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September 7, 2011

**HAND DELIVERED**

Jeff Derouen  
Executive Director  
Public Service Commission  
211 Sower Boulevard  
P.O. Box 615  
Frankfort, KY 40601

RECEIVED

SEP 07 2011

PUBLIC SERVICE  
COMMISSION

Re: Delta Natural Gas Company, Inc.  
Case No. 2011-00147

Dear Mr. Derouen:

We enclose for filing, pursuant to the instructions provided, an original and six copies of Delta Natural Gas Company, Inc.'s Responses to the Commission Staff's Second Request for Information in the above-captioned case. Also enclosed for filing are an original and ten copies of a Motion for Informal Conference in the above-captioned case. Please place these documents with the other papers in the case. Thank you in advance for your assistance.

Best Regards,

Monica H. Braun

Enclosure  
Cc: Mr. John Brown (w/encl.)

COMMONWEALTH OF KENTUCKY  
BEFORE THE PUBLIC SERVICE COMMISSION

RECEIVED

SEP 07 2011

PUBLIC SERVICE  
COMMISSION

In the Matter of:

APPLICATION OF DELTA NATURAL )  
GAS COMPANY, INC. FOR )  
APPROVAL OF A REVISED GAS )  
COST RECOVERY TARIFF )

CASE NO. 2011-00147

\* \* \* \* \*

MOTION FOR INFORMAL CONFERENCE

Delta Natural Gas Company, Inc. ("Delta") respectfully moves the Public Service Commission to schedule and hold an informal conference in the within-styled case for the purpose of discussing and clarifying outstanding issues in the case.

Dated: September 7, 2011

Respectfully submitted,

Robert M. Watt, III  
Stoll Keenon Ogden PLLC  
300 West Vine Street, Suite 2100  
Lexington, Kentucky 40507  
(859) 231-3000  
robert.watt@skofirm.com

By Robert M. Watt  
Counsel for Applicant



**COMMONWEALTH OF KENTUCKY**  
**BEFORE THE PUBLIC SERVICE COMMISSION**

**In the Matter of:**

**APPLICATION OF DELTA NATURAL GAS )**  
**COMPANY, INC. FOR APPROVAL OF A )**      **CASE NO. 2011-00147**  
**REVISED GAS COST RECOVERY TARIFF )**

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**VERIFICATION**

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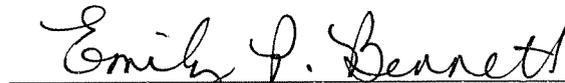
The undersigned, **John B. Brown**, being duly sworn, deposes and states that he is Chief Financial Officer, Treasurer and Secretary of Delta Natural Gas Company, Inc. and that he has personal knowledge of the matters set forth in the responses for which he is identified as the witness, and the answers contained therein are true and correct to the best of his information, knowledge and belief.

  
\_\_\_\_\_

**John B. Brown**

STATE OF KENTUCKY    )  
  )  
COUNTY OF CLARK    )

Subscribed and sworn to before me, a Notary Public in and before said County and State, this 7<sup>th</sup> day of September, 2011.

 (SEAL)  
\_\_\_\_\_  
Notary Public

My Commission Expires:

6/20/2012



**DELTA NATURAL GAS COMPANY, INC.**  
**CASE NO. 2011-00147**

**SECOND PSC DATA REQUEST**  
**DATED 8/18/2011**

1. Refer to Delta's response to Item 1 of Commission Staff's First Request for Information ("Staff's First Request").
  - a. Explain in detail how Delta determined that it finances its gas cost under-recoveries through all sources of capital. Provide the results of any analyses performed by Delta in making this determination.
  - b. A review of the monthly balance sheets filed with the Commission by Delta shows that, from January 1, 2007 to June 30, 2011, Delta's common equity gradually increased, from \$54.2 million to \$63.8 million, while its long-term debt steadily decreased, from \$58.7 million to \$56.7 million. Over that same period, Delta's short-term debt balance ranged from a high of \$30.7 million in November 2008 to a low of (\$11.5) million in April 2011. Delta's short-term debt balances were consistently larger from October 2007 through January 2009, when its Expected Gas Cost ("EGC") was typically \$10 or more per Mcf and its Quarterly Gas Cost ("QGC") (over) and under-recoveries ranged from (\$2,040,000) to \$6,570,000. Given (1) the apparent disconnect between Delta's gas cost over- and under-recoveries and its equity and long-term debt balances, and (2) the apparent relationship between those over- and under-recoveries and its short-term debt balances, explain why it is Delta's position that it uses all sources of capital to finance its over- and under-recoveries.

Response:

- a. Delta did not conduct a study to arrive at the conclusion that all sources of income are used to finance gas cost under-recoveries. Delta also cannot trace every source of financing to a specific use. The conclusion that Delta uses all sources of financing comes from the application of general finance theory. Any dollar from one financing source used to finance a project ultimately requires the use of a different source of financing to finance future projects. Therefore, it is inappropriate to attribute any source of financing to specific projects. In the text book "Financial Management Theory and Practice", Eugene Brigham explains:

"Suppose a particular firm's cost of debt is estimated to be 8 percent, its cost of equity is estimated to be 12 percent, and the decision has been made to finance next year's projects by selling debt. The argument is sometimes made that the cost of capital for these projects is 8 percent, because debt will be used to finance them. However, this position is incorrect. To

**DELTA NATURAL GAS COMPANY, INC.**  
**CASE NO. 2011-00147**

**SECOND PSC DATA REQUEST**  
**DATED 8/18/2011**

finance a particular set of projects with debt implies that the firm is also using up some of its potential for obtaining new low-cost debt in the future. As expansion occurs in subsequent years, at some point the firm will find it necessary to use additional equity financing to prevent the debt ratio from becoming too large.

....To avoid this problem, the firm should be viewed as an ongoing concern, and the cost of capital used in capital budgeting should be calculated as a weighted average, or composite, of the various types of funds it uses.”

There are numerous examples where the Commission follows this same logic. For example, Materials and Supplies, working capital, etc., could very well be financed at times using short term borrowing, however, the Commission does not specifically assign a source of capital to Materials and Supplies, working capital, etc., when applying the rate of return to Delta’s rate base. It applies a weighted average cost of capital to all of Delta’s capital requirements, and does not try to attribute a specific source to each type.

The Commission also seemed to be relying on this theory when, in its order in Case No. 90-158, page 14, it said:

Concerning the AG’s proposal to remove the entire 25 percent disallowance of Trimble County CWIP from common equity, the Commission has ruled in prior cases that the investment in utility plant cannot be traced to specific capital sources... Trimble County’s construction has been financed by all components of capital, not solely by common equity.

b. See a. above.

Sponsoring Witness:

John B. Brown



**DELTA NATURAL GAS COMPANY, INC.**  
**CASE NO. 2011-00147**

**SECOND PSC DATA REQUEST**  
**DATED 8/18/2011**

2. Refer to Delta's response to Item 2 of Staff's First Request. Explain how Delta has "modified the design of the control originally proposed in Wesolosky Testimony." Is this referring to the limitation identified in the last two bullets at the end of the response to Item 6, which discusses limiting the adjustment to the lesser of the difference between the current EGC and the prior quarter's QGC or 10 percent of the current EGC?
  - a. If yes, explain the rationale of this limiter and the choice of parameters.
  - b. If no, explain the modification in detail.

Response:

Yes. The modification of the control referred to in Item 2. of the Staff's First request is the limitation of the adjustment to the lesser of the difference between the current EGC and the prior quarter's QGC or 10 percent of the current EGC. The limiter was introduced into the calculation to lessen the potential impact on current rates and avoid significant over-recoveries. Without the limiter there is a risk of significant over-recoveries during the winter months when the rate difference is applied to periods with the greatest volumes. The use of the 10% limiter helped to mitigate this risk.

Sponsoring Witness:

Matthew D. Wesolosky



**DELTA NATURAL GAS COMPANY, INC.**  
**CASE NO. 2011-00147**

**SECOND PSC DATA REQUEST**  
**DATED 8/18/2011**

3. Confirm that the “sizable uncollectible gas cost balance” referenced in the third paragraph of the response to Item 2 is actually the “unrecovered” gas cost balance.

Response:

Yes.

Sponsoring Witness:

John B. Brown



**DELTA NATURAL GAS COMPANY, INC.**  
**CASE NO. 2011-00147**

**SECOND PSC DATA REQUEST**  
**DATED 8/18/2011**

4. Item 3 of Staff's First Request asked if Delta was aware of any other Kentucky gas distribution company proposing or receiving Commission approval for a carrying cost adjustment in its Gas Cost Recovery ("GCR") tariff. Delta responded that it was not aware of any Kentucky gas distribution company that had received such approval. It also cited two Commission Orders, one suggesting a revision of the Gas Cost Adjustment ("GCA") clause to include gas cost under-recovery carrying cost, the other suggesting that Delta look to its GCA mechanism to address the gas cost under-recovery issue.
- a. Explain whether Delta is familiar with the Commission's Order in Administrative Case No. 384, which addressed the issue of carrying charges on over- and under-recoveries of gas cost, saying:

We conclude that recovery of carrying charges is permissible but only if the LDC extends the recovery period of the AA component of its GCA by an additional 12 months. In essence, the total dollar amount of the over- or under-recoveries would be spread over 2 years of sales volumes rather than 1 year, as is presently the case...

The Commission finds that the recovery of carrying charges on over- and under-recoveries should be an option for the LDCs, but only in conjunction with an extension of the period over which the over- or under-recoveries are charged to ratepayers.

Given this Commission finding, explain whether Delta would propose a revision in its GCR carrying cost adjustment.

- b. Delta indicated it was not aware of another utility receiving approval of a carrying cost adjustment, but it did not address whether it was aware of another utility having proposed a carrying cost adjustment. Was Delta unaware of the request in Case No. 2002-00293 in which Columbia Gas of Kentucky, Inc. made proposals to add a carrying cost adjustment using its short-term debt cost for both a 24-month period and a 36-month period and that both proposals were denied by the Commission?

Response:

- a. Delta is familiar with Administrative Case No. 384. Delta does not propose a revision in its GCR mechanism to spread the total dollar amount of the over- or under-recoveries over 2 years.

**DELTA NATURAL GAS COMPANY, INC.**  
**CASE NO. 2011-00147**

**SECOND PSC DATA REQUEST**  
**DATED 8/18/2011**

- b. In proposing to include a carrying charge for over- and under-recoveries in the GCR, Delta relied on Commission directives in Delta's last two rate orders, particularly the Commission's Order in Case No. 2004-00067 in which it stated that, "The under-recoveries Delta experiences can be addressed more readily through its GCA mechanism, with a revision of the GCA clause to include the carrying costs of any under-recoveries that Delta experiences."

Delta was unaware of the Commission's ruling in the Columbia Gas Order.

Sponsoring Witness:

John B. Brown



**DELTA NATURAL GAS COMPANY, INC.**  
**CASE NO. 2011-00147**

**SECOND PSC DATA REQUEST**  
**DATED 8/18/2011**

5. Refer to Delta's response to Item 4 of Staff's First Request.
  - a. Explain whether Delta has considered changing the Actual Adjustment ("AA") calculation to use calendar month purchase volumes adjusted for system line loss in place of jurisdictional sales volumes in determining the Unit Book Cost of Gas for each month for which the monthly cost difference is being calculated.
    - (1) If it has, explain why the historical sales method was deemed superior to that method.
    - (2) If no, explain why not.
  - b. The last sentence of the response indicates that Delta's analysis showed that gas cost under-recoveries are primarily "a function of the calculation and amortization of the EGC." Explain this statement in light of the response to Item 5, specifically the calculation of the Unit Book Cost of Gas for August, September, and October 2010, which, as shown in Attachment II, Schedule IV, is calculated as \$17.0769, \$13.0073, and \$21.0219 per Mcf, respectively.

Response:

- a. Delta has considered using calendar month purchase volumes adjusted for system line loss in place of jurisdictional sales. Calculating the unit book cost of gas based on sales volumes provides a common denominator when determining the difference between the EGC rate and the unit book cost of gas. Otherwise, any under or over-recovery of attributable to differences in expected volumes sold and actual volumes sold would be deferred until it could be included in the balance adjustment twelve months later.
- b. The use of the word "primary" was intended to acknowledge that the statement was not true in every instance. We developed the proposed methodology to help minimize over and under-recovery. Our proposed methodology would accomplish this goal as shown in Attachment I provided in response to Item 5b. of the Staff's First Data request by reducing the under-recovery from \$3.2 million in May, 2010 to \$861,685 in June, 2010.

Sponsoring Witness:

Matthew D. Wesolosky



**DELTA NATURAL GAS COMPANY, INC.**  
**CASE NO. 2011-00147**

**SECOND PSC DATA REQUEST**  
**DATED 8/18/2011**

6. Refer to Delta's response to Item 5 of Staff's First Request.
  - a. Explain the discrepancy between the "as filed" AA calculation for February, March, and April 2011 and Delta's GCR filing in Case No. 2011-00214. Confirm that the AA filed in Case No. 2011-00214 was correct.
  - b. Show the effect of the proposed GCR carrying cost on the revised GCR calculations included in Item 5.
  - c. Provide the calculations resulting in the reduced volumes in the Mcf Purchases column in the revised EGC calculations for the prior six GCR filings.

Response:

- a. The "as filed" AA calculation for February, March and April 2011 included in Item 5 of the Staff's First Request contained incorrect amounts. The AA filed in case No. 2011-00214 was correct. A revised AA calculation using the proposed methodology is included as Attachment I.
- b. See Attachment II for the calculations of the carrying cost based on the revised GCR calculations.
- c. See Attachment III for the calculation of the EGC volumes.

Sponsoring Witness:

Matthew D. Wesolosky

DELTA NATURAL GAS COMPANY, INC.

ACTUAL ADJUSTMENT  
 DETAIL FOR THE THREE MONTHS ENDED  
 April 30, 2011

as filed

Particulars	Unit	For the Month Ended			For the Month Ended		
		Feb-11	Mar-11	Apr-11	Feb-11	Mar-11	Apr-11
SUPPLY COST PER BOOKS					2,235,658	3,334,816	1,233,970
PRIMARY GAS SUPPLIERS	\$	2,235,658	3,334,816	1,233,970	-	-	-
UTILITY PRODUCTION	\$	-	-	-	-	-	-
INCLUDABLE PROPANE	\$	-	-	-	-	-	-
UNCOLLECTIBLE GAS COSTS	\$	35,420	30,361	20,689	35,420	30,361	20,689
OTHER COST (SPECIFY)	\$	-	-	-	-	-	-
TOTAL	\$	<u>2,271,078</u>	<u>3,365,177</u>	<u>1,254,659</u>	<u>2,271,078</u>	<u>3,365,177</u>	<u>1,254,659</u>
SALES VOLUME					689,367	477,476	371,009
JURISDICTIONAL	MCF	689,367	477,476	371,009	-	-	-
OTHER VOLUMES (SPECIFY)	MCF	-	-	-	-	-	-
TOTAL	MCF	<u>689,367</u>	<u>477,476</u>	<u>371,009</u>	<u>689,367</u>	<u>477,476</u>	<u>371,009</u>
UNIT BOOK COST OF GAS	\$	3.2944	7.0478	3.3817	3.2944	7.0478	3.3817
QGC IN EFFECT FOR MONTH	\$	5.8247	5.8247	5.8247	5.1463	5.1463	5.1463
RATE DIFFERENCE	\$	(2.5303)	1.2231	(2.4430)	(1.8519)	1.9015	(1.7646)
MONTHLY SALES	MCF	689,367	477,476	371,009	689,367	477,476	371,009
MONTHLY COST DIFFERENCE	\$	<u>(1,744,305)</u>	<u>584,001</u>	<u>(906,375)</u>	<u>(1,276,639)</u>	<u>907,921</u>	<u>(654,682)</u>
				Three Month Period			Three Month Period
COST DIFFERENCE FOR THE THREE MONTHS	\$			(2,066,679)			(1,023,400)
TWELVE MONTHS SALES FOR PERIOD ENDED	MCF			<u>3,115,919</u>			<u>3,115,919</u>
CURRENT QUARTERLY ACTUAL ADJUSTMENT	\$/MCF			(0.6633)			(0.3284)

CARRYING COST OF UNRECOVERED GAS COST  
 AS OF JANUARY 31, 2010  
 FOR GCR EFFECTIVE APRIL 26, 2010

	Amounts	Ratios	Cost Rates	Weighted Cost of Capital	Allocated Unrecovered (Overrecovered) Gas Cost 01/31/10	Carrying Cost
Equity	60,514,477	47.53%	10.400%	4.943%	2,596,193	270,004
Long Term Debt	58,434,000	45.90%	6.830%	3.135%	2,506,936	171,226
Short Term Debt	8,368,388	6.57%	2.202%	0.145%	359,021	7,907
	<u>127,316,865</u>			<u>8.223%</u>	<u>5,462,150</u>	<u>449,137</u>
Equity portion of carrying cost				270,004		
Tax expansion factor, with PSC gross-up, per Case No. 2010-00116				<u>1.6065821</u>		
Equity portion of carrying cost, grossed up for income taxes				433,784		
Interest portion of carrying cost				<u>179,133</u>		
Annual carrying cost of unrecovered gas costs, grossed up for income taxes				612,917		
Quarterly carrying cost of unrecovered gas costs, grossed up for income taxes				153,229		
Prior quarter GCR carrying cost, grossed-up for income taxes				-		
Collections of prior quarter GCR carrying cost, grossed-up for income taxes				<u>-</u>		
Total				153,229		
Total estimated sales for the quarter (per Schedule II)			MCF	210,767		
GCR Carrying Cost Rate (GCRCC)			\$/MCF	<u>\$ 0.72701</u>		

Calculation of Cost Rates

Cost of Long Term Debt, January 31, 2010			
7.000%	Debentures	19,510,000	1,365,700
5.750%	Debentures	<u>38,924,000</u>	<u>2,238,130</u>
			3,603,830
	Debt Expense Amortization		<u>387,263</u>
	Annual Long Term Debt Expense		<u>3,991,093</u>
	Rate	<u>58,434,000</u>	<u>6.830%</u>
Cost of Short Term Debt, January 31, 2010 (rate as of 01/31/10)			
1.730%	Notes payable	8,368,388	144,773
0.125%	Unused line	<u>31,631,612</u>	<u>39,540</u>
	Annual Short Term Debt Expense		<u>184,313</u>
	Rate	8,368,388	<u>2.202%</u>

**CARRYING COST OF UNRECOVERED GAS COST  
AS OF APRIL 30, 2010  
FOR GCR EFFECTIVE JULY 26, 2010**

	Amounts	Ratios	Cost Rates	Weighted Cost of Capital	Allocated Unrecovered (Overrecovered) Gas Cost 04/30/10	Carrying Cost
Equity	61,932,260	51.48%	10.400%	5.354%	1,392,944	144,866
Long Term Debt	58,365,000	48.52%	6.830%	3.314%	1,312,712	89,662
Short Term Debt	-	0.00%	0.000%	0.000%	-	-
	<u>120,297,260</u>			<u>8.668%</u>	<u>2,705,656</u>	<u>234,528</u>
Equity portion of carrying cost				144,866		
Tax expansion factor, with PSC gross-up, per Case No. 2010-00116				<u>1.6065821</u>		
Equity portion of carrying cost, grossed up for income taxes				232,739		
Interest portion of carrying cost				<u>89,662</u>		
Annual carrying cost of unrecovered gas costs, grossed up for income taxes				322,401		
Quarterly carrying cost of unrecovered gas costs, grossed up for income taxes				80,600		
Prior quarter GCR carrying cost, grossed-up for income taxes				153,229		
Collections of prior quarter GCR carrying cost, grossed-up for income taxes				<u>(184,349)</u>		
Total				49,480		
Total estimated sales for the quarter (per Schedule II)			MCF	249,397		
GCR Carrying Cost Rate (GCRCC)			\$/MCF	<u>\$ 0.19840</u>		

Calculation of Cost Rates

Cost of Long Term Debt, April 30, 2010				
	7.000%	Debentures	19,460,000	1,362,200
	5.750%	Debentures	<u>38,905,000</u>	<u>2,237,038</u>
				3,599,238
Debt Expense Amortization				<u>387,263</u>
Annual Long Term Debt Expense				<u>3,986,501</u>
Rate			<u>58,365,000</u>	<u>6.830%</u>
Cost of Short Term Debt, April 30, 2010 (rate as of 04/30/10)				
	1.749%	Notes payable	-	-
	0.125%	Unused line	40,000,000	<u>50,000</u>
Annual Short Term Debt Expense				<u>50,000</u>
Rate			-	<u>0.000%</u>

CARRYING COST OF UNRECOVERED GAS COST  
AS OF July 31, 2010  
FOR GCR EFFECTIVE OCTOBER 25, 2010

	Amounts	Ratios	Cost Rates	Weighted Cost of Capital	Allocated Unrecovered (Overrecovered) Gas Cost 07/31/10	Carrying Cost
Equity	60,701,430	51.02%	10.400%	5.306%	1,947,818	202,573
Long Term Debt	58,267,000	48.98%	6.832%	3.346%	1,869,700	127,740
Short Term Debt	-	0.00%	0.000%	0.000%	-	-
	<u>118,968,430</u>			<u>8.652%</u>	<u>3,817,518</u>	<u>330,313</u>
Equity portion of carrying cost				202,573		
Tax expansion factor, with PSC gross-up, per Case No. 2010-00116				<u>1.6065821</u>		
Equity portion of carrying cost, grossed up for income taxes				325,450		
Interest portion of carrying cost				<u>127,740</u>		
Annual carrying cost of unrecovered gas costs, grossed up for income taxes				453,190		
Quarterly carrying cost of unrecovered gas costs, grossed up for income taxes				113,298		
Prior quarter GCR carrying cost, grossed-up for income taxes				80,600		
Collections of prior quarter GCR carrying cost, grossed-up for income taxes				<u>(33,015)</u>		
Total				160,883		
Total estimated sales for the quarter (per Schedule II)			MCF	1,484,846		
GCR Carrying Cost Rate (GCRCC)			\$/MCF	<u>\$ 0.10835</u>		

Calculation of Cost Rates

Cost of Long Term Debt, July 31, 2010			
7.000%	Debentures	19,460,000	1,362,200
5.750%	Debentures	<u>38,807,000</u>	<u>2,231,403</u>
			3,593,603
	Debt Expense Amortization		<u>387,263</u>
	Annual Long Term Debt Expense		<u>3,980,866</u>
	Rate	<u>58,267,000</u>	<u>6.832%</u>
Cost of Short Term Debt, July 31, 2010 (rate as of 07/31/10)			
1.850%	Notes payable	-	-
0.125%	Unused line	40,000,000	<u>50,000</u>
	Annual Short Term Debt Expense		<u>50,000</u>
	Rate	-	<u>0.000%</u>

CARRYING COST OF UNRECOVERED GAS COST  
AS OF OCTOBER 31, 2010  
FOR GCR EFFECTIVE JANUARY 24, 2011

	Amounts	Ratios	Cost Rates	Weighted Cost of Capital	Allocated Unrecovered (Overrecovered) Gas Cost 10/31/10	Carrying Cost
Equity	59,907,869	48.59%	10.400%	5.054%	2,567,922	267,064
Long Term Debt	58,172,000	47.18%	6.833%	3.224%	2,493,515	170,390
Short Term Debt	5,208,054	4.22%	2.592%	0.109%	223,241	5,787
	<u>123,287,923</u>			<u>8.387%</u>	<u>5,284,677</u>	<u>443,241</u>
Equity portion of carrying cost				267,064		
Tax expansion factor, with PSC gross-up, per Case No. 2010-00116				<u>1.6065821</u>		
Equity portion of carrying cost, grossed up for income taxes				429,060		
Interest portion of carrying cost				<u>176,177</u>		
Annual carrying cost of unrecovered gas costs, grossed up for income taxes				605,237		
Quarterly carrying cost of unrecovered gas costs, grossed up for income taxes				151,309		
Prior quarter GCR carrying cost, grossed-up for income taxes				113,298		
Collections of prior quarter GCR carrying cost, grossed-up for income taxes				<u>(125,479)</u>		
Total				139,128		
Total estimated sales for the quarter (per Schedule II)			MCF	1,107,475		
GCR Carrying Cost Rate (GCRCC)			\$/MCF	<u>\$ 0.12563</u>		

Calculation of Cost Rates

Cost of Long Term Debt, October 31, 2010			
7.000%	Debentures	19,435,000	1,360,450
5.750%	Debentures	38,737,000	<u>2,227,378</u>
			3,587,828
	Debt Expense Amortization		<u>387,263</u>
	Annual Long Term Debt Expense		3,975,091
	Rate	<u>58,172,000</u>	<u>6.833%</u>
Cost of Short Term Debt, October 31, 2010 (rate as of 10/31/10)			
1.757%	Notes payable	5,208,054	91,506
0.125%	Unused line	34,791,946	<u>43,490</u>
	Annual Short Term Debt Expense		<u>134,995</u>
	Rate	5,208,054	<u>2.592%</u>

From Grid Note

CARRYING COST OF UNRECOVERED GAS COST  
AS OF JANUARY 31, 2011  
FOR GCR EFFECTIVE APRIL 25, 2011

	Amounts	Ratios	Cost Rates	Weighted Cost of Capital	Allocated Unrecovered (Overrecovered) Gas Cost 01/31/11	Carrying Cost
Equity	63,401,197	51.27%	10.400%	5.332%	3,009,944	313,034
Long Term Debt	58,156,006	47.03%	6.834%	3.214%	2,760,931	188,672
Short Term Debt	2,103,103	1.70%	4.013%	0.068%	99,844	4,007
	<u>123,660,306</u>			<u>8.614%</u>	<u>5,870,718</u>	<u>505,713</u>
Equity portion of carrying cost				313,034		
Tax expansion factor, with PSC gross-up, per Case No. 2010-00116				<u>1.6065821</u>		
Equity portion of carrying cost, grossed up for income taxes				502,915		
Interest portion of carrying cost				<u>192,679</u>		
Annual carrying cost of unrecovered gas costs, grossed up for income taxes				695,594		
Quarterly carrying cost of unrecovered gas costs, grossed up for income taxes				173,899		
Prior quarter GCR carrying cost, grossed-up for income taxes				151,309		
Collections of prior quarter GCR carrying cost, grossed-up for income taxes				<u>(193,200)</u>		
Total				132,008		
Total estimated sales for the quarter (per Schedule II)			MCF	196,018		
GCR Carrying Cost Rate (GCRCC)			\$/MCF	<u>\$ 0.67345</u>		

Calculation of Cost Rates

Cost of Long Term Debt, January 31, 2011				
7.000% Debentures	19,435,000		1,360,450	
5.750% Debentures	38,721,006		2,226,458	
			3,586,908	
Debt Expense Amortization			<u>387,263</u>	
Annual Long Term Debt Expense			3,974,171	
Rate	<u>58,156,006</u>		<u>6.834%</u>	
Cost of Short Term Debt, January 31, 2011 (rate as of 01/31/11)				
1.761% Notes payable	2,103,103		37,036	
0.125% Unused line	37,896,897		<u>47,371</u>	
Annual Short Term Debt Expense			<u>84,407</u>	
Rate	2,103,103		<u>4.013%</u>	

CARRYING COST OF UNRECOVERED GAS COST  
AS OF APRIL 30, 2011  
FOR GCR EFFECTIVE JULY 25, 2011

	Amounts	Ratios	Cost Rates	Weighted Cost of Capital	Allocated Unrecovered (Overrecovered) Gas Cost 4/30/11	Carrying Cost
Equity	65,235,833	52.94%	10.400%	5.505%	151,145	15,719
Long Term Debt	57,997,006	47.06%	6.836%	3.217%	134,374	9,186
Short Term Debt	-	0.00%	0.000%	0.000%	-	-
	<u>123,232,839</u>			<u>8.722%</u>	<u>285,519</u>	<u>24,905</u>
Equity portion of carrying cost				15,719		
Tax expansion factor, with PSC gross-up, per Case No. 2010-00116				<u>1.6065821</u>		
Equity portion of carrying cost, grossed up for income taxes				25,254		
Interest portion of carrying cost				<u>9,186</u>		
Annual carrying cost of unrecovered gas costs, grossed up for income taxes				34,440		
Quarterly carrying cost of unrecovered gas costs, grossed up for income taxes				8,610		
Prior quarter GCR carrying cost, grossed-up for income taxes				173,899		
Collections of prior quarter GCR carrying cost, grossed-up for income taxes				<u>(203,616)</u>		
Total				(21,107)		
Total estimated sales for the quarter (per Schedule II)			MCF	247,068		
GCR Carrying Cost Rate (GCRCC)			\$/MCF	<u>\$ (0.08543)</u>		

Calculation of Cost Rates

Cost of Long Term Debt, April 30, 2011						
7.000% Debentures	19,420,000			1,359,400		1.221.08
5.750% Debentures	<u>38,577,006</u>			<u>2,218,178</u>		1.221.09
				3,577,578		
Debt Expense Amortization				<u>387,263</u>		
Annual Long Term Debt Expense				<u>3,964,841</u>		
Rate				<u>57,997,006</u>		<u>6.836%</u>
Cost of Short Term Debt, April 30, 2011 (rate as of 04/30/11)						
1.743% Notes payable	-			-		
0.125% Unused line	40,000,000			<u>50,000</u>		
Annual Short Term Debt Expense				<u>50,000</u>		
Rate				-		<u>0.000%</u>

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Estimated MCF Purchases for May, 2010 EGC

Use	200905			200906			200907		
	Billed MCF	MCF Including Unbilled	Normalized MCF	Billed MCF	MCF Including Unbilled	Normalized MCF	Billed MCF	MCF Including Unbilled	Normalized MCF
Area									
01	14,998	5,954	6,410	4,182	3,329	3,329	2,921	3,182	3,182
02	24,144	9,585	10,318	9,378	7,465	7,465	6,682	7,280	7,280
03	54,391	21,593	23,245	15,593	12,412	12,412	11,205	12,208	12,208
05	17,476	6,938	7,469	5,735	4,565	4,565	4,553	4,960	4,960
06	19,379	7,693	8,282	7,817	6,223	6,223	5,649	6,155	6,155
07	9,539	3,787	4,077	3,157	2,513	2,513	2,403	2,618	2,618
08	12,508	4,965	5,345	4,305	3,427	3,427	3,157	3,440	3,440
10	17,218	6,835	7,358	7,023	5,591	5,591	5,597	6,098	6,098
11	39,092	15,519	16,707	12,482	9,936	9,936	8,939	9,738	9,738
12	11,209	4,450	4,790	3,661	2,914	2,914	2,489	2,712	2,712
<b>Total(Area Code)</b>	<b>219,953</b>	<b>87,320</b>	<b>94,001</b>	<b>73,333</b>	<b>58,375</b>	<b>58,375</b>	<b>53,595</b>	<b>58,391</b>	<b>58,391</b>
Impact of unbilled to allocate		(132,633)			(14,958)			4,796	
NDD			109			10			-
ADD			89			9			3
Weather Factor			122%			100%			100%
Base Load			57,591			57,591			57,591
Weather Sensitive			29,729			784			800
Adjusted WS			36,410			784			800
Normalized diff, per above			94,001			58,375			58,391
			-			-			-
<b>Normalized Volumes by Supply Area</b>									
Columbia (01&05)			13,878			7,894			8,142
Tennessee (02&03)			33,563			19,877			19,488
South (06-12)			46,559			30,604			30,761
<b>Total</b>			<b>94,001</b>			<b>58,375</b>			<b>58,391</b>
<b>Estimated MCF Purchases for EGC Calculation</b>									<b><u>210,767</u></b>

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Estimated MCF Purchases for August, 2010 EGC

Use	200908			200909			200910		
	Billed MCF	MCF Including Unbilled	Normalized MCF	Billed MCF	MCF Including Unbilled	Normalized MCF	Billed MCF	MCF Including Unbilled	Normalized MCF
Area									
01	3,278	2,598	2,598	2,849	3,916	3,916	3,548	8,235	6,863
02	8,305	6,583	6,583	6,648	9,139	9,139	7,910	18,362	15,303
03	12,805	10,149	10,149	10,582	14,548	14,548	13,707	31,817	26,517
05	4,939	3,914	3,914	4,268	5,868	5,868	5,718	13,272	11,061
06	7,387	5,855	5,855	5,036	6,923	6,923	7,374	17,118	14,266
07	2,914	2,310	2,310	2,370	3,258	3,258	3,511	8,150	6,792
08	3,962	3,140	3,140	3,203	4,404	4,404	3,950	9,170	7,642
10	6,697	5,308	5,308	5,231	7,191	7,191	7,173	16,649	13,876
11	10,594	8,397	8,397	8,373	11,510	11,510	10,636	24,689	20,576
12	2,830	2,243	2,243	2,208	3,035	3,035	3,212	7,457	6,215
<b>Total(Area Code)</b>	<b>63,710</b>	<b>50,496</b>	<b>50,496</b>	<b>50,768</b>	<b>69,792</b>	<b>69,792</b>	<b>66,739</b>	<b>154,920</b>	<b>129,109</b>
Impact of unbilled to allocate		(13,214)			19,024			88,181	
NDD			-			49			269
ADD			3			27			364
Weather Factor			100%			100%			74%
Base Load			56,025			56,025			56,025
Weather Sensitive			(5,529)			13,767			98,895
Adjusted WS			(5,529)			13,767			73,084
Normalized diff, per above			50,496			69,792			129,109
			-			-			-
<b>Normalized Volumes by Supply Area</b>									
Columbia (01&05)			6,513			9,784			17,924
Tennessee (02&03)			16,731			23,686			41,819
South (06-12)			27,252			36,321			69,366
<b>Total</b>			<b>50,496</b>			<b>69,792</b>			<b>129,109</b>
<b>Estimated MCF Purchases for EGC Calculation</b>									<b><u>249,397</u></b>

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Estimated MCF Purchases for November, 2010 EGC

Use	200911			200912			201001		
	Billed MCF	MCF Including Unbilled	Normalized MCF	Billed MCF	MCF Including Unbilled	Normalized MCF	Billed MCF	MCF Including Unbilled	Normalized MCF
Area									
01	12,309	18,821	20,566	17,082	37,644	36,280	41,031	49,525	44,094
02	24,352	37,235	40,689	35,301	77,792	74,974	76,130	91,890	81,813
03	31,756	48,555	53,059	45,587	100,459	96,820	134,733	162,626	144,791
05	16,020	24,495	26,768	22,104	48,710	46,945	53,150	64,153	57,117
06	22,688	34,690	37,908	28,499	62,803	60,528	59,933	72,340	64,407
07	7,590	11,605	12,681	11,936	26,303	25,350	30,674	37,025	32,964
08	15,377	23,511	25,692	21,844	48,138	46,395	42,772	51,626	45,965
10	13,554	20,724	22,647	20,935	46,135	44,464	51,691	62,392	55,550
11	21,966	33,587	36,702	36,596	80,647	77,726	88,219	106,482	94,805
12	8,280	12,660	13,835	13,500	29,750	28,672	32,234	38,907	34,640
<b>Total(Area Code)</b>	<b>173,891</b>	<b>265,883</b>	<b>290,548</b>	<b>253,384</b>	<b>558,379</b>	<b>538,154</b>	<b>610,565</b>	<b>736,965</b>	<b>656,145</b>
Impact of unbilled to allocate		91,992			304,995			126,400	
NDD			561			882			995
ADD			502			919			1,129
Weather Factor			112%			96%			88%
Base Load			56,025			56,025			56,025
Weather Sensitive			209,858			502,354			680,940
Adjusted WS			234,523			482,129			600,120
Normalized diff, per above			290,548			538,154			656,145
			-			-			-
<b>Normalized Volumes by Supply Area</b>									
Columbia (01&05)			47,334			83,226			101,211
Tennessee (02&03)			93,748			171,794			226,604
South (06-12)			149,465			283,134			328,330
<b>Total</b>			<b>290,548</b>			<b>538,154</b>			<b>656,145</b>
<b>Estimated MCF Purchases for EGC Calculation</b>									<b><u>1,484,846</u></b>





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Estimated MCF Purchases for August, 2011 EGC

Use	201008			201009			201010		
	Billed MCF	MCF Including Unbilled	Normalized MCF	Billed MCF	MCF Including Unbilled	Normalized MCF	Billed MCF	MCF Including Unbilled	Normalized MCF
Area									
01	2,794	2,599	2,599	2,545	3,450	3,450	4,246	7,216	8,471
02	7,419	6,903	6,903	5,392	7,310	7,310	9,393	15,964	18,740
03	10,047	9,347	9,347	9,338	12,660	12,660	12,647	21,495	25,232
05	3,957	3,682	3,682	3,545	4,806	4,806	6,260	10,639	12,489
06	8,394	7,810	7,810	4,731	6,414	6,414	8,610	14,633	17,177
07	2,262	2,105	2,105	2,079	2,818	2,818	3,180	5,404	6,344
08	3,264	3,037	3,037	2,963	4,018	4,018	4,403	7,483	8,785
10	4,529	4,214	4,214	4,335	5,878	5,878	6,689	11,368	13,345
11	7,734	7,195	7,195	7,448	10,097	10,097	9,984	16,968	19,918
12	2,548	2,370	2,370	2,285	3,098	3,098	3,386	5,754	6,755
<b>Total(Area Code)</b>	<b>52,948</b>	<b>49,262</b>	<b>49,262</b>	<b>44,660</b>	<b>60,549</b>	<b>60,549</b>	<b>68,797</b>	<b>116,927</b>	<b>137,256</b>
Impact of unbilled to allocate		(3,686)			15,889			48,130	
NDD			-			49			271
ADD			-			29			206
Weather Factor			100%			100%			132%
Base Load			52,498			52,498			52,498
Weather Sensitive			(3,236)			8,051			64,429
Adjusted WS			(3,236)			8,051			84,758
Normalized diff, per above			49,262			60,549			137,256
			-			-			-
<b>Normalized Volumes by Supply Area</b>									
Columbia (01&05)			6,281			8,256			20,960
Tennessee (02&03)			16,250			19,971			43,972
South (06-12)			26,731			32,323			72,324
<b>Total</b>			<b>49,262</b>			<b>60,549</b>			<b>137,256</b>
									<b>247,068</b>

Estimated MCF Purchases for EGC Calculation



**DELTA NATURAL GAS COMPANY, INC.**  
**CASE NO. 2011-00147**

**SECOND PSC DATA REQUEST**  
**DATED 8/18/2011**

7. Refer to Delta's response to Item 6 of Staff's First Request, which states, "If the goal of the mechanism is to recover actual gas costs, while minimizing over/under-recovery, it is counter intuitive to reduce rates when you are in an under-recovery position and raise rates when you are in an over-recovery position."
- a. Explain whether Delta is referring to the EGC when it discusses the goal of "the mechanism."
  - b. Explain whether the results of the revised AA calculation for the three months ending April 2011 are necessarily intuitive, i.e. that Delta refund \$.6633 to its customers as opposed to refunding \$.3284 per Mcf (as filed in Delta's last GCR filing, Case No. 2011-00214) due to an EGC adjusted for the proposed control.
  - c. Explain whether it would be intuitive to calculate monthly cost differences for the example months of February, March, and April 2011 by dividing the Supply Cost per Books by the Supply Volume per Books, adjusted for system line loss to calculate the Unit Book Cost of Gas. Using monthly Mcf purchase volumes provided in Case No. 2011-00214, February calculated sales would be 425,022 Mcf derived from 433,165 purchase volumes (using a system average line loss of 1.88 percent), as opposed to the 689,367 Mcf sales reported in Delta's filing.

Response:

- a. No. The reference was a general statement about the GCR mechanism itself.
- b. Delta believes the proposed methodology when reviewed in its entirety yields the desired result of reducing the under-recovery of gas costs.
- c. See response to Item 5a.

Sponsoring Witness:

Matthew D. Wesolosky