GAS MARKETER GROUP INTERROGATORY #1

INTERROGATORY

Reference: Page 1, Paragraph 1.

Please provide the documentation in which the Ontario Energy Board determined that stakeholders were "largely satisfied with the existing regulatory system and that the natural gas sector would benefit more from specific improvements than from a transformative change". Please provide the document name, section, and quote.

RESPONSE

The source for Paragraph 1 in Enbridge's evidence is the Ontario Energy Board's Natural Gas Forum ("NGF") report titled:

"Natural Gas Regulation in Ontario: A Renewed Policy Framework", issued on March 30, 2005.

Please see "Context of the Current Policy Review" section on page 10 of the Board's NGF report for the Board's conclusion referenced in the question above:

> The Board notes that stakeholders are largely satisfied with many of the current regulatory arrangements, and it has determined that the sector will benefit more from specific, incremental structural improvements than from transformative change.

Witnesses: A. Kacicnik

GAS MARKETER GROUP INTERROGATORY #2

INTERROGATORY

Reference: Page 3, Paragraphs 9-11.

Please provide in the form of a formula the method by which the QRAM process takes place. In so doing, please explain how the QRAM reference price is calculated, what sub-components are involved, over what time period and on what triggers, if any, the sub-accounts are cleared; and what, if any, additional factors affect the QRAM process. In this explanation, please also indicate if there are any additional accounting or procedural rules which effect the reference price or any sub-components.

RESPONSE

Please see the attached diagram for the formulae and flow of the QRAM process.

A description of the process is also provided below.

Derivation of Change in QRAM Reference Price

Every year the Company prepares a volumetric forecast for the upcoming test year based upon degree days, average customer use, customer additions, and total customers.

The gas supply portfolio is developed based on the volumetric forecast. The gas supply portfolio consists of contracted pipeline capacity (i.e., TCPL, Alliance/Vector) and the physical supplies to fill those contracts, delivered supplies and peaking services. The supply portfolio identifies the forecasted volumes to be purchased each month at the various supply basins and/or hubs such as AECO, Empress, Chicago, and Dawn.

EGD maintains a database of future market prices for the price points identified above. These prices are derived from a number of industry sources such as Gas Daily and NGX.

The process to determine the QRAM reference price is identical for each QRAM. If EGD were to use the October 1, 2008 QRAM (EB-2008-0263) application as an example the process would be as follows:

Witnesses: M. Giridhar
D. Small

1) Calculate the 21-day average price for each month for each price point for the period of the QRAM. These forecasted monthly prices are provided at Exhibit Q4-3, Tab 1, Schedule 3, page 1.

2) Apply the forecasted monthly prices to the monthly forecasted volumes and determine the forecasted annual acquisition cost for each source of supply. These forecasted annual supply costs are provided at Exhibit Q4-3, Tab 1, Schedule 1, page 1, Item #'s 1 to 5.

3) Include the impact of approved tolls on the contracted capacity levels included in the supply portfolio. This will capture any changes in tolls such as NEB approved TCPL toll changes. These forecasted transportation costs are provided at Exhibit Q4-3, Tab 1, Schedule 1, page 1, Item # 7.

4) Calculate the "Reference Price". Divide the total annual acquisition cost by the forecasted volume. Exhibit Q4-3, Tab 1, Schedule 1, page 1, Item # 10.

5) Calculate the change in the "Reference Price". Exhibit Q4-3, Tab 1, Schedule 1, page 1, Item # 12.

The process for the subsequent QRAM will be to update the pricing forecast for a new 21-day period and then apply that forecast to the same monthly volumetric forecast.

<u>Determination of Change in Annualized Revenue Requirement</u>

The methodology described below is consistent with the evidence which is filed with each QRAM application.

1) First the forecast change in the reference price is applied against the Board approved gas cost volumes to arrive at a forecast annual change in the purchase cost of gas.

2) Next, the forecast change in the reference price is applied against the Board approved gas in storage volumes to determine the forecast change in gas in storage value and within the approved methodology of determining the impact within working cash related rate base elements. The total of these rate base impacts have the Board approved total return on rate base, grossed up for tax purposes, applied against them to determine the associated forecast change in carrying costs to be incorporated within annualized rates.

Witnesses: M. Giridhar
D. Small

3) The impact of the forecast change in the reference price also results in a change in the level of forecast capital tax associated with storage values which is also incorporated within annualized rates.

This process is further outlined in the Company's evidence in relation to Issue 5, pages 20 to 22 and is followed within each of the Company's QRAM applications. For sample/related exhibits filed with the October 1, 2008 QRAM (EB-2008-0263) application, please see Exhibit Q4-2, Tab 2 and Exhibit Q4-3, Tab 2.

Determination of Rates

The methodology described below is consistent with the evidence which is filed with each QRAM application.

1) Update the cost allocation model and rate design models relating to the changes in the determination of gas costs and other revenue requirement impacts as outlined above.

2) The gas supply charge is updated to reflect the forecast Empress price inclusive of fuel and the associated commodity related working cash requirement. The system gas fee and commodity related bad debt expense, which also make up the gas supply charge, do not change within a QRAM application.

3) The transportation charge is updated to reflect changes in upstream transportation costs.

4) The load balancing charge is updated to reflect change to the return on gas in inventory, discretionary and short term peaking supplies, and capital and large corporation taxes.

5) The delivery charge is updated to reflect changes in lost and unaccounted for gas.

A further description of the cost allocation and rate design processes can be found in the Cost Allocation portion of the Company's evidence filed at Exhibit E1, Issue C, pages 40 to 47 or in any of the Company's QRAM applications filed at Exhibit Qx-2, Tabs 3 and 4.

For sample cost allocation and rate design schedules from the October 1, 2008 QRAM application, please see EB-2008-0263, Exhibit Q4-3, Tabs 3 and 4.

Witnesses: M. Giridhar
D. Small

QRAM Application Review and Approval

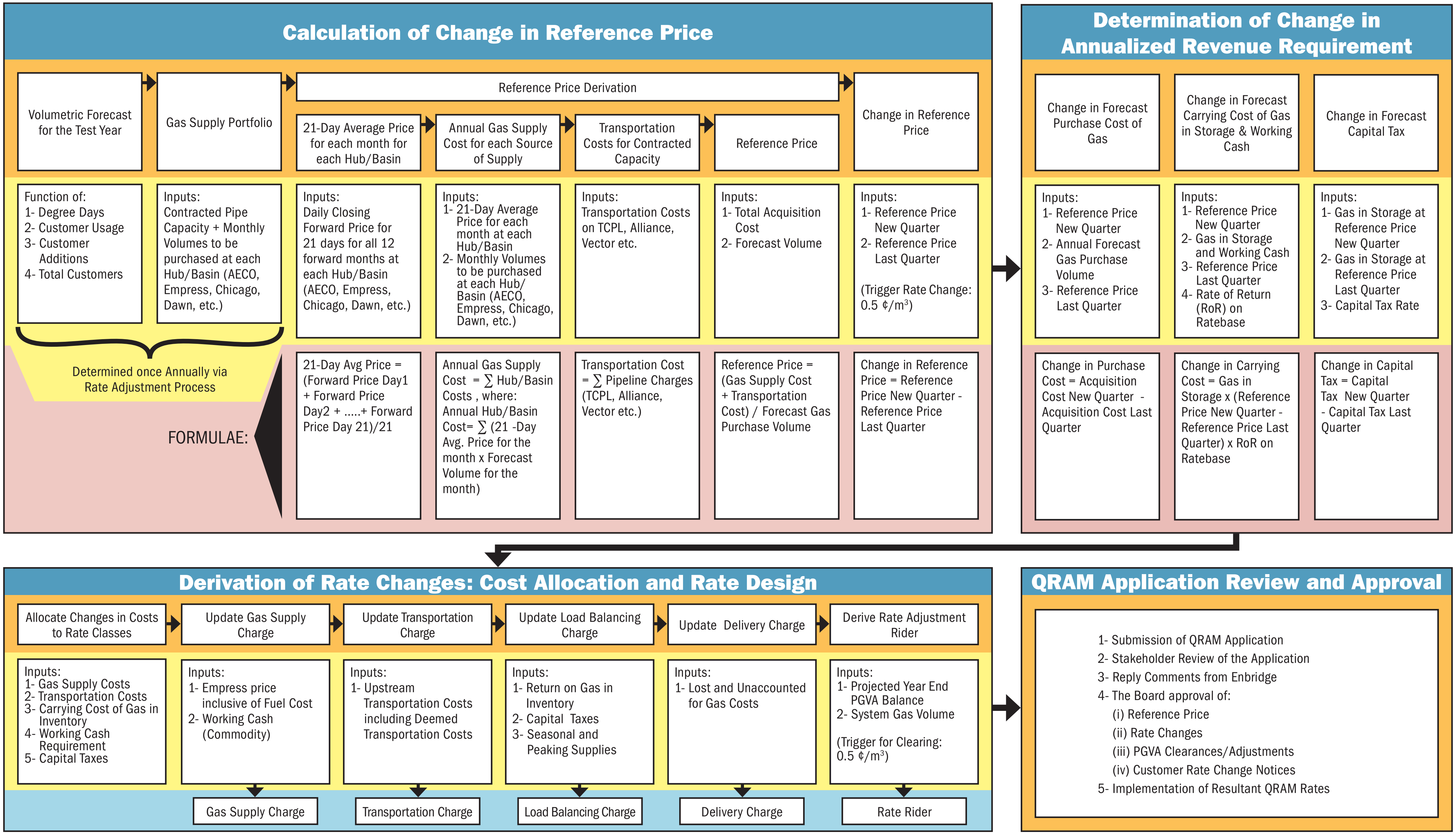
The QRAM process includes the regulatory framework for interested parties and the Board to review Enbridge's QRAM applications.

Once the application has been filed with the Board, copies are circulated to stakeholders for review and comment One week is allotted for this step. If stakeholders submit comments on the application, Enbridge files reply comments with the Board within a week. Thereafter, the Board issues an order disposing of the application in time for the Company to implement the resultant rates during the first billing cycle of the next quarter.

Enbridge informs all customers of QRAM rate changes and/or PGVA adjustments by means of a bill insert (i.e., customer rate notices) as well as by posting the same information on its website. As part of the QRAM process, Enbridge's rate notices are reviewed and approved by the Board.

Witnesses: M. Giridhar
D. Small

Enbridge Gas Distribution QRAM Process



Note: Monthly Customer Charge and Contract Demand Charge do not change with QRAMs.

GAS MARKETER GROUP INTERROGATORY #3

INTERROGATORY

Reference: Page 3, Paragraphs 9-11.

For each of the subcomponents which form the quarterly gas charge, including riders, please provide a full listing of what the price or account balances were on a monthly basis for the last three years. Please also indicate whether any portion of the monthly price or account balance was partly formed by a carry over from previous time periods.

RESPONSE

The attachments represent the projected year-end balance filed as part of the January 1 QRAM for the last three years.

Attachment 1 is the projected December 31, 2008 PGVA balance as filed in the January 1, 2009 at EB-2008-0348, Exhibit Q1-3, Tab 1, Schedule 2, page 3.

Attachment 2 is the projected December 31, 2007 PGVA balance as filed in the January 1, 2008 at EB-2007-0897, Exhibit Q1-3, Tab 1, Schedule 2, page 2.

Attachment 3 is the projected December 31, 2006 PGVA balance as filed in the January 1, 2007 at EB-2006-0288, Exhibit Q1-3, Tab 1, Schedule 2, page 2.

Witnesses: J. Collier
M. Giridhar
A. Kacicnik
D. Small

ENBRIDGE GAS DISTRIBUTION INC.
PROJECTED YEAR-END PGVA BALANCE
TWELVE MONTHS ENDED DECEMBER 31, 2008

		Col. 1	Col. 2	Col. 3	Col. 4	Col. 5	Col. 6	Col. 7	Col. 8	Col. 9	Col. 10	Col. 11
Item #	Month	Purchase Cost	10^3m^3	$\$/10^3m^3$	Reference Price	Unit Rate Difference	Forecast Month of PGVA	Forecast YTD PGVA	Forecast Rollover	Inventory Adjustment	Forecast Rider C	Forecast YTD PGVA with Inventory Adjustment
1.1	2007 Forecast PGVA Balance Rollover								(137,659.0)	-	-	(137,659.0)
1.2	January 1/08 Inventory Re-evaluation									32,618.4	-	(105,040.6)
1.3	January	156,258.1	535,200.2	291.962	303.215	(11.253)	(6,022.7)	(6,022.7)	-	-	10,431.3	(100,632.0)
1.4	February	123,950.0	370,446.7	334.596	303.215	31.381	11,625.0	5,602.3	-	-	19,864.6	(69,142.4)
1.5	March	232,215.6	646,643.1	359.109	303.215	55.894	36,143.7	41,746.0	-	-	19,432.0	(13,566.8)
1.6	April	128,340.3	344,310.4	372.746	340.684	32.062	11,039.3	52,785.3	-	(27,782.4)	15,702.7	(14,607.1)
1.7	May	136,743.9	331,913.5	411.987	340.684	71.303	23,666.3	76,451.6	-	-	11,860.2	20,919.4
1.8	June	168,245.1	376,599.0	446.749	340.684	106.065	39,943.8	116,395.4	-	-	8,781.0	69,644.2
1.9	July	169,881.1	356,354.6	476.719	438.790	37.929	13,516.3	129,911.7	-	(127,409.0)	3,210.2	(41,038.4)
1.10	August	150,810.4	438,182.0	344.173	438.790	(94.617)	(41,459.4)	88,452.2	-	-	1,148.2	(81,349.6)
1.11	September	169,216.4	474,940.5	356.290	438.790	(82.500)	(39,182.8)	49,269.5	-	-	1,005.9	(119,526.4)
1.12	October	155,860.1	510,660.3	305.213	387.103	(81.890)	(41,818.1)	7,451.3	-	113,674.7	(1,986.5)	(49,656.4)
1.13	November	106,648.1	330,982.8	322.216	387.103	(64.887)	(21,476.4)	(14,025.1)	-	-	(6,588.1)	(77,720.9)
1.14	December	132,356.0	403,703.1	327.855	387.103	(59.248)	(23,918.8)	(37,943.9)	-	-	(10,113.5)	(111,753.1)
	Sub-Total	**1,830,525**	**5,119,936.1**	**357.529**			(37,943.9)	(37,943.9)	(137,659.0)	(8,898.2)	72,748.0	(111,753.1)
	Impact of TCPL Toll Change on System Supply											-
												(111,753.1)
	January 1/08 Inventory Revaluation			1,620,263.9	20.132			32,618.4				
	April 1/08 Inventory Revaluation			741,475.0	(37.469)			(27,782.4)				
	July 1/08 Inventory Revaluation			1,298,687.0	(98.106)			(127,409.0)				
	October 1/08 Inventory Revaluation			2,199,289.8	51.687			113,674.7				

ENBRIDGE GAS DISTRIBUTION INC.
Projected Year-end PGVA Balance
Twelve Months Ended December 31, 2007

Item #	Month	Col. 1 Purchase Cost $(000)'s	Col. 2 10^3m^3	Col. 3 Unit Rate $\$/10^3m^3$	Col. 4 Reference Price $\$/10^3m^3$	Col. 5 Unit Rate Difference $\$/10^3m^3$	Col. 6 Forecasted Month of PGVA $(000)'s	Col. 7 Forecasted YTD PGVA $(000)'s	Col. 8 Forecasted Rollover	Col. 9 Inventory Revaluation $(000)'s	Col. 10 Forecasted Rider "C" $(000)'s	Col. 11 Adjusted YTD PGVA $(000)'s
1.1	2006 Forecast PGVA Balance Rollover								(106,597.0)			(106,597.0)
1.2	January 1/07 Inventory re-valuation									61,486.1		(45,110.9)
1.3	January	100,941.7	319,487.3	315.949	349.047	(33.098)	(10,574.0)	(10,574.0)			4,099.2	(51,585.7)
1.4	February	110,053.1	304,633.1	361.264	349.047	12.217	3,722.0	(6,852.0)			9,759.2	(38,104.5)
1.5	March	178,404.4	563,034.7	316.862	349.047	(32.185)	(18,121.0)	(24,973.0)			7,841.2	(48,384.3)
1.6	April 1/07 Inventory re-valuation									(8,405.7)		(56,790.0)
1.7	April	165,906.6	538,349.0	308.177	362.982	(54.805)	(29,504.0)	(54,477.0)			14,794.8	(71,499.2)
1.8	May	106,269.1	345,827.4	307.289	362.982	(55.693)	(19,260.0)	(73,737.0)			11,537.0	(79,222.2)
1.9	June	109,818.4	358,462.9	306.359	362.982	(56.623)	(20,297.0)	(94,034.0)			7,086.9	(92,432.4)
1.10	July	106,837.6	381,851.3	279.788	362.982	(83.194)	(31,768.0)	(125,802.0)			7,719.5	(116,480.8)
1.11	August	94,104.8	371,315.7	253.436	362.982	(109.546)	(40,676.0)	(166,478.0)			9,418.9	(147,737.9)
1.12	September	97,681.8	425,152.3	229.757	362.982	(133.225)	(56,641.0)	(223,119.0)			8,986.2	(195,392.8)
1.13	October 1/07 Inventory re-valuation									87,165.3		(108,227.5)
1.14	October	98,302.9	402,376.5	244.306	323.347	(79.041)	(31,804.0)	(254,923.0)			5,428.2	(134,603.2)
1.15	November	128,367.3	464,958.9	276.083	323.347	(47.264)	(21,976.0)	(276,899.0)			12,417.2	(144,162.0)
1.16	December	121,032.4	412,848.0	293.165	323.347	(30.182)	(12,461.0)	(289,360.0)			18,964.0	(137,659.0)
	Sub-Total	1,417,720.1	4,888,297.3	290.023				(289,360.0)	(106,597.0)	140,245.7	118,052.3	(137,659.0)

January 1/07 Inventory Revaluation Credit	1,883,476.2	32.645	61,486.1
April 1/07 Inventory Revaluation Credit	603,207.5	(13.935)	(8,405.7)
July 1/07 Inventory Revaluation Credit	1,354,388.6	0.000	-
October 1/07 Inventory Revaluation Credit	2,199,182.3	39.635	87,165.3

ENBRIDGE GAS DISTRIBUTION INC.
Projected Year-end PGVA Balance
Twelve Months Ended December 31, 2006

Item #	Month	Col. 1 Purchase Cost $(000)'s	Col. 2 10^3m^3	Col. 3 Unit Rate $\$/10^3m^3$	Col. 4 Reference Price $\$/10^3m^3$	Col. 5 Unit Rate Difference $\$/10^3m^3$	Col. 6 Forecasted Month of PGVA $(000)'s	Col. 7 Forecasted YTD PGVA $(000)'s	Col. 8 Prior Year Rollover $(000)'s	Col. 9 Inventory Revaluation $(000)'s	Col. 10 Rider "C" $(000)'s	Col. 11 Adjusted YTD PGVA $(000)'s
1.1	September 05 Rollover								2,800.7			2,800.7
1.2	December 05 Rollover								97,272.7			100,073.4
1.3	January 1/06 Inventory re-valuation									(166,678.1)		(66,604.7)
1.4	January	175,682.3	373,024.5	470.967	484.195	(13.228)	(4,934.0)	(4,934.0)			8,187.1	(63,351.6)
1.5	February	126,642.1	300,532.2	421.393	484.195	(62.802)	(18,874.0)	(23,808.0)			13,640.9	(68,584.7)
1.6	March	109,287.7	271,916.3	401.917	484.195	(82.278)	(22,373.0)	(46,181.0)			13,336.1	(77,621.6)
1.7	April 1/06 Inventory re-valuation									71,756.7		(5,864.9)
1.8	April	94,544.5	307,407.8	307.554	399.582	(92.028)	(28,290.0)	(74,471.0)			8,414.4	(25,740.5)
1.9	May	95,056.8	313,532.5	303.180	399.582	(96.402)	(30,225.0)	(104,696.0)			4,340.3	(51,625.2)
1.10	June	87,183.0	305,332.7	285.534	399.582	(114.048)	(34,822.0)	(139,518.0)			3,058.2	(83,389.0)
1.11	July 1/06 Inventory re-valuation									24,411.5		(58,977.4)
1.12	July	87,533.6	307,666.5	284.508	381.692	(97.184)	(29,900.0)	(169,418.0)			5,712.0	(83,165.4)
1.13	August	108,474.7	360,304.6	301.064	381.692	(80.628)	(29,051.0)	(198,469.0)			7,776.7	(104,439.6)
1.14	September	112,135.7	409,101.5	274.102	381.692	(107.590)	(44,015.0)	(242,484.0)			7,774.1	(140,680.5)
1.15	October 1/06 Inventory re-valuation									-		
1.16	October	111,932.2	493,176.8	226.962	381.692	(154.730)	(76,309.0)	(318,793.0)			23,048.8	(193,940.7)
1.17	November	172,232.9	505,310.5	340.846	381.692	(40.846)	(20,640.0)	(339,433.0)			46,270.4	(168,310.3)
1.18	December	174,617.9	482,648.9	361.791	381.692	(19.901)	(9,605.0)	(349,038.0)			71,318.3	(106,597.0)
	Sub-Total	1,455,323.4	4,429,954.8	328.519				(349,038.0)	100,073.4	(70,509.9)	212,877.4	(106,597.0)

January 1/06 Inventory Revaluation Credit	1,902,109.9	(87.628)	(166,678.1)
April 1/06 Inventory Revaluation Credit	848,057.4	84.613	71,756.7
July 1/06 Inventory Revaluation Credit	1,364,523.3	17.890	24,411.5
October 1/06 Inventory Revaluation Credit	2,112,011.4	0.000	-

GAS MARKETER GROUP INTERROGATORY #4

INTERROGATORY

Reference: Page 3, Paragraph 10

Enbridge currently adjusts its annualized revenue requirement on the reference price resulting from the QRAM. What impacts on the revenue requirement would there be if Enbridge moved to a monthly price for gas? In responding, please indicate all analysis and assumptions.

Has Enbridge considered using any other methods to set adjust its revenue requirement? Please provide the details of the forecasted revenue requirement versus actual revenue for the past three years.

RESPONSE

As outlined in the Company's evidence in relation to Issue 5, regardless of the frequency of a forecast adjustment mechanism in relation to changes in gas prices, the types of impacts within the revenue requirement would remain as a cost to the Company which are driven by changing gas prices. If Enbridge were to move to a monthly adjustment mechanism it would still be faced with the same base type of revenue requirement related cost impacts that it adjusts within the quarterly adjustment mechanism.

Enbridge does not compile data of actual and forecast annual revenue requirements specific to the various changes in gas prices that occur on a quarterly basis and their impacts within related carrying costs.

Witnesses: K. Culbert
M. Giridhar
A. Kacicnik

GAS MARKETER GROUP INTERROGATORY #5

INTERROGATORY

Reference: Page 9, Paragraph 31.

By looking at the 12 month cost of gas for QRAM setting, there seems to be an implied cost/ benefit of storage. Does EGD agree that this is the case? If not, why not?

RESPONSE

The 12 month cost of gas for QRAM reflects the purchasing pattern for system supplies, including load balancing for DP customers, which is made possible due to the availability of storage. This benefit is provided to system gas customers and direct purchase customers.

Witnesses: M. Giridhar
D. Small

GAS MARKETER GROUP INTERROGATORY #6

INTERROGATORY

Reference: Page 10, PGVA Variance Graph.

a) Please provide the source for the data used in this graph, and advise if historical average actual consumption and pricing were used, and for what time period.

b) Please also provide an example that illustrates conditions that would require a debit balance to be cleared from the PGVA.

c) Please advise how market conditions may effect the PGVA balance (E.g. breakout vs. choppy).

d) Please provide similar examples (using actual data including riders) to those provided by Union Gas on pages 16-19 of their submission.

e) Please confirm that the graph assumes that no gas is to provided to the customer from storage at the cost it would have been purchased at when injected into storage.

f) Please provide a new column to the graph illustrating what the net effect of billing the customer for gas purchased as well as gas used from storage.

RESPONSE

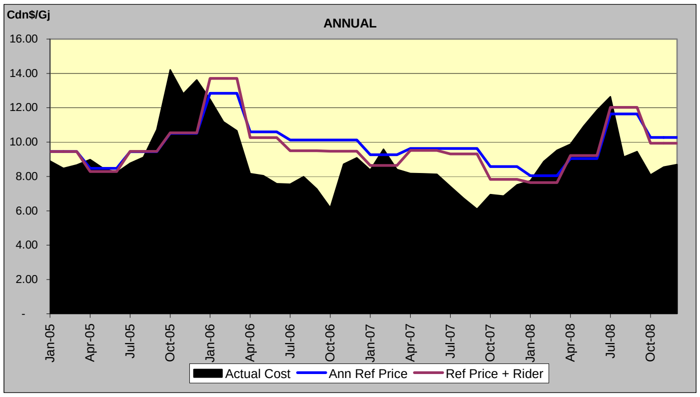
a) The consumption volume used for this illustration was based upon the typical customer load profile for a Rate 1 customer who uses natural gas for heating and water heating. The annual consumption for the typical customer would be 3, 064 m^3 per year. The monthly pricing data was the forecasted Empress price as per the July 2008 QRAM as shown in EB-2008-0069, Exhibit Q3-3, Tab 1, Schedule 3, page 1.

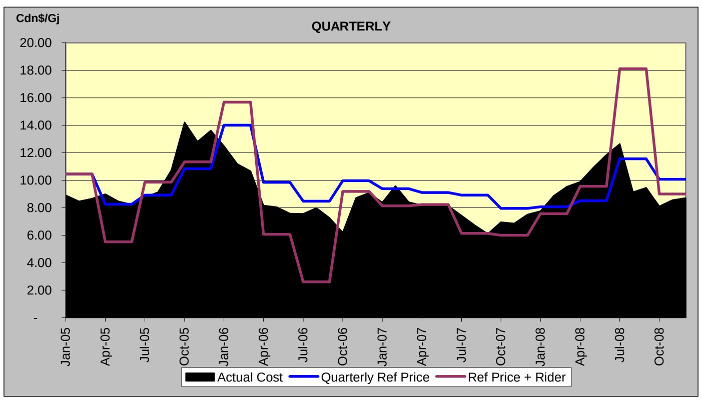
b) The purpose of the illustration was to demonstrate that rates, when developed based upon the annual gas acquisition forecast, will require no final adjustments assuming actual prices are equal to the forecast. On the other hand, assuming that all gas consumed in a month is also purchased in the same month, when it does not reflect purchasing patterns, will result in a credit or debit balance in the PGVA even if actual prices equal forecast. One example of a debit balance is if the forecast winter prices are lower than summer prices in the illustration referred to above.

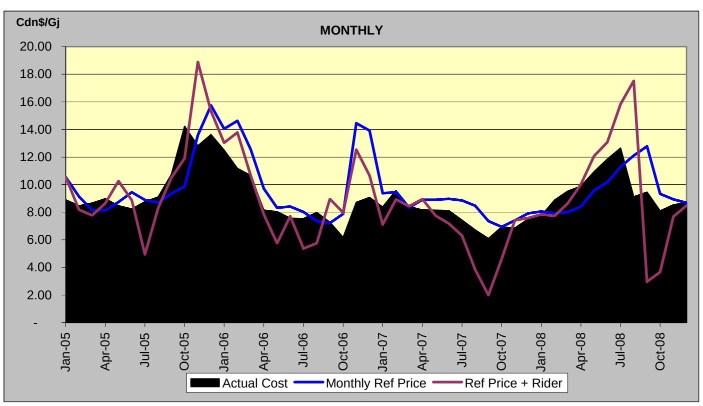
Witnesses: M. Giridhar
D. Small

c) EGD does not understand the reference to "breakout vs choppy".

d) The graphs below provide examples similar to those provided by Union Gas on pages 16 to 19 of their submission. The results are similar to those determined by Union. EGD has provided three comparators of forecasted reference prices, including riders calculated over the same period vs actual prices. The first graph compares the reference price as it is calculated today – an annual price based upon a 12 month forecast of prices that change quarterly. The rider is calculated using Union's methodology which EGD proposes to adopt. The second graph compares a quarterly reference price calculated based upon a 3 month forecast and a rider calculated using quarterly consumption. The third graph compares a monthly reference price and a rider using monthly consumption. EGD did not calculate a monthly price based upon a 12 month forecast due to the amount of time required to calculate the information. EGD chose the time period January 2005 to December 2008 which coincides with when EGD changed its year-end.







Period - January 2005 to Dec 2008						
	STABILITY			ACCURACY		
Filling Period	Volatility (1 St Dev)	Stability Comparison to Current Pricing Methodoogy		ABS Variance Act Cost to Ref Price	Accuracy Comparison to Current Pricing Methodology	
EGDI Yearly	1.476			$0.971		
Sen # 2 Quarterly	3.737	153.2%	Less Stable	$4.361	-349.3%	Less Accurate
Sen # 2 Monthly	3.565	141.6%	Less Stable	$3.252	-235.0%	Less Accurate

.

Witnesses: M. Giridhar
D. Small

e) The table assumes that gas is provided from storage at the cost at which it was purchased and injected into storage.

EGD develops its supply portfolio such that it can maintain relatively constant purchase levels and utilize storage for load balancing purposes. The graph was intended to reflect a constant purchase level, similar to the constant deliveries by direct purchase customers. The cost of load balancing system and direct purchase customers is recovered through load balancing charges applicable to all.

f) For the reasons described in e) above no additional column is required.

Witnesses: M. Giridhar
D. Small

GAS MARKETER GROUP INTERROGATORY #7

INTERROGATORY

Reference: General

Please provide the percentage of Enbridge customers that partake in Enbridge's Equal Billing Plan. Please also comment on whether EBP is an effective bill smoothing mechanism with respect to rate volatility.

RESPONSE

The percentage of customers enrolled in the Enbridge Budget Billing Plan will vary through the year. Generally, it ranges between 52% and 57%, with an average of about 55% of the customer base enrolled in the plan.

The Budget Billing Plan has been offered to residential (Rate 1) customers since at least 1960. Residential customers have the option to enroll in the Budget Billing Plan regardless of whether they are on system gas or direct purchase arrangements.

Given that the load profile of residential customers is heat sensitive (i.e., winter consumption is many times higher than summer consumption), the Budget Billing Plan enables bill amounts / payments to be spread over the year. In other words, the plan serves as a budgeting tool for homeowners whose bill amounts in the winter would otherwise be many times higher than their bill amounts in the summer.

The Budget Billing Plan is used to smooth volumetric peaks and valleys, not rate / price volatility. It does not in any way impact the rates / prices otherwise payable by system gas or direct purchase customers enrolled in the Budget Billing Plan. The plan was set up as a tool to smooth irregular monthly consumption effects for customers long before the emergence of natural gas price volatility (as exhibited in the last decade) or the establishment of the open natural gas market. Its purpose is independent from price volatility management.

The Enbridge Budget Billing Plan is an eleven month plan that commences in September each year and concludes in July with a true up of gas charges paid versus charges for gas consumed. Customers pay for their actual use in August. The plan also incorporates two windows where payment installments may be re-adjusted to reflect changing commodity costs (for system gas customers) or variances in weather

Witnesses: A. Creery
A. Kacicnik

versus the forecast. The plan aims to complete the budget billing cycle in a position as close to neutral as possible in order to avoid large credits or debits for customers in the July true up month.

Installment amounts in the plan may be changed at three different points in any budget billing cycle. July and August charges never equal the installment amount because July is the true up month, and August is the pay for actual use month.

In 2006, Enbridge changed the name of this program to Budget Billing Plan from Equal Billing Plan to more appropriately convey to customers that it is a mechanism to aid in budgeting expenses, versus a guarantee of fixed or equal payments.

Witnesses: A. Creery
A. Kacicnik

GAS MARKETER GROUP INTERROGATORY #8

INTERROGATORY

Reference: Page 11, Paragraph 36.

Would EGD agree that shorter time frame setting of the regulated rate (i.e. MRAM) allows for more accurate matching of actual commodity and gas service costs (transportation and storage) to the actual customers receiving default service? If not, why not?

RESPONSE

EGD does not agree. As noted in Exhibit E1, page 9, Paragraph 31, EGD's monthly purchases do not equal the monthly consumption of its customers, rather annual purchases equal the annual consumption of its customers. Assuming that all gas is purchased in the month that it is consumed would be unrepresentative of how gas is purchased for the actual customers receiving default service.

Witnesses: M. Giridhar
D. Small

GAS MARKETER GROUP INTERROGATORY #9

INTERROGATORY

Reference: Page 12, Paragraph 37.

Would regulatory and administration costs be reduced if transparent, mechanical processes were put in place for regulatory notification and approval, and if so, why? If not, why not? In order to put this information in context, please provide the administrative and regulatory costs associated with each of the QRAMs over the last three years.

RESPONSE

As noted in Enbridge's evidence at Exhibit E1, the Company's QRAM process has evolved over time and has achieved a great deal of familiarity with stakeholders. The content of Enbridge's QRAM applications lay out key pieces of information pertinent to a QRAM rate change in a transparent manner. Accordingly, Enbridge seldom receives formal questions or comments on its QRAM applications from stakeholders. In other words, the QRAM application process is essentially mechanical.

While the QRAM application process could be further streamlined (through means such as the proposed QRAM process timeline efficiency at Issue 7: Filing Requirements), the Company does not see any potential mechanistic changes to the QRAM process that would result in a material reduction to regulatory and administrative costs.

As outlined in the Company's evidence at Exhibit E1, paragraph 79, page 26, in QRAM applications Enbridge completes a seven step process as follows:

1. Determination of QRAM reference price;
2. Derivation of rate changes and projected year-end PGVA balance;
3. Submission of QRAM application;
4. Stakeholder review of the application;
5. Reply comments from Enbridge;
6. The Board approval of the forecast reference price, rate changes, and PGVA clearances / adjustments and customer rate change notice; and
7. Implementation of the resultant QRAM rates.

Costs associated with QRAM applications are not tracked separately. Hence, the Company is not able to provide such cost information over the last three years.

Witnesses: I. Abbasi
J. Collier
A. Kacicnik

GAS MARKETER GROUP INTERROGATORY #10

INTERROGATORY

Reference: Page 12, Paragraph 37.

Please provide a detailed estimate of the costs alluded to in this section for EGDI to change from a Quarterly Rate Adjustment Mechanism (QRAM) to a Monthly Rate Adjustment Mechanism (MRAM). Please also indicate which specific changes would be necessary for each of the following: cost allocation methodology, rate design methodology, IT system billing and communication processes.

RESPONSE

Please see the response to Board Staff Interrogatory #1 at Exhibit IR24, Schedule 1.

Witnesses: I. Abbasi
A. Kacicnik

GAS MARKETER GROUP INTERROGATORY #11

INTERROGATORY

Reference: Page 14, Paragraph 42.

Does Enbridge agree that any deviation from the Alberta price is due to decisions made by the utility, and that such decisions should be reviewed for prudency? If not, why not?

RESPONSE

EGD does not agree with the above statement.

EGD uses a Board approved methodology which is consistent with its procurement practices to derive an Alberta price. If the Ontario reference price uses a different methodology to arrive at an Alberta price it would have consequences for the current cost allocation and rate design methodologies which are also approved by the Board.

Witnesses: M. Giridhar
A. Kacicnik
D. Small

GAS MARKETER GROUP INTERROGATORY #12

INTERROGATORY

Reference: Page 15, Paragraph 44.

a) Does Enbridge believe that an Ontario-wide reference price would allow for greater transparency into Utility procurement practices, and if so why? If not, why not?

b) How would an Ontario Reference Price create a disconnect between a distributor's procurement practice and pricing? Please identify the specific disconnects that Enbridge perceive and what impacts they would have.

c) What impacts would an Ontario Reference Price have on equity between service offerings? In responding to this question, please indicate what Enbridge meant in using the term 'service offerings'.

d) What impacts would an Ontario Reference Price have on retroactive billing? In responding to this question, please indicate all components of the customer's bill that would be impacted, including any subcomponents of the accounts that currently comprise the QRAM. In responding to this question, please clearly indicate how Enbridge is assuming an Ontario Reference Price would be defined and all assumptions of its makeup.

RESPONSE

a) EGD's procurement practices are transparent and addressed in evidence filed with the Board in each rate proceeding. Since geography, physical connectivity and customer load profile dictate each utility's procurement costs, a single Ontario wide reference price applied across Ontario utilities would reduce transparency by creating a disconnect between procurement and pricing.

b) See a) above

c) The term service offerings refers to sales, Western bundled T and Ontario bundled T services. EGD's gas portfolio is designed to procure the commodity for its sales customers, transport for its sales and Western T customers and load balancing for sales, Western T and Ontario T customers. EGD uses a Board approved methodology to allocate the cost of its gas portfolio to these services. For example,

Witnesses: M. Giridhar
D. Small

sales customers pay a commodity charge based on an Empress price. Sales and Western T customers pay a transport cost based on the cost of transporting gas to the franchise area. Sales, Western T and Ontario T customers pay load balancing charges based on the cost of Ontario seasonal and peaking supplies in excess of commodity and average transportation costs. If the Ontario Reference Price deviates from the Company's procurement cost, it would distort the equitable allocation of costs between the different services.

d) If the Ontario Reference Price deviates from the distributor's procurement cost, it would result in additional dollars in the PGVA. This would result in greater retroactive billing as the PGVA captures variances in the commodity, transport and load balancing costs.

Witnesses: M. Giridhar
D. Small

GAS MARKETER GROUP INTERROGATORY #13

INTERROGATORY

Reference: Page 18, Paragraph 53.

Please provide any other evaluations done on alternate clearing frequencies for the PGVA. Please advise if EGD sees any merits in matching the clearing frequency to the rate setting frequency, and if so why? If not, why not?

RESPONSE

EGD is mindfull of harmonization of the methodologies of Union and EGD, whenever possible. Therefore, EGD analysed the adoption of Union's methodology of clearing the PGVA on a rolling 12 month basis. EGD would only see merits in matching the clearing frequency with the rate setting frequency if the rate setting frequency was continued to be based on a 12 month forecast for the reasons stated in its evidence at Exhibit E1, page 9, Paragraph 31.

Witnesses: J. Collier
M. Giridhar
A. Kacicnik
D. Small

GAS MARKETER GROUP INTERROGATORY #14

INTERROGATORY

Reference: Page 21, Paragraph 62-64.

a) Would carrying costs be reduced for Enbridge if transportation and storage were to be unbundled, and retailers were allowed access to do there own balancing? If not, why not?

b) How are these carrying costs factored into the regulated rate?

c) Does EGD deem it appropriate to allow Retailers to manage these costs for themselves, given the large percentage of core customers they serve? If not, why not?

RESPONSE

a) Unbundling of rates and services shifts (to a large extent, but not completely as Enbridge would have to stand by and fulfill its dual roles of the system operator and supplier of the last resort) obligations, responsibilities and cost incurrence associated with the provision of a (unbundled) service from the utility onto the customer or their gas vendor.

Through a regulated bundled service the utility assumes the responsibility for and incurs the cost of providing the service. The utility then recovers the costs of its services through the Board-approved rates. With unbundling, the responsibility and cost incurrence for the unbundled service is transferred onto the customer or their gas vendor. While costs incurred by the customer or their gas vendor for the unbundled service may not be the same as costs incurred by Enbridge under a bundled scenario, the costs for such a service would be carried by the customer or the customer would pay their gas vendor as per their contractual arrangement. It is also important to note that the utility has the dual obligation of the system operator and supplier of the last resort and, consequently, would incur costs to maintain system integrity/reliability and to ensure the system demand is met each day, including peak day demand.

Witnesses: J. Collier
K. Culbert
M. Girdhar
A. Kacicnik
M. Suarez

Accordingly, Enbridge's carrying costs would be reduced as compared to the current level, but costs to the customer may not be reduced.

b) Gas cost working cash related carrying costs are recovered through the gas supply charge which is paid by system gas customers only. Carrying costs of gas in inventory and tax related impacts are recovered through the load balancing charges which are paid by all system gas and direct purchase bundled customers.

c) With the current level of unbundling retailers themselves manage gas cost working cash related carrying costs. Unbundling of load balancing and storage for bundled general service (i.e., mass market) customers is outside the scope of this proceeding.

Witnesses: J. Collier
K. Culbert
M. Girdhar
A. Kacicnik
M. Suarez

GAS MARKETER GROUP INTERROGATORY #15

INTERROGATORY

Reference: Page 28, Paragraph 89.

> Please elaborate on and provide a proposal for simplified application, timeline and communications processes that would facilitate more frequent rate changes than QRAM. Please include the specific actions that will need to be taken to expedite processes and decisions to modify the current QRAM process.

RESPONSE

Enbridge does not support higher than quarterly price change frequency.

The Company notes however if the Board finds that a higher than quarterly (i.e., QRAM) price change frequency is appropriate, then the current QRAM application requirements, associated timeline, as well as customer communication process, would need to be greatly simplified to accommodate the higher frequency of price changes.

Witnesses: J. Collier
A. Kacicnik

GAS MARKETER GROUP INTERROGATORY #16

INTERROGATORY

Reference: Pages 29-30, Paragraphs 90-96.

a) Please explain the rationale for the lead time indicated (21 day strip ending 30 days prior to QRAM effective date), in light of recent volatility in the wholesale gas market.

b) Would EGD agree that a price reported closer to the delivery time period would most likely be more reflective of the value of physical gas delivered under the period in question? If not, why not?

c) Would EGD agree that Dawn is a liquid trading hub reflective of the cost of delivered gas (transportation adjusted to delivery in each utility franchise area)?

d) Does EGD believe there should be a mechanistic approach using NYMEX contract settlement as the marker price and take mid month basis marks to adjust for the utility supply mix? If not, why not?

e) Is it possible to report the NYMEX settles as the prompt month expires (3 days) prior to flow?

f) Would Enbridge agree that the primary drivers for using the current lead time are related to the timing of the regulatory approvals and notice periods in the current QRAM process?

RESPONSE

a) Current processes require 45 days from start to finish to implement a QRAM price change for a specific effective date. EGD is hopeful that with process improvements the timeline can be reduced to 30 days. EGD still believes however, that the Reference Price should still be based on a 21-day average of forecasted monthly prices because it is representative of the timeframe that a contract is traded for.

Witnesses: M. Giridhar
A. Kacicnik
D. Small

b) As discussed on page 9, paragraph 31 of its evidence, EGD does not believe that the market price of gas in one particular month is reflective of the value of gas consumed by a customer in that particular month. Customers in Ontario have the benefit of storage and EGD plans its gas supply portfolio accordingly.

c) While Dawn has developed over the years such that it has become a very active trading hub, EGD submits that there is not adequate supplies available at Dawn to meet its' entire demand. Even if this were the case there is not enough firm transportation available from Dawn to the CDA and to the EDA. EGD believes that a Utility should maintain a gas supply portfolio that is geographically diverse to eliminate the reliance upon one particular transporter or supply basin. EGD also believes that the role of the Utility is to be able to provide firm service to its customers (except for those that opt for interruptible service) and this cannot be met unless it has, at its disposal, firm transportation contracts to the franchise area.

d) No. As discussed in its' evidence, EGD believes that its rates should be based on the forecasted costs of its' supply portfolio and as such should capture the forecasted indices for all the pertinent price points including the associated transportation costs. This will ensure that rates are set based upon the Board approved cost allocation and rate design and that the subsequent clearing of the PGVA can follow that same cost allocation methodology.

e) Not withstanding that using Nymex is inconsistent with the need to reflect forecast gas costs in rates that are consistent with procurement practice, the timing proposed in this question would not allow sufficient time for preparation of evidence and schedules, regulatory approval, billing implementation and customer communication.

f) See e) above.

Witnesses: M. Giridhar
A. Kacicnik
D. Small

GAS MARKETER GROUP INTERROGATORY #17

INTERROGATORY

Reference: Page 36, Paragraph 118

Please explain how the tools provided by EGD are appropriate for Gas Vendors to manage the customer mobility impacts of GDAR, given that such tools are restricted during the peak winter demand months and the late storage injection season.

RESPONSE

As outlined in the Company's evidence in paragraph 125 and 131, the Company proposes to adopt MDV reestablishment and weather normalized MDV establishment. These two additional mechanisms will help address the customer mobility impacts to a large degree since it will reduce over and under deliveries caused by customer mobility.

Witnesses: M. Giridhar
I. MacPherson
B. Manwaring
D. Small

GAS MARKETER GROUP INTERROGATORY #18

INTERROGATORY

Reference: Page 36, Paragraph 119

a) Please provide an approximate duration in hours or days that that defines the “short notice” reference to replace deliveries on interrupted Suspension as discussed in this paragraph.

b) Would Enbridge consider imposing financial penalties on Direct Purchase customers for failure to deliver on interrupted Suspension?

RESPONSE

a) As the reason for interrupting a Suspension would likely reflect current supply/demand conditions, required actions would be anticipated based on the day ahead gas market. Therefore, in absence of further study, a 24 hour time frame would be an anticipated notice period.

b) There are financial penalties for failing to comply with a contracted requirement. Similar treatment would be envisioned in these cases.

Witnesses: M. Giridhar
A. Kacicnik
I. MacPherson
B. Manwaring
D. Small

GAS MARKETER GROUP INTERROGATORY #19

INTERROGATORY

Reference: Page 37, Paragraphs 122

Is it possible that more frequent balancing could result in reduced cost recovery from ratepayers? If not, why not?

RESPONSE

No. EGD balances all bundled customers on a daily basis for both planned and unplanned consumption. To the extent that load balancing requires gas purchases at peak prices, the return of the molecule at a subsequent time period (even if more frequent than annually) would not have an appreciable effect on customer rates.

Witnesses: M. Giridhar
A. Kacicnik
I. MacPherson
B. Manwaring
D. Small

GAS MARKETER GROUP INTERROGATORY #20

INTERROGATORY

Reference: Page 37, Paragraphs 123

Considering the mobility impacts of GDAR, does EGD believe that more frequent balancing of the system would provide greater efficiency, matching supply more closely with demand and costs, by customer and retailer? If not, why not?

RESPONSE

No. See the responses to Gas Marketer Group Interrogatories #17 and #19 at Exhibit IR8, IR14, IR18, IR19, Schedules 17 and 19, respectively.

Witnesses: M. Giridhar
A. Kacicnik
I. MacPherson
D. Small

GAS MARKETER GROUP INTERROGATORY #21

INTERROGATORY

Reference: Page 38, Paragraph 125

Please provide a detailed breakdown of the "large scale changes" to ENTRAC, contracts, processes, policies, and tariffs required for MDV re-establishment and multi-point balancing.

RESPONSE

In addition to a number of other business requirements, EnTRAC manages the following:

- facilitates the contract administration process
- processes transactions submitted by gas vendors / customers (creation of pools and price point groups, enrollments, transfers and drops) in compliance with GDAR
- establishes the delivery requirement for each pool based upon gas vendor and customer elections
- maintains a Banked Gas Account (BGA) report for each pool
- manages all gas nomination requests
- processes load balancing requests
- tracks all deliveries related to customers attached to pools
- tracks all consumptions volumes related to customers attached to pools
- tracks all gas vendor charges billed in relation to customers attached to pools
- monitors contractual compliance of pools in relation to their gas delivery agreements
- processes BGA disposition requests
- processes and directs payments / remittances to gas vendors / customers
- calculates and invoices (directly or through an interface to the customer billing system) all gas delivery agreement non-compliance charges

All of these business requirements are interrelated and provide a comprehensive solution through user interface screens, engines, reports, system interfaces and in some cases internet transport protocols. To accommodate multi-point balancing, MDV re-establishment and weather normalized MDV's would require significant change to a

Witnesses: I. Abbasi
B. Manwaring

significant portion of the integrated solution components. The analysis to date indicates that approximately 30 screens, 20 engines and 10 reports will require changes or development.

In relation to MDV re-establishment and multi-point balancing, the large scale changes required to EnTRAC involve, but are not limited to, the following:

1. Management of Election Process for Balancing Options

   EnTRAC will be modified to accommodate both Balance Point Options of EGD determined or Customer determined which will be elected at the Pool Level.

2. Checkpoint Value Determination

   An engine is required to calculate the check point value determination which will incorporate;
   - billed consumption to date
   - forecasted consumptions to the check point
   - forecasted weather variance
   - changes to pool composition
   - nominations and accepted load balancing transactions

3. Banked Gas Account ("BGA") Forecasts

   In addition to the current monthly BGA forecasts and final BGA balance at the end of each contract year, EnTRAC will be modified to provide volumetric forecasts for additional balancing points.

   BGA will need to be modified to accommodate the MDV for pools potentially changing on a monthly basis and the forecasting model calculations will need to be significantly modified.

4. Communications

   A mechanism is required to communicate, alert and provide directions of required actions to gas delivery agreement holders and required time lines for checkpoint balancing.

Witnesses: I. Abbasi
B. Manwaring

5. Processing Load Balancing Requests

   It is anticipated that there will be potential changes to the processing of load balancing requests to accommodate new considerations relevant to multi-point balancing.

6. Compliance Monitoring

   Revise the compliance engine to monitor the resultant activity at the deadline balancing points. EnTRAC will be required to perform actions triggered from the resultant activity such as BGA balance transfers, invoicing of penalties, and/or Gas Sale/Purchases.

7. Remittance Engine and Report Engines (Funds Imbalance and Invoice Remittance Statements)

   The remittance engine will require modification to accommodate the application of charges and amounts remitted in relation to multi-point balancing. The Funds Imbalance Report and Remittances Statements will also require modifications to include additional information / charge types. The engine that calculates the weighted average price used in the remittance process which has a dependency on MDV will require modifications.

8. Billing System Interface

   If charges need to be applied to customer invoices, EnTRAC upon calculating billing values will require an interface mechanism in order to communicate applicable charges to the billing system and correctly apply them to appropriate general ledger accounts.

9. Administration and Management Reports

   Additional reports will be required to manage the multi-point balancing process for monitoring and execution, as well as MDV re-establishment. For example: with the MDV's for pool's changing more frequently the assignment of FT capacity on TCPL has the potential of changing on a monthly basis. Reports will be required to trigger the updating of TCPL's Dovetail system with the changes to the monthly assignments of Enbridge capacity to third party shippers on TCPL.

Witnesses: I. Abbasi
B. Manwaring

10. MDV Establishment Engine and Screens

    The MDV Establishment Engine will need to be modified to accommodate the business rules applicable to the periodic re-establishment of MDV for pools once triggers are reached (such as pool account composition changes that have reached an agreed threshold).

11. Pool Composition Engine and Report

    The Pool Composition Report and engine will require modifications in order to generate additional Pool Composition Reports to coincide with and provide the lower level detail (such as account composition and account contribution to MDV calculation) supporting the re-established MDV for a Pool.

12. Nomination Engine and Screens

    All screens and engines relating to nomination management will need to be revised to accommodate the periodic change to the MDV of pools. Alerts and message triggers will require modification.

13. Weather Normalization Engine

    Create a data feed mechanism and incorporate a Weather Normalization into the MDV establishment process/calculation.

14. Database Modifications, Data Migration and Archiving Procedures

    Significant changes to the EnTRAC database will be required to accommodate the additional data related to MDR re-establishment, weather normalization data, and multi-point balancing.

.

Witnesses: I. Abbasi
B. Manwaring

GAS MARKETER GROUP INTERROGATORY #22

INTERROGATORY

Reference: Page 38, Paragraph 126

Please confirm/ deny that the $8.5M implementation costs alluded to in this paragraph include both weather normalized MDV re-establishment and multi-point BGA balancing.

RESPONSE

Confirmed, that the $8.5M implementation costs alluded to in this paragraph include both weather normalized MDV re-establishment and multi-point BGA balancing.

Witnesses: I. Abbasi
B. Manwaring

GAS MARKETER GROUP INTERROGATORY #23

INTERROGATORY

Reference: Page 38, Paragraph 126

Please provide a detailed breakdown of the $8.5M costs for the standardization of load balancing mechanisms between Union and Enbridge.

RESPONSE

The following is based on estimates that would result from the adoption of a multi point balancing model. The estimates are high level and the list is not to be interpreted as exhaustive or complete as it was prepared in absence of a formal/detailed evaluation.

Design and Development Including scoping study, transaction rules, programming development, test and warranty	$5,000,000
Infrastructure Changes to internal processes, documents, staffing, controls (Sox), contracts, training and testing, synchronization with other programs	$1,250,000
3rd Party Development, Training and Communications Any impacts from integration and testing with other systems and/or programs such as SAP	$1,250,000
Project Management	$500,000
Contractor Expenses Travel, living, administration	$500.000
Sum	$8,500,000

Witnesses: I. Abbasi
B. Manwaring

GAS MARKETER GROUP INTERROGATORY #24

INTERROGATORY

Reference: Page 38, Paragraph 126

Please explain why $8.5M worth of costs are required to implement multi-point balancing when this process is already done on the anniversary of the contract? Why does facilitating this process at minimum 2 more times per year cause such costs to be incurred?

RESPONSE

While the processes appear to have similar outcomes in truing up differences between estimated and actual consumptions, the functions driven from check points and the contract anniversary are very different and would require the creation of new logic and support.

Downstream functions stemming from the check point requirements would also be new, (please refer to GMG Interrogatory #21 at Exhibit IR8, IR14, IR18, IR19, Schedule 21 for detail) so would require design and testing. Any/all changes would be required to successfully interface with other customer service and support systems that take in metering/consumption information and allow billing.

Recent projects undertaken that have required changes to EnTRAC (such as GDAR and CIS) have proven to be comprehensive in nature. Standardization of the BGA management process would have many of the same requirements of resources as previous projects.

Witnesses: I. Abbasi
I. MacPherson
B. Manwaring

GAS MARKETER GROUP INTERROGATORY #25

INTERROGATORY

Reference: Page 38, Paragraph 127

Please provide a detailed breakdown of the $3.7M cost for weather normalized MDV establishment/ re-establishment.

RESPONSE

The following is based on estimates that would result from adoption of an MDV reestablishment process. These estimates are high level and the list is not to be interpreted as exhaustive or complete as it was prepared in absence of a formal/detailed evaluation.

Design and Development	
Including scoping study, transaction rules, hardware and software development including development of an appropriate weather normalization program	$2,650,000
Infrastructure	
Changes to internal processes, documents, contracts	$550,000
Project Management	$250,000
Contractor Expenses	
Travel, living, administration	$250.000
Sum	$3,700,000

Witnesses: I. Abbasi
B. Manwaring

GAS MARKETER GROUP INTERROGATORY #26

INTERROGATORY

Reference: Page 39, Paragraph 130

a) Considering that Direct Purchase (DP) customers deliver 60% of the supply volumes into the province, and Enbridge controls whether a DP customer can suspend deliveries, please advise if it is possible for Enbridge to draft DP supply.

b) Please advise if system customers, through EGD, experience a benefit/ cost by balancing all customers. If not, why not?

RESPONSE

a) No, for the simple fact that the DP customers continue to consume. In addition, the time of year that EGD does not allow suspensions (usually winter), EGD supplements the DP supply to these customers (and all other bundled ratepayers for that matter) with gas from its load balancing tools.

b) As noted in Enbridge's evidence at Exhibit E1, Paragraph 40, page 13, the supply portfolio serves to meet the twin obligations of the distributor - default supplier to system gas customers (i.e., regulated supply option) as well as system operator for all customers on its system. Because both system and DP customers are treated in the same fashion with respect to the balancing service and recovery of its costs, there is no asymmetrical benefit/cost conveyed to either group of bundled customers.

Witnesses: M. Giridhar
A. Kacicnik
I. MacPherson
B. Manwaring
D. Small

GAS MARKETER GROUP INTERROGATORY #27

INTERROGATORY

Reference: Page 50, Paragraph 173

a) Please provide a detailed breakdown of the $3.18M direct purchase management costs referred to in this paragraph using the incremental accounting approach

b) Please also provide the calculation that translates these costs into the new recovery rates for DPAC charges proposed in paragraph 178.

c) Please explain why Enbridge's proposed monthly account fee of $0.26 is $0.07 higher than Union's fee.

d) Please provide the break down of all elements comprising cost of system gas of $0.88 million using the incremental accounting approach.

e) Please provide the break down of all elements comprising the 2009 estimated system gas fee of $1.14 million using the incremental accounting approach.

f) Please provide the break down of all elements comprising the direct purchase management costs of $1.56 million using the incremental accounting approach.

RESPONSE

a) The breakdown of the $3.18M direct purchase management costs by function for 2009 based on the incremental costing approach is as follows:

	Incremental Cost Estimate for 2009	
	Direct Purchase	
Contract Management	$	1,370,425
Nominations	$	261,368
Invoicing & Payment Processing	$	68,384
Demand Forecasting & Supply Planning	$	36,803
Direct Purchase Billing Adjustments	$	631,123
Total incremental costs for activities	$	2,368,104
Fringe benefits for labour component of incremental costs	$	811,241
TOTAL	$	3,179,345

Witnesses: J. Coillier
A. Kacicnik
I. MacPherson
M. Suarez
B. Vari

b) The cost recovery of the $3.18 M is provided below:

	$ M
1132 Pools @ $75/mth	$1.00
701155 Accounts @ $0.26/mth	$2.18
Total	$3.18

As part of each annual rate adjustment application, the number of pools and accounts levels will be updated. The fixed fee will remain at $75. The amount recovered through the fixed fee will be updated based on the forecast number of pools. The variable fee will be adjusted to reflect the remaining amount to be recovered. The remaining amount will be divided by the forecast number of accounts to arrive at the cost per account (i.e., per account fee).

c) The Company's proposed DPAC structure is set to recover its forecast of incremental costs for this function. The amount of incremental costs recovered through the base charge equals base charge times the forecast number of pools. The remaining costs are recovered based on the variable charge which is determined based on the forecast number of accounts. The account fees of Enbridge and Union Gas are not the same due to the different number of pools and accounts between the two utilities, and different levels of incremental costs that are recovered through the DPAC charges.

d) The functions identified as system gas related pertain to the roles and responsibilities which were performed at that time. The grouping of the responsibilities into functions may not be directly comparable to the 2009 grouping of functions however the overall incremental cost amount is comparable. The breakdown of the existing level of incremental costs for the system gas functions is as follows:

Witnesses: J. Coillier
A. Kacicnik
I. MacPherson
M. Suarez
B. Vari

	Incremental Cost Estimate for 2002	
	System Gas	
Gas Acquisition	$	270,460
Risk Management	$	68,800
Contract Management	$	86,818
Nominations	$	33,907
Invoicing & Payment Processing and reporting	$	142,921
Supervision	$	89,537
Billing	$	6,157
Total incremental costs for activities	$	698,600
Fringe benefits for labour component of incremental costs	$	186,212
TOTAL	$	884,812

e) The breakdown of the $1.14M system gas costs by function for 2009 based on the proposed incremental costing approach is as follows:

	Incremental Cost Estimate for 2009	
	System Gas	
Gas Acquisition	$	257,398
Contract Management	$	200,738
Nominations	$	145,641
Invoicing & Payment Processing	$	115,433
Demand Forecasting & Supply Planning	$	64,708
Direct Purchase Billing Adjustments		N/A
Total incremental costs for activities	$	783,918
Fringe benefits for labour component of incremental costs	$	354,252
TOTAL	$	1,138,169

f) The functions identified as direct purchase administration related pertain to the roles and responsibilities which were performed at that time. The grouping of the responsibilities into functions may not be directly comparable to the 2009 grouping of functions however the overall incremental cost amount is comparable. The breakdown of the existing level of incremental costs for the direct purchase administration function is as follows:

Witnesses: J. Coillier
A. Kacicnik
I. MacPherson
M. Suarez
B. Vari

	Incremental Cost Estimate for 2002	
	Direct Purchase	
Nominations	$	428,833
Direct Purchase Administation	$	301,926
Direct Purchase Contract Management	$	400,530
Statement Preparation	$	24,163
Total incremental costs for activities	$	1,155,453
Fringe benefits for labour component of incremental costs	$	404,547
TOTAL	$	1,560,000

Witnesses: J. Coillier
A. Kacicnik
I. MacPherson
M. Suarez
B. Vari

GAS MARKETER GROUP INTERROGATORY #28

INTERROGATORY

Reference: Page 51, Paragraph 178

Please confirm that actual rate changes to DPAC fees will be addressed in a future Enbridge rate case, and not in these proceedings.

RESPONSE

Yes, the Company would bring forward its proposals to develop and implement the DPAC fee based on an incremental cost approach and new fee structure in its 2010 rate adjustment application.

Witness: A. Kacicnik

GAS MARKETER GROUP INTERROGATORY #29

INTERROGATORY

Reference: Page 52, Issue 9.2

If DP customers were to be provided access to manage their own transportation and storage, could EGD costs related to load balancing decline? If not, why not?

RESPONSE

With the current level of unbundling customers can make their own arrangements for gas supply and associated transportation to Enbridge's franchise area or can do so through a gas vendor. Such arrangements are accommodated through direct purchase options. Regardless of the type of customers' supply arrangements, Enbridge provides load balancing and distribution service to all customers.

Unbundling of load balancing and storage for bundled general service (i.e. mass market) customers is outside the scope of this proceeding.

Witnesses: J. Collier
M. Giridhar
A. Kacicnik
M. Suarez

GAS MARKETER GROUP INTERROGATORY #30

INTERROGATORY

Reference: Page 56, General – Billing Terminology

Does Enbridge agree that harmonized billing terminology amongst natural gas distributors would provide customers province wide with a clearer understanding of materials presented to them from the OEB, Industry, or Media, in support of customer education?

RESPONSE

Enbridge does not agree. As submitted in the evidence, given the current level of consistency amongst natural gas distributors the degree of variance would not be noticeable for the average customer.

Witness: A. Creery

GAS MARKETER GROUP INTERROGATORY #31

INTERROGATORY

Reference: Page 56, Paragraph 195

Please explain why an ongoing mechanism to coordinate bill messaging between Enbridge and Union Gas would be required.

RESPONSE

It is Enbridge's submission that a mechanism would be required to ensure agreement between the utilities on the content of bill messages that correspond to any changes in line item descriptions.

Witness: A. Creery

GAS MARKETER GROUP INTERROGATORY #32

INTERROGATORY

Reference: Page 58, Paragraph 202

Please provide a detailed breakdown of the estimated $100, 000 to change the disposition of PGVA balances over a 12 month rolling period.

RESPONSE

Please refer to the Company's response to Board Staff Interrogatory #9 at Exhibit I24, Schedule 9.

Witnesses: I. Abbasi
A. Kacicnik

GAS MARKETER GROUP INTERROGATORY #33

INTERROGATORY

Reference: Page 59, Paragraph 208

Please provide a detailed breakdown of the estimated $1.0 to $1.5 M per year cost increase to increase the price adjustment frequency.

RESPONSE

Please refer to the Company's response to Board Staff Interrogatories #1 and #9 at Exhibit I24, Schedules 1 and 9, respectively.

Witnesses: I. Abbasi
A. Kacicnik

GAS MARKETER GROUP INTERROGATORY #34

INTERROGATORY

Reference: Page 60, Paragraph 212

Please provide estimated timelines and implementation dates for all system and operational changes alluded to in this section.

RESPONSE

The simpler proposals such as removal of the trigger mechanism and a shift to clearing of PGVA balances over a 12 month rolling period could be implemented perhaps as early as January 2010 depending on when the decision to proceed with these proposals is made.

Proposals that require enhancements to key systems (EnTRAC, CIS) such as MDV re-establishment likely would not be implemented earlier than 2011.

Also, please see the responses to Gas Marketer Group Interrogatories #21 and # 35 at Exhibit IR8, IR14, IR18, IR19, Schedules 21 and 35, respectively.

Witnesses: I. Abbasi
A. Kacicnik

GAS MARKETER GROUP INTERROGATORY #35

INTERROGATORY

Reference: Page 60, Paragraph 213-214

Please provide Enbridge's rationale as to why MDV Re-establishment could not be implemented until sometime in 2011, given that GDAR mobility and load balancing issues need to be addressed expeditiously.

RESPONSE

The Company estimates that changes such as MDV re-establishment with weather normalization would not be implemented earlier than 2011. Enhancements to EnTRAC to incorporate the above changes are comprehensive in nature and require great care in planning and execution to avoid operational disruptions and an error free implementation.

Assuming the Board approval of the MDV re-establishment process, the implementation of the project would commence no earlier than in the 4th quarter of 2009 due to preparatory work required and the limitations on internal and (available) contracted resources. Based on Enbridge's experience with technology projects such as EnTRAC, GDAR, CIS, and NGEIR, implementation of MDV re-establishment would require at least 18 months from start to completion.

Witnesses: I. Abbasi
B. Manwaring

GAS MARKETER GROUP INTERROGATORY #36

INTERROGATORY

Reference: Technical Conference

a) EGD stated that they buy all (or virtually all) of their supply on a ratable basis and then use storage to balance their requirements on their system. Why does EGD deem this to be a preferred system as opposed to attempting to shape their supply and utilize excess pipeline capacity? Please provide the EGD injection and base volume guidelines that detail the rules that EGD must follow in setting daily or monthly injection volumes and monthly and annual storage totals.
b) EGD has stated they contract for some peaking supplies. Would Enbridge consider using more “real time” (Next day, ROM) shaping to account for the reality of available transportation out of the WCSB and other basins?

RESPONSE

a) As a system operator and supplier of last resort, EGD is required to maintain firm supply, transport, and storage to meet its daily, seasonal, and peak requirements. Utilizing firm long haul transport at a 100% load factor in conjunction with market area storage provides reliability of supply in a cost effective manner. EGD presumes that the term shaping supply and using excess pipeline capacity refers to the use of long haul interruptible transport (which has a lower priority of service) on the TransCanada Mainline to match daily demand. EGD does not believe that such procurement is prudent operating practice for a distributor required to balance supply and demand on a daily basis. Further, EGD’s concerns about such procurement practices are further addressed in EGD’s 2009 Rate Adjustment proceeding at EB-2008-0219, Exhibit C, Tab 1, Schedule 8.

   EGD’s injections depend on the following factors: daily scheduled deliveries and daily demand, discretionary purchases, injection rights under third party storage contracts, injection capabilities at Company owned Tecumseh facilities, and storage targets to meet winter space and deliverability requirements.

b) See response to part a) above. EGD’s peaking contracts provide firm supplies for a reservation fee. Readily available transport out of WCSB may not be firm. Prudent operating practice and EGD’s role as system operator and supplier of last resort constrain it’s use of non firm supply services.

Witnesses: M. Giridhar
D. Small

GAS MARKETER GROUP INTERROGATORY #37

INTERROGATORY

Reference: Technical Conference, November 28, 2008, Page 30

a) Please provide the breakdowns for all scenarios referred to above in IR GMG/EGDI #26 (a), (d), (e), and (f) using the fully-allocated costing methodology.
b) Please provide the fully-allocated accounting study conducted several years ago by Elenchus Research

RESPONSE

a) Please see response to Board Staff Interrogatory #5 at Exhibit IR24, Schedule 5.

b) Please see the attached report filed in RP-2003-0203 at Exhibit A3, Tab 5, Schedule 4. The study from Elenchus Research estimated the cost of the system gas function based on a stand alone company.

Witnesses: J. Collier
A. Kacicnik
M. Suarez

RP-2003-0203

Report on
Stand-Alone System Supply Costs

For
Enbridge Gas Distribution
Ontario Energy Savings Income Fund
Superior Energy

Prepared by
Elenchus Research Associates
(www.era-inc.ca)
(John Todd
Peter Elmslie
Michael Stedman
Judy Kwik)

January 21, 2004

elenchus
Research Associates

Table of Contents

1 BACKGROUND

In 2001, Enbridge Consumers Gas (ECG) agreed to an independent review of the costs of managing its system gas supply as part of a Settlement Proposal to the OEB in RP-2000-0040. Bracken Consulting was hired to "ascertain the costs of managing system gas as a distinct basis and how these costs would vary from the costs allocated to system gas customers..."

In CEED's view the approach taken by the Bracken Study was too limited as it did not capture all of the activities that would be carried out if a stand-alone operator provided system gas independently from the distribution function. In contrast, ECG's position was that the Bracken Study properly identified the functions necessary to manage system gas on a stand-alone basis.

In Decision with Reasons RP-2001-0032, the Board directed the Company to file a study of system gas management costs in two formats,[1] one being the format proposed by the Company and the other being the format proposed by CEED. The Board indicated that it expected both formats to be fully costed and presented in a manner that would enable the Board to make meaningful comparisons between the two approaches.

The specific terms of reference for this study were agreed to by Enbridge Gas Distribution (EGD) and participating intervenors as part of the settlement process in the Company's 2004 rates case.[2] In the words of the settlement proposal:

> *This study will identify and quantify all of the resources used by Enbridge Gas Distribution to bill and collect from system gas customers and to provide balancing services to system gas customers, and will compare these resources to the resources that would be required by a person who provides gas supply to system gas customers on a stand-alone basis; that is, separated from the distribution service per se, in a manner similar to direct purchase gas, instead of integrated with distribution service as is now the case.*

EGD has filed evidence that quantifies the 2005 System Gas Management Costs based on its fully allocated costs (FAC) at Exhibit A3, Tab 5, Schedule 3. Elenchus Research

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[1] Decision with Reasons, RP-2001-0032, paragraph 4.6.4.

[2] The Settlement Proposal is part of the public record in the Ontario Energy Board's ("OEB") RP-2003-0048 Decision.

Associates (ERA) was retained by EGD and the Participating Marketers (Ontario Energy Savings Income Fund and Superior Energy, represented by Macleod Dixon LLP) to conduct the study of the costs of supplying system gas on a stand-alone basis.

This report quantifies "the resources that would be required by a person who provides gas supply to system gas customers on a stand-alone basis; that is, separated from the distribution service per se, in a manner similar to direct purchase gas, instead of integrated with distribution service as is now the case." This report also presents a comparison of EGD's fully allocated 2005 System Gas Management Costs to the stand-alone costs.

Section 2 of this report provides an overview of the approach used to estimate the resources required for a stand-alone supplier to serve system gas customers and a high level view of the estimated costs. The detailed description of the cost items included in the analysis, and the basis of the estimate for each cost item, is provided in section 3. Detailed summary tables of the estimated costs appear in Appendix A. Section 4 summarizes the report's conclusions.

2 Overview of the Approach and Results

The details of the operating model to be assumed for the stand-alone supplier of system gas are not set out in the Settlement Proposal. During the course of the study, it became apparent that EGD and the marketers have different views on the assumptions that should be made about the activities that should be considered in quantifying the costs of a hypothetical stand-alone supplier for purposes of the project. In the view of ERA, both views are consistent with the Terms of Reference for the project.

ERA has addressed this dilemma by developing costs estimates for all activities that are relevant to the positions of either party. The sponsors of this work disagree on whether certain of the activities should be included in deriving the total costs of the stand-alone supplier. In ERA's view, the assumptions that are appropriate to make in this regard are a matter of policy and should be determined by the Board based on the use to be made of the estimated resource costs for a hypothetical stand-alone supplier.

In order to ensure that the Board can make a direct comparison between the FAC approach and the stand-alone approach, and to make the costs of the stand-alone supplier transparent for a variety of credible operational assumptions, ERA has quantified the stand-alone costs in two ways.

- Comparable Activity Approach: This approach includes in the costing of the stand-alone supplier only those activities that are currently performed by EGD in its capacity as the supplier of gas for system customers. The activities, or functions, considered in this approach correspond to the functions that are included in EGD's 2005 System Gas Management Costs. ERA estimates that the costs for these comparable activities would be:
    - For the Gas Management function: $955,182.
    - For the Billing and Customer Care function: $19,084,701.
    - Total: $20,039,883.
- Comprehensive Activity Approach: This approach includes in the costing of the supplier all activities that are currently performed by suppliers of direct purchase gas. Although some of these activities may not be necessary for a stand-alone supplier of system gas (depending on various operational assumptions), this approach ensures that the presumption that the stand-alone supplier operates "in a manner similar to direct purchase gas" is fully addressed in the study. ERA estimates that the cost that would be incurred by a stand-alone supplier for these additional functions would be:
    - Administration of customer contracts: $735,097.
    - Other operating costs: $69,780.
    - Load balancing: $17,578,105.
    - Marketing: $6,500,000.
    - Licensing compliance: $364,100.

    In addition, the cost of Comparative Activities would increase by $512,803 due to increases in customer service activity and common costs. The total costs of the

Comprehensive Activity Approach are therefore $45,799,768, an increase of $25,759,884 compared to the Comparable Activities Approach.

The Comparable Activity Approach provides the most direct comparison between EGD's fully allocated System Gas Management Costs and the cost of performing essentially the same activities on a stand-alone basis. The Comprehensive Activity Approach provides the most complete comparison to the costs incurred by retailers based on the way in which they operate in Ontario at this time.

The ERA study team developed its estimate of the annual costs of performing these functions using a bottom-up approach. That is, staff requirements were identified for the hypothetical stand-alone supplier and the associated salaries, benefits, office space, office equipment, etc that would be necessary for the business to operate were estimated. Details of the cost components are set out in Section 3 and Appendix A.

Having developed the total costs of the stand-alone supplier using this bottom-up approach, the cost items were arranged and grouped so that sub-totals could be derived that correspond to the functions included in EGD's 2005 System Gas Management Costs (the FAC study). These results are presented in Section 4.

It should be noted that the parties do not necessarily endorse the specific methods used by ERA to quantify the resources associated with specific activities, or the resulting quantum of costs. Where more than one reasonable method was available to estimate the costs associated with an activity, ERA attempted to select an approach that reflects the mid-range between approaches that would produce high and low costs.

It is therefore ERA's view that, on balance, the costs figures set out in this report are reasonable estimates that balance factors that could increase, and decrease, the costs that would be borne by a real-world stand-alone supplier of system gas.

2.1 DISAGGREGATING SYSTEM CUSTOMER AND SYSTEM OPERATIONAL GAS

In considering the activities that would be performed by a stand-alone supplier, it is necessary to recognize that the system gas function currently performed by EGD involves more than supplying system customers with gas. It is therefore necessary to separate conceptually EGD's existing system supply function into two components:

- provision of gas to system supply customers, and
- operational load balancing for the distribution system on a daily basis (i.e., using peaking gas and daily or monthly gas requirements to maintain "system integrity").

Costs associated with the latter function would be incurred by EGD even if 100% of customers were to sign up with retailers (or be served by a combination of retailers and a stand-alone supplier) and the current terms and conditions for retailers supplying gas to EGD were unchanged. Hence, daily load balancing would continue to be the responsibility of EGD even if gas for system customers were supplied on a stand-alone basis. Furthermore, because this service is provided for both direct purchase and system supply customers, the associated costs would be allocated to rate classes and would be recovered from all customers through the EGD delivery charge.

For purposes of this study, it is therefore assumed that the stand-alone supplier delivers gas to EGD on the same basis as retailers currently deliver gas (essentially at 100% load factor). As a result, costs related to daily load balancing are excluded from the assessment of the costs attributable to the hypothetical stand-alone supplier. This approach ensures consistency with the direction contained in the terms of reference that the stand-alone supplier operates "in a manner similar to direct purchase gas".

2.2 THE COMPARABLE ACTIVITIES APPROACH

This section compares the results of EGD 2005 System Gas Management Costs to ERA's estimate of performing the comparable activities on a stand-alone basis. The details of the approach used to derive each line item contributing to the estimated cost of Comparable Activities are provided in section 5.

EGD has filed evidence in the current proceeding, in compliance with the Settlement Proposal and the Board's RP-2001-0032 Decision, that derives its 2005 System Gas Management Costs using its fully allocated costing methodology at Exhibit A3, Tab 5, Schedule 3. The evidence identifies 13 cost categories (10 functions plus three additional cost categories). For ease of comparison with the stand-alone costs, EGD's fully allocated costs are presented in Table 1, below, reorganized and sub-totalled so as to facilitate a direct comparison with the stand-alone costs derived by ERA for the comparable Gas Management and Billing & Customer Care functions.

Table 1: 2005 System Gas Management Costs (FAC Method) and Stand-alone System Supply Costs (Comparable Activities)

	Function	Integrated Cost (FAC Method)	Comparable Stand-alone Cost
1.	Gas Acquisition	548,748	
2.	Risk Management	127,863	
3.	Contract Management	322,707	
4.	Nominations	509,663	
	Subtotal – Gas Management	**1,508,981**	**955,182**
5.	Invoice Processing & Payment	72,470	
6.	Reporting	24,157	
7.	Billing	4,499,159	
8.	Credit & Collection	6,639,473	
9.	CIS Fee	633,216	
10.	Call Center	1,247,473	
11.	A&G Overhead and Benefits	100,000	
	Subtotal	**13,215,948**	
	Commodity Elements		
12.	Return on Rate Base*	1,230,000	
13.	Bad Debt Expense*	8,140,000	
	Subtotal – Customer Care	**22,585,948**	**19,084,701**
	Total System Gas Management Costs	**24,094,929**	**20,039,883**

* Return on rate base and bad debt expense are not recovered by EGD through the System Gas Fee.

Based on the ERA estimate of costs, the stand-alone costs for the Gas Management function are $554,000 (i.e., about 37%) less than EGD's fully allocated cost for the comparable functions. The stand-alone costs for the Billing and Customer Care function are $3.5 million (i.e., about 15%) less than EGD's fully allocated costs for comparable functions. It should be noted that 82% of the stand-alone Billing and Customers Care costs are accounted for by the ABC billing charge ($15.6 million of the $19.1 million total stand-alone cost). As a result, the stand-alone costs are quite sensitive to the level of the EGD's ABC billing fee.

The total stand-alone cost for Comparable Activities is $4 million, or about 17%, less than EGD's fully allocated 2005 System Gas Management Costs.

2.3 <u>THE COMPREHENSIVE ACTIVITIES APPROACH</u>

The Comprehensive Activities Approach includes in the total costs of the hypothetical stand-alone supplier several activities that are currently integral to the operations of retailers in the Ontario market that are supplying direct purchase gas to customers.

Table 2: 2005 System Gas Management Costs (FAC Method) and Stand-alone System Supply Costs (Comprehensive)

	Function	Integrated Cost (FAC Method)	Comprehensive Stand-alone Cost
1.	Gas Acquisition	548,748	
2.	Risk Management	127,863	
3.	Contract Management	322,707	
4.	Nominations	509,663	
	Subtotal – Gas Management	**1,508,981**	**983,332**
5.	Invoice Processing & Payment	72,470	
6.	Reporting	24,157	
7.	Billing	4,499,159	
8.	Credit & Collection	6,639,473	
9.	CIS Fee	633,216	
10.	Call Center	1,247,473	
11.	A&G Overhead and Benefits	100,000	
	Subtotal	**13,215,948**	
	Commodity Elements		
12.	Return on Rate Base*	1,230,000	
13.	Bad Debt Expense*	8,140,000	
	Subtotal – Customer Care	**22,585,948**	**19,569,355**
	Additional Retailer Functions		
14.	Customer Contract Admin		735,097
15.	Other Operating Costs		69,780
16.	Load Balancing		17,578,104
17.	Marketing		6,500,000
18.	OEB Licensing/Compliance		364,100
	Subtotal – Additional Functions		**25,247,081**
	Total System Gas Management Costs	**24,094,929**	**45,799,768**

* Return on rate base and bad debt expense are not recovered by EGD through the System Gas Fee.

These costs are, in the view of some parties, relevant costs to include in the determination of the "resources that would be required by a person who provides gas supply to system gas customers on a stand-alone basis; that is, separated from the distribution service per se, in a manner similar to direct purchase gas, instead of integrated with distribution service as is now the case" (emphasis added).

It should be noted that Comprehensive Stand-alone Costs differ somewhat from the Comparative Stand-alone Costs for the Gas Management and Billing & Customer Care functions. The difference relates to an increase in the estimated call centre costs resulting from the inclusion of the additional retailer functions. The associated staff additions also increase common costs. Furthermore, the increase in Customer Care costs reduces the allocation of common costs to the Gas Management function.

Based on the ERA estimate of costs, the inclusion of the additional retail functions increases the stand-alone costs from $20.0 million to $45.8 million, a 129% increase relative to the Comparable Activities Approach.

3 COST ESTIMATION METHODOLOGY

The detailed breakdown of the costs included in the estimated stand-alone system supply costs for Comparable Activities is provided in Appendix A, Table A-1. This table consists of three pages showing respectively:

- Gas management costs,
- Billing & customer care costs, and
- Common costs.

The allocation of common costs to the Gas Management and the Billing & Customer Care functions is shown at the end of the table (page A-3). Page 3 also shows the total cost for Comparable Activities.

Table A-2 in Appendix A provides the detailed breakdown of the costs included in the estimated stand-alone system supply costs for the Comprehensive Activities Approach. Table A-2 contains a fourth page detailing the additional stand-alone costs associated with activities that are currently integral to the operations of retailers in the Ontario market that are supplying direct purchase gas to customers.

This section explains the approach used for each category of stand-alone costs. Numerical references are to the line numbers appearing in the tables in Appendix A.

3.1 DATA SOURCES

The sources of information used in establishing costs for the stand-alone model include:

- Expert Opinion of the ERA Team on costs associated with performing the functions on a stand-alone basis;
- Bracken Study filed in the EGD rate case RP-2001-0032 as Exhibit A, Tab 14, Schedule 6;
- EGD information;
- Information provided by the marketers involved in the discussions on the Stand-alone System Supply model;
- Service suppliers (e.g Customer Expressions, NYMEX, etc.)

3.2 GAS MANAGEMENT (1.0.0 AND 5.0.0)

3.2.1 SALARY & BONUSES (1.1.0 AND 5.1.0)

The Gas Management salary and bonus figures rely on the Bracken Study which contains salary and bonus information derived from a Towers Perrin Market Salary Survey of Oil and Gas Marketers and Producers. These salary and bonus levels are intended to reflect competitive levels for the energy procurement skills. The bonus levels used ranges from 5% for the analyst/clerk level to 25% for the Director (General Manager in the Bracken Study) and Senior Buyer level. Table 2, Salaries, Bonuses, Benefits and Payroll Costs, of the Bracken Study is reproduced here.

Bracken Study's Table 2- Salaries, Bonuses, Benefits and Payroll Costs

	Salary & Bonus			Benefits & Payroll Costs				
	Salary	Bonus	**Sub Total**	Benefits	CPP	EI	EHT	**Sub Total**
General Manager	120,000	30,000	**150,000**	30,784	1,673	839	1,905	**35,201**
Senior Buyer	95,000	23,750	**118,750**	18,010	1,673	839	1,508	**22,030**
Contract Specialist	68,000	10,200	**78,200**	13,900	1,673	839	993	**17,405**
Costing analyst	65,000	6,500	**71,500**	13,450	1,673	839	908	**16,870**
Analyst/clerical	45,000	2,250	**47,250**	10,162	1,673	839	600	**13,274**
	$393,000	$72,700	**$465,700**	$86,306	$8,366	$4,195	$5,914	**$104,781**

The Bracken Study's General Manager's salary, bonus, benefits and payroll costs have been applied to the Gas Management Director's position and the Costing Analyst's cost levels have been applied to the Senior Gas Supply Planner's position. The Transportation/Regulatory Specialist has been assigned costs half way between those of the Senior Buyer and the Contract Specialist.

3.2.2 EMPLOYEE BENEFITS (1.2.0 AND 5.2.0)

The benefit-to-salary-plus-bonus ratio of 22.5% used for staff matches that used in the Bracken Study. The benefits assumptions used in the Bracken Study are as follows.

- Pension/retirement plan cost of 5% of salary, based on RSP matching.
- Health and dental insurance including travel coverage at an average cost of $105 per month per employee.
- Life insurance of $28 per month per employee.
- Association dues and education subsidies of $2,000 per employee.
- Staff social functions costs of $200 per employee.
- EHT is 1.27% of payroll up to $5 million.

In addition, benefit costs include stock option and car allowance for the Director.

3.2.3 OTHER OPERATING EXPENSES (1.3.0 AND 5.3.0)

Subscriptions

Costs for subscriptions includes the Gas Daily Online for four users ($7,106) as well as subscriptions identified in the Bracken Study ($2,043) to Priceline Daily, Canadian Gas Price Reporter, newspaper and magazines.

NYMEX Fees and Installation

The NYMEX user fee is $843/month for three users. The NYMEX installation charge is $2,000 and the system is assumed to be in place for 5-years. The annualized cost is based on a cost of capital of 9.6%.

Employee Expenses

The Employee Expenses presented in the Bracken Study were used to derive these costs and include the following costs per 5 employees:

Travel to Calgary	$11,288	4 trips/year unrestricted economy
Hotel - Calgary trip	$ 1,320	4 x 2 nights
Meals	$ 1,000	4 x 2 days x $125
Local Meals/Entertainment	$ 2,400	
Conferences	$ 3,000	
Other	$ 1,000	
Total	$20,008	

Based on this data, the expense figure used is $4,000/employee for five employees.

3.3 BILLING AND CUSTOMER CARE (2.0.0 AND 6.0.0)

3.3.1 SALARY AND BONUSES (2.1.0 AND 6.1.0)

The stand-alone cost estimate assumes that 4 supervisors will be required for the call centre to ensure coverage, assuming that it operates weekday evenings and on the weekend as well as during business hours. In addition, a manager would be required.

Salaries for supervisory positions were estimated using the salary scales in the Bracken Report. The Manager - Call Centre was assigned a salary of $80,000 and the bonus level used was the mid-point of the 5 to 25% bonus range presented in the Bracken Study (i.e., 15%). The four Supervisors - Call Centre were assigned salaries of $60,000 plus bonus levels at 5%.

The salaries, bonuses, benefits and payroll costs for Billing and Customer Care staff, other than the Customer Service Representatives (CSRs) are summarized in the table below. The CRS costs are captured under Customer Service cost, in section 3.3.4.

Billing and Customer Care (Call Centre) - Salaries, Bonuses and Benefits								
	Salary	Bonus	Subtotal	Benefits	CPP	EI	EHT	Subtotal
Manager	80,000	12,000	92,000	7,796	1,673	839	1168	11,476
Supervisor	60,000	3,000	63,000	6,796	1,673	839	800	10,108
Total	140,000	15,000	155,000	14,592	3,346	1678	1968	21,584

3.3.2 EMPLOYEE BENEFITS (2.2.0 AND 6.2.0)

See section 3.2.2, above.

3.3.3 CUSTOMER INFORMATION SYSTEM (2.3.0 AND 6.3.0)

The capital and maintenance costs for purchasing and maintaining a customer information system vary dramatically based on. Based on the experience of the ERA team, a reasonable range for the CIS costs for the stand-alone supplier would be $2 million to $6 million. The average cost of $4 million has been used in this study. These costs are amortized over 5 years. Ongoing support/maintenance costs were similarly established at $250,000. Hardware costs obtained from Executive Communications Limited for a business communications management system (ACD equipment) was at $37,000. In addition, $100,000 was included under hardware for systems processors. The amortization period for hardware was also set at 5 years.

3.3.4 OTHER OPERATING EXPENSES (2.4.0 AND 6.4.0)

ABC (Agent Billing Collection) Cost

This cost was calculated based the ABC rates that EGD charges per bill to marketers. A weighted average cost was calculated based on the customer forecast data (by rate class) EGD expects to file for the 2005 Fiscal Year Budget for system customers multiplied by the appropriate ABC charge. The customer numbers are somewhat higher than historical experience based on the high level of customers that returned to system this past year.

Customer Service Costs

The direct cost of Customer Service Representatives (CSRs) is reflected in this line item (2.4.2 and 6.4.2). It represents the labour cost involved in outbound and inbound telephone calls with customers. The number of CSRs required was based on the average call volumes, average handle time, customer service representative costs, etc. reported by the marketers. Full details of salary levels, etc. are not included in this report as this information was provided on a confidential basis by the marketers.

It is estimated the stand-alone supplier's call centre would require about 20 call positions (34 staff) to deal effectively with the estimated call volumes under the Comparable Activities approach. An additional five positions (8 staff) would be required under the Comprehensive Activities approach. Customer service representatives could be a combination of part-time and full-time employees. The normal business practice is to schedule employees based on expected call traffic.

Office space and office expenses are based on the estimated number of positions.

Employee Expenses – Call Centre

Training and other expenses of $800 per call centre customer service representative are assumed.

Employee Expenses - Other

The Employee Expenses presented in the Bracken Study were used to derive a cost of $4,000 per employee (see Section 3.2.3). This cost per employee was applied to all non-CSR staff.

3.4 COMMON COSTS (3.0.0 AND 7.0.0)

3.4.1 LEASE PAYMENT (3.1.0 AND 7.1.0)

The office lease costs are based on locating the office in the area between the Toronto Pearson Airport and the Enbridge Consumers Gas head office location in North York. The location is ideal for meetings, which would be required between the stand-alone supplier and EGD. Further, close proximity to the Airport is practical for business travel to Calgary where many of the gas supply companies are located.

A survey of lease prices suggests that an average lease payment plus average TMI cost is approximately $17.00 per square foot in North York.

The office space requirement is consistent with the Bracken Study space requirement with the addition of workstations for Call Centre Representatives. The lease cost for the Comparative Activities approach was derived as follows:

Office space per staff 10' x 12'	12 offices	1,440 sq. ft.
Call Centre Workstation 10 x 8'	20 workstations	1,600 sq. ft.
Meeting Room areas 15' x 15'	2 meeting rooms	450 sq. ft.
Reception and Hallways 775	2 X Bracken Study	1,550 sq. ft.
	Total Space	5,040 sq. ft.
	@ $17.00/sq.ft.	$85,680

For the Comprehensive Activities approach, an additional 15 offices would be required for 12 staff handling Customer Contract Administration (se section 3.5.1) and the three managing Marketing (see section 3.5.5). In addition, 5 additional workstations would be required in the Call Centre. Lease payment costs would therefore be:

Office space per staff 10' x 12'	27 offices	3,240 sq. ft.
Call Centre Workstation 10 x 8'	25 workstations	2,000 sq. ft.
Meeting Room areas 15' x 15'	2 meeting rooms	450 sq. ft.
Reception and Hallways 775	2 X Bracken Study	1,550 sq. ft.
	Total Space	7,240 sq. ft.
	@ $17.00/sq.ft.	$123,080

3.4.2 FURNITURE AND OFFICE EQUIPMENT (3.2.0 AND 7.2.0)

Desktop Computers

Costs used in the Bracken Study were used to derive Desktop Computer costs in this study. In the Bracken Study the total cost is estimated at $20,250 for 5 employees, with a useful life of 3 years. The cost per employee for Desktop Computers used in this study therefore is $4,050 for three years. For the Call Centre, the number of computers was based on the number of workstations, not employees.

Computer Support

The cost of computer support is based on ERA's annual Computer Support cost per computer of $766.

Furniture

The following backup data to the Bracken Study on Furniture Cost was used to derive the cost of Furniture for the stand-alone supplier.

Workstation	$ 2,700
Chairs	$ 1,512
Desk Lamps	$ 205
Waste Basket	$ 130
Meeting Table	$ 540
Meeting Chairs	$ 1,115
Guest Chairs	$ 1,672
Book Cases	$ 578
Filing Cabinets	$ 1,701
Speaker Phones	$ 756
Total	$10,908

The useful life used in the Bracken Study and applied to the costs is 5 years.

Other Office Equipment

The Bracken Study's costs for Other Office Equipment were used to derive the costs for this study. These costs cover printer, photocopying and fax equipment.

Printer	$ 2,221
Photocopier/Fax/Printer	$ 4,639
Total	$ 6,859

Since the Bracken Study's costs are for 5 employees a cost per employee of $1,372 was used assuming similar usage of the equipment in this category per employee/ workstation. A useful life of 3 years is used.

3.4.3 MISCELLANEOUS (3.3.0 AND 7.3.0)

In this cost category, where expenses are incurred for each employee, the cost is calculated based on the total number of employees, including CSRs. Hence, for costs driven by total staff, as opposed to offices/workstations, the number of units is 46 for the Comparable Activities Approach and 69 for the Comprehensive Activities Approach.

Office Cleaning

The Office Cleaning cost of $6,500 for 1,600 square feet of office space used in the Bracken Study is the basis for the $4.06/sq.ft cleaning cost used. The cost is applied to the total rental space in each Approach.

Office Supplies

The Bracken Study's cost of $3,600 for Office Supplies for 5 employees, is the basis for the $720 per employee cost used in this study. This cost is applied to the total number of employees.

Internet

The Internet service cost is based on Bell Internet High Speed Service[3] which provides high-speed modem rental, five e-mail addresses, high-speed Internet access and 20 hours free remote dial-up access for $89.95 per month for a one-year contract. This cost is applied to the number of computers.

Telephone

The Telephone service cost is based on Bell's business line bundled service[4] at $46.45 per month per line. This cost is applied to the number of non-CSR staff plus workstations.

Cell Phone

The Cell Phone costs are based on a Rogers ATT[5] business plan that includes a cell phone at $49.99 and service for $40/month that provides 350 weekday minutes with

[3]http://www.bell.ca/shop/application/commercewf?origin=*.jsp&event=link(goto)&content=/jsp/content/business/internet/highspeed/alacarte.jsp
[4]http://www.bell.ca/shop/application/commercewf?origin=*.jsp&event=link(goto)&content=/jsp/content/business/voice/localaccess/indbuzline/pricing.jsp
[5]http://www.shoprogers.com/business/wireless/gbm/plans/overview.asp?shopperID=47NDBR8N4TA59HD3JKJCG7EJ2CKB92C1

unlimited evening and weekend use for a 24-month service agreement. All staff except call centre staff were allotted cell phones.

Postage and Courier

Based on the Bracken Study's Postage and Courier costs of $1,200 for 5 employees, this study uses $240/employee for Postage and Courier service assuming activities carried out by each employee requires, on average, this level of Postage and Courier services. This cost is applied to the total number of employees.

Legal Services

The cost of legal services is based on Jim Bracken's assumption in his backup data of 1 day per month to review contracts at $2,800 per day.

General Insurance

The General Insurance for SAS is based on ERA's general insurance cost of $800 for a 3,000 sq. ft. office for 14 employees. Four-times this rate was used as the General Insurance cost for the stand-alone supplier's office.

Human Resources and Payroll Services

The Human Resources and Payroll Services cost is based on ERA's cost per employee of $108/employee (Ceridian payroll service). This cost is applied to the total number of employees.

Consulting Fees

$15,000/year Consulting Fees are included to cover studies such as gas supply outlook and risk management reviews.

3.4.4 WORKING CAPITAL ALLOWANCE (3.5.0 AND 7.5.0)

Working capital requirement was derived by applying the OEB's working capital allowance in rate base for electricity distribution utilities described in the Electricity

Distribution Rate Handbook. The working capital allowed is 15 per cent of the sum of the cost of power and the electricity distribution utility's controllable expenses, which covers approximately 2-months of the supply cost and 1½ month of controllable expenses. Discussions with the marketers indicated that the billing lag (differential between revenue receipt and payment to the suppliers) is negligible. Therefore, for the stand-alone supplier, 1 ½ months of its costs are used as its working capital requirement. Using the OEB's allowed working capital allowance as a proxy, the cost included for stand-alone suppliers working capital is 12.5% of the annual cost subtotal in the Stand-alone System Supply Costs Table. To obtain the working capital allowance EGD's rate of return of 9.6% for 2004 was used.

3.4.5 ALLOCATION OF COMMON COSTS (3.7.0 AND 7.7.0)

Common costs were allocated to the Gas Management and Billing & Customer Care functions on the basis of the Salary and Bonus of each function. The Salary and Bonuses Subtotal for the Gas Management ($599,250 under the Comparable Activities approach) was used for that function. For the Billing and Customer Care function, the manager and supervisor salaries were added to the cost of customer service reps. (i.e., $1,556,200 in the Comparable Activities approach).

3.5 ADDITIONAL STAND-ALONE COSTS (8.0.0)

3.5.1 SALARY AND BONUSES (8.1.0)

There is considerable administration involved in initiating and maintaining direct purchase contracts and tracking the associated dollars, gas volumes and customer adds and deletions that are involved. There are also several different contracts involved in every Direct Purchase Agreement. The work involves significant manual input for both the marketer and for EGD and as a result tends to be error prone. Enbridge is implementing the Entrac system to help facilitate some of the administration involved. This system has some added flexibility but there will continue to be significant ongoing administration required by the marketers. A reasonable cost proxy for this item appears to be to base it on the number of employees in the EGD Contract Management Group as they administer all of the direct purchase contracts and deal with most direct purchase administration issues. Provision has been made for one of the positions to be a senior contract administrator given the size of the group.

The Manager-Contract Administration was assigned a salary of $80,000 and the bonus level used was the mid-point of the 5 to 25% bonus range presented in the Bracken Study, of 15%. The Senior Contract Administrator was assigned $55,000 plus a 5% bonus, and the 10 Contract Administrators were assigned salaries of $45,000 plus 5% bonuses.

Contract Administration - Salaries, Bonuses and Benefits								
	Salary	Bonus	Subtotal	Benefits	CPP	EI	EHT	Subtotal
Manager	80,000	12,000	92,000	7,796	1,673	839	1168	11,476
Senior Administrator	55,000	2,750	57,750	6,546	1,673	839	733	9,791
Administrator	45,000	2,250	47,250	6,046	1,673	839	600	9,158

3.5.2 EMPLOYEE BENEFITS (8.1.0)

See section 3.2.2.

3.5.3 OTHER OPERATING COSTS (8.2.0)

Direct Purchase Administration Charge

This fee would be paid to EGD by a stand-alone supplier, operating like a supplier of direct purchase gas, each Direct Purchase Agreement (DPA). For costing purposes 12 agreements (one for each month) have been assumed. The cost per DPA is $815.

3.5.4 LOAD BALANCING (8.3.0)

Operationally How a Marketer May Manage Year-end Load Balancing

As discussed in Section 2.1, a stand-alone supplier operating in a manner similar to existing marketers would not be responsible for daily load balancing. Daily load balancing would continue to be the responsibility of EGD as the system operator. Like marketers, the stand-alone supplier would be required to meet EGD's daily obligated deliveries and the year-end load balancing requirement. The obligation for year-end load balancing is determined by the difference between the actual consumption and the total annual gas nominated at the end of the contract year. The difference must either be removed from the system or brought into the system to balance within 180 days following the end of the contract. EGD's policy on year-end load balancing limits the balancing to plus or minus 5% of the contracts annual gas requirement.

The stand-alone supplier, like existing marketers, would have to recover the costs associated with year-end load balancing in the price of the commodity that it supplies its customers. A marketer could lock in the risk (Load Balancing cost) immediately or it could decide to manage the risk operationally throughout the term of the contract. In practice, a marketer would be likely to wait 6-8 months into the contract to assess the imbalance between gas delivered to EGD and the gas consumed by its customers and then assess how to manage the risk at least cost. There are many different ways in which a marketer may operationally manage this risk.

For example, a marketer could manage any imbalances physically. If it discovered that the position was long gas, it would either seek to sell gas off the EGD system when the Utility allowed suspensions/diversions prior to the end of the contract or wait until the end of the contract and sell the gas. If a marketer was short gas it would attempt to bring gas into the EGD system prior to the end of the contract or bring in the shortfall after the end of the contract.

An alternate approach would be to manage the risk financially through an option, then exercise the Put or Call Option after the end of the contract. The marketer may wait 6-8 months into a contract to identify a short or long position and then purchase a Call or Put option for the end of the contract.

There are other practical approaches through which a marketer can manage the Load Balancing requirements. For purposes of this study, however, it is necessary to assume an approach to load balancing that quantify in a reasonably straightforward manner the cost of year-end load balancing. In ERA's view, the best way to derive a year-end load balancing cost for purposes of this study is to assume the cost is incurred at the beginning of the contract year by way of purchasing options. This approach creates a transparent cost for a specified level of risk protection. For purposes of the study, it is assumed that options that protect against variances of up to 5% of the expected volumes. The cost is scalable, however, in that the cost can be increased or decreased proportionately to determine the cost of purchasing options to protect against greater or lesser variances.

The intention is to use the cost of the options as a proxy for the cost of all volumetric risks and therefore to eliminate any speculation related to volumetric variances and price variances due to market changes. By assuming that risk is addressed at any time after the commencement of the contract year, there would be a risk that the volume forecast or market prices could change; hence, risk could not be mitigated fully.

Call and Put Options

An option in the natural gas business is the right but not the obligation to buy gas (Call Option) or sell gas (Put Option) at a specific price for a specific time. At the end of the contract term the supplier would have the ability to exercise the option to manage its long or short position. The term "exercise" is used to describe the purchaser ability to demand the seller of the Call Option or Put Option to purchase or deliver natural gas at the exercise price. The option only has value for a defined period of time after which the underlying option will not be exercisable. The option premium is a value that will change over time based on volatility in the marketplace.

Assumption Used for an Initial Quote

The following assumptions were used in obtaining quotes:

- The term of the contract is one year. For the quotes below the contract start is December 1, 2003.
- A Put Option and a Call Option is secured at the start of the contract.
- 5% imbalance requirements are managed after the end of the contract. Assume the imbalance information is not validated until two months after the end of the contract.

- Exercise the Put or Call evenly over the third month at Dawn. In this case January 2005.
- The option is secured "at the money" for the month of January 2005. "At the Money" in the energy business is defined as an option where the strike price is the same as the current market price of the natural gas commodity. In this case the future price of the commodity today for the month of January 2005 is the same as the price one would pay or sell the commodity in January 2005.

The costs for a Call Option and a Put Option are quotes on November 20, 2003. A US exchange rate of 0.7674 and heat rate conversion of 37.69 GJ/103m^3 were used. A range of call and put option costs were then derived as follows:

Price of Commodity =	$5.050	US/MMBTU				
	$6.240	CND/GJ				
	$0.235	CND/M3				
			Range			
Quote: Call & Put	$1.020	US/MMBTU		$1.120	US/MMBTU	
	$1.260	CND/GJ	to	$1.384	CND/GJ	
	$0.048	CND/M3		$0.052	CND/M3	
Assume customer use at		**3,064**	M3/yr			
Assume number of customers		**1,151,302**				
Amount of Protection Required		**5**	%			
					Mid-Point	
Cost for Call Option =	$8,378,349	to	$9,199,756		**$ 8,789,052**	
Cost for Put Option =	$8,378,349	to	$9,199,756		**$ 8,789,052**	
Total Cost Option =	**$16,756,698**	**/yr**	**$18,399,511**	**/yr**	**$17,578,105**	**/yr**

The quote above is one quote for one contract starting December 1, 2003. The ideal method to assess the costs of Load Balancing is to repeat this quote over a twelve month period for contracts starting each month of the year. The volume used for each month would be the volumes in each contract. In the example above the volume would be reduced to reflect only the volume in the December contract.

For this study the mid-point of the call and put option ranges in the example above were used as the load balancing cost.

3.5.5 MARKETING COSTS (8.4.0)

Marketers in Ontario traditionally incur costs to acquire customers from door to door sales or through acquisition of another marketer's contracts. The hypothetical stand-alone supplier operating "in a manner similar to [a supplier of] direct purchase gas" can therefore be deemed to incur costs that are comparable to the costs that would be incurred by a marketer. The marketing cost figure attributable to the stand-alone supplier can be determined by multiplying the number of customers by the marketing cost per customer.

Cost per Customer

The acquisition costs incurred by Ontario marketers are, in many instances, a matter of public record. These acquisition costs have varied considerable, however, reflecting significant differences in the assets being acquired and the value of the specific assets being acquired.[6] As a result, reported acquisition costs do not provide a clear valuation of the customer contracts as distinct from other assets such as gas supply, storage and transportation contracts.

As a result, the marketing cost per customer used in this study was derived based on publicly available annual reports that include marketing cost details. A review of this information indicates that an average cost of $130 per new customer is reasonable.[7]

Number of Customers

The annual marketing cost for the stand-alone supplier that would be comparable to other marketers would be based on EGD's average annual customers growth (i.e. 50,000 customers).

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[6] For example, Energy Savings Income Trust carries an amortised annual amount approximately $47 million in its financial statements, with recent acquisition in Ontario having values ranging from about $70 to $235 per RCE (residential contract equivalent). This range driven by the underlying value of not only the customers acquired, but also gas supply contracts that may be "in or out of the money" and possibly other assets.

[7] Energy Savings Income Trust's financial reports were relied on as they provided the most accessible information.

Potentially, an initial start-up cost for the stand-alone supplier could be calculated reflecting an acquisition of the initial base of system customers. This figure has not been included for in ERA's estimate of the costs of the hypothetical stand-alone supplier. It is not clear whether the marketing cost derived above (i.e., $130) would be an appropriate basis for valuing customers transferred to the stand-alone marketer, nor how that hypothetical acquisition cost should be treated for purposes of the valuation of the costs of a stand-alone supplier of system gas. It should be noted, nevertheless, that from a financial accounting perspective such costs could be recognized and amortised over the expected life of the supplier's relationship with the average system gas customer.

Other Marketing-Related Costs

Marketing (related to end use customer marketing) would also require a manager. In addition, a marketing (research) analyst and marketing co-ordinator at a minimum would be required. The marketing salaries have not been included as these costs are captured in the marketing cost calculation above. However, three positions are assumed for purposes of determining incremental Common Costs for the Comprehensive Activities Approach, relative to the Comparable Activities Approach (i.e., for office space and other office requirements and costs).

3.5.6 OEB LICENSING AND COMPLIANCE COSTS (8.5.0)

The main cost items that are not covered as part of marketing costs (i.e. reaffirmation costs) are the cost for the complaint resolution process and renewal requirement costs. The complaint resolution costs are paid by marketers to Customer Expressions in Ottawa to help pay for the process. Cost is based primarily on each marketer's "track record" of calls. This cost has been calculated based on an average of 500 calls per month ($35 on average to resolve) plus a flat fee of $100 per month. This information was obtained from the service provider. Calls tend to be much higher during marketing campaigns but then drop dramatically after they are completed. The information provided was considered an appropriate average for to use for this cost study.

The renewal requirements for customer supply contracts currently involve sending a letter to customers in advance of their contract renewal date to inform them of their options and the contract rate going forward. Follow-up calls may result but these are included in the Customer Service costs. For the Stand-alone Supplier, an average contract length of 4 years was assumed because large marketers focus on selling 3 and 5-year contracts. Accordingly, about 275,000 letters would be produced and mailed over the course of a year. The main cost element is postage. The bulk rate for postage is currently 36 cents per letter.

This mailing could be outsourced for about $152,400 annually. Almost two-thirds of the costs are for postage ($99,000). Paper, envelopes, data and mail processing would cost an additional $53,400 annually.

A few additional compliance items were identified. Affirmation calls to customers are included in the customer service costing and are not reflected here. The cost of fraud investigations was considered minor and not predictable. Hence no cost has been included for this item.

4 SUMMARY OF CONCLUSIONS

Table 3 summarizes the high level comparison of EGD's 2005 fully allocated System Gas Management Costs to the estimates costs of a stand-alone supplier of system gas using both the costs Comparable Activities and Comprehensive Approaches.

Table 3: Summary of System Gas Management Costs

	Function	**Integrated Cost (FAC Method)**	**Comparable Approach**	**Comprehensive Approach**
	Gas Management	**1,508,981**	**955,182**	**983,332**
	Customer Care	**22,585,948**	**19,084,701**	**19,569,355**
	Additional Retailer Costs			**25,247,081**
	Total System Gas Costs	**24,094,929**	**20,039,883**	**45,799,768**

Appendix A: Detailed Breakdown of Stand-Alone Costs

Table A-1: Stand-alone System Supply Costs - Comparable Activities Approach

	Cost Component	Annualized Cost	Useful Life	Total Cost	Number of units	Cost per unit	Data Source
1.0.0	**GAS MANAGEMENT**						
1.1.0	**Salary & Bonuses**						
1.1.1	Director	150,000	1	150,000	1	150,000	Bracken Study
1.1.2	Senior Buyer	118,750	1	118,750	1	118,750	Bracken Study
1.1.3	Contract Specialist	78,200	1	78,200	1	78,200	Bracken Study
1.1.4	Analyst/Clerical Support	47,250	1	47,250	1	47,250	Bracken Study
1.1.5	Senior Costing Analyst	35,750	1	35,750	0.5	71,500	Bracken Study
1.1.6	Senior Gas Supply Planner	71,500	1	71,500	1	71,500	ERA
1.1.7	Transporation/Regulatory Specialist	97,800	1	97,800	1	97,800	ERA
1.1.8	**Subtotal**	**599,250**					
1.2.0	**Employee Benefits**						
1.2.1	Director	35,201	1	35,201	1	35,201	Bracken Study
1.2.2	Senior Buyer	22,030	1	22,030	1	22,030	Bracken Study
1.2.3	Contract Specialist	17,405	1	17,405	1	17,405	Bracken Study
1.2.4	Analyst/Clerical Support	10,631	1	10,631	1	10,631	Bracken Study
1.2.5	Senior Costing Analyst				0.5	16,870	Bracken Study
1.2.6	Senior Gas Supply Planner	16,870	1	16,870	1	16,870	ERA
1.2.7	Transporation/Regulatory Specialist	19,718	1	19,718	1	19,718	ERA
1.2.8	**Subtotal**	121,855					
1.3.0	**Other Operating Expenses**						
1.3.1	Subscriptions	9,149	1	9,149	1	9,149	Bracken Study
1.3.2	NYMEX -User Fee	10,008	1	10,008	12	834	ERA
1.3.3	NYMEX Installation	522	5	2,000			NYMEX, ERA
1.3.4	Employee Expenses	28,000	1	28,000	7	4,000	Bracken Study
1.4.0	**Subtotal: Gas Management**	**768,784**					
1.5.0	**Allocation of Common Costs**	**186,397**					
1.6.0	**Total: Gas Management**	**955,182**					

Table A-1: Stand-alone System Supply Costs - Comparable Activities Approach

	Cost Component	Annualized Cost	Useful Life	Total Cost	Number of units	Cost per unit	Data Source
2.0.0	**BILLING AND CUSTOMER CARE**						
2.1.0	**Salary & Bonuses**						
2.1.1	Manager - Call Centre	92,000	1	92,000	1	92,000	Marketers, ERA
2.1.2	Supervisors - Call Centre	252,000	1	252,000	4	63,000	Marketers, ERA
2.2.0	**Employee Benefits**						
2.2.1	Manager - Call Centre	11,476	1	11,476	1	11,476	Marketers, ERA
2.2.2	Supervisors - Call Centre,	40,432	1	40,432	4	10,108	Marketers, ERA
2.3.0	**Customer Information System**						
2.3.1	a. Capital/purchase costs	1,044,429	5	4,000,000	1	4,000,000	Marketers input, ERA
2.3.2	b. Average maintanence costs	250,000	1	250,000	1	250,000	Marketers input, ERA
2.3.3	c. Hardware requirements	35,772	5	137,000	1	137,000	
2.4.0	**Other Operating Expenses**						
2.4.1	ABC billing charge from EGD	15,608,735	1	15,608,735	1,151,302	13.56	EGD ABC fee
2.4.2	Customer Service(CS) Costs	1,212,200	1	1,212,200			Marketers, ERA
2.4.3	Employee Expenses-Call Centre	33,600	1	33,600	42	800	ERA
2.4.4	Employe Expenses - Other	20,000	1	20,000	5	4,000	Bracken Study
2.5.0	**Subtotal: Billing & Customer Care**	**18,600,644**					
2.6.0	**Allocation of Common Costs**	**484,058**					
2.7.0	**Total: Billing & Customer Care**	**19,084,701**					

Table A-1: Stand-alone System Supply Costs - Comparable Activities Approach

	Cost Component	Annualized Cost	Useful Life	Total Cost	Number of units	Cost per unit	Data Source
3.0.0	**COMMON COSTS**						
3.1.0	**Lease Payment**	85,680	1	85,680	5,040	17	ERA Survey
3.2.0	**Furniture and Office Equipment**						
3.2.1	Desktop computers	51,747	3	129,600	32	4,050	Bracken Study
3.2.2	Computer Support	24,512	1	24,512	32	766	ERA's cost
3.2.3	Furniture	91,141	5	349,056	32	10,908	Bracken Study
3.2.4	Other Office Equipment	17,528	3	43,898	32	1,372	Bracken Study
3.3.0	**Miscellaneous**						
3.3.1	Office Cleaning	26,309	1	26,309	6,480	4.06	Bracken Study
3.3.2	Office Supplies	33,120	1	33,120	46	720	Bracken Study
3.3.3	Internet	6,912	1	6,912	32	216	Bell Internet Service
3.3.4	Telephone	17,837	1	17,837	32	557	Bell Bundled Service
3.3.5	Long Distance	2,304	1	2,304	28,800	0.08	Bell Long Distance,
3.3.6	Cell Phones	6,060	2	12,120	12	1,010	ATT Wireless Service.
3.3.7	Postage and Courier	11,040	1	11,040	46	240	Bracken Study
3.3.8	Legal Services	33,600	1				Bracken Study
3.3.9	Memberships/donations	1,070	1				OEA Membership
3.3.10	General Insurance	4,000	1	4,000		57	Based on ERA's cost
3.3.11	Human resources and payroll services	4,968	1	4,968	46	108	Based on ERA's cost
3.3.12	Consulting Fees	15,000	1				ERA
3.4.0	**Subtotal: Common Costs**	**432,828**					
3.5.0	**Working Capital Allowance**	**237,627**					12.5 % of expenses
3.6.0	**Total: Common Costs**	**670,455**					
3.7.0	**Allocation of Common Costs**						
3.7.1	Gas Management	**186,397**					
3.7.2	Billing & Customer Care	**484,058**					
4.0.0	**TOTAL: COMPARABLE COST**	**20,039,883**					

Table A-2: Stand-alone System Supply Costs - Comprehensive Activities Approach

	Cost Component	Annualized Cost	Cost Differential	Useful Life	Total Cost	Number of units	Cost per unit	Data Source
5.0.0	**GAS MANAGEMENT**							
5.1.0	**Salary & Bonuses**							
5.1.1	Director	150,000	-	1	150,000	1	150,000	Bracken Study
5.1.2	Senior Buyer	118,750	-	1	118,750	1	118,750	Bracken Study
5.1.3	Contract Specialist	78,200	-	1	78,200	1	78,200	Bracken Study
5.1.4	Analyst/Clerical Support	47,250	-	1	47,250	1	47,250	Bracken Study
5.1.5	Senior Costing Analyst	35,750	-	1	35,750	0.5	71,500	Bracken Study
5.1.6	Senior Gas Supply Planner	71,500	-	1	71,500	1	71,500	ERA
5.1.7	Transporation/Regulatory Specialist	97,800	-	1	97,800	1	97,800	ERA
5.1.8	**Subtotal**	**599,250**						
5.2.0	**Employee Benefits**							
5.2.1	Director	35,201	-	1	35,201	1	35,201	Bracken Study
5.2.2	Senior Buyer	22,030	-	1	22,030	1	22,030	Bracken Study
5.2.3	Contract Specialist	17,405	-	1	17,405	1	17,405	Bracken Study
5.2.4	Analyst/Clerical Support	10,631	-	1	10,631	1	10,631	Bracken Study
5.2.5	Senior Costing Analyst					0.5	16,870	Bracken Study
5.2.6	Senior Gas Supply Planner	16,870	-	1	16,870	1	16,870	ERA
5.2.7	Transporation/Regulatory Specialist	19,718	-	1	19,718	1	19,718	ERA
5.2.8	**Subtotal**	121,855						
5.3.0	**Other Operating Expenses**							
5.3.1	Subscriptions	9,149	-	1	9,149	1	9,149	Bracken Study
5.3.2	NYMEX -User Fee	10,008	-	1	10,008	12	834	ERA
5.3.3	NYMEX Installation	522	-	5	2,000			NYMEX, ERA
5.3.4	Employee Expenses	28,000	-	1	28,000	7	4,000	Bracken Study
5.4.0	**Subtotal: Gas Management**	**768,784**	-					
5.5.0	**Allocation of Common Costs**	**214,547**	28,150					
5.6.0	**Total: Gas Management**	**983,332**	28,150					

Table A-2: Stand-alone System Supply Costs - Comprehensive Activities Approach

	Cost Component	Annualized Cost	Cost Differential	Useful Life	Total Cost	Number of units	Cost per unit	Data Source
6.0.0	**BILLING AND CUSTOMER CARE**							
6.1.0	**Salary & Bonuses**							
6.1.1	Manager - Call Centre	92,000	-	1	92,000	1	92,000	Marketers, ERA
6.1.2	Supervisors - Call Centre	252,000	-	1	252,000	4	63,000	Marketers, ERA
6.2.0	**Employee Benefits**							
6.2.1	Manager - Call Centre	11,476	-	1	11,476	1	11,476	Marketers, ERA
6.2.2	Supervisors - Call Centre,	40,432	-	1	40,432	4	10,108	Marketers, ERA
6.3.0	**Customer Information System:**							
6.3.1	a. Capital/purchase costs	1,044,429	-	5	4,000,000	1	4,000,000	Marketers input, ERA
6.3.2	b. Average maintanence costs	250,000	-	1	250,000	1	250,000	Marketers input, ERA
6.3.3	c. Hardware requirements	35,772	-	5	137,000	1	137,000	
6.4.0	**Other Operating Expenses**							
6.4.1	ABC billing charge from EGD	15,608,735	-	1	15,608,735	1,151,302	13.56	EGD ABC fee
6.4.2	Customer Service(CS) Costs	1,515,250	303,050	1	1,515,250		1.25	Marketers, ERA
6.4.3	Employee Expenses-Call Centre	33,600	-	1	33,600	42	800	ERA
6.4.4	Employe Expenses - Other	20,000	-	1	20,000	5	4,000	Bracken Study
6.5.0	**Subtotal: Billing & Customer Care**	**18,903,694**	303,050					
6.6.0	**Allocation of Common Costs**	**665,661**	181,603					
6.7.0	**Total: Billing & Customer Care**	**19,569,355**	484,653					

Table A-2: Stand-alone System Supply Costs - Comprehensive Activities Approach

	Cost Component	Annualized Cost	Cost Differential	Useful Life	Total Cost	Number of units	Cost per unit	Data Source
7.0.0	**COMMON COSTS**							
7.1.0	**Lease Payment**	123,080	37,400	1	123,080	7,240	17	ERA Survey
7.2.0	**Furniture and Office Equipment**							
7.2.1	Desktop computers	84,090	32,342	3	210,600	52	4,050	Bracken Study
7.2.2	Computer Support	39,832	15,320	1	39,832	52	766	ERA's cost
7.2.3	Furniture	148,104	56,963	5	567,216	52	10,908	Bracken Study
7.2.4	Other Office Equipment	28,483	10,955	3	71,334	52	1,372	Bracken Study
7.3.0	**Miscellaneous**							
7.3.1	Office Cleaning	29,394	3,086	1	29,394	7,240	4.06	Bracken Study
7.3.2	Office Supplies	49,680	16,560	1	49,680	69	720	Bracken Study
7.3.3	Internet	11,232	4,320	1	11,232	52	216	Bell Internet Service
7.3.4	Telephone	28,985	11,148	1	28,985	52	557	Bell Bundled Service
7.3.5	Long Distance	2,304	-	1	2,304	28,800	0.08	Bell Long Distance,
7.3.6	Cell Phones	13,635	7,575	2	27,270	27	1,010	ATT Wireless Service.
7.3.7	Postage and Courier	16,560	5,520	1	16,560	69	240	Bracken Study
7.3.8	Legal Services	33,600	-	1				Bracken Study
7.3.9	Memberships/donations	1,070	-	1				OEA Membership
7.3.10	General Insurance	4,000	-	1	4,000		57	Based on ERA's cost
7.3.11	Human resources and payroll services	7,452	2,484	1	7,452	69	108	Based on ERA's cost
7.3.12	Consulting Fees	15,000	-	1				ERA
7.4.0	**Subtotal: Common Costs**	**636,501**	203,673					
7.5.0	**Working Capital Allowance**	**243,708**	6,081					12.5 % of expenses
7.6.0	**Total: Common Costs**	**880,208**	209,753					
7.7.0	**Allocation of Common Costs**							
7.7.1	Gas Management	**214,547**	28,150					
7.7.2	Billing & Customer Care	**665,661**	181,603					

Table A-2: Stand-alone System Supply Costs - Comprehensive Activities Approach

	Cost Component	Annualized Cost	Cost Differential	Useful Life	Total Cost	Number of units	Cost per unit	Data Source
8.0.0	**ADDITIONAL RETAILER COSTS**							
8.1.0	**Customer Contract Admin.**							
	Salaries							
8.1.1	Manager, Contract Administration	92,000	92,000	1	92,000	1	92,000	Marketers, ERA
8.1.2	Senior Contract Administrator	57,750	57,750	1	57,750	1	57,750	ERA
8.1.3	Contract Administrator	472,500	472,500	1	472,500	10	47,250	EGD
	Benefits							
8.1.4	Manager, Contract Admin	11,476	11,476	1	11,476	1	11,476	Marketers, ERA
8.1.5	Senior Contract Adminstrator	9,791	9,791	1	9,791	1	9,791	ERA
8.1.6	Contract Administrator	91,580	91,580	1	91,580	10	9,158	ERA
8.1.7	**Subtotal: Contract Admin**	**735,097**	**735,097**					
8.2.0	**Other Operating Costs**							
8.2.1	Direct Purchase Admin charge	9,780	9,780	1	9,780	12	815	EGD DPAC fee
8.2.1	Employee Expenses	60,000	60,000	1	60,000	15	4,000	Bracken Study
8.3.0	**Load Balancing**							
8.3.1	Call Option	8,789,052	8,789,052	1	8,789,052	3,100m^3	1,151,302	Quote for 20/11/03
8.3.2	Put Option	8,789,052	8,789,052	1	8,789,052	3,100m^3	1,151,302	Quote for 20/11/03
8.4.0	**Marketing Costs**	6,500,000	6,500,000	1	6,500,000	50,000	130	Cost/customer based on
8.5.0	**OEB Licensing/Compliance Costs**							
8.5.1	a. licence cost	500	500	One	500	1	500	OEB
8.5.2	b. reaffirm contracts							Marketers
8.5.3	c. fraud reporting and investigation							
8.5.4	d. complaint resolution costs	210,000	210,000	1	210,000	6,000	35	Customer Expression
8.5.5		1,200	1,200	1	1,200	12	100	Customer Expression
8.5.6	e. renewal requirements cost	152,400	152,400	1	152,400			Mediamix
8.5.7	f. GDAR requirements							
8.5.8	**Subtotal: License Compliance**	**364,100**	**364,100**					
8.6.0	**Total Additional Costs**	**25,247,081**	**25,247,081**					
9.0.0	**TOTAL: COMPREHENSIVE COST**	**45,799,768**	**25,759,884**					