supply and infrastructure in order to meet the objectives of the Annual Contracting Plan over the long term.

18. The Terasen Utilities' plan for facilities and gas supply purchases is sufficiently flexible to account for the decrease in forecast demand due to increased EEC funding if approved by the Commission.

#### **E. Low or No-Carbon Initiatives**

19. The Terasen Utilities three low-or no-carbon initiatives described in section 3 of the 2010 LTRP (alternative energy services, natural gas vehicle services and biomethane gas supply) are the same as those described in the 2008 Resource Plan Action Items. They are consistent with British Columbia's energy objective of reducing GHG emissions, and have been approached with the interests of customers in mind; however, they are still in a nascent stage. While recognizing that these initiatives require further Commission approvals before they can proceed, the Terasen Utilities believe it is important to be transparent with stakeholders regarding these initiatives and to plan appropriately. Accordingly, the Terasen Utilities have described in the 2010 LTRP the nature of these services and how demand for the services may be forecast and met.

20. The Commission Panel raised a legal issue regarding the extent to which these no-or low-carbon initiatives are regulated public utility services. The Terasen Utilities submit that these are all regulated services and in the public interest for the Terasen Utilities to pursue.<sup>15</sup> However, it is appropriate for the Commission to deal with that issue, along with other

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<sup>15</sup> With respect to alternative energy services see Exhibit B-10, BCUC IRs 2.5, 2.7, 2.9 and 2.10. With respect to NGV, please see Exhibit B-5, BCUC IRs 1.10, 1.12, and 1.31 and Exhibit B-10, BCUC IRs 2.7, 2.10, 2.12, 2.13, 2.14, 2.24, 2.26 and 2.33. Biogas is being considered in TGI's Biomethane Gas Application proceeding.

initiative-specific considerations, in the other proceedings dealing with the specific initiatives. The Terasen Utilities explained why this approach of initiative-specific applications makes sense in their submission filed November 9, 2010.<sup>16</sup>

21. The Terasen Utilities are not seeking approvals of any specific initiatives in this 2010 LTRP. The acceptance of the 2010 LTRP would not be a prejudgment of future applications for these initiatives, just as it would not prejudice CPCNs related to gas infrastructure. Similarly, the Commission did not prejudge future applications relating to these specific initiatives when the Commission accepted the 2008 Resource Plan. Planning approvals under section 44.1 must, to that extent, be considered at a higher level.

**F. British Columbia’s Energy Objectives and the *Clean Energy Act***

22. The 2010 LTRP is supported by British Columbia’s energy objectives. These objectives are listed in section 2 of the CEA, and must be considered by the Commission pursuant to subsection 44.1(8) of the UCA.<sup>17</sup> As set out in the following table, the 2010 LTRP is supported by a number of energy objectives.

Energy Objective	2010 LTRP
To take demand-side measures and to conserve energy (section 2(b) of the CEA)	The Terasen Utilities plan to use existing EEC funding and file for approval of ongoing and expanded funding post-2012 after the necessary analytic and planning work is complete. <sup>18</sup>
To use and foster the development in British Columbia of innovative technologies that support energy conservation and efficiency and the use of clean or renewable resources (section 2(d) of the CEA)	The Terasen Utilities will be implementing an innovative technologies EEC program in late 2010 that supports energy conservation and efficiency. <sup>19</sup>  The Terasen Utilities low- and no-carbon initiatives also support this objective. <sup>20</sup>
To reduce BC greenhouse gas emissions (section 2(g) of the CEA)	The Terasen’s EEC programs and plans to seek approval for and implement ongoing and expanded funding would reduce GHG emissions by reducing use of natural gas. <sup>21</sup>  The Terasen Utilities low or no-carbon initiatives would also reduce GHG emissions. <sup>22</sup>

<sup>16</sup> Exhibit B-11. The submission addressed whether a second procedural conference is necessary.

<sup>17</sup> Section 44.1(8)(a).

<sup>18</sup> Exhibit B-5, BCUC IR 1.38.1.

<sup>19</sup> Exhibit B-1, page 119.

<sup>20</sup> Exhibit B-1, Sections 3 and 5.4.2, page 119.

<sup>21</sup> Exhibit B-1, section 5.

Energy Objective	2010 LTRP
To encourage the switching from one kind of energy source or use to another that decreases greenhouse gas emissions in British Columbia (section 2(h) of the CEA)	The Terasen Utilities EEC programming currently includes high to low carbon fuel switch activities. <sup>23</sup> The Terasen Utilities NGV EEC program <sup>24</sup> and NGV service initiatives <sup>25</sup> would encourage the switching from diesel and gasoline to NGV, which would decrease greenhouse emissions in B.C.
To encourage communities to reduce greenhouse gas emissions and use energy efficiently (section 2(i) of the CEA)	The Terasen Utilities existing and planned EEC programs would encourage communities to reduce GHG emissions and use energy efficiently. <sup>26</sup>  The Terasen Utilities low- and no-carbon initiatives also support this objective. <sup>27</sup>
To reduce waste by encouraging the use of waste heat, biogas and biomass (section 2(j) of the CEA)	The Terasen Utilities innovative technologies EEC program <sup>28</sup> and AES and biogas initiatives <sup>29</sup> would reduce waste by encouraging the use of waste heat, biogas and biomass.
To encourage economic development and the creation and retention of jobs (section 2(k) of the CEA)	The implementation of the Terasen Utilities EEC programs and capital plans would encourage development and the creation and retention of jobs. <sup>30</sup>
To foster the development of first nation and rural communities through the use and development of clean or renewable resources (section 2(l) of the CEA).	As part of the implementation of the Terasen Utilities EEC programs, training for skills and energy efficiency improvements for rural industry and businesses will help foster the development of First Nations and Rural Communities. <sup>31</sup>

23. The 2010 LTRP also does not hamper any of the other objectives in section 2 of the CEA, including the objective to achieve electricity self-sufficiency.<sup>32</sup>

**G. The Public Interest**

24. The Terasen Utilities submit that carrying out the 2010 LTRP is in the public interest. The Terasen Utilities have demonstrated that they are diligently planning for continued

<sup>22</sup> See, e.g., Exhibit B-1, Section 3.

<sup>23</sup> Exhibit B-1, page 117.

<sup>24</sup> See, e.g., Exhibit B-1, page 119.

<sup>25</sup> Exhibit B-1, Section 3.1.2.

<sup>26</sup> Exhibit B-1, pages 115 to 119.

<sup>27</sup> Exhibit B-1, Sections 3 and 5.4.2, page 119.

<sup>28</sup> Exhibit B-1, page 119.

<sup>29</sup> Exhibit B-1, sections 3.1.1 and 3.1.3.

<sup>30</sup> Regarding EEC Programs, see Exhibit B-5, BCUC IR 1.38.1.

<sup>31</sup> Exhibit B-5, BCUC IR 1.38.1.

<sup>32</sup> Also note that the Terasen Utilities are not prescribed public utilities for the purposes of section 19 of the CEA.

safe and reliable service to customers, by taking into account the planning environment and planning appropriately to meet forecast demand through implementing demand-side measures, securing gas supply and prudently planning for the construction or expansion of facilities.

25. The 2010 LTRP is summed up in the Action Plan which describes the activities that the Terasen Utilities intend to pursue over the next four years based on the information and recommendations provided in the resource plan. The Action Plan is in the public interest because:<sup>33</sup>

- (a) The 2010 LTRP is based on current trends in public policy on energy and GHG emissions in B.C.;
- (b) The four-year Action Plan will be revised again in two years when the next resource plan is submitted, has a short term implementation time frame and can be adjusted to address emerging policies and trends;
- (c) The actions are aimed at helping to reach provincial GHG emissions reduction targets, helping customers reach their own GHG emissions reduction goals and providing safe, reliable and secure energy service for all of our customers;
- (d) The actions that the Terasen Utilities will undertake during the next two to four years balance the development of new energy solutions for customers within today's economic and resource constraints; and
- (e) The Action Plan includes ongoing work toward the development and analysis of a range of potential future scenarios as part of our long term resource planning process.

26. It is therefore in the interest of persons who receive or may receive service from the Terasen Utilities that the Terasen Utilities carry out the 2010 LTRP.

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<sup>33</sup> Exhibit B-10, CEC IR 2.1.1.1.

**III. CONCLUSION**

27. For the reasons described above, the Terasen Utilities respectfully submit that the 2010 LTRP meets the requirements of the UCA and should be accepted as filed pursuant to section 44.1(6) of the UCA.

ALL OF WHICH IS RESPECTFULLY SUBMITTED.

FASKEN MARTINEAU DuMOULIN LLP

Per: *original signed by*

Dated: November 16, 2010

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**Chris Bystrom**  
**Counsel for the Terasen Utilities**