## Dewey \& LeBoeuf

## VIA FEDERAL EXPRESS

Ms. Debra A. Howland
Executive Director and Secretary
State of New Hampshire
Public Utilities Commission
21 S. Fruit Street, Suite 10
Concord, NH 03301-2429


## Re: New Hampshire Gas Corporation: Winter 2010-2011 Cost of Gas Adjustment

Dear Ms. Howland:
In accordance with the Commission's Tariff Filing Rules and in accordance with the terms of New Hampshire Gas Corporation's ("NHGC") cost of gas adjustment, enclosed are an original and eight (8) copies of the following pages: $43^{\text {rd }}$ Revised Tariff page 24 , with supporting data and pre-filed testimony, proposed to become effective November 1,2010 , together with a CD. The tariff page and attachments provide the calculation of the Cost of Gas Adjustment for the Winter Period November 1, 2010 through April 30, 2011. For the six-month period, the Cost of Gas Rate for the Non-Fixed Option Program is $\$ 1.5025$ per therm and $\$ 1.5225$ per therm for the Fixed Price Option Program; and the total revenue to be collected by the cost of gas adjustment is $\$ 1,527,736$.

Also enclosed are an original and eight (8) copies of the tariffs and supporting documentation for the new delivery rates reflecting an increase in delivery charges of $\$ 57,747$, beginning November 1, 2010, as authorized by the terms of the Settlement Agreement approved in Order 25,039. Please return a copy of the tariff page, bearing the Commission's receipt stamp, in the enclosed envelope. If you require further information, or have any questions, do not hesitate to contact me.

cc: Jennifer Boucher, The Berkshire Gas Company
Karen L. Zink, The Berkshire Gas Company
Stephen P. Frink, NHPUC
Robert J. Wyatt, NHPUC

Albany | Almaty | Austin | Belung | Boston | Brussels | Charlotte | Chicago | dubal Frankfurt | Hartford | Hong Kong I Houston | Jacksonville | Johannesburg (pty) ltb. I Los angeles Milan | Moscow/ Paris multinational partnership| Riyadh affilated office|Rome|San Francisco|Sulicon Valley| Warsaw

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## New Hampshire Gas Corporation

## 38




| ENTRIES | -4,043,307 |
| :---: | :---: |
|  | 1,067,818 |
| VOLUME IN THERMS | -1,255,082 |
|  | 1,553,462 |
| PROPANE COST | -048,562 |
|  | 1,016,812 |
| total sales |  |

## NEW HAMPSHIRE GÅS CORPORATION

## CONVERSION OF PRODUCED GAS COSTS TO THERMS



NEW HAMPSHIRE GAS CORPORATION

CALCULATION OF COST OF GAS ADJUSTMENT
SUPPLY/DEMAND BALANCE ALL VOLUMES IN THERMS

| Line No. |  |  | NOV 2010 | DEC 2010 | JAN 2011 | FEB 2011 | MAR 2011 | APR 2011 | TOTAL |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SENDOUT |  |  |  |  |  |  |  |  |  |
| 1 | FIRM SENDOUT * |  | 121,107 | 212,021 | 245,208 | 211,316 | 162,557 | 85,808 | 1,038,017 |
| 3 | COMPANY USE |  | 3,675 | 6,364 | 7,085 | 5,530 | 4,236 | 2,911 | 29,801 |
| 5 | TOTAL SENDOUT |  | 124.782 | 218,385 | 252,293 | 216,846 | 166,793 | 88,719 | 1,067,818 |
| 7 | * UNACCTED FOR VOLS INCLUDED |  | 1,978 | 3,462 | 4,004 | 3,451 | 2,654 | 1,401 | 16,950 |
| 9 | COSTS |  |  |  |  |  |  |  |  |
| 10 |  |  |  |  |  |  |  |  |  |
| 11 | PROPANE SENDOUT FROM ABOVE |  | 124,782 | 218,385 | 252,293 | 216,846 | 166,793 | 88,719 | 1,067,818 |
| 13 |  |  |  |  |  |  |  |  |  |
| 14 | COST/THERM |  | \$1.4407 | \$1.4613 | \$1.4732 | \$1.4671 | \$1.4466 | \$1.4312 |  |
| 15 |  |  |  |  |  |  |  |  |  |
| 16 | FPO PREMIUM |  | (\$292) | (\$399) | (\$845) | (\$758) | (\$692) | (\$514) | (\$3,500) |
| 18 19 | TOTAL PROPANE COSTS |  | \$179,485 | \$318,736 | \$370,826 | \$317,370 | \$240,587 | \$126,459 | \$1,553,462 |
| 20 | REVENUES |  |  |  |  |  |  |  |  |
| 21 |  |  |  |  |  |  |  |  |  |
| 22 23 | FIRM SALES |  | 84,823 | 115,888 | 245,514 | 220,142 | 201,062 | 149,384 | 1,016,812 |
| 24 | RATEITHERM AVERAGE |  | \$1.5025 | \$1.5025 | \$1.5025 | \$1.5025 | \$1.5025 | $\$ 1.5025$ |  |
| 26 | TOTAL COG REVENUES |  | \$127,444 | \$174,119 | \$368,879 | \$330,758 | \$302,091 | \$224,446 | \$1,527.736 |
| 27 ( 27 |  |  |  |  |  |  |  |  |  |
| 28 29 | UNDER/(OVER) COLLECTION |  | \$52,041 | \$144,617 | \$1,947 | $(\$ 13,388)$ | (\$61,504) | $(\$ 97,987)$ | \$25,726 |
| 30 | INTEREST FROM ATTACHMENT C |  | (\$4) | \$263 | \$462 | \$448 | \$347 | \$132 | \$1,648 |
| 31 32 | FINAL UNDER/(OVER) COLLECTION | $(\$ 27,374)$ | \$24,663 | \$169,543 | \$171,952 | \$159,012 | \$97,855 | \$0 |  |

NEW HAMPSHIRE GAS CORPORATION

CALCULATION OF COST OF GAS
SUPPLY / DEMAND BALANCE ALL VOLUMES

|  | NOV 2010 | DEC 2010 | JAN 2011 | FEB 2011 | MAR 2011 | APR 2011 | TOTAL | $\begin{aligned} & \text { LINE } \\ & \text { NO. } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| TOTAL FIRM DEMAND (GALLONS) | 136,371 | 238,667 | 275,724 | 236,985 | 182,283 | 96,959 | 1,166,988 | 1 |
| PROPANE STABILIZATION PLAN PRE-PURCHASES |  |  |  |  |  |  |  | 3 |
| GALLONS | 85,000 | 130,000 | 190,000 | 140,000 | 100,000 | 55,000 | 700,000 | 4 |
| PRICE | \$1.361 | \$1.361 | \$1.361 | \$1.361 | \$1,361 | \$1.361 |  | 5 |
| PERC | inc. | inc. | inc. | inc. | inc. | inc. |  | 6 |
| TRANSPORTATION | inc. | inc. | inc. | inc. | inc. | inc. |  | 7 |
| TOTAL COST (GALLONS) | \$115,713 | \$176,972 | \$258,652 | \$190,586 | \$136,133 | \$74.873 | \$952,928 | 8 |
| SPOTPURCHASES |  |  |  |  |  |  |  | 10 |
| GALLONS | 51,371 | 108,667 | 85,724 | 96,985 | 82,283 | 41,959 | 466,988 | 11 |
| Mt. Beivieu (9/10/10) | \$1.1225 | \$1.1275 | \$1.1338 | \$1.1133 | \$1.0604 | \$1.0131 |  | 13 |
| Broker | \$0.0100 | \$0.0100 | \$0.0100 | \$0.0100 | \$0.0100 | \$0.0100 |  | 14 |
| Террсо | \$0.1125 | \$0.1125 | \$0.1125 | \$0.1125 | \$0.1125 | \$0.1125 |  | 15 |
| Perc | \$0.0050 | \$0.0050 | \$0.0050 | \$0.0050 | \$0.0050 | \$0.0050 |  | 16 |
| Transportation | \$0.0690 | \$0.0690 | \$0.0690 | \$0.0690 | \$0.0690 | \$0.0690 |  | 17 |
| PRICE (GALLONS) | \$1.3190 | \$1.3240 | \$1.3303 | \$1.3098 | \$1.2569 | \$1.2096 | \$1.2996 | 18 |
| COST (GALLONS) | \$67,758 | \$143,875 | \$114,034 | \$127,033 | \$103,424 | \$50,755 | \$606,879 | 20 |
| TOTAL |  |  |  |  |  |  |  | 22 |
| GALLONS | 136,371 | 238,667 | 275,724 | 236,985 | 182,283 | 96,959 | 1,166,988 | 23 |
| PRICE (GALLONS) | \$1.3454 | \$1.3443 | \$1.3517 | \$1.3403 | \$1.3142 | \$1.2957 | \$1.3366 | 25 |
| COST (GALLONS) | \$183,470 | \$320,847 | \$372,686 | \$317.619 | \$239,556 | \$125,628 | \$1,559,806 | 27 |
| TOTAL COSTS |  |  |  |  |  |  |  | 29 |
| COST | \$183,470 | \$320,847 | \$372,686 | \$317,619 | \$239,556 | \$125,628 | \$1,559,806 | 30 |
| THERM DEMAND | 124,782 | 218,385 | 252,293 | 216,846 | 168,793 | 88,719 | 1,067,818 | 31 |
| MONTHLY COST PER THERM | \$1.4703 | \$1.4692 | \$1.4772 | \$1.4647 | \$1.4362 | \$1.4160 | \$1.4607 | 32 |

New Hampshire Gas Corporation
2010-2011 Winter Hedging Schedule

|  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | April-2010 |  | May-2010 |  |  |  |  |  |
| Lune |  |  |  |  |  |  |  |  |
| No |  |  |  |  |  |  |  |  |

NEW HAMPSHIRE GAS CORPORATION

CGA REFUND INTEREST CALCULATION FOR THE WINTER PERIOD NOV., 2010 THROUGH APR., 2011


BEG. BAL. WIINTEREST $=-$ OVER/UNDER BEG.BAL. @ MAY $10+$ INTEREST EXPENSE MAY 10 THROUGH OCT 10

| $=$ COL. 1, LINE 1 | $+\quad$ COL. 7, LINES 1 TO 12 |
| :--- | :--- |
| $=\underline{(\$ 26,933)}$ | $+\quad \$ 1,207$ |
| $=\underline{(\$ 25,726)}$ |  |


|  | New Hampshire Gas Corporation |  |  |  |  | Attachment D <br> Supports Line 7 Column 1 <br> Attachment C |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Actual -Over/Under Collection All in Therms |  | November 2009 thr ough April 2010 |  |  |  |  |  |
|  | ACTUAL | ACTUAL | ACTUAL | ACTUAL | ACTUAL | ACTUAL | ACTUAL |  |
|  | PRIOR | NOV | DEC | JAN | FEB | MAR | APR | TOTALS |
| 1 SALES |  |  |  |  |  |  |  |  |
| FOR NON-FPO |  | 75,106 | 89,213 | 198,811 | 173,062 | 148,688 | 105,760 | 790,640 |
| FOR FPO |  | 13,849 | 18,593 | 43.219 | 35,846 | 31,061 | 20,919 | 163,487 |
| TOTAL THERMS |  | 88,955 | 107,806 | 242,030 | 208,908 | 179,749 | 126,679 | 954,127 |
| 2 COG RATE PER TARIFF |  |  |  |  |  |  |  |  |
| FOR NON-FPO |  | \$1.3743 | \$1.3743 | \$1.4796 | \$1.5103 | \$1.6374 | \$1.5178 |  |
| FOR FPO |  | \$1.3402 | \$1.3402 | \$1.3402 | \$1.3402 | \$1.3402 | \$1.3402 |  |
| 3 RECOVERED COSTS= |  |  |  |  |  |  |  |  |
| SALES $\times$ COG RATE |  |  |  |  |  |  |  |  |
| FOR NON-FPO |  | \$103,218 | \$122,605 | \$294,161 | \$261,376 | \$243,462 | \$160,523 | \$1,185,344 |
| FOR FPO |  | \$18,560 | \$24,918 | \$57.922 | \$48,041 | \$41,628 | \$28.036 | $\$ 219,105$ |
| TOTAL |  | \$121,779 | \$147,522 | \$352,081 | \$309,417 | \$285,186 | \$188,558 | \$1,404,542 |
| 4 USED BY UTILITY |  | 3,675 | 6,364 | 7,085 | 5,530 | 4,236 | 2,911 | 29,801 |
| FOR MAKING GAS (THERMS) |  |  |  |  |  |  |  |  |
| heating degree DAYS (CONCORD) |  | 691 | 1229 | 1297 | 1005 | 786 | 481 | 5.489 |
| 5 TOTAL SENDOUT (THERMS) |  | 112,038 | 222,014 | 237.491 | 193,085 | 139,205 | 78,527 | 982,360 |
| 6 COST PER THERM |  | \$1.2732 | \$1.3568 | \$1.3600 | \$1.4093 | \$1.3753 | \$1.3485 |  |
| 7 TOTAL COSTS |  | \$142,645 | \$301,221 | \$322,988 | \$272,122 | \$191,446 | \$105,894 | \$1,336,317 |
| 8 ACTUAL (OVER)/ |  |  |  |  |  |  |  |  |
| UNDER COLLECTION |  | \$20,866 | \$153,699 | $(\$ 29,092)$ | $(\$ 37,295)$ | (\$93,740) | $(\$ 82,664)$ | $(\$ 68,226)$ |
| 9 INTEREST AMOUNT |  | \$135 | \$372 | \$542 | \$453 | \$277 | \$39 | \$1,818 |
| 10 FINAL (OVER)/UNDER COLLECTION | \$39,475 | \$60,476 | \$214,547 | \$185,996 | \$149,155 | \$55,692 | $(\$ 26,933)$ |  |

NEW HAMPSHIRE GAS CORPORATON
PROPANE INVENTORY
FOR THE WNTER PERIOD NOVEMBER 2010 TO APRIL 2011

| $\begin{aligned} & \text { LINE } \\ & \text { NO. } \end{aligned}$ |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | September 2010 (Estmated) | Therms | Cost | Therm | Qal. |  |  |
| 2 |  |  |  |  |  |  |  |
| 3 | Beginning Balance | 55,609 | \$78,276 | \$1.4076 | \$1.2880 |  |  |
| 4 | Received during month | 75,000 | \$103,650 | \$1.3820 | \$1.2646 |  |  |
| 5 | Total Available | 130,609 | \$181,926 | \$1.3929 | \$1.2745 |  |  |
| 6 | Less Vapor | 50,143 | \$69,844 | \$1.3929 | \$1.2745 |  |  |
| 7 | Ending Balance | 80,466 | \$112,082 | \$1.3929 | \$1.2745 |  |  |
| 8 |  |  |  |  |  |  |  |
| 9 |  |  |  | Ra |  |  |  |
| 10 | October 2010 (Forecasted) | Therms | Cost | Therm | Gal. |  |  |
| 11 |  |  |  |  |  |  |  |
| 12 | Beginning Balance | 80,466 | 112,082 | \$1,3929 | \$1.2745 |  |  |
| 13 | Received during month | 85,000 | \$118,167 | \$1.3902 | \$1.2721 |  |  |
| 14 | Total Available | 165,466 | \$230,249 | \$1.3915 | \$1.2733 |  |  |
| 15 | Less Vapor | 87.274 | \$121,443 | \$1.3915 | \$1.2733 |  |  |
| 16 | Ending Balance | 78,192 | \$108,806 | \$1.3915 | \$1.2733 |  |  |
| 17 |  |  |  |  |  |  |  |
| 18 |  |  |  | Ra |  |  |  |
| 19 | November 2010 (Forecasted) | Therms | Cost | Therm | Gal. | Therms | Cost |
| 20 |  |  |  |  |  |  |  |
| 21 | Beginning Balance | 78,192 | \$108,806 | \$1.3915 | \$1.2733 |  |  |
| 22 | Received during month | 130,000 | \$191,143 | \$1,4703 | \$1.3454 |  |  |
| 23 | Total Available | 208,192 | \$299,949 | \$1.4407 | \$1.3183 |  |  |
| 24 | Less Vapor | 124,782 | \$179,782 | \$1.4407 | \$1.3183 | 124,782 | \$179,782 |
| 25 | Ending Balance | 83,411 | \$120,167 | \$1.4407 | \$1.3182 |  |  |
| 26 |  |  |  |  |  |  |  |
| 27 |  |  |  | Ra |  |  |  |
| 28 | December 2010 (Forecasted) | Therms | Cost | Therm | Gal. | Therms | Cost |
| 29 |  |  |  |  |  |  |  |
| 30 | Beginning Balance | 83,411 | \$120.167 | \$1.4407 | \$1.3182 |  |  |
| 31 | Received during month | 220,000 | \$323,220 | \$1.4692 | \$1.3443 |  |  |
| 32 | Total Available | 303,411 | \$443,387 | \$1.4613 | \$1.3372 |  |  |
| 33 | Less Vapor | 218,385 | \$319,135 | \$1.4613 | \$1.3372 | 218,385 | S319,135 |
| 34 | Ending Balance | 85,026 | \$124,252 | \$1.4613 | \$1.3372 |  |  |
| 35 |  |  |  |  |  |  |  |
| 36 |  |  |  | Ra |  |  |  |
| 37 | January 2011 (Forecasted) | Therms | Cost | Therm | Gal. | Therms | Cost |
| 38 |  |  |  |  |  |  |  |
| 39 | Beginning Balance | 85,026 | \$124,252 | \$1.4613 | \$1.3372 |  |  |
| 40 | Received during month | 250,000 | \$369,299 | \$1.4772 | \$1.3517 |  |  |
| 41 | Total Available | 335,026 | \$493,551 | \$1.4732 | \$1.3480 |  |  |
| 42 | Less Vapor | 252,293 | \$371,671 | \$1.4732 | \$1.3480 | 252,293 | \$371,671 |
| 43 | Ending Balance | 82,733 | \$121,880 | \$1.4732 | \$1.3480 |  |  |
| 44 |  |  |  |  |  |  |  |
| 45 |  |  |  | Rat |  |  |  |
| 46 | February 2011 (Forecasted) | Thems | Cost | Therm | Gal. | Therms | Cost |
| 47 |  |  |  |  |  |  |  |
| 48 | Beginning Batance | 82,733 | \$121,800 | \$1.4732 | \$1.3480 |  |  |
| 49 | Received during month | 215,000 | \$314,915 | \$1.4647 | \$1.3403 |  |  |
| 50 | Total Available | 297,733 | \$436,795 | \$1.4671 | \$1.3424 |  |  |
| 51 | Less Vapor | 216,846 | \$318,133 | \$1.4671 | \$1.3424 | 216,846 | \$318,133 |
| 52 | Ending Balance | 80,887 | \$118,662 | \$1.4671 | \$1.3424 |  |  |
| 53 |  |  |  |  |  |  |  |
| 54 |  |  |  | Rat |  |  |  |
| 55 | March 2011 (Forecasted) | Thems | Cost | Therm | Gat | Therms | Cost |
| 56 |  |  |  |  |  |  |  |
| 57 | Beginning Balance | 80,887 | \$118,662 | \$1.4670 | \$1.3423 |  |  |
| 58 | Received during month | 160,000 | \$229,800 | \$1.4362 | \$1.3142 |  |  |
| 59 | Total Available | 240,887 | \$348,462 | \$1.4466 | \$1.3236 |  |  |
| 60 | Less Vapor | 166,793 | \$241,283 | \$1.4466 | \$1.3236 | 166,793 | \$241,283 |
| 61 | Ending Balance | 74,094 | \$107.179 | \$1.4465 | \$1.3236 |  |  |
| 62 |  |  |  |  |  |  |  |
| 63 |  |  |  | Rat |  |  |  |
| 64 | April 2011 (Forecasted) | Therms | Cost | Therm | Gal. | Therms | Cost |
| 65 |  |  |  |  |  |  |  |
| 66 | Beginning Balance | 74,094 | \$107,179 | \$1.4465 | \$1.3236 |  |  |
| 67 | Received during month | 75,000 | \$105,201 | \$1.4160 | \$1.2957 |  |  |
| 68 | Total Available | 149,094 | \$213,300 | \$1.4312 | \$1.3096 |  |  |
| 69 | Less Vapor | 88,719 | \$126,973 | \$1.4312 | \$1.3096 | 88,719 | \$126,973 |
| 70 | Ending Balance | 60,375 | \$86,407 | \$1.4312 | \$1.3096 |  |  |
| 71 |  |  |  |  |  |  |  |
| 72 |  |  |  | TOTALS |  | 1,067,818 | 1,556,962 |

Forecasted 2010-2011 Winter Period vs. Actual 2009-2010 Winter Period



Fixed Price Option Program
Forecasted 2010-2011 Winter Period vs. Actual 2009-2010 Winter Period



## Propane Market Purchase Cost Analysis

 WINTER 2010-2011```
LINE
NO.
```



## Surcharge

Supplemental Schedule E

| New Hampshire Gas Corporation COG FPO vs Non-FPO Price Comparison |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Winter Period | FPO Rate | Amount of Premium | Percent Participation (therms) | Actual <br> FPO Volumes | Premium Revenue | Typical Residential FPO bill | Average Non-FPO Rate | Typical Residential non-FPO bill | $\begin{gathered} \text { Cost/(Savings) } \\ \text { to FPO } \\ \text { Customers } \\ \hline \end{gathered}$ |
| 2009-2010 | \$1.3402 | \$0.02 | 17.12\% | 163,486 | \$3,270 | \$2,256 | \$1.4900 | \$2,396 | (\$140) |
| 2008-2009 | \$2.2408 | \$0.02 | 21.08\% | 205,970 | \$4,119 | \$2,974 | \$1.7347 | \$2,492 | \$482 |
| 2007-2008 | \$1.5212 | \$0.02 | 28.01\% | 266,419 | \$5,328 | \$2,288 | \$1.7646 | \$2,520 | (\$232) |
| 2006-2007 | \$1.4741 | \$0.02 | 21.86\% | 206,686 | \$4,134 | \$2,250 | \$1.5397 | \$2,313 | (\$63) |
| 2005-2006 | \$1.5260 | \$0.02 | 42.91\% | 348,849 | \$6,977 | \$2,248 | \$1.3742 | \$2,103 | \$145 |
| 2004-2005 | \$1.2323 | n/a | 39.44\% | 340,315 | n/a | \$1,946 | \$1.2647 | \$1,976 | (\$30) |
| 2003-2004 | \$0.8877 | n/a | 38.78\% | 316,300 | n/a | \$1,580 | \$1.0325 | \$1,718 | (\$138) |
| Total |  |  |  |  |  | \$15,542 |  | \$15,517 | \$25 |


| New Hampshire Gas Corporation - Winter 2010/11 Weather Normalization - Firm Sendout |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Month | Actual Firm Sendout | Base Use | Heat Use | Actual Calendar Month Degree Days | Normal Calendar Month Degree Days | Colder (Warmer) Than Normal | Actual Unit <br> Heat Load <br> Therm/DD | Weather Adjustment | Normal Heat Load | Normalized Firm Sendout | Actual Company Use | Unaccounted <br> For <br> $1.66 \%$ | Total Firm Sendout |
|  | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) | (11) | (12) | (13) |
|  |  |  | (1) - (2) |  |  | (4) - (5) | (3) $/(4)$ | (6) $\times(7)$ | (3) $+(8)$ | (1) - (3) $+(9)$ |  | $(10-11) * 1.66 \%$ | $(10)-(11)+(12)$ |
| November | 112,038 | 42,074 | 69,964 | 691 | 797 | (106) | 101.25 | 10,766 | 80,730 | 122,804 | 3,675 | 1,978 | 121,107 |
| December | 222,014 | 42,074 | 179,940 | 1,229 | 1,181 | 48 | 146.41 | $(7,091)$ | 172,849 | 214,923 | 6,364 | 3,462 | 212,021 |
| January | 237,491 | 42,074 | 195,417 | 1.297 | 1,369 | (72) | 150.67 | 10,798 | 206,215 | 248,289 | 7.085 | 4,004 | 245,208 |
| February | 193,085 | 42,074 | 151.011 | 1,005 | 1,140 | (135) | 150.26 | 20,310 | 171,321 | 213,395 | 5,530 | 3,451 | 211,316 |
| March | 139,205 | 42,074 | 97,131 | 786 | 988 | (202) | 123.58 | 24,934 | 122,065 | 164,139 | 4,236 | 2,654 | 162,557 |
| April | 78,527 | 42,074 | 36,453 | 481 | 597 | (116) | 75.79 | 8,791 | 45,244 | 87,318 | 2,911 | 1,401 | 85,808 |
| Total | 982,360 | 252,444 | 729,916 | 5,489 | 6,072 | (583) |  | 68,508 | 798,424 | 1,050,868 | 29,801 | 16,950 | 1,038,017 |

New Hampshire Gas Corporation

| New Hampshire Gas CorporationWeather Normalization - Sales Rate Residential |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Month | Billing Cycle <br> Customers | Billing Cycle Sales | Base Load | Heating Load | Billing Cycle Monthly Actual Degree Days | Billing Cycle Monthiy Normal Degree Days | Colder (Warmer) Than Normal | Actual Unit Heat Load Therm/DD | Weather Adjustment | Normal | Normal Firm Billing Cycle |
|  |  | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | $\frac{\text { Therms }}{(10)}$ |
|  |  |  |  | (1) - (3) |  |  | (4) - (5) | (3) / (4) | (6) $\times(7)$ | (3) $+(8)$ | (1) - (3) + (9) |
| November | 800 | 20,474 | 7,301 | 13,174 | 614 | 569 | 45 | 21 |  |  |  |
| December | 811 | 27,871 | 7,301 | 20,571 | 769 | 853 | (84) | 21.44 | (967) | 12,206 | 19,507 |
| January | 812 | 59,391 | 7,301 | 52,091 | 1,197 | 1,220 | (23) | 26.731 | $\frac{2,239}{979}$ | 22,810 | 30,110 |
| February | 823 | 49,622 | 7,301 | 42,322 | 1,238 | 1,323 | (84) | 43.51 | 979 | 53,069 | 60,370 |
| March | 819 | 41,917 | 7,301 | 34,617 | $\frac{1,268}{}$ | 1,113 | $\frac{(147)}{}$ | 34.17 | 2,884 | 45,206 | 52,506 |
| April | 811 | 29,826 | 7,301 | 22,526 | 736 | 1, 924 | $\frac{(188)}{}$ | 35.84 | 5,273 <br> 5745 | 39,889 | 47,190 |
| Total |  | 22910 |  |  |  |  |  | 30.61 | 5,745 | 28,270 | 35,571 |
|  |  |  | 43,803 | 185,29 | 5,521 | 6,002 | (480) | 192 | 16,152 | 201,450 | 245,253 |

New Hampshire Gas Corporation

| New Hampshire Gas CorporationWeather Normalization - Sales Rate Commercial |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Month | Billing Cycle Customers | $\begin{array}{c}\text { Billing Cycle } \\ \text { Sales }\end{array}$ | Base Load | Heating Load | Billing Cycle Monthly Actual Degree Days | Billing Cycle Monthly Normal Degree Days | Colder (Warmer) Than Normal | Actual Unit Heat Load Therm/DD | Weather Adjustment | Normal | Normal Firm Billing Cycle |
|  |  | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | $\frac{\text { Heat Load }}{(9)}$ | (10) |
|  |  |  |  | (1) - (3) |  |  | (4) - (5) | (3) / (4) | (6) $\times(7)$ | (3) $+(8)$ | (1) $-(3)+(9)$ |
| November | 330 | 68,482 | 30,470 | 38,013 | 612 | 561 | 51 | 62.16 | (3, 166) |  |  |
| December | 339 | 79,933 | 30,470 | 49,464 | 752 | 841 | (89) | 65.79 | $\frac{(3,166)}{5,845}$ | 34,847 55,308 | 65,316 85,778 |
| January | 341 | 182,639 | 30,470 | 152,170 | 1,191 | 1,211 | (20) | 127.73 | 2,845 | 154,674 | 85,778 |
| February | 333 | 159,286 | 30,470 | 128,817 | 1,253 | 1,334 | (81) | 102.80 | 2,505 | 154,674 137,166 | 185,144 167,635 |
| March | 318 | 137,832 | 30,470 | 107,363 | 972 | 1,117 | (145) | 110.46 | 16,349 | 137,166 | 167,635 153,872 |
| April | 342 | 96,853 | 30,470 | 66,384 | 749 | 940 | (191) | 88.65 | 16,960 | $\frac{123,403}{83,344}$ | 153,872 113,813 |
| Total |  | 725,025 | 182,817 | 542,208 | 5,529 | 6,004 | (475) | 558 | 46,534 | 588,742 | 771,559 |


| November | 84,823 |
| :---: | ---: |
| December | 115,888 |
| January | 245,514 |
| February | 220,142 |
| March | 201,062 |
| April | 149,384 |
| Total Winter Sales Volumes | $1,016,812$ |

## NEW HAMPSHIRE GAS CORPORATION

## Direct Testimony of Jennifer Boucher

## Q. Please state your name, employer and business address.

A. My name is Jennifer Boucher. I am employed by The Berkshire Gas Company ("Berkshire") and my business address is 115 Cheshire Rd., Pittsfield, MA 01201.

## Q. What is your position?

A. I am the Manager - Regulatory Economics for Berkshire.
Q. Could you please briefly describe your educational and professional background?
A. Yes. I graduated from the Massachusetts College of Liberal Arts in 1994 with a Bachelor of Science degree in Business Administration and from Western New England College in 1999 with a Masters of Business Administration. I joined Berkshire in 1997 and have held several positions including Planning Analyst, Administrator of Rates and Planning and Supervisor of Rates and Planning. I was promoted to the Manager of Regulatory Economics in March 2006.

## Q. Please summarize your responsibilities.

A. As the Manager of Regulatory Economics, my primary responsibility is to prepare all of the external rate filings and reports to state regulatory agencies, including all semi-annual and out-of-period factor filings, monthly reports and annual reconciliations as related to the Cost of Gas Adjustment Clause ("CGAC") and Local Distribution Adjustment Clause ("LDAC"). I also manage retail service contracts with large customers and provide analysis on tariffs and pricing issues, as well as operating revenue forecasts for the Company's annual operating budget. Additionally, I am responsible for the oversight of gas supply, including planning and dispatch to secure a reliable and least cost gas supply for the benefit of customers. I also oversee the activities between the Company and third-party
marketers. Finally, I assist New Hampshire Gas Corporation ("NHGC" or the "Company") with its regulatory filings.
Q. Have you testified as a witness in any other proceedings involving either company?
A. I have experience as a witness in Massachusetts testifying before the Massachusetts Department of Public Utilities ("MDPU"). I testified as a witness in Berkshire's last base rate case (D.T.E. 01-56), in its Forecast and Supply Plans (D.T.E. 05-07 and D.P.U. 08-39), for approval of a gas supply contract with Coral Energy (D.T.E. 06-27), a proceeding seeking approval of a gas portfolio optimization alliance agreement with Shell Energy North America (D.P.U. 07-31) and recently in support of Berkshire's Energy Efficiency Programs (D.P.U. 09124 and D.P.U. 10-13). I have testified before the New Hampshire Public Utilities Commission on several occasions with regards to NHGC's seasonal Cost of Gas ("COG") filings.

## Q. What is the purpose of your testimony in this proceeding?

A. The purpose of my testimony is to explain the calculation of the Cost of Gas Adjustment ("COG") to be billed from November 1, 2010 to April 30, 2011. My testimony will also address the delivery rate increase effective November 1, 2010 and other issues related to the winter period.

## COST OF GAS ADJUSTMENT

Q. Please explain the calculation of the Cost of Gas ("COG") Rate on the proposed 43rd revised Tariff Page 24.
A. The proposed 43 rd revised Tariff Page 24 contains the calculation of the $2010-$ 2011 Winter COG rate and summarizes the Company's forecast of propane sendout and propane costs. The estimated total cost of the forecasted propane sendout from November 1, 2010 through April 30, 2011 is $\$ 1,527,736$. The information presented on the tariff page is supported by Attachments A through E
which will be described later in this testimony.

To derive the Total Anticipated Period Costs, the following adjustments have been made:

1) The prior period over-collection of $(\$ 26,933)$ is added to the forecasted propane costs. This calculation of the undercollection is demonstrated on Attachment D.
2) Interest of $\$ 1,207$ is added to the forecasted propane costs. Attachment C shows this forecasted interest calculation for the period May 2010 through April 2011. The interest calculation is based on the Wall Street Journal's posted prime rate.

The Non-FPO rate of $\$ 1.5025$ per therm is forecasted by taking the Total Anticipated Period Costs of $\$ 1,527,736$ divided by the Total Projected Gas Sales in Therms for the period of $1,016,812$. The unit cost of gas sold for the Fixed Price Option Program ("FPO") rate of $\$ 1.5225$ per therm was calculated by adding a $\$ 0.02$ premium to the established Non-FPO rate.

## Q. Please describe Attachment A.

A. This attachment converts the produced gas costs to therms. The $1,067,818$ therms represent propane sendout as detailed on Attachment $B$ and the $\$ 1.4581$ per therm cost represents the average cost per therm for the winter season as detailed on line 72 of Attachment E.

## Q. Please describe Attachment B.

A. Attachment B represents the combined (over)/under collection calculation for the 2010-2011 winter period based on the anticipated volumes, the cost of gas, and any applicable interest charges. As shown on line 5, total sendout is the weather normalized 2009-2010 winter period firm sendout and Company Use. Firm sales volumes shown on line 22 are derived from the weather normalized 2009-2010

## Direct Testimony of Jennifer Boucher

winter period firm sales. On line 16 , the Company has also included the anticipated $\$ 0.02$ per therm FPO premium revenues as a credit to propane costs.

## Q. Are unaccounted-for gas volumes included in the filing?

A. Unaccounted-for gas volumes are included in the firm sendout volumes on line 1 and are displayed on line 7 of Attachment B . The Company continues to experience improvements in system loss and is pleased to report that as of June 30 , 2010, the 12 month-to-date unaccounted-for percentage was reduced to $1.66 \%$. Compared to previous periods, this represents a significant reduction in unaccounted-for percentage level of $6.44 \%$ in the 2005-2006 timeframe.
Q. How is Attachment $C$ represented in the COG calculation?
A. Attachment C represents the COG interest calculation through April 2011. This is calculated utilizing the prior period over-collection plus interest, and amounts to \$1,207.

## Q. What is Attachment $D$ ?

A. Attachment D is the actual (over)/under collection balance for the prior period November 2009 through April 2010, including interest. The ending balance of $(\$ 26,933)$ is included on line 1 , column 1, of Attachment C.

## Q. Please describe Attachment E.

A. Attachment E projects the cost of propane in inventory through April 2011. This attachment is important as the cost of propane sold includes pre-purchased propane, spot market propane as well as propane withdrawn from storage.

## FPO AND NON-FPO CUSTOMER PROGRAMS

Q. Will NHGC offer a FPO program for the winter 2009-2010 COG period?
A. Yes. NHGC will again offer the FPO program for the Winter 2010-2011 COG period. This program allows customers to lock in their cost of gas and enrollment

## Direct Testimony of Jennifer Boucher

in the program is limited to $50 \%$ of the expected winter usage with allotments made available for both commercial and residential customer classes. Customers are accepted into the program on a first-come, first-served basis.
Q. Will there be a premium applied to the EPO cost of gas rate?
A. Yes. As approved in Order No. 24,516, Docket DG 05-144, the Company has applied a $\$ 0.02$ per therm premium to the COG rate to derive the FPO COG rate. The Company FPO enrollment period is expected to close on October 19, 2010 and based on historical usage of those customers who have previously subscribed, the Company expects FPO volumes of approximately 200,000 therms.

## Q. Please describe the pre-purchased propane.

A. The Company has again implemented its Propane Purchasing Stabilization Plan (the "Plan") as approved in Order No. 24,617, docketed as DG 06-037. Attachment B-2 provides a synopsis of the prices and gallons of propane purchased with respect to the Plan. The weighted average price of the 700,000 gallons procured under the Plan is $\$ 1.361$ per gallon, or $\$ 1.4874$ per therm. This price can be seen on line 5 of Attachment B-1, and includes commodity, PERC and transportation costs.

## Q. How were spot market prices determined?

A. The spot market costs per gallon of propane shown on line 13 of Attachment B-1 are the ClearPort propane futures settlement prices as of September 10, 2010, plus brokers', pipeline and transportation fees.
Q. How are NHGC customers be notified of the availability of the FPO program?
A. A letter to customers will be mailed in late September 2010 advising them of the program and how they can participate in it.
Q. How will the winter 2010-2011 Cost of Gas Rate ("CGR") for residential heating customers participating in the FPO program affect the average New Hampshire Gas Corporation customer?
A. The winter 2010-2011 CGR of $\$ 1.5225$ for customers participating in the FPO program is an increase of $\$ 0.1823$ per therm from the winter 2009-2010 FPO CGR of $\$ 1.3402$. To the average residential heat customer, this would be a $\$ 169.88$ increase for the 2010-2011 winter COG period for the gas cost component of their bill only, or a $13.6 \%$ increase. If the proposed Monthly Customer Charge, per therm Delivery Rates and surcharge are factored into the analysis, the average residential heat customer will see a $\$ 155.89$ increase in their total costs for the 2010-2011 winter C.OG period, or a $6.9 \%$ increase.
Q. How will the winter 2010-2011 CGR for customers not participating in the FPO program affect the average New Hampshire Gas Corporation customer?
A. The Winter 2010-2011 CGR of $\$ 1.5025$ per therm for customers not participating in the FPO program is an increase of $\$ 0.0125$ per therm from the average winter 2009-2010 CGR of $\$ 1.4900$ per therm. To the average residential heat customer, this would be an $\$ 11.58$ increase for the 2010-2011 winter COG period for the gas cost component of their bill only, or a $0.8 \%$ increase. If the proposed Monthly Customer Charge, per therm Delivery Rates and surcharge are factored into the analysis, the customer will see a ( $\$ 2.41$ ) decrease in their total costs for the 2010-2011 winter COG period, or a ( $0.1 \%$ ) decrease.
Q. What is the primary reason for the increase in the FPO per therm winter COG?
A. The primary reason for the increase is higher market prices of propane versus the winter 2009-2010 period.
Q. What is the primary reason for the increase in the Non-FPO per therm winter COG?

## Direct Testimony of Jennifer Boucher

A. The primary reason for the increase is higher market prices of propane versus the winter 2009-2010 period.
Q. Please describe Supplemental Schedule E.
A. Supplemental Schedule E provides a billing comparison between a typical FPO customer and a non-FPO customer. For the Winter 2009-2010 period, a typical FPO customer's winter billing amounted to approximately (\$140) less than a nonFPO customer's winter billing.
Q. Has there been any impact on pipeline or trucking fees on NHGC's cost of gas?
A. At the end of the 2009-2010 winter season, pipeline and trucking fees were $\$ 0.1240$ per gallon and $\$ 0.0575$ per gallon "base rate" respectively. The forecasted pipeline fee is $\$ 0.1125$ per gallon, a decrease of $(9.3 \%)$, and the forecasted trucking fee remains at $\$ 0.0575$ per gallon (exclusive of the fuel surcharge).
Q. Does Northern Gas Transport ("NGT") impose a fuel surcharge to their trucking rates?
A. Yes. At the end of the 2009-2010 Winter COG period, NGT charged a "fuel surcharge" rate of $20.0 \%$ from Selkirk, New York. NGT's current "fuel surcharge" is $20.5 \%$. The surcharge is calculated using the weekly average diesel gasoline prices, and contributes to the increased trucking fees.

## MISCELLANEOUS

Q. Are there other adjustments to rates for the winter 2010-2011 Cost of Gas period that should be considered?
A. Yes. Pursuant to the Settlement Agreement approved in Order 25,039 on October 30, 2009, the Company is authorized to increase its delivery charges by an additional $\$ 57,747$ beginning November 1, 2010. The requisite tariffs and
supporting documentation for the new delivery rates are provided with this filing. Also, the application of the Company's rate case surcharge will be completed on October 31, 2010. As required by Order 25,118 issued on June 24, 2010, the reconciliation of approved expenses and revenues related to the rate case surcharge will be filed prior to the 2011 Summer COG and any remaining (over)/under-collection will be (credited) or charged to the COG. For the upcoming winter period, there will be no surcharge in effect for NHGC.
Q. Will the Company meet its 7-day onsite storage requirements pursuant to PUC 506.03?
A. Yes. As discussed in a letter submitted to the Commission on March 22, 2004, the Company is meeting its 7-day onsite storage requirements through an arrangement with Northern Gas Transport, Inc. and The Berkshire Gas Company. The storage facilities provided by The Berkshire Gas Company are located in Greenfield, Massachusetts.
Q. Is the Company requesting a waiver of N.H. Code Admin. Rule Puc 1203.05 which requires rate changes to be implemented on a service-rendered basis?
A. Yes, the Company is requesting a waiver of N.H. Code Admin. Rule Puc 1203.05 as was granted in previous COG and delivery rate proceedings. First, NHGC customers are accustomed to rate change on a bills-rendered basis and a change in policy may result in customer confusion. In addition, the Company's current billing system is not designed to accommodate changes to billing on a servicerendered basis and such a change would necessitate modifying or replacing the billing system at a substantial cost to NHGC.

## Q. Does this conclude your testimony?

A. Yes, it does.

