



ERICA M. HAMILTON COMMISSION SECRETARY Commission.Secretary@bcuc.com web site: http://www.bcuc.com SIXTH FLOOR, 900 HOWE STREET, BOX 250 VANCOUVER, B.C. CANADA V6Z 2N3 TELEPHONE: (604) 660-4700 BC TOLL FREE: 1-800-663-1385 FACSIMILE: (604) 660-1102

Log No. 28870

VIA E-MAIL

regulatory.affairs@terasengas.com

April 16, 2009

Mr. Tom Loski Chief Regulatory Officer Terasen Gas Inc. 16705 Fraser Highway Surrey, B.C. V4N 0E8

Dear Mr. Loski:

Re: Terasen Gas Inc.

<u>Gas Supply Mitigation Incentive Program for 2007/08</u>

Further to Terasen Gas' March 23, 2009 filing, the Commission accepts the calculation of an incentive payment of \$1,076,091 and issues the attached Commission staff report entitled "Staff Overview Report - Gas Supply Mitigation Incentive Program (GSMIP) 2007/08."

Yours truly,

Original signed by:

Erica Hamilton

RB/dg Enclosure

cc: Interested Parties (TGI-2008-09 GSMIP-RI)

Staff Overview Report

GAS SUPPLY MITIGATION

INCENTIVE PROGRAM

(GSMIP)

2007 / 2008

TABLE OF CONTENTS

			Page No
1.0	Introd	uction	1
2.0	GSMII	P Objectives	1
3.0	Service	e Quality Indicators ("SQI's)	1
4.0	Interna	al Auditors Examination	3
5.0	GSMII	P Report for 2006/07	3
	5.1 5.3 5.4	Economic Environment Gas Supply Mitigation Incentive Plan 2006/07 GSMIP Report Overview and the Development of the Incentive	
6.0	Compo	onents of GSMIP Margin	5
7.0	Comm	odity Resale Revenue to Commodity Resale Margin	8
8.0	Unique	e Market Initiatives	8
9.0	Conclu	ısion	9
APPE	ENDICES	5	
APPE	ENDIX 1 ENDIX 2 ENDIX 3	ORDER NO. G-79-02 ORDER NO. G-137-06 Letter - Internal Audit Services dated February 21, 2008	

OVERVIEW OF THE GAS SUPPLY MITIGATION INCENTIVE PROGRAM ("GSMIP") FOR 2006/07

1.0 INTRODUCTION

This report is based on information supplied to the B.C. Utilities Commission by the Terasen Gas Inc. ("Terasen Gas" or the "Company") Gas Supply Mitigation Incentive Program ("GSMIP") Year end Report: November 2007 – October 2008) dated March 23, 2009. The information was submitted to Commission staff in the format of prior reports and this detail was relied on to develop the following overview.

2.0 GSMIP OBJECTIVES

The intent of the program has not changed over the years and is based on the alignment of the interests of customers, shareholders and employees. The objectives of the program remain the same from the initial introduction and continue to be based on five major elements as outlined below. The current formula was approved by Order No. G-79-02 for the term between November 1, 2003 and October 31, 2004 (Appendix 1). The continuation of the formula for 2006/07 was approved by Order No. G-137-06 (Appendix 2). The following objectives originally established with the first program serve as guiding principles for the incentive structure of the 2007/08 GSMIP.

- 1. Supply Security The plan should maintain a high security of supply and not adversely affect total net gas costs.
- 2. Alignment of Interests Terasen Gas should be encouraged to maximize net revenues from offsystem business activities.
- 3. Fair and Reasonable Incentives The objective is to encourage new initiatives to capture value.
- 4. Simplicity Plan should minimize administrative effort.
- 5. Fair and Reasonable Performance The performance targets and productivity improvements should be fair and reasonable.

3.0 SERVICE QUALITY INDICATORS ("SQI'S")

Terasen Gas filed a report with the Commission on January 21, 2009 that outlined its performance relative to each SQI for the period November 2007 to October 2008. Commission staff reviewed the results of the report and assessed the performance under the SQI criteria.

- 1. Annual Contract Plan ("ACP") Portfolio Optimization The ACP was submitted May 16, 2007 and approved by L-58-07 on July 11, 2007 and Terasen Gas executed its gas supply contracting according to the ACP.
- 2. Price Risk Management Plan ("PRMP") The original PRMP for November 2007 to October 2010 was submitted on April 26, 2007 and approved by L-38-07 dated May 18, 2007. The PRMP has been filed in a timely manner and implemented within the approved guidelines.

- 3. Counterparty Risk and Credit Exposure Management Terasen Gas has effectively managed credit exposure and prudently avoided non-recoveries for the period in question.
- 4. Commodity Supply Reliability By putting in place commodity, pipeline and storage asset diversification within the Annual Contracting Plan, Terasen Gas continued to ensure 100% delivery of firm customer demand for the November 2007 to October 2008 contract year.
- 5. Comparison of Average Utility Gas Costs (Table No. 1) The Terasen Gas commodity cost is higher then other Pacific North West utilities due to the significant amount of Station #2 gas and the inability to access Rockies gas. Unfortunately, Terasen Gas has been unable to secure firm space on Northwest Pipelines Ltd. ("NWP") and access lower priced Rockies gas which averaged \$4.42 CAD (see Table No.2) over the year (range was a high of \$7.03/GJ in Feb-07 to a low of \$1.11/GJ in Oct-07). The price of Rockies gas is depressed when supply from that area exceeds the capacity of the pipelines to deliver it to markets.

Table No. 1 Comparison of the Average Utility Cost of Gas											
	Terasen Gas Inc.	Puget Sound Energy Inc.	Northwest <u>Natural</u>	Cascade <u>Natural Gas</u>	Avista <u>Utilities</u>						
Gas cost	\$ 7.29	\$ 6.90	\$6.99	\$ 7.13	\$ 6.92						

Table No. 2 – Daily and Monthly Prices – 2007/08 (\$Cdn/GJ)

						Monthly			
	Average D		1		Average	Index			I
	Terasen	AECO	St#2	Sumas	Terasen	Sumas	AECO	St#2	Rockies
	Cost				Cost				
07-Nov	\$6.22	\$5.69	\$5.88	\$6.65	\$6.22	\$6.71	\$5.82	\$5.99	\$2.84
07-Dec	\$6.71	\$6.11	\$6.32	\$7.15	\$6.71	\$7.70	\$6.26	\$6.77	\$5.73
08-Jan	\$6.72	\$6.88	\$7.00	\$7.83	\$6.72	\$7.04	\$6.10	\$6.46	\$5.66
08-Feb	\$7.07	\$7.38	\$7.29	\$7.83	\$7.07	\$8.08	\$6.88	\$7.26	\$6.70
08-Mar	\$7.30	\$8.11	\$8.01	\$8.43	\$7.30	\$7.91	\$7.30	\$7.47	\$7.43
08-Apr	\$8.07	\$8.91	\$8.88	\$9.42	\$8.07	\$8.58	\$8.09	\$8.19	\$7.69
08-May	\$10.33	\$9.51	\$9.38	\$9.71	\$10.33	\$9.82	\$8.92	\$9.41	\$8.62
08-Jun	\$12.00	\$10.59	\$10.52	\$10.73	\$12.00	\$10.22	\$9.58	\$9.67	\$8.39
08-Jul	\$14.15	\$9.29	\$8.73	\$9.02	\$14.15	\$11.22	\$10.80	\$10.59	\$8.64
08-Aug	\$7.52	\$7.13	\$6.77	\$7.06	\$7.52	\$7.72	\$8.44	\$7.25	\$6.77
08-Sep	\$5.29	\$5.93	\$5.71	\$6.09	\$5.29	\$7.04	\$7.05	\$6.48	\$1.70
08-Oct	\$5.71	\$6.41	\$6.18	\$6.62	\$5.71	\$6.26	\$5.91	\$5.58	\$3.44
AVERAGE	\$7.21	\$7.20	\$7.20	\$7.82	\$8.09	\$8.19	\$7.60	\$7.59	\$6.13

AUDITORS Review

In its letter dated March 5, 2009 Terasen Gas' internal auditors conducted a review and indicated that the calculation of the TGI share of the GSMIP total Eligible Margin was determined in accordance with Order G-85-07.

5.0 GSMIP REPORT FOR 2007/08

5.1 Economic Environment

Table No. 2, illustrates the average, maximum and minimum prices for Sumas, AECO and Station #2 during the reporting period. The maximum highs for monthly priced gas at all locations occurred in July, 2008 which is very unusual. October 2008 was the lowest priced month for Monthly Index gas for Station 2 and Sumas. September 2008 was the lowest priced monthly index gas for Rockies. AECO lowest priced gas index occurred in November 2007.

5.2 Currency

The exchange rate reached a low of 1.2995 Canadian dollars to the United States dollar on October 28, 2008 and hit a high on November 7, 2007 of 1.1030 Canadian dollars during the examination period. The exchange rate continued to be highly volatile throughout the gas year.

5.3 Gas Supply Mitigation Incentive Plan 2007/08

The GSMIP margin (shown in Table No. 3) available for the sharing incentive formula is \$26.1 million and the source of this revenue is made up of the two components; Commodity Resale and Transport & Other Margin. Each segment has a different method of calculation to determine the applicable incentive portion shared between Terasen Gas and its customers.

Table No. 3 – GSMIP Margin		
Transport & Other Commodity Resale Margin TOTAL GSMIP Margin	\$17.0 <u>\$ 9.1</u> \$26.1	65.1% 34.9% 100%

As shown in Table No. 4, the proposed GSMIP Margin for 2007/08 (\$26.1 million) represents an decrease of about \$12.2 million (31.8% decrease) over 2006/07.

Table No. 4 – Total GSMIP (\$ millions) Mitigation Amounts from Current and Prior Years								
YEAR 2007/08 2006/07 2005/06 2004/05 2003/04 2002/03	TOTAL \$26.1 \$38.3 39.9 25.6 32.0 30.8							

Table No. 5

	20	05/06	20	06/07	(+/-)	(+/-) %
Margin (\$MM)							
Transportation & Other	\$	19.4	\$	23.1	\$	3.7	19%
Commodity Re-sale	\$	20.4	\$	15.2	\$	(5.2)	-26%
Total	\$	39.9	\$	38.3	\$	(1.6)	-4%

6.0 COMPONENTS OF GSMIP MITIGATION MARGIN

- 1. Transportation and Other Margin Revenue.
- 2. Commodity Optimization

Transportation margin, in this case is \$8.8 million and is broken down into the majors components as shown in Table No. 6 consisting of; T-South, T-North, Nova, Nova/ANG, T-South, Southern Crossing Pipeline ("SCP") and Northwest Pipeline Corporation ("NWP").

									T-	South/		
	T-	South	T-	North	- 1	Nova	No	va/ANG		SCP	1	NWP
Margin (\$000)												
2005/06	\$	9,361	\$	2	\$	3,028	\$	532	\$	5	\$	107
2006/07	\$	5,651	\$	645	\$	1,505	\$	674	\$	362	\$	-
Margin (\$/GJ)												
2005/06	\$	0.41	\$	0.06	\$	0.11	\$	0.15	\$	0.52	\$	0.12
2006/07	\$	0.31	\$	0.08	\$	0.10	\$	0.21	\$	0.33	\$	-
Volume (TJ)												
2005/06	2	23,095		39	:	28,451		3,578		9		918
2006/07		17,971		8,544		15,041		3,255		1,104		0

Table 6: Transportation Margin and Volume by Pipeline Resource

T-South – Table No.6 indicates that 41.5% of the total Transportation Margin was gained from T-South. The overall margin declined reflecting a decrease in volume due to colder weather. The value of the summer assignments decreased from \$.31/GJ to \$.19/GJ or \$.12/GJ.

T-South/SCP – Operational Flow Orders occurred during the winter resulting in favourable AECO/Sumas differentials. The average margin widened to \$.46/GJ or a difference of \$.13/GJ over 2006/07.

Nova Gas Transmission Ltd. Alberta System (NGTL) and NGTL/Foothills – The Alternate Access program allows TGI to optimize NGTL capacity by buying AECO gas and then selling it at the Empress delivery point. In total this strategy contributed \$1,686,000 to the Transportation Margin.

Other Margin - In the category "Other" margin, revenue amounted to \$14.3 million and included; Capacity Assignments/Releases, T-South Revenue, Cochrane & Empress Extraction, Park & Lends to third parties as shown in Table No. 7 below.

Table 7 - Other Optimization Margin

	Opuninzación n	·~. 8			
	Capacity		Cochrane &		
	Assignments	T-South	Empress	Park &	
	& Releases	Revenue	Extraction	Lends	Total
Margin (\$MM)					
2005/06	\$2.5	\$0.0	\$0.9	\$3.0	\$6.4
2006/07	\$7.3	\$1.9	\$1.0	\$4.1	\$14.3

Table 7: Other Optimization Margin

Capacity Assignments & Release – The value of T-South summer assignments decreased from \$.27/GJ to \$.15/GJ as a result of a higher level of contracted capacity held by shippers. The NGTL/Foothills value decreased from a nearly full toll recovery to almost nothing.

T-South Revenue – Terasen Gas assumed long term T-South capacity in exchange for payment of \$2 million and shed shorter term capacity.

Cochrane & Empress Extraction – The plant contributed about \$1.3 million. This facility extracts liquids from the gas at the Empress border and Terasen Gas is credited with the value of the liquids extracted. The contract is based on the spread between propane and natural gas which widened this past year.

Park/Lend – The average winter/summer spread was lower than in previous years resulting in a drop of \$1.4 million in margin from 2006/07.

6.2 Commodity Optimization

	20	05/06	20	06/07	(+/-)	(+/-) %
Commodity Re-sale							
Volume (PJ)		27.6		25.5		(2.2)	-8%
Revenue (\$MM)	\$	207	\$	185	\$	(22)	-11%

Table 8: Commodity Re-sale Volume & Revenue

In comparison to last year, volumes have decreased by 2.0 PJ or about 8% and corresponding revenue has declined by 1% as shown in Table No. 8. There were five sources of Commodity Resale Revenue categorized as; Huntingdon, Kingsgate, Empress, AECO and Rate 10 (Table No. 9).

		Hunt.	Kir	ngsgate	E	mpress	AECO Rat		ate 10	
Revenue (\$MN	<u>l)</u>									
2005/06	\$	151.1	\$	1.9	\$	15.0	\$	21.3	\$	17.8
2006/07	\$	109.9	\$	33.9	\$	16.3	\$	2.5	\$	22.6
Volume (TJ)										
2005/06		18,688		368		2,053		3,755		2,784
2006/07		14,563		4,946		2,303		354		3,303
Price (\$/GJ)										
2005/06	\$	8.09	\$	5.29	\$	7.30	\$	5.66	\$	6.40
2006/07	\$	7.55	\$	6.85	\$	7.09	\$	6.96	\$	6.85

Table 9: Commodity Re-sale Revenue, Volume and Average Re-sale Price by Location

Table No.

Tabulation Results from Table No.9 – Total Revenue, Total Volume and Average Resale Price

Total Commodity Re-sale Revenue 2006/07 = \$185.2 million

Total Volume 2006/07 = 25,469,000 TJ. The average resale price is \$7.27/GJ for 2006/07

Total Commodity Re-sale Revenue 2006/07 = \$182.8 million

Total Volume 2006/07 = 23,462,000 TJ. The average resale price is \$7.79/GJ for 2007/08

Huntingdon – The majority of Resale Mitigation Revenue was generated through Huntingdon. As shown in Table No. 9, the average resale price was approximately \$.28/GJ higher than last year and with increased volumes (3,309 TJ) revenue increased by about \$30 million (27.3%).

Kingsgate – This trading hub is used as a balancing tool. Volume increased from 4,946 TJ to 523 TJ or 5.4%.

Empress – Volumes decreased substantially and revenue decreased from \$16.3 million down to \$3 million.

AECO – Volume decreased from 354 TJ in 2006/07 to 45 TJ. Revenue decreased from \$2.5 million down to \$.3 million.

7.0 THE CONVERSION OF COMMODITY RESALE REVENUE TO COMMODITY RESALE ELIGIBLE MARGIN

The formula for calculating the Eligible Resale Margin is as follows:

Eligible Resale Margin = (Weighted Average Annual Sumas Monthly Index – Hurdle Discount) where the Hurdle Discount = 17 PJ/Annual Resale Margin.

The Hurdle Discount = 17/ (Total Commodity Resale Sales volume in a year for the commodity component) or 17/23.5 PJ. The Hurtle Discount = 17/23.5 PJ = \$.73/GJ.

Hurdle Rate = Weighted Average Annual Sumas Monthly Index – Hurdle Discount = \$8.13 - \$.73/GJ = \$7.40/GJ.

Commodity Eligible Margin Revenue = Hurdle Rate * cumulative volume by month = (\$7.80 - \$7.40)* 23,500,000 about \$9.1 million.

Table 10: Inputs for Eligible Commodity Re-sale Margin Formula

	UoM	200	05/06	2006/07
Commodity Resale				
Hurdle Discount	Ratio		0.62	0.67
Resale Price	\$/GJ	\$	7.49	\$ 7.27
Sumas Monthly Index	\$/GJ	\$	7.37	\$ 7.35
Eligible Margin	\$/GJ	\$	0.74	\$ 0.60
Eligible Margin	\$MM	\$	20.4	\$ 15.2

8.0 Incentive Sharing Mechanism

The Total Mitigation Revenue in 2007/08 is about \$203 million as compared to \$212 million in 2006/07. The total Eligible Margin is composed of the Eligible Commodity Resale Sharing (\$9.1 million) plus Eligible Transportation and Storage Margin (approximately \$16.9 million). The formula yields an eligible margin in 2007/08 of about \$26 million as compared to \$38 million in 2006/07.

9.0 UNIQUE MARKET INITIATIVES

Terasen Gas introduced new innovations this year to take advantage of market opportunities in a number of areas.

TGI performed over 6,600 transactions or a 2% increase over the prior year and TGI was able to take advantage of the following:

- 1. Operational Flow Orders on Northwest Pipeline resulted in wide AECO-Sumas differentials in the winter period.
- 2. Wide Station 2-Kingsgate summer differentials resulting from high demand at Kingsgate and discounted Station 2 pricing.

- 3. Intra-summer spreads for storage optimization resulting in \$0.9 million new savings.
- 4. Assuming long-term T-South capacity and shedding a corresponding amount of short-term capacity in exchange for a \$2 million payment from the counterparty.

10.0 CONCLUSION

GSMIP continues to meet the objectives and aligns the interests of customers and shareholders of Terasen Gas.