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November 6, 2006

Ministry of Energy, Mines & Petroleum Resources
Oil & Gas Policy Branch
Oil & Gas Division
5th Floor, 1810 Blanshard Street
P.O. Box 9318 Stn. Prov. Govt.
Victoria, B.C. V8W 9N3

Attention: Ms. Jennifer Davison, Senior Regulatory Advisor

Dear Ms. Davison:

Re: Terasen Gas Inc. ("Terasen Gas")
2006 Annual Review and Mid-Term Assessment Review

Response to the Ministry of Energy, Mines & Petroleum Resources ("MEMPR") Information Request ("IR") No. 1

On October 16, 2006, Terasen Gas filed its Annual Review and Mid-Term Assessment Review material. On October 25, 2006, according to the Regulatory Timetable, the MEMPR filed its IR No. 1.

Terasen Gas respectfully submits the attached response to MEMPR IR No. 1.

If there are any questions regarding the attached, please contact Mr. Tom Loski, Director, Regulatory Affairs at (604) 592-7464.

Yours very truly,

TERASEN GAS INC.

Original signed by: Tom Loski

For: Scott A. Thomson

Attachment

c: Mr. R.J. Pellatt, Commission Secretary, BCUC
2004 – 2007 PBR NSP Participants

1.0 Reference: Customer Additions Forecast, Economic Outlook for British Columbia, Section A-4 Gas Sales and Transportation Volumes, page 6.

"Also, TGI continues to focus on educating existing and prospective customers as to the economic benefits of natural gas for space and water heating relative to other energy sources as well as offer programs to encourage natural gas use."

1.1 Please describe the programs that Terasen Gas has in place to encourage natural gas use.

Response:

Of the existing 2006 programs, three in particular are focused on encouraging efficient natural gas use over other energy forms in the new construction sector. The three programs are the New Construction Heating program, PowerSmart New Home program and the Efficient Boiler program. Descriptions of each program are provided in Section B-3 of the Application.

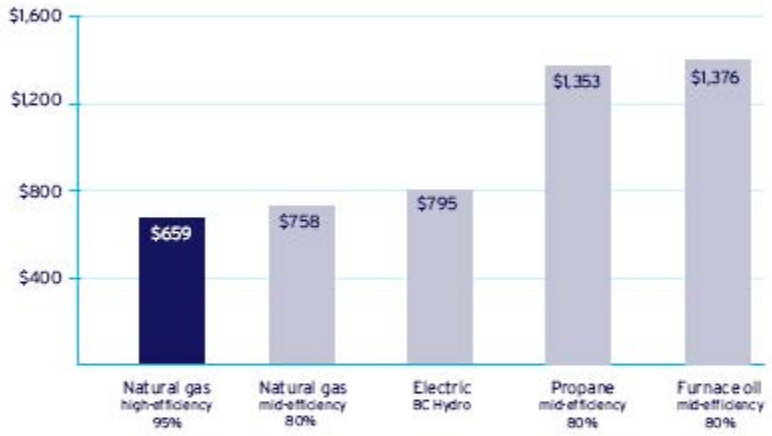
In addition to the above programs, Terasen Gas encourages natural gas use through its Residential Account Managers promoting the use of natural gas to the builder/developer community through sales and marketing activities. Terasen Gas also encourages the use of natural gas to the general public through the various public communications and mass media activities. For example, Terasen Gas advises customers that natural gas is competitively priced through the display of point of sale material (sample below) at Home Shows.

Terasen Gas

Burn gas not cash

Average annual fuel cost - space heating only

Lower Mainland Service Area



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1.2 Please describe, if any, load shifting programs that Terasen Gas has in place to address the forecasted peak demand and capital additions noted in the Five Year Major Capital Plan.

Response:

Terasen Gas' DSM efforts are focused on promoting natural gas conservation and efficiency to its customers through a combination of awareness, education and incentive programs. Its programs are targeted primarily at residential and commercial customers, where the load is "peaky", driven by the need for space heating. The programs outlined in the table in section B-3, page 9 all contribute to helping to manage the need to expand the transmission system to meet growth in peak day demand. The existing DSM programs however do not impact the requirement for the major capital projects that may or may not require a CPCN as listed in Section B-1, starting on page 5.

Further, as outlined in the Terasen Gas 2006 Resource Plan filed on July 31, 2006, there are no significant transmission system capacity upgrades required for the Interior and Coastal systems until earliest 2011 for the Coastal system, given current planning assumptions.

1.3 Please describe the effectiveness of these programs and provide an example.

Response:

Descriptions of the all the existing DSM programs and their effectiveness are provided in Section B-3 of the Application. Terasen Gas believes it programs are effective in encouraging energy efficiency and conservation as evidenced by the estimated reduction in energy use, greenhouse gas emission impact on the environment and the financial benefits (i.e. positive Total Resource Cost results) available to the utility and its customers.

2.0 Reference: Revenue Forecast, Section A-4 Gas Sales and Transportation Volumes, page 10.

2.1 Please explain how 2006 actual revenue results (to date) compare to forecasted revenue for 2006.

Response:

The table below compares actual January to September 2006 revenues to forecasted 2006 revenues of the comparable period. 2006 Projection forecast is compiled with actual revenue from January to June and projected revenue from July to December.

	January to September 2006			
	Actual[5]	Projected	Variance	Variance
Revenue ($ million)				
Residential[1]	$623.3	$624.3	($1.0)	-0.2%
Commercial[2]	331.4	330.3	1.1	0.3%
Firm Sales[3]	33.2	33.5	(0.3)	-0.9%
Industrial[4]	38.9	38.2	0.7	1.8%
Total	$1,026.8	$1,026.3	$0.5	0.0%

Notes:
1. Rate 1
2. Rate 2, 3 & 23
3. Rate 4, 5 & 6
4. Rate 7, 22, 25 & 27
5. RSAM Margin Adjustments are added to Actual Revenue of Rates 1, 2, 3, and 23. Projected/forecasted revenue are normalized revenue.

2.2 What is the explanation for the variance between forecast and actual results?

Response:

Revenue variance between end-of-year projection and actual results is immaterial.

3.0 Reference: 2007 Operating and Maintenance Expense, Section A-5 O&M Expense, page 1.

3.1 Please explain how 2006 actual operating and maintenance (O&M) results (to date) compare to forecasted results for 2006.

Response:

	January to September 2006			
	Actual	Approved	Variance ($)	Variance (%)
O&M Expense ($ million)	$109.8	$125.3	($15.5)	-14.1%

The actual O&M expense from January to September 2006 is $109.8 million, which is $15.5 million, or 14.1% less than the 9-month pro-rated approved O&M in 2006.

The approved 2006 O&M expense is a formula-based amount that is a function of forecast average number of customers and inflation, less a productivity factor. This is inherently different from the actual O&M expense which is subject to the realities of operational requirements. As noted on Section A, Tab 10, Page 1, the favourable variance of $15.5 million between the actual O&M versus the projected O&M for the first nine months in 2006 is attributable to productivity improvements made possible by the integration activities of the Company with TGVI, which were facilitated by the PBR settlement. As noted on Section A, Tab 10, Page 6, the aforementioned favourable variance is shared with customers via the Earnings Sharing Mechanism, with the customer's portion of the 2006 incentive earnings surplus projected to be $8.2 million on a pre-tax basis.

3.2 What is the explanation for the variance between forecast and actual results?

Response:

Please refer to the response to Question 3.1.

4.0 Reference: Tables 1, 2 and 3, Section B-1 Five Year Major Capital Plan, pages 2, 5 and 11.

4.1 Please indicate the units used in each of the three tables.

Response:

Figures contained in tables 1, 2, & 3 present planned capital expenditures in Thousands of Dollars ($'000's). On that basis, a figure of 6,611 translates to $6,611,000.

The one exception within the table is the top line of Table 1, which contains Forecast Year End Customer Additions. In this case, the figure represents the forecast customer additions as opposed to capital expenditures.

5.0 Reference: Approved CPCN – Residential Unbundling Program, Section B-1 Five Year Major Capital Plan, page 12.

5.1 What has been the impact, in terms of financial, customer growth etc, for Terasen Gas of the Commercial Unbundling Program?

Response:

In implementing Unbundling, both for commercial customers, and in the coming year for residential customers, Terasen Gas is responding to direction from the Commission and calls from interested parties, as well as the B.C. Energy Policy. Terasen Gas' role to date has been to facilitate the discovery of a solution for commodity unbundling for low-volume customers, including both commercial and residential customers, that meets the needs of stakeholders, is supportive of B.C. Energy Policy, and provides value to customers.

With respect to the Commercial Unbundling program, it is the customers who are the beneficiary of the program in now being able to lock-in their natural gas costs, providing commercial customers a tool to manage their energy costs. As gas costs are a flow through item, implementation of unbundling does not provide a direct financial benefit to Terasen Gas.

For Terasen Gas, and its commercial customers, the financial impact of the Commercial Unbundling program to provide commodity choice for small and large commercial customers (i.e. Rate 2 and 3 customers) has been approximately $7 million to date, funds spent for the implementation of the program, recorded in a deferral account and being recovered from all eligible commercial customers. In addition, annual operating costs of approximately $100,000 per year are being incurred to support the operation of the program and also is being recovered from all eligible commercial customers.

Terasen Gas believes the program has been a success on all fronts, in terms of the operation of the program (i.e. systems and processes), number of customer complaints, customer participation level and customer satisfaction. To-date, approximately 19,000 commercial customers have elected to participate in the program representing one quarter of the eligible commercial customer base. Participating customers are satisfied with the program, as evidenced by the results of a survey conducted in 2005, measuring the satisfaction levels of those customers participating in the Commercial Unbundling. Approximately 80% of respondents indicated that they were satisfied with the service they had received from their gas marketer.

With regards to the impact of the Commercial Unbundling program on new commercial customer growth, it is difficult to measure whether the program itself has directly resulted in new commercial customers on the Terasen Gas distribution system.

5.2 What is the forecast impact of the Commercial Unbundling Program for 2007?

Response:

Except for the annual operating costs, no further spending is planned at this point to enhance the Commercial Unbundling program, as much of the focus of resources will be on ensuring the successful rollout of the Residential Unbundling program. The existing Commercial Unbundling program will benefit from the rollout of the Residential Unbundling program as the systems and processes will be modified and automated where possible, offering a more robust solution to support both the Residential and Commercial Unbundling programs.

5.3 What is the forecast impact, in terms of financial, customer growth etc, for Terasen Gas of the Residential Unbundling Program?

Response:

The forecasted costs to implement Residential Unbundling is estimated to be $12.5 million with annual operating costs estimated at $500,000 per year net of recoveries from gas marketers. For more details, please refer to Terasen Gas' Application for Residential Unbundling dated April 13, 2006.

As indicated in the response to question 5.1 above, it is difficult to determine whether the Residential Unbundling program will directly lead to new residential customers on the Terasen Gas distribution system. Terasen Gas believes that by implementing the Residential Unbundling program, it will be providing value to its existing residential customers by offering a cost-effective option for residential customers to achieve commodity rate stability by being able to lock-in their commodity rate for up to a five year period. The beneficiary of the Residential Unbundling program will be the residential customers and not Terasen Gas.

6.0 Reference: Leaks per Kilometre of Distribution Mains, Section B-2 Service Quality Indicators, page 12.

6.1 Please provide an estimate of the annual amount of natural gas leakage and foregone revenue.

Response:

Although Terasen Gas does track and report the number of leaks on Distribution Mains, it does not track the amount of lost gas due to leaks on Distribution Mains.

Leak rates from the "Handbook for Estimating Methane Emissions from Canadian Natural Gas Systems" (1998), based on a 1996 study by Radian for the Gas Research Institute (USA) and the Environmental Protection Agency, indicate a volume of 24.2 GJ per leak per year for steel distribution main and a volume of 26.0 GJ per leak per year for PE distribution main. Terasen Gas is not able to validate whether the estimates referenced in this study are representative of the gas losses on its system as a result of leaks on Distribution Mains but provides this information to demonstrate the likely immateriality of the volumes, and the associated revenues, involved.

7.0 Reference: Summary of Service Quality Indicators, Section B-2 Service Quality Indicators, page 14.

7.1 Please outline Terasen Gas's plans and goals for each Service Quality Indicator (SQI) in 2007.

Response:

The Service Quality Indicators ("SQIs") were established during the Terasen Gas Inc. 2004-2007 Performance-Based Rate ("PBR") Settlement, and the ten SQIs that were established at that time are to be used throughout the PBR period. In addition, two of the Service Quality Indicators from previous years were not effective as measures but are included as Directional Indicators. The SQIs provide a measure to ensure service levels are not compromised as a result of cost savings activities undertaken by the Company. To date, the SQI results for the duration of the PBR period demonstrate that Terasen Gas' performance for the past three years has been very good. Further, Terasen Gas expects to maintain its performance and to achieve good SQI results in 2007.

Further explanations for each of the ten SQIs follow.

1. Emergency Response Time (Response Time Dispatched to Site for Emergency Calls)

Tracks the average length of time, after notification, for a qualified Terasen Gas representative to arrive on the scene of a gas emergency (i.e. a pulled main or a situation where gas is blowing) at any location on the Terasen Gas system both during and after working hours, including weekends. The benchmark of 21.1 minutes remains the same for 2007 and the goal is to meet or exceed the benchmark.

2. Speed of Answer – Emergency (Percent of Responses Within 30 Seconds by a Person - Emergency Calls)

Tracks the call answer time for emergency calls for both the Lower Mainland and Interior, and the SQI is the percentage of calls answered within 30 seconds. The benchmark of 95% remains the same for 2007 and the goal is to meet or exceed the benchmark.

3. Speed of Answer – Non-Emergency (Percent Responses Within 30 Seconds by a Person – Non-Emergency Calls)

Tracks the call answer time for non-emergency calls, including general, bill inquiries, and service application, for both the Lower Mainland and Interior, and the SQI is the percentage of calls answered within 30 seconds. The benchmark of 75% remains

the same for 2007 and the goal is to meet or exceed the benchmark.

4. Transmission System Integrity (Transmission System Annual Reportable Incidents)

Tracks several different kinds of incidents that are reported to government, and it should be noted that some government agencies have changed their interpretation of a reportable incident which may increase the number of incidents reported under this SQI during the current PBR period. The benchmark level of 2 remains the same for 2007 and the goal is to meet or exceed the benchmark.

5a. Residential & Commercial Customer Billing Activity (Customer Bills Produced Meeting Activity Criteria)

Tracks three performance measures that are contained within the CustomerWorks Client Services Agreement. These three measures, generally described as accuracy, timeliness, and completion, are combined to form a single SQI measure. The benchmark index of 5.0 remains the same for 2007 and the goal is to meet or exceed the benchmark.

5b. Industrial Customer Billing Activity (Percent of Industrial Customer Bills Accurate)

Tracks the accuracy of billing for Industrial customers. The benchmark of 99.5% remains the same for 2007 and the goal is to meet or exceed the benchmark.

6. Meter Exchange Appointment Activity (Percent of Appointments Met for Meter Exchange)

Tracks the percentage of meter exchange appointments met. The benchmark of 92.2% remains the same for 2007 and the goal is to meet or exceed the benchmark.

7. Industrial Meter Measurement (Industrial Meter Measurement First Report Under 10%)

Tracks the percentage of times that there is less than 10% deviation between the preliminary billing estimate that is first reported to an industrial customer and the final amount that is billed to the customer. The benchmark of 90% remains the same for 2007 and the goal is to meet or exceed the benchmark.

8. Customer Satisfaction (Independent Customer Satisfaction Survey)

Tracks the level of customer satisfaction based on four surveys conducted by parties outside of Terasen Gas. Surveys of four distinct customer groups are conducted and are weighed as follows: Residential customers are weighed 75%, Small Commercial customers are weighed 5%, Large Commercial customers are weighed 10%, and Builder/Developers are weighted 10%. The 2007 results are to be compared to prior years' results. The goal is to maintain performance in highly rated attributes and improve customer satisfaction where reasonable opportunities exist.

9. Customer Satisfaction (Number of Customer Complaints to BCUC)

Tracks the number of customer complaints submitted to the British Columbia Utilities Commission (the "Commission") that the Commission then requests, either by Commission Letter or by a Complaint/Inquiry Record, that Terasen Gas provide a written response. As agreed during the PBR Settlement, there is no performance threshold for this SQI, but 2007 results will be considered in the context of previous results and consideration will be given to external factors and any relevant uncontrollable events that can influence results.

10. Customer Satisfaction (Number of Prior Period Adjustments)

Tracks the number of prior period adjustments for Industrial Transportation Service customers – a prior period adjustment is a billing inaccuracy that is identified after a bill has been issued. As agreed during the PBR Settlement, there is no performance threshold for this SQI, but 2007 results will be considered in the context of previous results.

8.0 Reference: General Overview of DSM Programs at Terasen Gas, Section B-3 2006 DSM Status Report, page 1.

"The majority of Terasen Gas initiatives to which the Ministry is making a financial contribution support the Government of British Columbia's strategy around "Energy Efficient Buildings: A Plan for BC"."

Pages 18 and 19 of the above noted publication describes the potential cost savings and reduced energy consumption targets that the Province is pursuing in its energy policy.

Terasen Gas notes in

Reference: General Overview of DSM Programs at Terasen Gas, Section B-3 2006 DSM Status Report, page 20, that

"As a percentage of total utility revenue, Terasen Gas' existing approved DSM funding of $3.1 million per year ranks the lowest when compared to the other major gas utilities DSM funding in Canada."

8.1 Please explain the gap between current Terasen Gas investments in Demand Side Management (DSM) and the goals of the provincial energy efficiency policy, along with the results of the Conservation Potential Review (CPR).

Response:

Since the $3 million funding for DSM programs was initially established back in 1998 as part of a multi-year performance based rate making agreement, there has been no increase to the approved funding. However, much has changed since 1998 with energy prices higher today and a growing desire on the part of customers, stakeholders and policy makers to adopt energy efficiency as a means to managing the growing energy challenge in B.C.

As indicated in the Application, Terasen Gas intends to explore and evaluate the opportunities identified by the CPR in the next year or so with some more detailed research and / or potential pilot programs. Further funding will be required in order for Terasen Gas to realize some of the available energy efficiency opportunities identified. Terasen Gas is planning to seek an increase in DSM funding in the future, however, in light of the current multi-year PBR agreement is not seeking the additional funding at this time. As part of the future funding request, Terasen Gas intends to also outline the necessary regulatory framework required to keep the utility neutral from the impact of lost revenues as a result of energy efficiency and provide an appropriate incentive mechanism that encourages the utility to achieve more DSM savings by allowing the utility to share in the customer savings that are achieved as a result of a DSM program.

Terasen Gas believes the next year or so of further research activities and pilot initiatives will help to better validate the expected results and costs of expanding its portfolio of DSM programs.

8.2 Please explain how Terasen Gas plans to address this gap.

Response:

Please refer to the response to Question 8.1.

9.0 Reference: Other Activities, Education and Outreach Initiatives, Section B-3 DSM Status Report, page 5.

"Terasen Gas engages in a number of demand side management related activities designed to enhance energy efficiency-related outcomes in British Columbia."

9.1 Please describe the cost effectiveness of a program that would address building envelopes for existing detached residential, multi-unit residential, and small commercial buildings by improving windows, doors, insulation and draft proofing.

Response:

In regards to the residential sector, generally speaking, the Conservation Potential Review ("CPR)" found that building envelope measures do not pass the economic screen used in the report, which was the Total Resource Cost test. From pages 47 and 48 of the Residential CPR: "The space heating measures that fail the economic screen include all the building envelope measures…" Space heating measures that pass in certain markets include high performance windows which pass in new single detached/duplex home construction in all regions but in row housing only in the Lower Mainland..." Exhibit 4.4a on page 49 and exhibit 4.4c on page 51 of the Residential CPR provide information on those measures found by Marbek Resource Consultants to have positive, or close to positive, cost-benefit results. Those measures that did not pass the economic screen, which include all of the insulation measures, can be found in Appendix B of the Residential CPR.

In the commercial sector, the only building envelope measure that passed the economic screen used by Marbek Resource Consultants in the CPR was High Performance Glazing in new construction of commercial buildings with high window-to-wall ratios, which had a cost/benefit ratio of 0.97 for both the Lower Mainland and the Interior. The results can be found in Appendix E of the Commercial CPR.

9.2 Please describe the merit of a residential program that targets rental and/or social housing where free-ridership on energy efficiency upgrades is considered to be low.

Response:

Dealing first with programs aimed specifically at rental housing, any program addressing this marketplace must first deal with the challenge of the split incentive where the landlord owns the property and presumably would therefore be responsible for the cost of any efficiency upgrades, while the tenant would typically be the beneficiary of any operating cost savings resulting from the upgrade. In this case, the tenant, having no financial interest in the building structure or fixtures, is not in a position to authorize retrofits that would directly benefit the tenant in the form of reduced utility bills. In tight rental markets, such as those that we have experienced recently in much of British Columbia, the challenge of the split incentive is exacerbated by very low vacancy rates.

To date, the energy efficiency industry has not arrived at a solution to the split incentive challenge.

Terasen Gas' energy efficiency programs are funded by gas ratepayers, therefore Terasen Gas is restricted to efficiency programs that are aimed at gas customers. Anecdotal evidence suggests that much of the social housing in the province of British Columbia has electricity as its energy source for heat and domestic hot water, as electric heat and hot water require a lower capital investment at the time of construction than gas. BC Housing, for example, uses electric baseboard heating as its construction standard. For this reason, if Terasen Gas were to engage in a program aimed at non-gas users in social housing, such a program would require its primary funding from a source other than gas ratepayers.

10.0 Reference: Energy Star Heating System Upgrade, 2006 Incentive Program Descriptions, Section B-3 DSM Status Report, page 5.

10.1 Does Terasen Gas intend to extend the residential Energy Star furnace programs to the small commercial sector? If not, why not?

Response:

Terasen Gas is currently in the very initial stages of developing a program aimed at the small commercial sector. Given the successful of the Efficient Boiler Program for large commercial applications, Terasen Gas has recently commissioned a feasibility study that looks at the use of Energy Star boilers in the small commercial sector. Terasen Gas intends to use the findings of this study once finalized as the basis for launching a pilot program in 2007 for Energy Star boilers for the small commercial sector.

11.0 Reference: Total Resource Cost Test and DSM Incentive Status, Summary of 2006 Results, Section B-3 DSM Status Report, page 9.

"The TRC test is a measure of the net benefits of a utility's DSM programs. Terasen Gas calculates overall TRC impact on a 'portfolio' basis, that is, by examining the impact of the combined group of programs for the year."

11.1 Please describe how the TRC net benefit is calculated in the summary table on page 9.

Response:

Please refer to Terasen Gas' response to BCUC IR No. 1, Question 36.

11.2 Please describe how external benefits such as public subsidies, Provincial Sales Tax exemptions and third party contributions are incorporated into the TRC net benefit calculations.

Response:

Provincial Sales Tax exemptions on equipment are not incorporated into the Company's TRC net benefit calculations. Third party contributions to program amounts (as opposed to incentive amounts) are incorporated into the "cost" factor in the calculation. Third party contributions to incentive amounts are not incorporated into TRC calculations: "With the TRC test, the utility-to-customer incentive is not considered a cost. Although this incentive is a cost to the utility, it is cancelled out by the benefit received by the customer." (source: Primer on Gas Integrated Resource Planning, National Association of Regulatory Utility Commissioners, December 1993)

12.0 Reference: Greenhouse Gas Reduction, Summary of 2006 Results, Section B-3 DSM Status Report, page 9.

"In its demand side management incentive offers, Terasen Gas informs participating customers of its intent to record resulting emission reductions as part of the company's GHG Management Program."

12.1 Please describe how Terasen Gas factors in a financial value for Greenhouse Gas emissions reductions in its evaluation of DSM options?

Response:

Terasen Gas does not factor in any financial value for Greenhouse Gas emissions reductions in evaluations of DSM programs.

13.0 Reference: Research Initiatives, Section B-3 DSM Status Report, page 11.

"Terasen Gas is also participating with Enbridge Gas in a study of hot water appliances".

13.1 Please describe the cost-effectiveness of a program to promote efficient domestic water heaters or tankless water heaters for new and existing buildings.

Response:

Terasen Gas is currently participating with Enbridge Gas in a study of tankless water heaters in a commercial application. The study is scheduled to be completed by the end of March 2007. From page 48 of the Residential CPR, "DHW measures that fail the economic screen include the condensing water heater, the instantaneous water heater, waste water heat recovery, and solar water heating. All these measures have upfront costs too high relative to the value of their energy savings." More detailed information regarding cost-benefit analyses of domestic hot water measures can be found in Appendix B of the Residential CPR.

14.0 Reference: Key Deliverables of the CPR, Research Initiatives, Section B-3 DSM Status Report, page 11.

"*The CPR focuses on economic screening of natural gas and fuel-independent technologies as well as the combined utility economic analysis of fuel substitution (from electric to natural gas).*"

14.1 Please provide a listing of the cost effectiveness of all programs considered under the CPR, along with a priority ranking of such efforts should Terasen Gas be approved for increased DSM funding.

Response:

Detailed information regarding cost-effectiveness of all measures considered in the CPR can be found in the appendices: pages B-1 to B-30 and C-1 to C-4 of the Appendix to the Residential CPR; and pages E-1 to E-19 and F-1 to F-6 of the Appendix to the Commercial CPR.

Exhibits 7.4 and 7.5 on page 96 of the Residential CPR, and Exhibit 7.8 on page 90 of the Commercial CPR would be used to guide Terasen Gas' efforts towards increased DSM activity, however, the measures presented in the CPR require further program development and analysis before a final ranking of priorities can be derived. Such matters as verification of participant costs, cost-benefit ratios, projected participation levels, and an understanding of impacts from upcoming legislation on DSM priorities need careful analysis prior to developing a larger DSM portfolio. The CPR does, however, provide us with some directional information on DSM opportunities that Terasen Gas may not yet have tapped.

15.0 Reference: General Overview of DSM Programs at Terasen Gas, Section B-3 2006 DSM Status Report, page 23.

"Fuel choice measures continue to be of great interest to Terasen Gas. Terasen Gas plans to work closely with MEMPR and with BC Hydro to examine ways to encourage and incent British Columbians, including the development community, to use the right fuel for the right place at the right time."

15.1 Please explain how Terasen Gas is working with other agencies and utilities to jointly conduct DSM activities such as energy audits and the expansion of current programs.

Response:

As described on page 6 of section B-3, Terasen Gas currently partners with BC Hydro and FortisBC on the variable speed motor component of the Energy Star Heating Upgrade program. On Vancouver Island, TGVI offers the Think Grand program for new construction which gives builders and developers an incentive of $1000 for the installation of gas heat and hot water; BC Hydro pays $250 of the $1000 incentive. As well on Vancouver Island, TGVI offers the Yank the Tank program which gives homeowners an incentive of $400 for converting from electric to gas hot water; BC Hydro pays $200 of the $400 incentive. Terasen Gas would like to build on these fuel switching programs and expand similar incentives to the Lower Mainland and Interior service territories. Terasen Gas' current DSM funding for the Lower Mainland and Interior is restricted to efficiency initiatives, as opposed to fuel switching (gas load building) initiatives.

Terasen Gas continues to work cooperatively with BC Hydro, FortisBC and MEMPR to build on mutual successes. Areas of discussion include increasing cooperation and coordination in sales and marketing outreach to builders, developers and commercial accounts by Terasen Gas and BC Hydro Account Managers.

15.2 Please explain the methodology used to calculate current hook up fees for new construction and whether they provide a price signal to promote higher energy efficiency and lower peak loads. This is particularly important for new construction as rate signals or DSM programs for consumers do not directly influence the efficiency of the building design.

Response:

In the case of new construction for residential and small commercial customers where a natural gas main is pre-existing, the customer is required to pay $300 plus tax ($85 Application Fee + $215 Service Line Installation Fee) to attach to the system provided the installation costs do not exceed the $1,100 Service Line Cost Allowance. If the installation cost exceeds the Service Line Cost Allowance, the customer is required to pay the difference. Higher building and appliance efficiencies – with their associated effects on peak load – do not affect the cost to attach to natural gas service. As such,

connection policies do not serve as a price signal to home builders. However, home builders do have other incentive programs available to them to encourage the use of more efficient building techniques and the installation of higher efficiency appliances.

For residential and small commercial customers who require an extension of the natural gas main and all other customers in Rate 3 and above, an economic test (main extension test) is required to determine whether the attachment is economic with respect to existing rate payers. The economic test evaluates whether the expected incremental annual demand can justify the incremental cost to service that load. If the load is deemed economic and the main extension test is positive, then the service is provided based on the standard installation fees discussed above. If the annual demand is not sufficient to justify the expense, then the customer is required to make a contribution to offset any costs that are above what can be justified by the expected consumption. In situations where the attachment of a customer is evaluated with an economic test, it is possible that higher building efficiencies and higher appliance efficiencies could cause the need for a customer contribution where it would not otherwise have been required had lower efficiency choices been made. Additionally, in the case where a contribution is required when lower efficiency choices are made, the use of higher efficiency building designs and appliances could increase the amount of the required contribution. It must be noted that higher efficiency buildings and appliances do not cause an increase in attachment costs in situations where there is sufficient consumption to offset installation costs. In addition, peak load is not a factor in the economic test as the evaluation of whether a customer is economic to attach is based annual consumption. To summarize, the net effect of attachment policies for customers requiring an economic test who have higher building and appliance efficiencies can be either neutral or cause additional installation costs for natural gas service.

As discussed above, the economic test is used to ensure that only economic customers are added to the rate base and that existing rate payers are not burdened by the addition of new customers. This purpose can sometimes run contrary to the objectives of DSM and the promotion of higher efficiency. It is the recognition of these and other challenges that motivates Terasen Gas to work closely with MEMPR and with BC Hydro to examine ways to encourage and incent British Columbians, including the development community, to use the right fuel for the right place at the right time.