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October 24, 2008

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British Columbia Utilities Commission  
Sixth Floor  
900 Howe Street  
Vancouver, B.C.  
V6Z 2N3

Attention: Ms. Erica M. Hamilton, Commission Secretary

Dear Ms. Hamilton:

**Re: Terasen Gas Inc., Terasen Gas (Vancouver Island) Inc. and Terasen Gas (Whistler) Inc. (collectively the "Companies") 2008 Resource Plan**

**Reply Submissions of the Companies**

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On June 22, 2008, the Companies filed their consolidated 2008 Resource Plan. In accordance with Commission Order No. G-120-08 setting out the Regulatory Timetable, the Companies respectfully attach their Reply Submissions.

If there are any questions regarding the attached, please contact the undersigned or Ken Ross at (604) 576-7343 or [ken.ross@terasengas.com](mailto:ken.ross@terasengas.com).

Yours very truly,

**TERASEN GAS INC.,  
TERASEN GAS (VANCOUVER ISLAND) INC. and  
TERASEN GAS (WHISTLER) INC.**

***Original signed:***

Tom A. Loski

Attachment

cc: Registered Parties (e-mail only)

**BRITISH COLUMBIA UTILITIES COMMISSION**

**IN THE MATTER OF the *Utilities Commission Act*,  
R.S.B.C. 1996, Chapter 473 (the “*Act*”)**

**and**

**Terasen Gas Inc.,  
Terasen Gas (Vancouver Island) Inc., and  
Terasen Gas (Whistler) Inc., joint**

**Application for British Columbia Utilities Commission Acceptance of their  
2008 Resource Plan**

**REPLY SUBMISSIONS OF**

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

**October 24, 2008**

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**REPLY SUBMISSIONS OF  
TERASEN GAS INC., TERASEN GAS (VANCOUVER ISLAND) INC. and  
TERASEN GAS (WHISTLER) INC.**

**A. INTRODUCTION**

1. These submissions represent Terasen Gas' Reply Submissions to the submissions of British Columbia Hydro and Power Authority ("BC Hydro") and the British Columbia Public Interest Advocacy Centre on behalf of the British Columbia Old Age Pensioners Organization *et al* ("BCOAPO"), which were the only two registered Intervenor who submitted information requests and final arguments in this proceeding. While these Intervenor have some concerns with some aspects of the background or methodology presented by Terasen Gas in its 2008 Resource Plan, neither Intervenor disagrees with the action plan set out in the 2008 Resource Plan or suggests that the 2008 Resource Plan should not be accepted by the Commission.

**B. REPLY TO BC HYDRO SUBMISSIONS**

2. BC Hydro's very brief submission only makes reference to matters that, by Commission Letter L-45-08<sup>1</sup>, must be addressed as part of Terasen Gas' Energy Efficiency and Conservation ("EEC") Application.<sup>2</sup> Accordingly, BC Hydro's substantive submissions will be addressed by Terasen Gas in the EEC Application.

**C. REPLY TO BCOAPO SUBMISSIONS**

3. BCOAPO's submissions take the form of a "comment", rather than a direct challenge to the action plan set out in the 2008 Resource Plan. BCOAPO's specific "comments" are addressed below.

4. BCOAPO concedes that using natural gas for end uses such as space and water heating instead of electricity will decrease the need for electricity, but argues that this contradicts the provincial objective of reducing GHGs<sup>3</sup>. The evidence on the record, specifically in Section 2.2.2 of the Application,<sup>4</sup> demonstrates how the approach identified by

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<sup>1</sup> Exhibit A-3, BCUC Letter

<sup>2</sup> Final Submissions of BC Hydro, October 14, 2008. p2 – paragraph 2.

<sup>3</sup> BCOAPO Final Submission, October 16, 2008. p3.

<sup>4</sup> Exhibit B-1, p 18-21

Terasen Gas is aligned with Provincial objectives to reduce GHGs and identifies where in the Resource Plan to find more information about specific initiatives. Terasen Gas has also clearly laid out details in Section 4 of the Application regarding increased energy efficiency and conservation programming as well as in Section 7 of the Application how increasing the use of natural gas, such as in its use as a transportation fuel or for electrifying Ports represent other initiatives and end uses that will reduce GHGs and help to address this Provincial objective.

5. BCOAPO also claims that Terasen Gas' approach to examining GHG emissions is solely regional<sup>5</sup>. In fact, the evidence is that Terasen Gas has examined GHG emissions from a provincial policy perspective<sup>6</sup> as well as a regional perspective. Terasen Gas submits that these perspectives are consistent, and that it is not appropriate to ignore the regional aspect of this issue and the fact that both the Region and the Province of BC have only a finite amount of renewable resources that can be economically captured.

6. BCOAPO disagrees with Terasen Gas' reference case demand scenario, suggesting that Terasen Gas has failed to incorporate consideration of economic cycles and suggesting that the low growth scenario instead represents a reference case from which the robust and low growth scenarios should be based<sup>7</sup>. The low growth scenario includes a number of factors that, should they all occur together within the planning period, could cause the low demand estimated under this scenario<sup>8</sup>. While BCOAPO suggests that these factors have now all occurred and will affect natural gas demand over the long term, Terasen Gas submits that such has not yet been observed and is not a foregone conclusion. While the current U.S. economic crisis is affecting global economies, the full impact is not yet determined and its affect on the other two forecast drivers cited by BCOAPO in its final submission<sup>9</sup> is still uncertain.<sup>10</sup> Further, it can also be expected that over the 20 year planning time frame of the

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<sup>5</sup> BCOAPO Final Submission, October 16, 2008. p3.

<sup>6</sup> Exhibit B-1, p 18-21

<sup>7</sup> BCOAPO Final Submission, October 16, 2008. p2.

<sup>8</sup> Exhibit B-1. p36.

<sup>9</sup> BCOAPO Final Submission, October 16, 2008. p2.

<sup>10</sup> Exhibit B-1, Section 3.3, page 35 explains that many future scenarios are possible and that Terasen Gas has described only two in addition to the reference case that could reasonably be expected to result in high and low demand forecasts. These two scenarios bound a broad range of potential outcomes that Terasen Gas needs to be prepared for. For example, the increased difficulty in borrowing money as a result of the current financial crisis could mean that funding to develop and build new technologies is hard to acquire. This condition could stall investment in energy efficiency and renewable energy projects. In such a case, reliance on end use fossil fuel consumption could continue and perhaps grow, and provincial targets for renewable, self sufficient electricity supply might not be met. These conditions are among many possible scenarios within the high and low that could yet occur.

2008 Resource Plan, other economic cycles, including economic upturns, will likely also be experienced. Terasen Gas therefore submits that while economic cycles can be difficult to predict, the demand forecast presented in the 2008 Resource Plan is a long-term forecast and the reference case presented in the 2008 Resource Plan remains a reasonable estimate of future demand and the high and low growth demand scenarios continue to bound a reasonable range of possible demand outcomes including economic cycles. Terasen Gas will continue to review and update its long-range forecast as new information becomes available, primarily within the timeframes of its annual planning cycles.

7. BCOAPO expresses its concern with regional infrastructure and appears to recognize the lengthy lead times required for gas infrastructure projects<sup>11</sup>. Terasen Gas agrees with BCOAPO's concern in this regard and has provided the discussion on regional infrastructure issues to give insight into how and why Terasen Gas takes actions to secure reliable supply without waiting for the market. The Action Plan items 3, 6 and 7<sup>12</sup> address this issue and identify specific solutions Terasen Gas will participate in to alleviate the impact of looming regional infrastructure constraints that could affect its customers.

8. Finally BCOAPO expresses concern with regard to Terasen Gas' design day demand methodology, specifically with respect to the co-linearity of the HDD13 and HDD18 weather variables included in the methodology report<sup>13</sup>. In its response to BCOAPO information request 1.14.3 and 1.14.4<sup>14</sup>, Terasen Gas acknowledges that co-linearity exists between these variables, but expresses concerns that when modelled individually, the HDD13 variable alone appears to over estimate peak demand, while the HDD18 variable alone appears to under estimate demand when compared to previous actual data. With regards to the R-square statistics that were reported in the Resource Plan, Terasen confirms those figures are the adjusted R-square values, which do incorporate the number of regressors employed in the model. The methodology used by Terasen Gas to determine design day demand has been used for several years and is a reasonable way to estimate future design day demand. Terasen Gas submits that it undertakes careful effort to provide stakeholders with clear and understandable explanations of its demand forecasting methodology and results at its Resource Planning information sessions and within its Resource Plan. Terasen Gas further

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<sup>11</sup> Ibid. p5.

<sup>12</sup> Exhibit B-1. p 111-112.

<sup>13</sup> BCOAPO Final Submission, October 16, 2008. p6.

<sup>14</sup> Terasen Gas Response to BCOAPO IR1, September 30, 2008.

submits that the level of detail and breadth of information contained in the 2008 Resource Plan is appropriate. Terasen Gas will continue to review its forecasting methodology and make appropriate adjustments when improved information or changes in accepted, reasonable forecasting practices are identified.

**D. CONCLUSION**

9. Terasen Gas respectfully submits that the 2008 Resource Plan should be approved in the form submitted on June 29, 2008.

All of which is respectfully submitted.

**TERASEN GAS INC.,  
TERASEN GAS (VANCOUVER ISLAND) INC., and  
TERASEN GAS (WHISTLER) INC.**

***Original signed:***

Tom A. Loski

October 24, 2008