BEFORE THE
STATE OF NEW YORK
PUBLIC SERVICE COMMISSION

Case 11-G-0280
In the Matter of
Corning Natural Gas Corporation
September 2011

Prepared Exhibits of:
GAS RATES PANEL
Hieu Cam
Junior Engineer
Johanna Miller
Utility Engineer I
Aferdita Bardhi
Utility Engineer II
Aric J. Rider, Sr. Utility Engineer III

State of New York
Department of Public Service
Three Empire State Plaza
Albany, New York 12223-1350

## List of Information Request Responses Submitted for the Record

| IR Number |  |
| :---: | :--- |
| DPS 21 | Billing System |
| DPS 57 | Supply Information |
| DPS 64 | MFC and RDM |
| DPS 154 | Variance Reports |
| DPS 159 | Residential Meters |
| DPS 163 | High Pressure Distribution Main (Line 15) |
| DPS 171 | Residential Regulators |
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# CASE 11-G-0280 <br> CORNING GAS - RATES 

# STATE OF NEW YORK <br> STAFF OF THE DEPARTMENT OF PUBLIC SERVICE 

## INTERROGATORY/DOCUMENT REQUEST

Request No.:
Requested By:
Date of Request:
Witness:
Subject:

DPS-21
Aric Rider/Johanna Miller
June 9, 2011
Fi Sarhangi/Mario DiValentino
Billing System

References Case 08-G-1137, JP p. 32.

1. Corning agreed to expeditiously purchase or lease and install a new billing system to replace the Company's current system, and meet with Staff quarterly during the development of the system.
a. Has the Company purchased a new billing system? If not, why not?
b. Provide a narrative of the work that has been done to procure a new billing system.
c. Has the Company developed an RFP? If so, please provide a copy.

## Response:

1a. No. The Company did an evaluation of software packages and started negotiations on the acquisition costs. When the actual costs exceeded the working estimate by a factor of two, the Company chose to reevaluate it options. Upon this reevaluation, the Company determined, based upon its priorities, that it would be more beneficial to expend the amounts allowed for the new billing system for much-needed infrastructure improvements. Since the Company was required to account for capital expenditures in total and there was no line item expenditure requirement in Case 08-G-1137, Corning believes that its approach was appropriate. Also, please see the response to DPS-20, Part 2.

1b. The Company continues to evaluate the software packages of the Harris Co. Corning is in the process of obtaining prices of two software packages in order to make a recommendation to management.

1c. No. The current accounting and billing system was purchased, installed and maintained by the Harris Co. The Company believes that the migration to a new system would be easier with this vendor because of its knowledge of the architecture of the current system, thereby reducing the potential for downtime and cost overruns during the installation stage. The Harris Co. has a suite of differing software packages provided by different subsidiaries that permits competitive pricing.

Name of Respondent: L. Mario DiValentino<br>Position of Respondent: President, Moonstone Consulting LLC<br>Date: June 17, 2011

# CASE 11-G-0280 <br> CORNING GAS - RATES 

# STATE OF NEW YORK <br> STAFF OF THE DEPARTMENT OF PUBLIC SERVICE 

## INTERROGATORY/DOCUMENT REQUEST

Request No.:
Requested By:
Date of Request:
Witness:
Subject:

DPS-57
Aric Rider/Hieu Cam/Michael Colby
June 20, 2011
Miller
Supply Information

1. What percentage of Corning's storage assets are from Inergy storage (p. 8 of Mr. Miller's testimony $-3,000 \mathrm{dth} /$ day for 50 days)? Provide the calculations to support the response.
2. What percentage of Corning's total supply portfolio is Inergy storage (p. 8 of Mr . Miller's testimony $-3,000$ dth/day for 50 days)? Provide calculations to support the response.
3. What percentage of Corning's total supply portfolio was made up of local production in the test year? Provide the calculations to support the response.
4. What percentage of Corning's total supply portfolio will be made up of local production in the rate year? Provide the calculations to support the response.

## Response:

1. 

|  | Annual Dth | \% of Total |
| :--- | ---: | ---: |
| DTI GSS | 576,516 | $78.33 \%$ |
| TCO FSS | 9,532 | $1.30 \%$ |
| Inergy FSS | 150,000 | $20.38 \%$ |
| Total | 736,048 | $100.00 \%$ |

2. Estimated Annual Requirement in Dth

1,657,341 $\begin{array}{ll}\text { Inergy FSS Annual Dth } & 150,000 \\ & 9,05 \%\end{array}$
3. Estimated Annual Requirement in Dth

1,657,341
Estimated Annual Local Production Purchase in Dth

546,500
$32.97 \%$

Estimated Annual Requirement in Dth 1,657,341 Estimated Annual Local Production Purchase in Dth 546,500 32.97\%

Name of Respondent: Russell Miller
Position of Respondent: Vice President - Gas Supply and Marketing Date: July 6, 2011

# CASE 11-G-0280 <br> CORNING GAS - RATES 

# STATE OF NEW YORK <br> STAFF OF THE DEPARTMENT OF PUBLIC SERVICE 

## INTERROGATORY / DOCUMENT REQUEST

Request No.:
Requested By:
Date of Request:
Witness:
Subject:

DPS-64
Aferdita Bardhi
June 20, 2011
Paul Normand
MFC \& RDM

1. Has the Company testified to any changes in the MFC methodology? Please clarify any such changes.
2. Please explain the proposed changes to RDM with respect to weather normalization, as discussed in testimony on page 23 of 24 . Why does the Company want to discontinue weather normalization? Please also describe why you testified that weather normalization is redundant in the context of RDM, on page 23 of 24, lines 16-18.

## Response:

1. The Company is not proposing any changes to the MFC methodology.
2. The RDM accounts for the weather normalization, and the Company is not proposing any changes to the RDM. To simplify the RDM reconciliation process and true-up the Company is proposing that the existing monthly weather normalization adjustment be discontinued. Because the RDM accounts for weather, weather normalization is redundant in the context of the RDM.

Respondent: Paul M. Normand
Position of Respondent: Principal, Management Applications Consulting, Inc.
Date: June 29, 2011

# CASE 11-G-0280 <br> CORNING GAS - RATES <br> STATE OF NEW YORK STAFF OF THE DEPARTMENT OF PUBLIC SERVICE <br> <br> INTERROGATORY / DOCUMENT REQUEST 

 <br> <br> INTERROGATORY / DOCUMENT REQUEST}

Request No.:
Requested By:
Date of Request:
Witness:
Subject:

DPS-154
Johanna Miller
July 20, 2011
Cook
Variance Reports

1. Please provide the monthly capital variance reports for 2011.

Response:

1. The requested information is contained in attachment "DPS-1542011 Budget Variance Reports - Jan-May 2011.xlsx".

Name of Respondent: Matt Cook / L. Mario DiValentino
Position of Respondent: Vice President - Operations / President, Moonstone Consulting LLC Date: July 21, 2011


## CASE 11-G-0280 <br> CORNING GAS - RATES

## STATE OF NEW YORK STAFF OF THE DEPARTMENT OF PUBLIC SERVICE <br> <br> INTERROGATORY / DOCUMENT REQUEST

 <br> <br> INTERROGATORY / DOCUMENT REQUEST}Request No.:
Requested By:
Date of Request:
Witness:
Subject:

DPS-159
Johanna Miller
July 20, 2011
Cook
Residential Meters

1. Provide the number of residential meters Corning is required to replace in its annual residential meter replacement program.
2. How many residential meters were replaced annually from years 2008-2010?
3. How did the Company forecast the cost per residential meter? What does the cost per include? Please provide supporting information/analysis that supports the Company's forecast.

## Response:

1. Corning has approximately 6,000 residential meters in its system that are outdated. These meters are no longer supported by the manufacturer or are non-Temperature Compensated meters. Beginning in 2010, the DPS Office of Consumer Services instructed Corning to remove and replace $10 \%$ of the remaining quantity of these meters, or approximately 600 per year. Additionally, as part of its mandated program, Corning is required to remove approximately $4 \%$ of certain categories of its residential meters for intesting which amounts to approximately 500 meters per year. Of the 500 meters, approximately $60 \%$, or almost 300 per year, are not repairable and therefore must be replaced. As a result, beginning in 2010, Corning requires approximately 900 meters per year to be replaced.
2. $2008-500$

2009-550
2010-925
3. The cost per meter, as shown on the Capital Budget, includes the cost of the meter as a complete unit. The cost per meter is an estimate based on historical averages.

Name of Respondent: Matt Cook
Position of Respondent: Vice President - Operations
Date: July 28, 2011

# CASE 11-G-0280 <br> CORNING GAS - RATES 

# STATE OF NEW YORK STAFF OF THE DEPARTMENT OF PUBLIC SERVICE INTERROGATORY / DOCUMENT REQUEST 

Request No.:
Requested By:
Date of Request:
Witness:
Subject:

DPS-163
Johanna Miller
July 20, 2011
Cook
HP Distribution Main (Line 15)

1. Provide a timeline for the planned work on Line 15, including the Bath reliability second supply and Line 15 systematic replacement projects.
2. How does a contract between Corning and Bath affect this timeline?

## Response:

1. The 2011 Line 15 work is underway and will be completed prior to the end of the year; therefore, Corning is well into the 2011 timeline for this project. For 2012 construction it is currently estimated that design, layout, permitting, Article 7 submittal and approval will require approximately eight months to complete. Construction will require three to four months to complete. For each one mile replacement discussed in the capital budget from 2013 to completion will require approximately three months for design, layout and permitting and one month for construction.
2. The 2011 construction will proceed with or without a $\mathrm{CNGC} / \mathrm{Bath}$ contract in place. With regards to the Inergy interconnect construction scheduled for 2012, Corning must have a signed agreement by September 1, 2011 in order to have construction complete by September - October 2012. Not having a contract in place may also affect the construction timeline for the remaining Line 15 reliability construction that is proposed to begin in 2013.

Name of Respondent: Matt Cook
Position of Respondent: Vice President - Operations
Date: July 28, 2011

# CASE 11-G-0280 <br> CORNING GAS - RATES 

## STATE OF NEW YORK <br> STAFF OF THE DEPARTMENT OF PUBLIC SERVICE

## INTERROGATORY / DOCUMENT REQUEST

## Request No.:

Requested By:
Date of Request:
Witness:
Subject:

DPS-171
Johanna Miller
July 20, 2011
Cook
Residential Regulators

1. How many residential regulators were installed annually from 2008-2010?
2. How did the Company forecast the number of residential regulators included in the proposed budget?
3. How did the Company forecast the cost per residential regulator? What does the cost per include? Please provide supporting information/analysis that supports the Company's forecast.

## Response:

1. $2008-410 ; 2009-430 ; 2010-380$.
2. The forecast is based on the historical replacements from the previous three years.
3. The cost per replacement was based on the average cost over the last three years plus an inflation adder each year to cover increased costs. The cost per includes the cost of the regulator plus additional miscellaneous materials required for the installation (fittings, etc.). Please see Attachment DPS-171.

Name of Respondent: Matt Cook
Position of Respondent: Vice President -- Operations
Date: August 9, 2011

# CASE 11-G-0280 <br> CORNING GAS - RATES <br> STATE OF NEW YORK <br> STAFF OF THE DEPARTMENT OF PUBLIC SERVICE 

INTERROGATORY / DOCUMENT REQUEST

Request No.:
Requested By:
Date of Request:
Witness:
Subject:

DPS-172
Johanna Miller
July 20, 2011
Cook
Non-Residential Regulators

1. How many non-residential regulators were installed annually from 2008-2010?
2. How did the Company forecast the number of non-residential regulators included in the proposed budget?
3. How did the Company forecast the cost per non-residential regulator? What does the cost per include? Please provide supporting information/analysis that supports the Company's forecast.

## Response:

Corning assumes that this interrogatory relates to Project ID items 2.2 in the CNGC Capital Expenditures:

1. $2008-18$

2009-4
2010-31
2. The actual numbers of regulators to be replaced were not known at the time the capital expenditure was forecasted. Specific locations are not chosen until spring of the budget year. The forecast was based on an average of the last three years.
3. The cost per was determined by averaging the cost of the last three years of regulators purchased. Please see Attachment DPS-172. The average price per regulator for Project ID 2.2 was $\$ 384.13$. However because of the unknown types of regulators that needed replacement the cost per budget amount was increased to cover possible larger sized units.

Name of Respondent: Matt Cook
Position of Respondent: Vice President - Operations
Date: August 17, 2011

## Attachment DPS-172

Regulators Installated 2008, 2009, 2010
Capital Budget Project ID 2.2

| Project ID | Purchase <br> Date | Qty | Meter Type | Total Cost |
| :---: | :---: | :---: | :---: | ---: |
| 2.2 | $8 / 31 / 08$ | 5 | S200 | $1,430.25$ |
|  | $8 / 31 / 08$ | 10 | S202 | $3,206.89$ |
|  | $10 / 31 / 08$ | 3 | S200 | 773.58 |
| Total 2008 |  | 18 |  | $5,410.72$ |
| 2.2 | $10 / 31 / 09$ | 3 | S202 | 786.25 |
|  | $12 / 31 / 09$ | 1 | FG | $2,882.97$ |
| Total 2009 |  | 4 |  | $3,669.22$ |
| 2.2 | $3 / 31 / 10$ | 1 | FG | $2,665.22$ |
|  | $8 / 31 / 10$ | 10 | S202 | $3,087.39$ |
|  | $10 / 31 / 10$ | 5 | S202 | $1,341.95$ |
|  | $10 / 31 / 10$ | 5 | S202H | $1,479.94$ |
|  | $10 / 1 / 10$ | 10 | S202 | $2,704.19$ |

Project ID 2.2 Average Regulator Cost
384.13

Information taken from CWIP

CASE 11-G-0280
CORNING GAS - RATES

# STATE OF NEW YORK <br> STAFF OF THE DEPARTMENT OF PUBLIC SERVICE 

INTERROGATORY / DOCUMENT REQUEST

Request No.:
Requested By:
Date of Request:
Witness:
Subject:

DPS-182 [UPDATED RESPONSE]
Hieu Cam
July 20, 2011
Mario DiValentino
Sales Volumes

1. Please provide the sales volumes for NYSEG, EMPIRE, and STAND for the most recent 3 years. Are there separate contracts for each of the customers? Please provide a copy of the bill and the contracts for these customers.

Response:

1. The attachment to this response, "DPS-182 NYSE\&G Stand Empire Sales 2008$2010 . x l s "$ " contains the requested sale volumes. There is a separate contract for each customer. The requested contracts, contained in separate pdf documents, are attached.

Update:

1. The requested sales volumes are updated through July 2011 in the attachment to this response, "DPS-182 Sales NYSEG Stand Empire 2008 to 2011 - update 8+26+11.xlsx".

Name of Respondent: L. Mario DiValentino
Position of Respondent: President, Moonstone Consulting LLC
Date: July 28, 2011 [UPDATED AUGUST 31, 2011]

Corning Natural Gas Corp
Sales Volumes
Calendar Year 2008 through 2010
DPS-182

| 2008 | Month | MCF Sales Volumes |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  | NYSEG | STAND | EMPIRE |
|  | January | 493,363 | 0 | 0 |
|  | February | 467,727 | 0 | 0 |
|  | March | 403,018 | 0 | 0 |
|  | April | 194,271 | 0 | 0 |
|  | May | 132,778 | 0 | 0 |
|  | June | 71,276 | 0 | 0 |
|  | July | 65,217 | 0 | 0 |
|  | August | 69,713 | 0 | 0 |
|  | September | 73,234 | 0 | 0 |
|  | October | 122,684 | 0 | 0 |
|  | November | 264,479 | 0 | 0 |
|  | December | 376,584 | 0 | 0 |
|  | Total 2008 | 2,734,344 | 0 | 0 |


| 2009 |  | MCF Sales Volumes |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Month | NYSEG | STAND | EMPIRE |
|  | January | 515,881 | 0 | 0 |
|  | February | 350,224 | 0 | 0 |
|  | March | 287,526 | 0 | 0 |
|  | April | 153,720 | 0 | 0 |
|  | May | 128,436 | 0 | 0 |
|  | June | 122,539 | 0 | 0 |
|  | July | 145,681 | 0 | 0 |
|  | August | 152,415 | 0 | 0 |
|  | September | 184,028 | 0 | 0 |
|  | October | 172,710 | 0 | 0 |
|  | November | 227,060 | 0 | 0 |
|  | December | 420,118 | 2,961 | 0 |
|  | Total 2009 | 2,860,338 | 2,961 | 0 |


| MCF Sales Volumes |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| 2010 | Month | NYSEG | STAND | EMPIRE |
|  | January | 471,552 | 30,000 | 0 |
|  | February | 382,210 | 25,941 | 0 |
|  | March | 301,119 | 30,000 | 0 |
|  | April | 181,932 | 14,500 | 0 |
|  | May | 179,780 | 15,283 | 0 |
|  | June | 204,777 | 14,790 | 5,910 |
|  | July | 192,541 | 14,790 | 5,910 |
|  | August | 194,280 | 14,790 | 5,910 |
|  | September | 223,232 | 14,790 | 5,910 |
|  | October | 303,563 | 15,283 | 6,107 |
|  | November | 314,665 | 14,790 | 8,880 |
|  | December | 419,083 | 44,400 | 0 |
|  | Total 2010 | 3,368,734 | 249,357 | 38,627 |
| MCF Sales Volumes |  |  |  |  |
| 2011 | Month | NYSEG | STAND | EMPIRE |
|  | January | 445,385 | 42,920 | 6,433 |
|  | February | 346,944 | 69,076 | 2,772 |
|  | March | 364,823 | 30,597 | 3,069 |
|  | April | 249,926 | 28,031 | 2,910 |
|  | May | 164,413 | 30,597 | 7,657 |
|  | June | 185,989 | 22,605 | 8,880 |
|  | July | 167,765 | 0 | 8,401 |
|  | August | - | - | - |
|  | September | - | - | - |
|  | October | - | - | - |
|  | November | - | - | - |
|  | December | - | - | - |
|  | Total 2011 | 1,925,245 | 223,826 | 40,122 |

CASE 11-G-0280
CORNING GAS - RATES

# STATE OF NEW YORK <br> STAFF OF THE DEPARTMENT OF PUBLIC SERVICE 

## INTERROGATORY / DOCUMENT REQUEST

Request No.:
Requested By:
Date of Request:
Witness:
Subject:

DPS-220
Hieu Cam
August 9, 2011
Mario DiValentino
Depreciation

In your response to DPS-147, inventory parts numbers and associated quantities are retired via the First In First Out (FIFO) inventory method.

1. Why does Corning use FIFO inventory method as opposed to retiring the specific parts and their associated quantities from its records?
2. Does Corning have the ability to book the retirement based on vintage?
3. Describe how specific sections of mains are tracked in the AS/400 system.
4. Describe how specific service lines are tracked in the AS/400 system.

## Response:

1. Although vintage year information is contained in the Company's CPRs, retiring the specific parts and their associated quantities would be a manual process and burdensome. That is why Corning uses the FIFO inventory method. However, since 2009, the Company has been compiling a database that can be searched electronically that would permit retiring the specific parts and their associated quantities in the future.
2. No. Please see the response to part 1.
3. Mains and services are only tracked in the $\mathrm{AS} / 400$ on a summary posting basis. The detail is maintained in the CPR and the external database described in the response to part 1.
4. Please see the response to part 3.

Name of Respondent: L. Mario DiValentino
Position of Respondent: President, Moonstone Consulting LLC
Date: August 12, 2011

# CASE 11-G-0280 <br> CORNING GAS - RATES <br> STATE OF NEW YORK STAFF OF THE DEPARTMENT OF PUBLIC SERVICE INTERROGATORY / DOCUMENT REQUEST 

Request No.:
Requested By:
Date of Request:
Witness:
Subject:

DPS-227
Hieu Cam, Aric Rider
August 12, 2011
Paul Normand/Mario DiValentino
COS

1. Reference Exhibit CNG-5, Schedule 1, page 2 of 2. Please identify where SC 2 and SC 7 minimum charge revenue (delivery revenue) is included in the cost study. If the SC 2 and SC 7 minimum charge revenue (delivery revenue) is included in purchase gas expense, please correct the Cost study.
2. Reference Exhibit CNG-5, Schedule 1, page 2 of 2. Please identify where Hammondsport transport revenue billed in the Gas Supply Charge (delivery revenue) is included in the cost study. If the Hammondsport transport revenue billed in the Gas Supply Charge (delivery revenue) is included in purchase gas expense, please correct the Cost study.
3. Reference Exhibit CNG-5, Schedule 1, page 2 of 2. Please identify where Hammondsport transport revenue billed in the DRA (delivery revenue) is included in the cost study. If the Hammondsport transport revenue billed in the DRA (delivery revenue) is included in purchase gas expense, please correct the Cost study.
4. Reference Exhibit CNG-5, Schedule 1, page 2 of 2. Please identify where the Bath Transportation and Revenue True-up (delivery revenue) is included in the cost study. If the Bath Transportation and Revenue True-up (delivery revenue) is included in purchase gas expense, please correct the Cost study.
5. Reference Exhibit CNG-5, Schedule 1, page 2 of 2. Please identify where the Bath or Corning System Charges (delivery revenue) is included in the cost study. If the Bath or Corning System Charges (delivery revenue) is included in purchase gas expense, please correct the Cost study.
6. Per the Company's response to IR DPS-57 Inergy storage is $9.05 \%$ of the Company's total supply portfolio. Please allocate "SYSTEM SUPPLY ADDITION STOR" and all associated costs to Corning by multiplying the total cost by $9.05 \%$ and then by the 3 month winter sales allocator (approx $77 \%$ ). The remaining costs are to be allocated to Bath and Hammondsport by the 3 month winter sales allocator. Please provide the resulting "CORNCOS Class 12-31-10 Design Day with Line 15 and Rel Adds" and
"CORNCOS10 Jurisdictional Design Day with Line 15 and Rel Adds" files in excel format.
7. Please allocate "SYSTEM SUPPLY ADDITION STOR", "BATH RELIABILITY ADDITION STORAGE" and "LINE 15 IMPROVEMENTS" and all associated costs to each Jurisdiction using the "TRANSUPP" ( 3 month winter sales) Allocator. Please provide the resulting "CORNCOS Class 12-31-10 Design Day with Line 15 and Rel Adds" and "CORNCOS10 Jurisdictional Design Day with Line 15 and Rel Adds" files in excel format.

## Response:

1. The revenues have been included as a minimum charge in delivery revenues.
2. The Hammondsport transport revenue billed in the Gas Supply Charge (delivery revenue) is included in purchase gas revenues in the amount of $\$ 114,737$. This amount has been included in the revised cost study as requested. The revision was made only to identify the impact on customer class rate of return. The revision has no impact on the revenue requirement determination requested by the Company.
3. The Hammondsport transport revenue billed in the DRA (delivery revenue) associated with transport customers is included in purchase gas revenues in the amount of $\$ 71,970$. This amount has been included in the revised cost study as requested. The revision was made only to identify the impact on customer class rate of return. The revision has no impact on the revenue requirement determination requested by the Company.
4. The Bath Transportation $(\$ 114,737)$ and Revenue True-up $(-\$ 12,998)$ is the amount recorded as expense to match amounts collected in revenues. No revision to the cost study is required. Please see the response to part 2.
5. The Bath or Corning System Charges (delivery revenue is included in purchase gas revenues in the amount of $\$ 187,166.65$ inclusive of Greek Peak CIAC of $\$ 43,605.90$. This amount has been included in the revised cost study as requested in addition to the CIAC surcharge amount of $\$ 3.25$ per MCF for rate code VMO and VRO. The resulting CIAC charges are $\$ 25,000$ for VRO and $\$ 17,684$ for VMO. The revision was made only to identify the impact on customer class rate of return. The revision has no impact on the revenue requirement determination requested by the Company.
6. Please see the attached files, "DPS-227-6 CORNCOSJ10 Juris Design Day 12-31-10 Rev 8-24-11 with Line 15 \& Rel Adds.xls" and "DPS-227-6 CORNCOS Class 12-31-10 Des Day 8-24-11 with Line 15 \& Rel Adds.xls".
7. Please see the attached files, "DPS-227-7 CORNCOSJ10 Juris Design Day 12-31-10 Rev 8-24-11 with Line 15 \& Rel Adds.xls" and "DPS-227-7 CORNCOS Class 12-31-10 Des Day 8-24-11 with Line 15 \& Rel Adds.xls".

Please note that the files referenced in the responses to parts 6 and 7 contain proprietary information of the same nature as that for which Corning sought protection from disclosure at the time the Company filed its direct evidence on May 24, 2011. Accordingly, this information will be provided in accordance with the July 13, 2011 Ruling Establishing Schedule and Adopting Protection Order.

Name of Respondent: L. Mario DiValentino
Position of Respondent: President, Moonstone Consulting LLC
Date: August 29, 2011

## CASE 11-G-0280 <br> CORNING GAS - RATES

STATE OF NEW YORK
STAFF OF THE DEPARTMENT OF PUBLIC SERVICE
INTERROGATORY / DOCUMENT REQUEST

Request No.:
Requested By:
Date of Request:
Witness:
Subject:

DPS-228
Aric Rider/Johanna Miller
August 16, 2011
Sarhangi/DiValentino/Cook
Strategic Plan

1. Does the Company have a near term and long term (10-15 year) strategic plan? If so, please provide a copy.

Response:

1. The Company does not have a written near-term or long-term strategic plan.

Name of Respondent: L. Mario DiValentino
Position of Respondent: President, Moonstone Consulting LLC
Date: August 26, 2011

# CASE 11-G-0280 <br> CORNING GAS - RATES 

STATE OF NEW YORK STAFF OF THE DEPARTMENT OF PUBLIC SERVICE INTERROGATORY / DOCUMENT REQUEST

Request No.:
Requested By:
Date of Request:
Witness:
Subject:

DPS-229
Aric Rider/Johanna Miller
August 16, 2011
Sarhangi/DiValentino/Cook
Capital Expenditures Procedures

1. Does the Company have policies and procedures for initiating, developing and executing capital projects? If so, provide a copy.

Response:

1. The Company does not have written policies and procedures for initiating, developing and executing capital projects. However, the Company has a process/protocol that it follows in preparing and executing its capital projects. Please see the response to DPS-50 and Exhibit CNG-11, FAQ-15, for the Company's protocol.
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# CASE 11-G-0280 <br> CORNING GAS - RATES 

# STATE OF NEW YORK <br> STAFF OF THE DEPARTMENT OF PUBLIC SERVICE INTERROGATORY / DOCUMENT REQUEST 

Request No.:
Requested By:
Date of Request:
Witness:
Subject:

DPS-230
Aric Rider/Johanna Miller
August 16, 2011
Sarhangi/DiValentino/Cook
Capital Expenditures Procedures

1. Please describe all Company milestones of a project life cycle from planning to closeout.
2. Does the Company have defined deliverables required for each project phase? If so, provide a copy.
3. Does the Company establish an official budget at the initiation of a project? If so, does the amount change throughout planning, design or construction? If so, are the reasons documented and how does management approve the changes?

## Response:

1. The milestones are as follows:
a. Project identification, development and project estimate.
b. Management review of overall budget.
c. Presentation to and approval by Board of Directors.
d. Monthly monitoring and variance reporting on project to management.
e. Quarterly Board reporting on budget performance.
f. If significant overrun on costs due to changed circumstances, seek Board approval for additional costs. (Significant underruns would receive Board attention as well.)
g. Project completed.
2. Yes. The process is described and reported in the response to DPS-50 and in Exhibit CNG-11, FAQ-15.
3. a. Yes.
b. The amount can change.
c. The reasons are presented to management at the time the budget revisions are sought. Board approval is ultimately required.

Name of Respondent: L. Mario DiValentino<br>Position of Respondent: President, Moonstone Consulting LLC<br>Date: August 24, 2011

CASE 11-G-0280
CORNING GAS - RATES
STATE OF NEW YORK
STAFF OF THE DEPARTMENT OF PUBLIC SERVICE

## INTERROGATORY / DOCUMENT REQUEST

Request No.:
Requested By:
Date of Request:
Witness:
Subject:

DPS-231
Aric Rider/Johanna Miller
August 16, 2011
Cook
Project Prioritization

1. Does the Company have a documented capital expenditure project prioritization system (ranks the merit of capital projects using factors such as: community/development needs, reliability, environment, labor relations, operational support needs, public safety and rate of return)? If so, please provide a copy.

## Response:

1. No. The Company does not have a specific documented capital expenditure project prioritization system. Given the size of the Company and scope of the projects undertaken, however, the Company is able to prioritize its projects by regulatory requirements, reliability projects and general capital improvements without a system, such as that described in the question, in place.

Name of Respondent: Matt Cook
Position of Respondent: Vice President-Operations
Date: August 24, 2011

## CASE 11-G-0280 <br> CORNING GAS - RATES

# STATE OF NEW YORK <br> STAFF OF THE DEPARTMENT OF PUBLIC SERVICE 

## INTERROGATORY / DOCUMENT REQUEST

Request No.:
Requested By:
Date of Request:
Witness:
Subject:

DPS-232
Aric Rider/Johanna Miller
August 16, 2011
Cook
Project management performance

1. Does the Company have project management performance measures to determine the effectiveness of cost estimation and scheduling?

Response:

1. The Company does not have specific project management performance measures. Given the size of the Company and scope of the projects undertaken, however, the Company is able to review projects to determine the cause of any deviation from schedule and cost estimate. The lessons learned can be used in the development and estimating of new projects.

Name of Respondent: Matt Cook
Position of Respondent: Vice President-Operations
Date: August 24, 2011

CASE 11-G-0280

## CORNING GAS - RATES

# STATE OF NEW YORK <br> STAFF OF THE DEPARTMENT OF PUBLIC SERVICE 

INTERROGATORY / DOCUMENT REQUEST

Request No.:
Requested By:
Date of Request:
Witness:
Subject:

DPS-233
Aric Rider/Johanna Miller
August 16, 2011
Cook
Project Authorization of Overruns

1. Please explain how projects receive timely, appropriate review and authorization when expenditures exceed initial authorizations. How are these authorizations tracked and documented?

## Response:

1. The initial project overruns are identified via the monthly capital budget variance report and in consultation with the project manager. If significant overruns are identified, an action plan is developed that addresses the root cause of the overrun with the objective of bringing the project within budget. If the project cannot be brought within budget, a plan is developed to adjust the timing of other projects to meet the overall capital budget. In any event, the action plans must be approved by management and the Board of Directors.

Name of Respondent: Matt Cook
Position of Respondent: Vice President-Operations
Date: August 24, 2011

## CASE 11-G-0280 <br> CORNING GAS - RATES

# STATE OF NEW YORK STAFF OF THE DEPARTMENT OF PUBLIC SERVICE INTERROGATORY / DOCUMENT REQUEST 

Request No.:
Requested By:
Date of Request:
Witness:
Subject:

DPS-234
Aric Rider/Johanna Miller
August 16, 2011
Cook
Project Time Tracking

1. Does the Company track the time it takes (including travel time) to complete O\&M and capital work by its outside contractors and internal workforce? If so, please provide a copy.

## Response:

1. The Company does not have a formal reporting system that tracks the time it takes (including travel time) to complete $\mathrm{O} \& \mathrm{M}$ and capital work by its outside contractors and internal workforce. Given the size of the Company and scope of the projects undertaken, however, the Company is able to assign on-site inspectors who monitor the contractor manpower, quality and quantity of work performed on each project. Likewise, supervisory personnel do on-site spot checks of internal workforce project and O\&M performance.

Name of Respondent: Matt Cook
Position of Respondent: Vice President-Operations
Date: August 24, 2011

# CASE 11-G-0280 <br> CORNING GAS - RATES <br> STATE OF NEW YORK STAFF OF THE DEPARTMENT OF PUBLIC SERVICE INTERROGATORY / DOCUMENT REQUEST 

Request No.:
Requested By:
Date of Request:
Witness:
Subject:

DPS-254
Hieu Cam
August 26, 2011
Russ Miller
SC 14-Customers

1. The Company is consistently losing SC14 - AGR Residential customers from year to year. What percentage of those customers is migrating to $\mathrm{SC}-1$ in the previous 3 years?

Response:

1. During the years 2008-2010, all SC14-AGR Residential customers who left that service class migrated to the SC-1 Residential rate class.

Name of Respondent: L. Mario DiValentino
Position of Respondent: President, Moonstone Consulting LLC
Date: August 29, 2011

## CORNING NATURAL GAS

## CASE 11-G-0280

## Comparison of Sales Forecast - Rate Year 1

| Corning | Rate Codes | Staff |  | Company |  | Difference |  | Total CCF |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Average Customers | Annual CCF/CUS | Average <br> Customers | Annual CCF/CUS | Customers | CCF/cus |  |
| SC-1 Residential | RI,RO,TI,TO | 10,831 | 897.6 | 10,507 | 886.0 | 324 | 12 | 411,974 |
| SC-1 Residential | VRO | 140 | 549.8 | 140 | 549.8 | - | - | - |
| SC-1 Commercial | CI,CO | 695 | 2,335.8 | 683 | 2,149.7 | 12 | 186 | 146,736 |
| SC-1 Public Authority | MI,MO | 47 | 3,055.9 | 46 | 3297.4 | 1 | (241) | $(8,053)$ |
| SC - Public Authority | VMO | 5 | 13,602.8 | 4 | 13,602.8 | 1 | 0 | 13,603 |
| SC-14 AGR Residential | ARO | 2,298 | 1,104.9 | 2,615 | 1,094.2 | (317) | 11 | $(324,598)$ |
| SC-14 AGR Commercial | ACO | 166 | 8,356.8 | 173 | 7,606.4 | (7) | 750 | 86,054 |
| SC-14 AGR Public Authority | AMO | 53 | 8,361.1 | 53 | 8,808.0 | 0 | (447) | $(22,238)$ |
| SC-5 Outdoor Lighting | GL01,GL02 | 12 | 110.0 | 12 | 110.0 | - | - | - |
| SC-7 Industrial Trans | IT,ITO | 4.0 | 1,836,850.4 | 4 | 1,797,248.8 | - | 39,602 | 158,406 |
| SC-6 Commercial Trans | CT,CTO,MT,MTO | 11 | 104,992.7 | 11 | 100,281.9 | - | 4,711 | 63,723 |
| SC-6 Public Authority Trans | PT,PTO | 10 | 96,236.5 | 10 | 95,030.1 | - | 1,206 | 12,064 |
|  |  |  |  |  |  | - | - | - |
| SC-1 Residential Hsport | HR,HRO | 406 | 832.6 | 364 | 852.1 | 42 | (19) | 25,753 |
| SC-7 AGR Hsport Res | HA | 44 | 1,046 | 43 | 1,000 | 1 | 45 | 1,983 |
| SC 7 - AGR Hsport Com | HAC | 2 | 6,429 | 2 | 6,133 | - | 296 | 593 |
| SC-2 Commercial Hsport | HC, HCO | 75 | 1,600 | 73 | 1,581 | 2 | 19 | 3,353 |
| SC-4 Hammondsport Trans | HT,HTO | 4 | 45,163 | 4 | 45,445 | - | (281) | $(1,125)$ |
| Trans and Sales Flex Hsport | HTF,OTF,SC5, HOI | 5 | 117,847 | 5 | 114,312 | - | 3,536 | 17,678 |
|  |  |  |  |  |  | - | - | - |
| Bath EG\&W - Firm | BR | 1 | 2,629,521 | 1 | 2,742,536 | - | $(113,015)$ | $(113,015)$ |
| Bath - Trans SC-3 X Hsport | BC 3 | 1 | 273,184 | 1 | 270,733 | - | 2,451 | 2,451 |
| Bath - Trans SC-4 X Hsport | BC 4 | 1 | 1,216,240 | 1 | 1,202,593 | - | 13,648 | 13,648 |
|  |  |  |  |  |  | - | - | - |
| Contract 1 |  | 3 | 132,619 | 3 | 187,173 | - | $(54,554)$ | $(163,662)$ |
| Contract 2 |  | 1 | 3,761,050 | 1 | 3,809,690 | - | (54,54) | (163,62) |
| Contract 3 |  | 1 | 486,650 | 1 | 464,100 | - | 22,550 | 22,550 |
| Contract 4 |  | 1 | 2,259,340 | 1 | 2,493,610 | - | $(234,270)$ | $(234,270)$ |
| Contract 5 |  | 1 | 17,822,250 | 1 | 15,832,555 | - | 1,989,695 | 1,989,695 |
| Contract 6 |  | 1 | 4,441,150 | 1 | 4,896,760 | - | $(455,610)$ | $(455,610)$ |
|  |  |  |  |  |  | - | - | - |
| NYSEG |  | 1 | 3,404,844 | 1 | 3,265,818.00 |  | - | - |
| Empire |  | 1 | 124,097 | 1 | 0 |  | 124,097 | 124,097 |
| Stand |  | 1 | 32,189 | 1 | 0 |  | 32,189 | 32,189 |
|  |  |  |  |  | Total | 59 |  | 1,803,979 |
|  |  |  |  |  | Residential | 50 |  | 115,112 |
|  |  |  |  |  | Contracts | - |  | 1,158,703 |

## CORNING NATURAL GAS

## CASE 11-G-0280

## Comparison of Sales Forecast - Rate Year 2

| Corning | Rate Codes | Staff |  | Company |  | Difference |  | Total CCF |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Average Customers | Annual CCF | Average Customers | Annual CCF | Customers | CCF/cus |  |
| SC-1 Residential | RI,RO,TI,TO, VRO | 11,017 | 901 | 10,507 | 886 | 510 | 15 | 613,260 |
| SC-1 Residential | VRO | 140 | 549.8 | 140 | 549.8 | - | - | - |
| SC-1 Commercial | CI,CO | 695 | 2,336 | 683 | 2,150 | 12 | 186 | 146,736 |
| SC-1 Public Authority | MI,MO,VMO | 50 | 3,056 | 46 | 3,297 | 4 | (241) | 1,115 |
| SC - Public Authority | VMO | 5 | 13,603 | 4 | 13,603 | 1 | 0 | 13,603 |
| SC-14 AGR Residential | ARO | 2,134 | 1,105 | 2,615 | 1,094 | (480) | 11 | $(505,084)$ |
| SC-14 AGR Commercial | ACO | 166 | 8,829 | 173 | 7,606 | (7) | 1,223 | 164,516 |
| SC-14 AGR Public Authority | AMO | 53 | 8,361 | 53 | 8,808 | 0 | (447) | $(22,238)$ |
| SC-5 Outdoor Lighting | GL01,GL02 | 12 | 110 | 12 | 1,320 | - | $(1,210)$ | $(14,520)$ |
| SC-7 Industrial Trans | IT,ITO | 4 | 1,836,850 | 4 | 1,797,249 | - | 39,602 | 158,406 |
| SC-6 Commercial Trans | CT,CTO,MT,MTO | 11 | 104,993 | 11 | 100,282 | - | 4,711 | 63,723 |
| SC-6 Public Authority Trans | PT,PTO | 10 | 96,237 | 10 | 95,030 | - | 1,206 | 12,064 |
|  |  |  |  |  |  | - | - | - |
| SC-1 Residential Hsport | HR,HRO | 428 | 833 | 364 | 852 | 64 | (19) | 44,123 |
| SC-7 AGR Hsport Res | HA | 44 | 1,046 | 43 | 1,000 | 1 | 45 | 1,983 |
| SC 7 - AGR Hsport Com | HAC | 2 | 6,429 | 2 | 6,133 | - | 296 | 593 |
| SC-2 Commercial Hsport | HC, HCO | 76 | 1,600 | 73 | 1,581 | 3 | 19 | 5,242 |
| SC-4 Hammondsport Trans | HT,HTO | 4 | 45,163 | 4 | 45,445 | - | (281) | $(1,125)$ |
| Trans and Sales Flex Hsport | HTF,OTF, SC5, HOI | 5 | 117,847 | 5 | 114,312 | - | 3,536 | 17,678 |
|  |  |  |  |  |  |  |  |  |
| Bath EG\&W - Firm | BR | 1 | 2,629,521 | 1 | 2,742,536 | - | $(113,015)$ | $(113,015)$ |
| Bath - Trans SC-3 X Hsport | BC 3 | 1 | 273,184 | 1 | 270,733 | - | 2,451 | 2,451 |
| Bath - Trans SC-4 X Hsport | BC 4 | 1 | 1,216,240 | 1 | 1,202,593 | - | 13,648 | 13,648 |
|  |  | - | - |  |  | - | - | - |
| Contract 1 |  | 3 | 132,619 | 3 | 187,173 | - | $(54,554)$ | $(163,662)$ |
| Contract 2 |  | 1 | 3,761,050 | 1 | 3,809,690 | - | $(48,640)$ | - |
| Contract 3 |  | 1 | 486,650 | 1 | 464,100 | - | - | 22,550 |
| Contract 4 |  | 1 | 2,259,340 | 1 | 2,493,610 | - | $(234,270)$ | $(234,270)$ |
| Contract 5 |  | 1 | 17,822,250 | 1 | 15,832,555 | - | 1,989,695 | 1,989,695 |
| Contract 6 |  | 1 | 4,441,150 | 1 | 4,896,760 | - | $(455,610)$ | $(455,610)$ |
|  |  |  |  |  |  | - | - | - |
| NYSEG |  | 1 | 3,404,844 | 1 | 3,265,818.00 | - | - | - |
| Empire |  | 1 | 124,097 | 1 | 0 |  | 124,097 | 124,097 |
| Stand |  | 1 | 32,189 | 1 | 0 |  | 32,189 | 32,189 |
|  |  |  |  |  | tal | 109 |  | 1,918,148 |
|  |  |  |  |  | esidential | 95 |  | 154,282 |
|  |  |  |  |  | ontracts | - |  | 1,158,703 |

## CORNING NATURAL GAS

## CASE 11-G-0280

## Comparison of Sales Forecast - Rate Year 3

| Corning | Rate Codes | Staff |  | Company |  | Difference |  | Total CCF |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Average Customers | Annual | Average Customers | Average Monthly CCF | Customers | CCF/cus |  |
|  |  |  |  |  |  |  |  |  |
| SC-1 Residential | RI,RO,TI,TO, VRO | 11,204 | 904 | 10,507 | 886 | 697 | 18 | 814,546 |
| SC-1 Residential | VRO | 140 | 549.8 | 140 | 549.8 | - | - | - |
| SC-1 Commercial | $\mathrm{CI}, \mathrm{CO}$ | 695 | 2,336 | 683 | 2,150 | 12 | 186 | 155,832 |
| SC-1 Public Authority | MI,MO,VMO | 50 | 3,056 | 46 | 3,297 | 4 | (241) | 1,115 |
| SC - Public Authority | VMO | 5 | 13,603 | 4 | 13,603 | 1 | 0 | 13,603 |
| SC-14 AGR Residential | ARO | 1,971 | 1,105 | 2,615 | 1,094 | (644) | 11 | $(683,375)$ |
| SC-14 AGR Commercial | ACO | 166 | 9,301 | 173 | 7,606 | (7) | 1,695 | 228,043 |
| SC-14 AGR Public Authority | AMO | 53 | 8,361 | 53 | 8,808 | 0 | (447) | $(22,215)$ |
| SC-5 Outdoor Lighting | GL01,GL02 | 12 | 110 | 12 | 1,320 | - | $(1,210)$ | $(14,520)$ |
| SC-7 Industrial Trans | IT,ITO | 4 | 1,836,850 | 4 | 1,797,249 | - | 39,602 | 158,406 |
| SC-6 Commercial Trans | СТ,СТО,Мт,МТО | 11 | 104,993 | 11 | 100,282 | - | 4,711 | 51,819 |
| SC-6 Public Authority Trans | PT,PTO | 10 | 96,237 | 10 | 95,030 | - | 1,206 | 12,064 |
|  |  | - | - |  |  | - | - | - |
| SC-1 Residential Hsport | HR,HRO | 450 | 833 | 364 | 852 | 86 | (19) | 64,480 |
| SC-7 AGR Hsport Res | HA | 44 | 1,046 | 43 | 1,000 | 1 | 45 | 3,339 |
| SC 7 - AGR Hsport Com | HAC | 2 | 6,429 | 2 | 6,133 | - | 296 | 593 |
| SC-2 Commercial Hsport | HC,HCO | 77 | 1,600 | 73 | 1,581 | 4 | 19 | 8,070 |
| SC-4 Hammondsport Trans | HT,HTO | 4 | 45,163 | 4 | 45,445 | - | (281) | $(1,125)$ |
| Trans and Sales Flex Hsport | HTF,OTF,SC5, HO. | 5 | 117,847 | 5 | 114,312 | - | 3,536 | 17,678 |
|  |  | - | - |  |  | - | - | - |
| Bath EG\&W - Firm | BR | 1 | 2,629,521 | 1 | 2,742,536 | - | $(113,015)$ | $(113,015)$ |
| Bath - Trans SC-3 X Hsport | BC 3 | 1 | 273,184 | 1 | 270,733 | - | 2,451 | 2,451 |
| Bath - Trans SC-4 X Hsport | BC 4 | 1 | 1,216,240 | 1 | 1,202,593 | - | 13,648 | 13,648 |
|  |  | - | - |  |  | - | - | - |
| Contract 1 |  | 3 | 132,619 | 3 | 187,173 | - | $(54,554)$ | $(163,662)$ |
| Contract 2 |  | 1 | 3,761,050 | 1 | 3,809,690 | - | $(48,640)$ | - |
| Contract 3 |  | 1 | 486,650 | 1 | 464,100 | - | 464,100 | 22,550 |
| Contract 4 |  | 1 | 2,259,340 | 1 | 2,493,610 | - | $(234,270)$ | $(234,270)$ |
| Contract 5 |  | 1 | 17,822,250 | 1 | 15,832,555 | - | 1,989,695 | 1,989,695 |
| Contract 6 |  | 1 | 4,441,150 | 1 | 4,896,760 | - | $(455,610)$ | $(455,610)$ |
|  |  |  |  |  |  | - | - | - |
| NYSEG |  | 1 | 3,404,844 | 1 | 3,265,818.00 | - | - | - |
| Empire |  | 1 | 124,097 | 1 | 0 |  | 124,097 | 124,097 |
| Stand |  | 1 | 32,189 | 1 | 0 |  | 32,189 | 32,189 |
|  |  |  |  |  | Total | 155 |  | 2,026,427 |
|  |  |  |  |  | Residential | 140 |  | 198,990 |
|  |  |  |  |  | Contracts | - |  | 1,158,703 |

PLOTS COMPARING STAFF'S AND COMPANY'S FORECAST

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Figure 1. S.C. Residential Customers Excluding Virgil


Figure 2. S.C. 1 Residential - Usage per Customer (UPC)


Figure 3. S.C. 14 Corning - AGR Residential Customers


Figure 4. S.C. 14 AGR - Residential Usage per Customer


Figure 5. S.C. 1 Hammondsport - Residential Customers


Figure 6. S.C. 1 Hammondsport Residential - UPC


Figure 7. S.C 7 Hammondsport - Residential AGR UPC


Figure 8. S.C. 4 Hammondsport Transportation Customers


Figure 9. S.C. 4 Hammondsport Transportation UPC


Figure 10. S.C 1 Corning - Commercial Customers


Figure 11. S.C. 1 Corning - Commercial UPC


Figure 12. S.C. 14 AGR - Commercial Customers


## CORNING NATURAL GAS

CASE 11-G-0280
Figure 13. S.C. 14 AGR Commercial UPC


Figure 14. S.C. 2 Hammondsport Commercial Customers


Figure 15. S.C. 2 Hammondsport Commercial UPC


Figure 16. S.C. 1 Corning Public Authority (excluding Virgil) UPC


Figure 17. S.C. 14 Corning AGR Public Authority UPC


Figure 18. S.C. 6 Public Authority Transportation UPC


Figure 19. S.C. 6 Commercial Transportation UPC.


Figure 20. S.C. 7 Transportation UPC


Figure 21. S.C. 7 Hammondsport AGR Commercial UPC


Figure 22. Hammondsport Transportation Flex.


Figure 23. Bath Firm


Figure 24. Bath S.C. 3 X Hammondsport


Figure 25. Bath S.C. 4 x Hammondsport


Figure 26. Contract 2 UPC


Figure 27. Contract 3 UPC


Figure 28. Contract 4 UPC


Figure 29. Contract 5 UPC


Figure 30. Contract 6 UPC

CORNING NATURAL GAS
11-G-0280

## RATE DESIGN ADJUSTMENTS - YEAR 1


CORNING NATURAL GAS 11-G-0280
RATE DESIGN ADJUSTMENTS - YEAR 2

| Revenues |  | Staff |  | Company | DifferenceStaff - Company |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Operating Revenues |  |  |  |  |  |  |
| Delivery rates | \$ | 10,169,334 | \$ | 12,845,758 | \$ | (12,464,966) |
| NYSEG + | \$ | 380,792 | \$ | 348,266 | \$ | $(83,726)$ |
| MFC supply procurement \& record collections | \$ | 264,540 | \$ | 500,174 | \$ | $(235,634)$ |
|  |  |  |  |  |  |  |
| RDM |  |  | \$ | - | \$ | - |
| Total | \$ | 10,814,666 | \$ | 13,694,198 | \$ | $(2,879,532)$ |
|  |  |  |  |  |  |  |
| Bath Transport Charge | \$ | 322,583 | \$ | - | \$ | 322,583 |
| Line 15 Transp. | \$ | - | \$ | - | \$ | - |
|  |  |  |  |  |  |  |
| TOTAL Op. Revenues | \$ | 11,137,249 | \$ | 13,694,198 | \$ | $(2,556,949)$ |
|  |  |  |  |  |  |  |
| Other Gas Revenues |  |  |  |  |  |  |
| VIRGIL SURCHARGE | \$ | 106,801 |  |  |  |  |
| TRANSPORTATION | \$ | 159,241 | \$ | 137,460 | \$ | 128,582 |
| ACCESS REVENUE | \$ | 545,284 | \$ | 250,000 | \$ | 295,284 |
| MFC | \$ | - | \$ | 378,026 | \$ | $(378,026)$ |
|  |  |  |  |  |  |  |
| TOTAL | \$ | 811,326 | \$ | 765,486 | \$ | 45,840 |
|  |  |  |  |  |  |  |
| TOTAL - OPERATING \& OTHER | S | 11,948,575 | \$ | 14,459,684 | \$ | $(2,511,109)$ |

CORNING NATURAL GAS 11-G-0280
RATE DESIGN ADJUSTMENTS - YEAR 3

| Revenues | Staff |  | Company |  |  | ifference - Company |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Operating Revenues |  |  |  |  |  |  |
| Delivery rates | \$ | 10,853,510 | \$ | 13,747,222 | \$ | $(13,359,145)$ |
| NYSEG + | \$ | 388,077 | \$ | 348,266 | \$ | $(83,726)$ |
| MFC supply procurement \& record collections | \$ | 264,540 | \$ | 500,174 | \$ | $(235,634)$ |
| RDM |  |  | \$ | - | \$ | - |
| Total | \$ | 11,506,127 | \$ | 14,595,662 | \$ | $(3,089,535)$ |
| Bath Transport Charge | \$ | 322,583 | \$ | - | \$ | 322,583 |
| Line 15 Transp. | \$ | - | \$ | - | \$ | - |
| TOTAL Op. Revenues | \$ | 11,828,710 | \$ | 14,595,662 | \$ | $(2,766,952)$ |
| Other Gas Revenues |  |  |  |  |  |  |
| VIRGIL SURCHARGE | \$ | 106,801 |  |  |  |  |
| TRANSPORTATION | \$ | - | \$ | 137,460 | \$ | $(30,659)$ |
| ACCESS REVENUE | \$ | 545,284 | \$ | 250,000 | \$ | 295,284 |
| MFC | \$ | - | \$ | 378,026 | \$ | $(378,026)$ |
| TOTAL | \$ | 652,085 | \$ | 765,486 | \$ | $(113,401)$ |
| TOTAL - OPERATING \& OTHER | \$ | 12,480,795 | \$ | 15,361,148 | \$ | $(2,880,353)$ |

CORNING NATURAL GAS CORPORATION
CASE 11-G-0280
Other Revenues

|  | Surcharge Revenues |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2008 |  | 2009 |  | 2010 |  |
| January | \$ | 131 | \$ | 1,251 | \$ | 1,411 |
| February | \$ | 131 | \$ | 1,244 | \$ | 1,053 |
| March | \$ | 131 | \$ | 1,106 | \$ | 1,048 |
| April | \$ | 4,796 | \$ | 1,103 | \$ | 1,039 |
| May | \$ | 1,289 | \$ | 1,096 | \$ | 1,037 |
| June | \$ | 1,280 | \$ | 1,093 | \$ | 1,032 |
| July | \$ | 1,277 | \$ | 1,090 | \$ | 1,025 |
| August | \$ | 1,282 | \$ | 1,083 | \$ | 1,046 |
| September | \$ | 1,259 | \$ | 1,080 | \$ | 1,023 |
| October | \$ | 1,260 | \$ | 1,072 | \$ | 1,020 |
| November | \$ | 1,256 | \$ | 1,072 | \$ | 1,011 |
| December | \$ | 1,251 | \$ | 1,063 | \$ | 985 |
| Total | \$ | 15,343 | \$ | 13,352 | \$ | 12,727 |
| Average |  |  |  |  |  | 13,807 |


|  | Re-connect Fees |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
|  | 2008 |  | 2009 | $\mathbf{2 0 1 0}$ |  |  |
| January | $\$$ | 280 | $\$$ | 240 | $\$$ | 160 |
| Febrary | $\$$ | 520 | $\$$ | 140 | $\$$ | 40 |
| March | $\$$ | 160 | $\$$ | 160 | $\$$ | 140 |
| April | $\$$ | 140 | $\$$ | 280 | $\$$ | 260 |
| May | $\$$ | 420 | $\$$ | 320 | $\$$ | 360 |
| June | $\$$ | 400 | $\$$ | 420 | $\$$ | 400 |
| July | $\$$ | 160 | $\$$ | 400 | $\$$ | 260 |
| August | $\$$ | 220 | $\$$ | 180 | $\$$ | 340 |
| September | $\$$ | 440 | $\$$ | 120 | $\$$ | 380 |
| October | $\$$ | 980 | $\$$ | 560 | $\$$ | 800 |
| November | $\$$ | 1,000 | $\$$ | 400 | $\$$ | 400 |
| December | $\$$ | 780 | $\$$ | 420 | $\$$ | 260 |
| Total | $\$$ | 5,500 | $\$$ | 3,640 | $\$$ | 3,800 |
| Average |  |  |  |  | $\$$ | $\mathbf{4 , 3 1 3}$ |

CORNING NATURAL GAS
CASE 11-G-0820
AVERAGE SERVICE LIVES
WORKPAPER - LDC STUDY
Average Service Lives (Years)

| ACCOUNT NUMBER | Net Salvage | CNG - <br> Existing | KEY-LI | KEY-NY | NFG | CHG\&E | CONEDISON | O \& R | NMPC | NYSEG | RGE | Staff Proposed OTHER AVERAGE | Rate |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 367 | 2.000\% | 60 | 75 | 70 | 60 | 70 | 80 | 75 | 80 | 75 | - | 73 | 1.340\% |
| 376 | 1.820\% | 60 | 75 | 70 | 70 | 85 | 70 | 75 | 69 | 70 | 75 | 73 | 1.341\% |
| 380 | 2.000\% | 47 | 52 | 40 | 55 | 70 | 55 | 65 | 60 | 50 | 44 | 55 | 1.796\% |

AVERAGE

## PROJECT NAME

## Project Number

Project Description
Summary of proposed project
Project AnalysisBackground explaining why the project is needed
Project history, including past project revisions (project type - one time / long term program)
Risk Scores (safety, reliability, etc)
Finance
Estimated Cost: Include any cost assumptions
Estimated Cost Range:
Expenditures to Date:
How will any overspend be funded?
Investment Planning:
Year 1
Year 2
Year 3
Year 4
Year 5 +
Resources Needed
Internal, External
Operational Impact on System
Project Risk
Risk of project slipping
Project Milestones
Start/Completion Dates
Customer Impact
Identify impacts to service and reliability if this project was not performed.
Summary of Project Benefits
Quantify potential project benefits
Options
Stop project?, Operate as is?, Continue the program?, Alternatives?
Recommendations

## Appendix

Contractor estimates, project background, etc.

## CORNING NATURAL GAS CORPORATION CASE 11-G-0280

STAFF'S 2011 CAPITAL BUDGET ADJUSTMENTS

| Acct. No. | Project | Description |  | Staff Total |  | Company Total | Adjustment |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1 | Services |  |  |  |  |  |  |
| 380 | 1.1 | New installations | \$ | 65,000 | \$ | 65,000 | \$ | - |
| 380 | 1.2 | Systematic replacement | \$ | 520,000 | \$ | 520,000 | \$ | - |
| 380 | 1.3 | Other replacement | \$ | - | \$ | - | \$ | - |
|  |  | Project Total | \$ | 585,000 | \$ | 585,000 | \$ | - |
|  |  |  |  |  |  |  |  |  |
|  | 2 | Meters \& Regulators |  |  |  |  |  |  |
| 383 | 2.1 | Residential regulators | \$ | 16,000 | \$ | 16,000 | \$ | - |
| 378 | 2.2 | Non-residential regulators | \$ | 6,365 | \$ | 6,365 | \$ | - |
| 381 | 2.3 | Residential meters | \$ | 49,000 | \$ | 49,000 | \$ | - |
| 381 | 2.4 | Non-residential meters | \$ | 7,500 | \$ | 7,500 | \$ | - |
| 378 | 2.5 | Rotary / turbine meters | \$ | 22,915 | \$ | 22,915 | \$ | - |
| 378 | 2.6 | Volume correctors | \$ | 6,600 | \$ | 6,600 | \$ | - |
| 378 | 2.7 | Pressure recorders | \$ | 3,119 | \$ | 3,119 | \$ | - |
| 378 | 2.8 | AMR | \$ | 14,322 | \$ | 14,322 | \$ | - |
|  |  | Project Total | \$ | 125,822 | \$ | 125,822 | \$ | - |
|  |  |  |  |  |  |  |  |  |
|  | 3 | Main - Distribution |  |  |  |  |  |  |
| 376 | 3.1 | New installations | \$ | 50,000 | \$ | 50,000 | \$ | - |
| 376 | 3.2 | Systematic Replacement | \$ | 792,000 | \$ | 792,000 | \$ | - |
| 376 | 3.3 | Other replacement (Cross Town Line repair) | \$ | 80,000 | \$ | 80,000 | \$ | - |
| 376 | 3.4 | Other replacement (Leak Repair, system upgrades) | \$ | 80,000 | \$ | 80,000 | \$ | - |
| 376 | 3.5 | Blank | \$ | - | \$ | - | \$ | - |
| 376 | 3.6 | Blank | \$ | - | \$ | - | \$ | - |
| 376 | 3.7 | Blank | \$ | - |  | - | \$ | - |
|  |  | Project Total | \$ | 1,002,000 | \$ | 1,002,000 | \$ | - |
|  |  |  |  |  |  |  |  |  |
|  | 4 | Main - HP Distribution |  |  |  |  |  |  |
| 376 | 4.1 | New installations | \$ | - | \$ | - | \$ | - |
| 376 | 4.2 | Line 11 | \$ | 20,000 | \$ | 20,000 | \$ | - |
| 376 | 4.3 | Bath Reliability - Second Supply | \$ | 50,000 | \$ | 50,000 | \$ | - |
| 376 | 4.31 | Line 15 Systematic Replacement | \$ | 1,480,000 | \$ | 1,480,000 | \$ | - |
| 376 | 4.4 | Blank | \$ | - | \$ | - | \$ | - |
| 376 | 4.5 | Blank | \$ | - | \$ | - | \$ | - |
|  |  | Project Total | \$ | 1,550,000 | \$ | 1,550,000 | \$ | - |
|  |  |  |  |  |  |  |  |  |
|  | 5 | Main - Distribution extension |  |  |  |  |  |  |
| 376 | 5.1 | Blank | \$ | - | \$ | - | \$ | - |
|  |  | Project Total | \$ | $\cdot$ | \$ | - | \$ | - |
|  |  |  |  |  |  |  |  |  |
|  | 6 | Cathodic Protection |  |  |  |  |  |  |
| 376 | 6.1 | System Cathodic Protection | \$ | 40,000 | \$ | 40,000 | \$ | - |
| 369 | 6.2 | Blank | \$ | - | \$ | - | \$ | - |
| 376 | 6.3 | Blank | \$ | - | \$ | - | \$ | - |
|  |  | Project Total | \$ | 40,000 | \$ | 40,000 | \$ | - |
|  |  |  |  |  |  |  |  |  |
|  | 7 | SCADA |  |  |  |  |  |  |
| 391 | 7.1 | Hardware / Software upgrade | \$ | 20,000 | \$ | 20,000 | \$ | - |
| 378 | 7.2 | RTU /other equipment (current installation improvements) | \$ | 45,000 | \$ | 45,000 | \$ | - |
|  |  | Project Total | \$ | 65,000 | \$ | 65,000 | \$ | - |
|  |  |  |  |  |  |  |  |  |
|  | 8 | M\&R Stations |  |  |  |  |  |  |
| 378 | 8.1 | M\&R Station replacement | \$ | 100,000 | \$ | 100,000 | \$ | - |
| 378 | 8.2 | Herrington Station (odorizer install) | \$ | 15,000 | \$ | 15,000 | \$ | - |
| 378 | 8.3 | Orr Hill Station (odorizer install) | \$ | 15,000 | \$ | 15,000 | \$ | - |
| 378 | 8.4 | Blank | \$ | - | \$ | - | \$ | - |
| 378 | 8.5 | Blank | \$ | - | \$ | - | \$ | - |
|  |  | Project Total | \$ | 130,000 | \$ | 130,000 | \$ | - |
|  |  |  |  |  |  |  |  |  |

Exhibit___(GRP-9)
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## CORNING NATURAL GAS CORPORATION CASE 11-G-0280

STAFF'S 2011 CAPITAL BUDGET ADJUSTMENTS

| Acct. No. | Project | Description | Staff Total |  | Company Total |  | Adjustment |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 9 | Transportation Equipment |  |  |  |  |  |  |
| 392 | 9.1 | Replace small vehicle | \$ | 81,000 | \$ | 81,000 | \$ | - |
| 392 | 9.2 | Replace1987 Line Truck | \$ | - | \$ | - | \$ | - |
| 392 | 9.3 | Heavy Equip Trailer | \$ | 10,000 | \$ | 10,000 | \$ | - |
| 392 | 9.4 | Replace Backhoe | \$ | - | \$ | - | \$ | - |
| 392 | 9.5 | Purchase Mini Excav | \$ | - | \$ | - | \$ | - |
| 392 | 9.6 | Replace small vehicle | \$ | - | \$ | - | \$ | - |
| 392 | 9.7 | Replace line tech truck | \$ | - | \$ | - | \$ | - |
| 392 | 9.8 | Replace dump truck | \$ | - | \$ | - | \$ | - |
| 392 | 9.9 | Replace backhoe | \$ | - | \$ | - | \$ | - |
| 392 | 9.10 | Replace 1987 line truck | \$ | - | \$ | - | \$ | - |
| 392 | 9.11 | Heavy Equipment Trailer | \$ | - | \$ | - | \$ | - |
| 392 | 9.12 | Replace line truck | \$ | - | \$ | - | \$ | - |
| 392 | 9.13 | Replace 1996 line truck | \$ | - | \$ | - | \$ | - |
|  |  | Project Total | \$ | 91,000 | \$ | 91,000 | \$ | - |
|  |  |  |  |  |  |  |  |  |
|  | 10 | Tools and Equipment |  |  |  |  |  |  |
| 394 | 10.1 | Pipeline Locator | \$ | 4,000 | \$ | 4,000 | \$ | - |
| 394 | 10.2 | HFI | \$ | 4,500 | \$ | 4,500 | \$ | - |
| 394 | 10.3 | CGI | \$ | 6,800 | \$ | 6,800 | \$ | - |
| 394 | 10.4 | Portable Shoring | \$ | - | \$ | - | \$ | - |
| 394 | 10.5 | CP Data Logger | \$ | 15,000 | \$ | 15,000 | \$ | - |
| 394 | 10.6 | Blank | \$ | - | \$ | - | \$ | - |
| 394 | 10.7 | Electro fusion Controller | \$ | - | \$ | - | \$ | - |
| 394 | 10.8 | Mueller (8" to 12") machine | \$ | - | \$ | - | \$ | - |
| 394 | 10.9 | Health HFI | \$ | - | \$ | - | \$ | - |
| 394 | 10.10 | Engineering survey equipment | \$ | - | \$ | - | \$ | - |
| 394 | 10.11 | Blank | \$ | - | \$ | - | \$ | - |
| 394 | 10.12 | GPS Survey Equipment | \$ | - | \$ | - | \$ | - |
| 394 | 10.13 | Welding Machine | \$ | - | \$ | - | \$ | - |
| 394 | 10.14 | Blank | \$ | - | \$ | - | \$ | - |
| 394 | 10.15 | Blank | \$ | - | \$ | - | \$ | - |
| 394 | 10.16 | Lighting | \$ | - | \$ | - | \$ | - |
| 394 | 10.17 | Stopper Replacement Equipment | \$ | - | \$ | - | \$ | - |
| 394 | 10.18 | Misc.Tools and Equipment | \$ | 3,000 | \$ | 3,000 | \$ | - |
|  |  | Project Total | \$ | 33,300 | \$ | 33,300 | \$ | - |
|  |  |  |  |  |  |  |  |  |
|  | 11 | Safety Equipment |  |  |  |  |  |  |
| 394 | 11.1 | PPE | \$ | 15,000 | \$ | 15,000 | \$ | - |
| 394 | 11.2 | Flash fire coveralls / hood / gloves | \$ | 4,416 | \$ | 4,416 | \$ | - |
| 394 | 11.3 | Supplied Air Respirator | \$ | 400 | \$ | 400 | \$ | - |
| 394 | 11.4 | Confined space gas monitor | \$ | - | \$ | - | \$ | - |
|  |  | Project Total | \$ | 19,816 | \$ | 19,816 | \$ | - |
|  |  |  |  |  |  |  |  |  |
|  | 12 | General Office |  |  |  |  |  |  |
| 390 | 12.1 | HVAC | \$ | - | \$ | 90,000 | \$ | $(90,000)$ |
| 390 | 12.2 | Parking Lot Refurbishment | \$ | - | \$ | - | \$ | - |
| 390 | 12.3 | Office Furniture and Equipment | \$ | 7,500 | \$ | - | \$ | 7,500 |
| 390 | 12.4 | Building Upgrades | \$ | 10,000 | \$ | 10,000 | \$ | - |
|  |  | Project Total | \$ | 17,500 | \$ | 100,000 | \$ | $(82,500)$ |
|  |  |  |  |  |  |  |  |  |
|  | 13 | IT equipment |  |  |  |  |  |  |
| 391 | 13.1 | Computers / software | \$ | 12,500 | \$ | 12,500 | \$ | - |
| 391 | 13.2 | Field Laptops | \$ | 2,400 | \$ | 2,400 | \$ | - |
| 391 | 13.3 | Field GPS equipment | \$ | 500 | \$ | 500 | \$ | - |
| 391 | 13.4 | CADD Software replacement | \$ | 25,000 | \$ | 25,000 | \$ | - |
| 391 | 13.5 | Blank | \$ | - | \$ | - | \$ | - |
| 391 | 13.6 | Printer and Computer Replacement | \$ | 7,500 | \$ | 7,500 | \$ | - |
| 391 | 13.7 | Accounting and Billing System Upgrade | \$ | - | \$ | 350,000 | \$ | $(350,000)$ |
| 391 | 13.8 | Enterprise Software (Microsoft and Norton Updates) | \$ | 12,500 | \$ | 12,500 | \$ | - |
| 391 | 13.9 | AS400 Equipment/Software/Licensing Costs | \$ | - | \$ | 60,000 | \$ | $(60,000)$ |
|  |  | Project Total | \$ | 60,400 | \$ | 470,400 | \$ | $(410,000)$ |
|  |  |  |  |  |  |  |  |  |
|  | 14 | Major Projects |  |  |  |  |  |  |
| 369 | 14.1 | Virgil expansion - Main \& Services | \$ | - | \$ | 340,000 | \$ | $(340,000)$ |
| 380 | 14.2 | Blank | \$ | - | \$ | - | \$ | - |
| 383 | 14.3 | Blank | \$ | - | \$ | - | \$ | - |
| 378 | 14.4 | Blank | \$ | - | \$ | - | \$ | - |
| 369 | 14.6 | Cross Town-E Pultney repair 2010 | \$ | 50,000 | \$ | 50,000 | \$ | - |
|  |  | Project Total | \$ | 50,000 | \$ | 390,000 | \$ | $(340,000)$ |
|  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
|  |  |  | \$ | 3,769,838 | \$ | 4,602,338 | \$ | $(832,500)$ |

## CORNING NATURAL GAS CORPORATION CASE 11-G-0280

STAFF'S 2012 CAPITAL BUDGET ADJUSTMENTS

| Acct. No. | Project | Description |  | Staff Total |  | Company Total | Adjustment |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1 | Services |  |  |  |  |  |  |
| 380 | 1.1 | New installations | \$ | 132,470 | \$ | 132,470 | \$ | - |
| 380 | 1.2 | Systematic replacement | \$ | 529,880 | \$ | 529,880 | \$ | - |
| 380 | 1.3 | Other replacement | \$ | - | \$ | - - | \$ | - |
|  |  | Project Total | \$ | 662,350 | \$ | 662,350 | \$ | - |
|  |  |  |  |  |  |  |  |  |
|  | 2 | Meters \& Regulators |  |  |  |  |  |  |
| 383 | 2.1 | Residential regulators | \$ | 17,527 | \$ | 20,380 | \$ | $(2,853)$ |
| 378 | 2.2 | Non-residential regulators | \$ | 3,841 | \$ | 6,486 | \$ | $(2,645)$ |
| 381 | 2.3 | Residential meters | \$ | 65,980 | \$ | 71,330 | \$ | $(5,350)$ |
| 381 | 2.4 | Non-residential meters | \$ | 7,643 | \$ | 7,643 | \$ | - |
| 378 | 2.5 | Rotary / turbine meters | \$ | 35,026 | \$ | 35,026 | \$ | - |
| 378 | 2.6 | Volume correctors | \$ | 11,209 | \$ | 11,209 | \$ | - |
| 378 | 2.7 | Pressure recorders | \$ | 5,297 | \$ | 5,297 | \$ | - |
| 378 | 2.8 | AMR | \$ | 16,216 | \$ | 16,216 | \$ | - |
|  |  | Project Total | \$ | 162,739 | \$ | 173,587 | \$ | $(10,848)$ |
|  |  |  |  |  |  |  |  |  |
|  | 3 | Main - Distribution |  |  |  |  |  |  |
| 376 | 3.1 | New installations | S | - | \$ | 75,000 | \$ | $(75,000)$ |
| 376 | 3.2 | Systematic Replacement | \$ | 941,556 | \$ | 941,556 | \$ | - |
| 376 | 3.3 | Other replacement (Cross Town Line repair) | \$ | 75,000 | \$ | 75,000 | \$ | - |
| 376 | 3.4 | Other replacement (Leak Repair, system upgrades) | \$ | - | \$ | - - | \$ | - |
| 376 | 3.5 | Blank | \$ | - | \$ | - - | \$ |  |
| 376 | 3.6 | Blank | \$ | - | \$ | - - | \$ | - |
| 376 | 3.7 | Blank | \$ | - | \$ | - - | \$ | - |
|  |  | Project Total | \$ | 1,016,556 | \$ | 1,091,556 | \$ | $(75,000)$ |
|  |  |  |  |  |  |  |  |  |
|  | 4 | Main - HP Distribution |  |  |  |  |  |  |
| 376 | 4.1 | New installations | \$ | - | \$ | - | \$ | - |
| 376 | 4.2 | Line 11 | \$ | - | \$ | - - | \$ | - |
| 376 | 4.3 | Bath Reliability - Second Supply | \$ | - | \$ | 4,500,000 | \$ | (4,500,000) |
| 376 | 4.4 | Line 15 Systematic Replacement Program | \$ | 750,000 | \$ | \$ - | \$ | 750,000 |
| 376 | 4.5 | Line 6 Systematic Replacement Program | \$ | 350,000 | \$ | - - | \$ | 350,000 |
| 376 | 4.6 | Blank | \$ | - | \$ | - - | \$ | - |
|  |  | Project Total | \$ | 1,100,000 | \$ | 4,500,000 | \$ | $(3,400,000)$ |
|  |  |  |  |  |  |  |  |  |
|  | 5 | Main - Distribution extension |  |  |  |  |  |  |
| 376 | 5.1 | Blank | \$ | - | \$ | - - | \$ | - |
|  |  | Project Total | \$ | $\cdot$ | \$ | - - | \$ | - |
|  |  |  |  |  |  |  |  |  |
|  | 6 | Cathodic Protection |  |  |  |  |  |  |
| 376 | 6.1 | System Cathodic Protection | \$ | 61,140 | \$ | 61,140 | \$ | - |
| 369 | 6.2 | Blank | \$ | - | \$ | \$ - | \$ | - |
| 376 | 6.3 | Blank | \$ | - | \$ | - - | \$ | - |
|  |  | Project Total | \$ | 61,140 | \$ | 61,140 | \$ | - |
|  |  |  |  |  |  |  |  |  |
|  | 7 | SCADA |  |  |  |  |  |  |
| 391 | 7.1 | Hardware / Software upgrade | \$ | 30,570 | \$ | 30,570 | \$ | - |
| 378 | 7.2 | RTU /other equipment (current installation improvements) | \$ | 45,855 | \$ | 45,855 | \$ | - |
|  |  | Project Total | \$ | 76,425 | \$ | 76,425 | \$ | - |
|  |  |  |  |  |  |  |  |  |
|  | 8 | M\&R Stations |  |  |  |  |  |  |
| 378 | 8.1 | M\&R Station replacement | \$ | 152,850 | \$ | 152,850 | \$ | - |
| 378 | 8.2 | Blank | \$ | - | \$ | \$ - | \$ | - |
| 378 | 8.3 | Blank | \$ | - | \$ | - - | \$ | - |
| 378 | 8.4 | Blank | \$ | - | \$ | - - | \$ | - |
| 378 | 8.5 | Blank | \$ | - | \$ | - - | \$ | - |
|  |  | Project Total | S | 152,850 | \$ | 152,850 | \$ | - |
|  |  |  |  |  |  |  |  |  |

Exhibit___(GRP-9)
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## CORNING NATURAL GAS CORPORATION CASE 11-G-0280

STAFF'S 2012 CAPITAL BUDGET ADJUSTMENTS

| Acct. No. | Project | Description |  | Staff Total |  | pany Total | Adjustment |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 9 | Transportation Equipment |  |  |  |  |  |  |
| 392 | 9.1 | Replace small vehicle | \$ | 110,052 | \$ | 110,052 | \$ | - |
| 392 | 9.2 | Replace Line Truck | \$ | - | \$ | - | \$ | - |
| 392 | 9.3 | Heavy Equip Trailer | \$ | - | \$ |  | \$ | - |
| 392 | 9.4 | Replace Backhoe | \$ | - | \$ | - | \$ | - |
| 392 | 9.5 | Purchase Mini Excav | \$ | 55,000 | \$ | 55,000 | \$ | - |
| 392 | 9.6 | Replace small vehicle | \$ | - | \$ | - | \$ | - |
| 392 | 9.7 | Replace line tech truck | \$ | - | \$ | - | \$ | - |
| 392 | 9.8 | Replace dump truck | \$ | - | \$ | - | \$ | - |
| 392 | 9.9 | Replace backhoe | \$ | - | \$ | - | \$ | - |
| 392 | 9.10 | Replace 1987 line truck | \$ | - | \$ | - | \$ | - |
| 392 | 9.11 | Heavy Equipment Trailer | \$ | - | \$ | - | \$ | - |
| 392 | 9.12 | Replace line truck | \$ | - | \$ | - | \$ | - |
| 392 | 9.13 | ATV w/ Trailer | \$ | 18,000 | \$ | 18,000 | \$ | - |
|  |  | Project Total | \$ | 79,756 | \$ | 183,052 | \$ | $(103,296)$ |
|  |  |  |  |  |  |  |  |  |
|  | 10 | Tools and Equipment |  |  |  |  |  |  |
| 394 | 10.1 | Pipeline Locator | \$ | 4,076 | \$ | 4,076 | \$ | - |
| 394 | 10.2 | HFI | \$ | 4,586 | \$ | 4,586 | \$ | - |
| 394 | 10.3 | CGI | \$ | 10,394 | \$ | 10,394 | \$ | - |
| 394 | 10.4 | Portable Shoring | \$ | 14,266 | \$ | 14,266 | \$ | - |
| 394 | 10.5 | CP Data Logger | \$ | 15,285 | \$ | 15,285 | \$ | - |
| 394 | 10.6 | Blank | \$ | - | \$ | - | \$ | - |
| 394 | 10.7 | Electro fusion Controller | \$ | - | \$ | - | \$ | - |
| 394 | 10.8 | Mueller (8" to 12") machine | \$ | - | \$ | - | \$ | - |
| 394 | 10.9 | Health HFI | \$ | - | \$ | - | \$ | - |
| 394 | 10.10 | Engineering survey equipment | \$ | - | \$ | - | \$ | - |
| 394 | 10.11 | Blank | \$ | - | \$ | - | \$ | - |
| 394 | 10.12 | GPS Survey Equipment | \$ | - | \$ | - | \$ | - |
| 394 | 10.13 | Welding Machine | \$ | - | \$ | - | \$ | - |
| 394 | 10.14 | Blank | \$ | - | \$ | - | \$ | - |
| 394 | 10.15 | Blank | \$ | - | \$ | - | \$ | - |
| 394 | 10.16 | Lighting | \$ | 2,038 | \$ | 2,038 | \$ | - |
| 394 | 10.17 | Stopper Replacement Equipment | \$ | - | \$ | - | \$ | - |
| 394 | 10.18 | Misc.Tools and Equipment | \$ | 25,000 | \$ | 25,000 | \$ | - |
|  |  | Project Total | \$ | 50,644 | \$ | 75,644 | \$ | $(25,000)$ |
|  |  |  |  |  |  |  |  |  |
|  | 11 | Safety Equipment |  |  |  |  |  |  |
| 394 | 11.1 | PPE | \$ | 25,475 | \$ | 25,475 | \$ | - |
| 394 | 11.2 | Flash fire coveralls / hood / gloves | \$ | 2,250 | \$ | 2,250 | \$ | - |
| 394 | 11.3 | Supplied Air Respirator | \$ | - | \$ | - | \$ | - |
| 394 | 11.4 | Confined space gas monitor | \$ | - | \$ | - | \$ | - |
|  |  | Project Total | \$ | 27,725 | \$ | 27,725 | \$ | - |
|  |  |  |  |  |  |  |  |  |
|  | 12 | General Office |  |  |  |  |  |  |
| 390 | 12.1 | HVAC | \$ | - | \$ | 50,000 | \$ | $(50,000)$ |
| 390 | 12.2 | Parking Lot Refurbishment | \$ | - | \$ | 35,000 | \$ | $(35,000)$ |
| 390 | 12.3 | Office Furniture and Equipment | \$ | 7,643 | \$ | 7,643 | \$ | - |
| 390 | 12.4 | Building Upgrades-Security | \$ | 15,285 | \$ | 15,285 | \$ | - |
|  |  | Project Total | \$ | 22,928 | \$ | 107,928 | \$ | $(85,000)$ |
|  |  |  |  |  |  |  |  |  |
|  | 13 | IT equipment |  |  |  |  |  |  |
| 391 | 13.1 | Computers / software | \$ | 25,475 | \$ | 25,475 | \$ | - |
| 391 | 13.2 | Field Laptops | \$ | 2,446 | \$ | 2,446 | \$ | - |
| 391 | 13.3 | Field GPS equipment | \$ | 510 | \$ | 510 | \$ | - |
| 391 | 13.4 | CADD Software replacement | \$ | 5,000 | \$ | 5,000 | \$ | - |
| 391 | 13.5 | Blank | \$ | - | \$ | - | \$ | - |
| 391 | 13.6 | Printer and Computer Replacement | \$ | 7,643 | \$ | 7,643 | \$ | - |
| 391 | 13.7 | Accounting and Billing System Upgrade | \$ | - | \$ | 350,000 | \$ | $(350,000)$ |
| 391 | 13.8 | Enterprise Software (Microsoft and Norton Updates) | \$ | 12,738 | \$ | 12,738 | \$ | - |
| 391 | 13.9 | AS400 Equipment/Software/Licensing Costs | \$ | - | \$ | - | \$ | - |
|  |  | Project Total | \$ | 53,810 | \$ | 403,810 | \$ | $(350,000)$ |
|  |  |  |  |  |  |  |  |  |
|  | 14 | Major Projects |  |  |  |  |  |  |
| 369 | 14.1 | Virgil expansion - Main \& services | \$ | - | \$ | 150,000 | \$ | $(150,000)$ |
| 380 | 14.2 | Blank | \$ | - | \$ | - | \$ | - |
| 383 | 14.3 | Blank | \$ | - | \$ | - | \$ | - |
| 378 | 14.4 | Blank | \$ | - | \$ | - | \$ | - |
| 369 | 14.5 | Blank | \$ | - | \$ | - | \$ | - |
|  |  | Project Total | \$ | - | \$ | 150,000 | \$ | $(150,000)$ |
|  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
|  |  |  | \$ | 3,466,922 | \$ | 7,666,067 | \$ | (4,199,145) |

Exhibit (GRP-9)
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## CORNING NATURAL GAS CORPORATION CASE 11-G-0280

STAFF'S 2013 CAPITAL BUDGET ADJUSTMENTS

| Acct. No. | Project | Description |  | Staff Total |  | Company Total | Adjustment |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1 | Services |  |  |  |  |  |  |
| 380 | 1.1 | New installations | \$ | 270,239 | \$ | \$ 270,239 | \$ | - |
| 380 | 1.2 | Systematic replacement | \$ | 540,478 | \$ | 540,478 | \$ | - |
| 380 | 1.3 | Other replacement | \$ |  | \$ | \$ | \$ | - |
|  |  | Project Total | \$ | 810,716 | \$ | \$ 810,716 | \$ | - |
|  |  |  |  |  |  |  |  |  |
|  | 2 | Meters \& Regulators |  |  |  |  |  |  |
| 383 | 2.1 | Residential regulators | \$ | 17,877 | \$ | 20,788 | \$ | $(2,910)$ |
| 378 | 2.2 | Non-residential regulators | \$ | 3,841 | \$ | \$ 6,616 | \$ | $(2,775)$ |
| 381 | 2.3 | Residential meters | \$ | 67,300 | \$ | 72,757 | \$ | $(5,457)$ |
| 381 | 2.4 | Non-residential meters | \$ | 7,795 | \$ | 7,795 | \$ | - |
| 378 | 2.5 | Rotary / turbine meters | \$ | 35,727 | \$ | 35,727 | \$ | - |
| 378 | 2.6 | Volume correctors | \$ | 11,433 | \$ | 11,433 | \$ | - |
| 378 | 2.7 | Pressure recorders | \$ | 5,403 | \$ | 5,403 | \$ |  |
| 378 | 2.8 | AMR | \$ | 16,540 | \$ | 16,540 | \$ | - |
|  |  | Project Total | \$ | 165,917 | \$ | 177,059 | \$ | (11,142) |
|  |  |  |  |  |  |  |  |  |
|  | 3 | Main - Distribution |  |  |  |  |  |  |
| 376 | 3.1 | New installations | \$ | - | \$ | 120,000 | \$ | $(120,000)$ |
| 376 | 3.2 | Systematic Replacement | \$ | 960,387 | \$ | 960,387 | \$ | - |
| 376 | 3.3 | Other replacement (Cross Town Line repair) | \$ | 83,150 | \$ | 83,150 | \$ | - |
| 376 | 3.4 | Other replacement (Leak Repair, system upgrades) | \$ | - | \$ | \$ | \$ | - |
| 376 | 3.5 | Blank | \$ | - | \$ | \$ | \$ | - |
| 376 | 3.6 | Blank | \$ | - | \$ | \$ | \$ | - |
| 376 | 3.7 | Blank | \$ | - | \$ | \$ | \$ | - |
|  |  | Project Total | \$ | 1,043,538 | \$ | \$ 1,163,538 | \$ | $(120,000)$ |
|  |  |  |  |  |  |  |  |  |
|  | 4 | Main - HP Distribution |  |  |  |  |  |  |
| 376 | 4.1 | New installations | \$ | - | \$ | \$ | \$ | - |
| 376 | 4.2 | Blank | \$ | - | \$ | \$ - | \$ | - |
| 376 | 4.3 | Bath Reliability - Second Supply | \$ | 4,500,000 | \$ | \$ - | \$ | 4,500,000 |
| 376 | 4.4 | Line 15 Systematic Replacement Program | \$ | - | \$ | 750,000 | \$ | $(750,000)$ |
| 376 | 4.5 | Line 6 Systematic Replacement Program | \$ | - | \$ | 500,000 | \$ | $(500,000)$ |
| 376 | 4.6 | Blank | \$ | - | \$ | - - | \$ | - |
|  |  | Project Total | \$ | 4,500,000 | \$ | 1,250,000 | \$ | 3,250,000 |
|  |  |  |  |  |  |  |  |  |
|  | 5 | Main - Distribution extension |  |  |  |  |  |  |
| 376 | 5.1 | Blank | \$ | - | \$ | \$ - | \$ | - |
|  |  | Project Total | \$ | - | \$ | S - | \$ | - |
|  |  |  |  |  |  |  | \$ | - |
|  | 6 | Cathodic Protection |  |  |  |  | \$ | - |
| 376 | 6.1 | System Cathodic Protection | \$ | 62,363 | \$ | 62,363 | \$ | - |
| 369 | 6.2 | Blank | \$ | - | \$ | \$ - | \$ | - |
| 376 | 6.3 | Blank | \$ | - | \$ | \$ - | \$ | - |
|  |  | Project Total | \$ | 62,363 | \$ | 62,363 | \$ | - |
|  |  |  |  |  |  |  |  | - |
|  | 7 | SCADA |  |  |  |  | \$ | - |
| 391 | 7.1 | Hardware / Software upgrade | \$ | 31,181 | \$ | 31,181 | \$ | - |
| 378 | 7.2 | RTU /other equipment (current installation improvements) | \$ | 46,772 | \$ | 46,772 | \$ | - |
|  |  | Project Total | \$ | 77,954 | \$ | 77,954 | \$ | - |
|  |  |  |  |  |  |  |  |  |
|  | 8 | M \& R Stations |  |  |  |  | \$ | - |
| 378 | 8.1 | M\&R Station replacement | \$ | 77,954 | \$ | 77,954 | \$ | - |
| 378 | 8.2 | Blank | \$ | - | \$ | \$ - | \$ | - |
| 378 | 8.3 | Blank | \$ | - | \$ | \$ - | \$ | - |
| 378 | 8.4 | Blank | \$ | - | \$ | \$ - | \$ | - |
| 378 | 8.5 | Replace Whiskey Creek Station | \$ | 200,000 | \$ | 200,000 | \$ | - |
|  |  | Project Total | \$ | 277,954 | \$ | 277,954 | \$ | - |
|  |  |  |  |  |  |  |  |  |

Exhibit___(GRP-9)

## CORNING NATURAL GAS CORPORATION CASE 11-G-0280

STAFF'S 2013 CAPITAL BUDGET ADJUSTMENTS

| Acct. No. | Project | Description |  | Staff Total |  | pany Total | Adjustment |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 9 | Transportation Equipment |  |  |  |  |  |  |
| 392 | 9.1 | Replace small vehicle | \$ | 84,190 | \$ | 84,190 | \$ | - |
| 392 | 9.2 | Replace Line Truck | \$ | 100,000 | \$ | 100,000 | \$ | - |
| 392 | 9.3 | Heavy Equip Trailer | \$ | - | \$ | - | \$ | - |
| 392 | 9.4 | Replace Backhoe | \$ | - | \$ | - | \$ | - |
| 392 | 9.5 | Purchase Mini Excav | \$ | - | \$ | - | \$ | - |
| 392 | 9.6 | Replace small vehicle | \$ | - | \$ | - | \$ | - |
| 392 | 9.7 | Replace line tech truck | \$ | - | \$ | - | \$ | - |
| 392 | 9.8 | Replace dump truck | \$ | - | \$ | - | \$ | - |
| 392 | 9.9 | Replace backhoe | \$ | - | \$ |  | \$ | - |
| 392 | 9.10 | Replace 1987 line truck | \$ | - | \$ | - | \$ | - |
| 392 | 9.11 | Heavy Equipment Trailer | \$ | - | \$ |  | \$ | - |
| 392 | 9.12 | Replace line truck | \$ | - | \$ | - | \$ | - |
| 392 | 9.13 | Replace 1996 line truck | \$ | - | \$ | - | \$ | - |
|  |  | Project Total | \$ | 79,750 | \$ | 184,190 | \$ | $(104,440)$ |
|  |  |  |  |  |  |  |  |  |
|  | 10 | Tools and Equipment |  |  |  |  |  |  |
| 394 | 10.1 | Pipeline Locator | \$ | 4,158 | \$ | 4,158 | \$ | - |
| 394 | 10.2 | HFI | \$ | - | \$ | - | \$ | - |
| 394 | 10.3 | CGI | \$ | 10,602 | \$ | 10,602 | \$ | - |
| 394 | 10.4 | Portable Shoring | \$ | - | \$ | - | \$ | - |
| 394 | 10.5 | CP Data Logger | \$ | - | \$ | - | \$ | - |
| 394 | 10.6 | Blank | \$ | - | \$ | - | \$ | - |
| 394 | 10.7 | Electro fusion Controller | \$ | - | \$ | - | \$ | - |
| 394 | 10.8 | Mueller (8" to 12") machine | \$ | 15,591 | \$ | 15,591 | \$ | - |
| 394 | 10.9 | Health HFI | \$ | - | \$ | - | \$ | - |
| 394 | 10.10 | Engineering survey equipment | \$ | - | \$ | - | \$ | - |
| 394 | 10.11 | Blank | \$ | - | \$ | - | \$ | - |
| 394 | 10.12 | GPS Survey Equipment | \$ | - | \$ | - | \$ | - |
| 394 | 10.13 | Welding Machine | \$ | - | \$ | - | \$ | - |
| 394 | 10.14 | Blank | \$ | - | \$ | - | \$ | - |
| 394 | 10.15 | Blank | \$ | - | \$ | - | \$ | - |
| 394 | 10.16 | Lighting | \$ | - | \$ | - | \$ | - |
| 394 | 10.17 | Stopper Replacement Equipment | \$ | - | \$ | - | \$ | - |
| 394 | 10.18 | Misc.Tools and Equipment | \$ | 27,500 | \$ | 27,500 | \$ | - |
|  |  | Project Total | \$ | 50,643 | \$ | 57,850 | \$ | $(7,207)$ |
|  |  |  |  |  |  |  |  |  |
|  | 11 | Safety Equipment |  |  |  |  |  |  |
| 394 | 11.1 | PPE | \$ | 23,386 | \$ | 23,386 | \$ | - |
| 394 | 11.2 | Flash fire coveralls / hood / gloves | \$ | 2,295 | \$ | 2,295 | \$ | - |
| 394 | 11.3 | Supplied Air Respirator | \$ | - | \$ | - | \$ | - |
| 394 | 11.4 | Confined space gas monitor | \$ | - | \$ | - | \$ | - |
|  |  | Project Total | \$ | 25,681 | \$ | 25,681 | \$ | - |
|  |  |  |  |  |  |  |  |  |
|  | 12 | General Office |  |  |  |  |  |  |
| 390 | 12.1 | HVAC | \$ | - | \$ | 50,000 | \$ | $(50,000)$ |
| 390 | 12.2 | Parking Lot Refurbishment | \$ | - | \$ | 35,000 | \$ | $(35,000)$ |
| 390 | 12.3 | Office Furniture and Equipment | \$ | 7,795 | \$ | 7,795 | \$ | - |
| 390 | 12.4 | Building Upgrades | \$ | 22,500 | \$ | 22,500 | \$ | - |
|  |  | Project Total | \$ | 30,295 | \$ | 115,295 | \$ | $(85,000)$ |
|  |  |  |  |  |  |  |  |  |
|  | 13 | IT equipment |  |  |  |  |  |  |
| 391 | 13.1 | Computers / software | \$ | 25,985 | \$ | 25,985 | \$ | - |
| 391 | 13.2 | Field Laptops | \$ | 2,495 | \$ | 2,495 | \$ | - |
| 391 | 13.3 | Field GPS equipment | \$ | - | \$ | - | \$ | - |
| 391 | 13.4 | CADD Software replacement | \$ | - | \$ | - | \$ | - |
| 391 | 13.5 | Blank | \$ | - | \$ | - | \$ | - |
| 391 | 13.6 | Printer and Computer Replacement | \$ | 7,795 | \$ | 7,795 | \$ | - |
| 391 | 13.7 | Accounting and Billing System Upgrade | \$ | - | \$ | 150,000 | \$ | $(150,000)$ |
| 391 | 13.8 | Enterprise Software (Microsoft and Norton Updates) | \$ | 12,992 | \$ | 12,992 | \$ | - |
| 391 | 13.9 | AS400 Equipment/Software/Licensing Costs | \$ | 62,363 | \$ | 62,363 | \$ | - |
|  |  | Project Total | \$ | 111,629 | \$ | 261,629 | \$ | $(150,000)$ |
|  |  |  |  |  |  |  |  |  |
|  | 14 | Major Projects |  |  |  |  |  |  |
| 369 | 14.1 | Blank | \$ | - | \$ | - | \$ | - |
| 380 | 14.2 | Blank | \$ | - | \$ | - | \$ | - |
| 383 | 14.3 | Blank | \$ | - | \$ | - | \$ | - |
| 378 | 14.4 | Blank | \$ | - | \$ | - | \$ | - |
| 369 | 14.5 | Blank | \$ | - | \$ | - | \$ | - |
|  |  | Project Total | \$ | - | \$ | - | \$ | - |
|  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
|  |  |  | \$ | 7,236,439 | \$ | 4,464,228 | \$ | 2,772,211 |

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## CORNING NATURAL GAS CORPORATION CASE 11-G-0280

STAFF'S 2014 CAPITAL BUDGET ADJUSTMENTS

| Acct. No. | Project | Description |  | Staff Total |  | Company Total |  | Adjustment |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1 | Services |  |  |  |  |  |  |
| 380 | 1.1 | New installations | \$ | 275,914 | \$ | 275,914 | \$ | - |
| 380 | 1.2 | Systematic replacement | \$ | 551,828 | \$ | 551,828 | \$ | - |
| 380 | 1.3 | Other replacement | \$ | - | \$ | \$ - | \$ | - |
|  |  | Project Total | \$ | 827,741 | \$ | 827,741 | \$ | - |
|  |  |  |  |  |  |  |  |  |
|  | 2 | Meters \& Regulators |  |  |  |  |  |  |
| 383 | 2.1 | Residential regulators | \$ | 18,253 | \$ | 21,224 | \$ | $(2,971)$ |
| 378 | 2.2 | Non-residential regulators | \$ | 3,841 | \$ | 6,755 | \$ | $(2,914)$ |
| 381 | 2.3 | Residential meters | \$ | 68,713 | \$ | 74,284 | \$ | $(5,571)$ |
| 381 | 2.4 | Non-residential meters | \$ | 7,959 | \$ | 7,959 | \$ | - |
| 378 | 2.5 | Rotary / turbine meters | \$ | 36,477 | \$ | 36,477 | \$ | - |
| 378 | 2.6 | Volume correctors | \$ | 11,673 | \$ | 11,673 | \$ | - |
| 378 | 2.7 | Pressure recorders | \$ | 5,517 | \$ | 5,517 | \$ | - |
| 378 | 2.8 | AMR | \$ | 16,888 | \$ | 16,888 | \$ | - |
|  |  | Project Total | \$ | 169,321 | \$ | 180,777 | \$ | $(11,456)$ |
|  |  |  |  |  |  |  |  |  |
|  | 3 | Main - Distribution |  |  |  |  |  |  |
| 376 | 3.1 | New installations | \$ | - | \$ | 125,000 | \$ | $(125,000)$ |
| 376 | 3.2 | Systematic Replacement | \$ | 980,555 | \$ | 980,555 | \$ | - |
| 376 | 3.3 | Other replacement (Cross Town Line repair) | \$ | 84,897 | \$ | 84,897 | \$ |  |
| 376 | 3.4 | Other replacement (Leak Repair, system upgrades) | \$ | - | \$ | \$ - | \$ |  |
| 376 | 3.5 | Blank | \$ | - | \$ | \$ - | \$ | - |
| 376 | 3.6 | Blank | \$ | - | \$ | \$ - | \$ |  |
| 376 | 3.7 | Blank | \$ | - | \$ | \$ - | \$ | - |
|  |  | Project Total | \$ | 1,065,452 |  | 1,190,452 | \$ | $(125,000)$ |
|  |  |  |  |  |  |  |  |  |
|  | 4 | Main - HP Distribution |  |  |  |  |  |  |
| 376 | 4.1 | New installations | \$ | - | \$ | \$ - | \$ | - |
| 376 | 4.2 | Blank | \$ | - | \$ | \$ - | \$ | - |
| 376 | 4.3 | Blank | \$ | - | \$ | \$ - | \$ | - |
| 376 | 4.4 | Line 15 Systematic Replacement Program | \$ | 787,500 | \$ | 787,500 | \$ | - |
| 376 | 4.5 | Line 6 Systematic Replacement Program | \$ | 350,000 | \$ | 525,000 | \$ | $(175,000)$ |
| 376 | 4.6 | Blank | \$ | - | \$ | \$ - | \$ | - |
|  |  | Project Total | \$ | 1,137,500 | \$ | 1,312,500 | \$ | $(175,000)$ |
|  |  |  |  |  |  |  |  |  |
|  | 5 | Main - Distribution extension |  |  |  |  |  |  |
| 376 | 5.1 | Blank | \$ | - | \$ | \$ - | \$ | - |
|  |  | Project Total | \$ | - | \$ | 5 - | \$ | - |
|  |  |  |  |  |  |  |  |  |
|  | 6 | Cathodic Protection |  |  |  |  |  |  |
| 376 | 6.1 | System Cathodic Protection | \$ | 63,672 | \$ | 63,672 | \$ | - |
| 369 | 6.2 | Blank | \$ | - | \$ | \$ - |  | - |
| 376 | 6.3 | Blank | \$ | - | \$ | \$ - | \$ | - |
|  |  | Project Total | \$ | 63,672 | \$ | 63,672 |  | - |
|  |  |  |  |  |  |  |  |  |
|  | 7 | SCADA |  |  |  |  |  |  |
| 391 | 7.1 | Hardware / Software upgrade | \$ | 31,836 | \$ | 31,836 | \$ | - |
| 378 | 7.2 | RTU /other equipment (current installation improvements) | \$ | 47,754 | \$ | 47,754 | \$ | - |
|  |  | Project Total | \$ | 79,591 | \$ | 79,591 | \$ | - |
|  |  |  |  |  |  |  |  |  |
|  | 8 | M\&R Stations |  |  |  |  |  |  |
| 378 | 8.1 | M\&R Station replacement | \$ | 132,651 | \$ | 132,651 | \$ | - |
| 378 | 8.2 | Blank | \$ | - |  | \$ - | \$ | - |
| 378 | 8.3 | Blank | \$ | - | \$ | S - | \$ | - |
| 378 | 8.4 | Blank | \$ | - | \$ | \$ - | \$ | - |
| 378 | 8.5 | Blank | \$ | - | \$ | 5 - | \$ | - |
|  |  | Project Total | \$ | 132,651 | \$ | 132,651 | \$ | - |
|  |  |  |  |  |  |  |  |  |

Exhibit___(GRP-9)

## CORNING NATURAL GAS CORPORATION CASE 11-G-0280

STAFF'S 2014 CAPITAL BUDGET ADJUSTMENTS

| Acct. No. | Project | Description | Staff Total |  | Company Total |  | Adjustment |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 9 | Transportation Equipment |  |  |  |  |  |  |
| 392 | 9.1 | Replace small vehicle | \$ | 85,958 | \$ | 85,958 | \$ | - |
| 392 | 9.2 | Replace Line Truck | \$ | - | \$ | - | \$ | - |
| 392 | 9.3 | Heavy Equip Trailer | \$ | - | \$ | - | \$ | - |
| 392 | 9.4 | Replace Backhoe | \$ | - | \$ | - | \$ | - |
| 392 | 9.5 | Purchase Mini Excav | \$ | - | \$ | - | \$ | - |
| 392 | 9.6 | Replace small vehicle | \$ | - | \$ | - | \$ | - |
| 392 | 9.7 | Replace line tech truck | \$ | - | \$ | - | \$ | - |
| 392 | 9.8 | Replace dump truck | \$ | - | \$ | - | \$ | - |
| 392 | 9.9 | Replace backhoe | \$ | - | \$ | - | \$ | - |
| 392 | 9.10 | Replace 1987 line truck | \$ | - | \$ | - | \$ | - |
| 392 | 9.11 | Heavy Equipment Trailer | \$ | - | \$ | - | \$ | - |
| 392 | 9.12 | Vacumn Excavator | \$ | 150,000 | \$ | 150,000 | \$ | - |
| 392 | 9.13 | Replace 1996 line truck | \$ | - | \$ | - | \$ | - |
|  |  | Project Total | \$ | 79,750 | \$ | 235,958 | \$ | $(156,208)$ |
|  |  |  |  |  |  |  |  |  |
|  | 10 | Tools and Equipment |  |  |  |  |  |  |
| 394 | 10.1 | Pipeline Locator | \$ | 4,245 | \$ | 4,245 | \$ | - |
| 394 | 10.2 | HFI | \$ | - | \$ | - | \$ | - |
| 394 | 10.3 | CGI | \$ | 10,824 | \$ | 10,824 | \$ | - |
| 394 | 10.4 | Portable Shoring | \$ | - | \$ | - | \$ | - |
| 394 | 10.5 | CP Data Logger | \$ | - | \$ | - | \$ | - |
| 394 | 10.6 | Blank | \$ | - | \$ | - | \$ | - |
| 394 | 10.7 | Electro fusion Controller | \$ | 5,969 | \$ | 5,969 | \$ | - |
| 394 | 10.8 | Mueller (8" to 12") machine | \$ | - | \$ | - | \$ | - |
| 394 | 10.9 | Health HFI | \$ | 3,024 | \$ | 3,024 | \$ | - |
| 394 | 10.10 | Engineering survey equipment | \$ | - | \$ | - | \$ | - |
| 394 | 10.11 | Blank | \$ | - | \$ | - | \$ | - |
| 394 | 10.12 | GPS Survey Equipment | \$ | - | \$ | - | \$ | - |
| 394 | 10.13 | Welding Machine | \$ | - | \$ | - | \$ | - |
| 394 | 10.14 | Blank | \$ | - | \$ | - | \$ | - |
| 394 | 10.15 | Blank | \$ | - | \$ | - | \$ | - |
| 394 | 10.16 | Lighting | \$ | - | \$ | - | \$ | - |
| 394 | 10.17 | Stopper Replacement Equipment | \$ | - | \$ | - | \$ | - |
| 394 | 10.18 | Misc.Tools and Equipment | \$ | 30,000 | \$ | 30,000 | \$ | - |
|  |  | Project Total | \$ | 50,643 | \$ | 54,063 | \$ | $(3,420)$ |
|  |  |  |  |  |  |  |  |  |
|  | 11 | Safety Equipment |  |  |  |  |  |  |
| 394 | 11.1 | PPE | \$ | 23,877 | \$ | 23,877 | \$ | - |
| 394 | 11.2 | Flash fire coveralls / hood / gloves | \$ | 2,343 | \$ | 2,343 | \$ | - |
| 394 | 11.3 | Supplied Air Respirator | \$ | - | \$ | - | \$ | - |
| 394 | 11.4 | Confined space gas monitor | \$ | - | \$ | - | \$ | - |
|  |  | Project Total | \$ | 26,220 | \$ | 26,220 | \$ | - |
|  |  |  |  |  |  |  |  |  |
|  | 12 | General Office |  |  |  |  |  |  |
| 390 | 12.1 | HVAC | \$ | - | \$ | - | \$ | - |
| 390 | 12.2 | Parking Lot Refurbishment | \$ | - | \$ | 35,000 | \$ | $(35,000)$ |
| 390 | 12.3 | Office Furniture and Equipment | \$ | 7,959 | \$ | 7,959 | \$ | - |
| 390 | 12.4 | Building Upgrades | \$ | 25,000 | \$ | 25,000 | \$ | - |
|  |  | Project Total | \$ | 32,959 | \$ | 67,959 | \$ | $(35,000)$ |
|  |  |  |  |  |  |  |  |  |
|  | 13 | IT equipment |  |  |  |  |  |  |
| 391 | 13.1 | Computers / software | \$ | 26,530 | \$ | 26,530 | \$ | - |
| 391 | 13.2 | Field Laptops | \$ | 2,547 | \$ | 2,547 | \$ | - |
| 391 | 13.3 | Field GPS equipment | \$ | 531 | \$ | 531 | \$ | - |
| 391 | 13.4 | CADD Software replacement | \$ | - | \$ | - | \$ | - |
| 391 | 13.5 | Blank | \$ | - | \$ | - | \$ | - |
| 391 | 13.6 | Printer and Computer Replacement | \$ | 7,959 | \$ | 7,959 | \$ | - |
| 391 | 13.7 | Accounting and Billing System Upgrade | \$ | - | \$ | 150,000 | \$ | $(150,000)$ |
| 391 | 13.8 | Enterprise Software (Microsoft and Norton Updates) | \$ | 13,265 | \$ | 13,265 | \$ | - |
| 391 | 13.9 | AS400 Equipment/Software/Licensing Costs | \$ | 63,672 | \$ | 63,672 | \$ | - |
|  |  | Project Total | \$ | 114,504 | \$ | 264,504 | \$ | $(150,000)$ |
|  |  |  |  |  |  |  |  |  |
|  | 14 | Major Projects |  |  |  |  |  |  |
| 369 | 14.1 | Blank | \$ | - | \$ | - | \$ | - |
| 380 | 14.2 | Blank | \$ | - | \$ | - | \$ | - |
| 383 | 14.3 | Blank | \$ | - | \$ | - | \$ | - |
| 378 | 14.4 | Blank | \$ | - | \$ | - | \$ | - |
| 369 | 14.5 | Blank | \$ | - | \$ | - | \$ | - |
|  |  | Project Total | \$ | - | \$ | - | \$ | - |
|  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
|  |  |  | \$ | 3,780,004 | \$ | 4,436,088 | \$ | $(656,085)$ |

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## CORNING NATURAL GAS CORPORATION CASE 11-G-0280

STAFF'S 2015 CAPITAL BUDGET ADJUSTMENTS

| Acct. No. | Project | Description | Staff Total |  | Company Total |  | Adjustment |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1 | Services |  |  |  |  |  |  |
| 380 | 1.1 | New installations | \$ | 281,984 | \$ | 281,984 | \$ | - |
| 380 | 1.2 | Systematic replacement | \$ | 563,968 | \$ | 563,968 | \$ | - |
| 380 | 1.3 | Other replacement | \$ | - | \$ | - | \$ | - |
|  |  | Project Total | \$ | 845,952 | \$ | 845,952 | \$ | - |
|  |  |  |  |  |  |  |  |  |
|  | 2 | Meters \& Regulators |  |  |  |  |  |  |
| 383 | 2.1 | Residential regulators | \$ | 18,654 | \$ | 21,691 | \$ | $(3,037)$ |
| 378 | 2.2 | Non-residential regulators | \$ | 3,841 | \$ | 6,904 | \$ | $(3,062)$ |
| 381 | 2.3 | Residential meters | \$ | 70,225 | \$ | 75,919 | \$ | $(5,694)$ |
| 381 | 2.4 | Non-residential meters | \$ | 8,134 | \$ | 8,134 | \$ | - |
| 378 | 2.5 | Rotary / turbine meters | \$ | 37,280 | \$ | 37,280 | \$ | - |
| 378 | 2.6 | Volume correctors | \$ | 11,930 | \$ | 11,930 | \$ | - |
| 378 | 2.7 | Pressure recorders | \$ | 5,638 | \$ | 5,638 | \$ |  |
| 378 | 2.8 | AMR | \$ | 17,259 | \$ | 17,259 | \$ | - |
|  |  | Project Total | \$ | 172,961 | \$ | 184,754 | \$ | $(11,793)$ |
|  |  |  |  |  |  |  |  |  |
|  | 3 | Main - Distribution |  |  |  |  |  |  |
| 376 | 3.1 | New installations | \$ | - | \$ | 130,000 | \$ | $(130,000)$ |
| 376 | 3.2 | Systematic Replacement | \$ | 1,034,880 | \$ | 1,034,880 | \$ | - |
| 376 | 3.3 | Other replacement (Cross Town Line repair) | \$ | 86,764 | \$ | 86,764 | \$ | - |
| 376 | 3.4 | Other replacement (Leak Repair, system upgrades) | \$ | - | \$ | - | \$ | - |
| 376 | 3.5 | Blank | \$ | - | \$ | - | \$ | - |
| 376 | 3.6 | Blank | \$ | - | \$ | - | \$ | - |
| 376 | 3.7 | Blank | \$ | - | \$ | - | \$ | - |
|  |  | Project Total | \$ | 1,121,644 | \$ | 1,251,644 | \$ | $(130,000)$ |
|  |  |  |  |  |  |  |  |  |
|  | 4 | Main - HP Distribution |  |  |  |  |  |  |
| 376 | 4.1 | New installations | \$ | - | \$ | - | \$ | - |
| 376 | 4.2 | Blank | \$ | - | \$ | - | \$ | - |
| 376 | 4.3 | Blank | \$ | - | \$ | - | \$ | - |
| 376 | 4.4 | Line 15 Systematic Replacement Program | \$ | 826,875 | \$ | 826,875 | \$ | - |
| 376 | 4.5 | Line 6 Systematic Replacement Program | \$ | 350,000 | \$ | 551,250 | \$ | $(201,250)$ |
| 376 | 4.6 | Blank | \$ | - | \$ | - | \$ | - |
|  |  | Project Total | \$ | 1,176,875 | \$ | 1,378,125 | \$ | $(201,250)$ |
|  |  |  |  |  |  |  |  |  |
|  | 5 | Main - Distribution extension |  |  |  |  |  |  |
| 376 | 5.1 | Blank | \$ | - | \$ | - | \$ | - |
|  |  | Project Total | \$ | - | \$ | - | \$ | - |
|  |  |  |  |  |  |  |  |  |
|  | 6 | Cathodic Protection |  |  |  |  |  |  |
| 376 | 6.1 | System Cathodic Protection | \$ | 65,073 | \$ | 65,073 | \$ | - |
| 369 | 6.2 | Blank | \$ | - | \$ | - | \$ | - |
| 376 | 6.3 | Blank | \$ | - | \$ | - | \$ | - |
|  |  | Project Total | \$ | 65,073 | \$ | 65,073 | \$ | - |
|  |  |  |  |  |  |  |  |  |
|  | 7 | SCADA |  |  |  |  |  |  |
| 391 | 7.1 | Hardware / Software upgrade | \$ | - | \$ | - | \$ | - |
| 378 | 7.2 | RTU /other equipment (current installation improvements) | \$ | 32,537 | \$ | 32,537 | \$ | - |
|  |  | Project Total | \$ | 32,537 | \$ | 32,537 | \$ | - |
|  |  |  |  |  |  |  |  |  |
|  | 8 | M \& R Stations |  |  |  |  |  |  |
| 378 | 8.1 | M\&R Station replacement | \$ | 135,569 | \$ | 135,569 | \$ | - |
| 378 | 8.2 | Blank | \$ | - | \$ | - | \$ | - |
| 378 | 8.3 | Blank | \$ | - | \$ | - | \$ | - |
| 378 | 8.4 | Blank | \$ | - | \$ | - | \$ | - |
| 378 | 8.5 | Blank | \$ | - | \$ | - | \$ | - |
|  |  | Project Total | \$ | 135,569 | \$ | 135,569 | \$ | - |
|  |  |  |  |  |  |  |  |  |

Exhibit___(GRP-9)
Page 10 of 10

## CORNING NATURAL GAS CORPORATION CASE 11-G-0280

STAFF'S 2015 CAPITAL BUDGET ADJUSTMENTS

| Acct. No. | Project | Description |  | Staff Total |  | Company Total | Adjustment |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 9 | Transportation Equipment |  |  |  |  |  |  |
| 392 | 9.1 | Replace small vehicle | \$ | 87,849 | \$ | 87,849 | \$ | - |
| 392 | 9.2 | Replace Line Truck | \$ | 100,000 | \$ | 100,000 | \$ | - |
| 392 | 9.3 | Heavy Equip Trailer | \$ | - | \$ | - | \$ | - |
| 392 | 9.4 | Replace Backhoe | \$ |  | \$ | - | \$ | - |
| 392 | 9.5 | Purchase Mini Excav | \$ | - | \$ | - | \$ | - |
| 392 | 9.6 | Replace small vehicle | \$ | - | \$ | - | \$ | - |
| 392 | 9.7 | Replace line tech truck | \$ | - | \$ | - | \$ | - |
| 392 | 9.8 | Replace dump truck | \$ | - | \$ | - | \$ | - |
| 392 | 9.9 | Replace backhoe | \$ | - | \$ | - | \$ | - |
| 392 | 9.10 | Replace 1987 line truck | \$ | - | \$ | - | \$ | - |
| 392 | 9.11 | Heavy Equipment Trailer | \$ | - | \$ | - | \$ | - |
| 392 | 9.12 | Replace line truck | \$ | - | \$ | - | \$ | - |
| 392 | 9.13 | Replace 1996 line truck | \$ | - | \$ | - | \$ | - |
|  |  | Project Total | \$ | 79,750 | \$ | 187,849 | \$ | $(108,099)$ |
|  |  |  |  |  |  |  |  |  |
|  | 10 | Tools and Equipment |  |  |  |  |  |  |
| 394 | 10.1 | Pipeline Locator | \$ | 4,338 | \$ | 4,338 | \$ | - |
| 394 | 10.2 | HFI | \$ | 4,880 | \$ | 4,880 | \$ | - |
| 394 | 10.3 | CGI | \$ | 11,062 | \$ | 11,062 | \$ | - |
| 394 | 10.4 | Portable Shoring | \$ | - | \$ | - | \$ | - |
| 394 | 10.5 | CP Data Logger | \$ | - | \$ | - | \$ | - |
| 394 | 10.6 | Blank | \$ | - | \$ | - | \$ | - |
| 394 | 10.7 | Electro fusion Controller | \$ | - | \$ | - | \$ | - |
| 394 | 10.8 | Mueller (8" to 12") machine | \$ | - | \$ | - | \$ |  |
| 394 | 10.9 | Health HFI | \$ | - | \$ | - | \$ | - |
| 394 | 10.10 | Engineering survey equipment | \$ | - | \$ | - | \$ |  |
| 394 | 10.11 | Blank | \$ | - | \$ | - | \$ | - |
| 394 | 10.12 | GPS Survey Equipment | \$ | - | \$ | - | \$ | - |
| 394 | 10.13 | Welding Machine | \$ | - | \$ | - | \$ | - |
| 394 | 10.14 | Blank | \$ | - | \$ | - | \$ | - |
| 394 | 10.15 | Blank | \$ | - | \$ | - | \$ | - |
| 394 | 10.16 | Lighting | \$ | - | \$ | - | \$ | - |
| 394 | 10.17 | Stopper Replacement Equipment | \$ | - | \$ | - | \$ | - |
| 394 | 10.18 | Misc.Tools and Equipment | \$ | 32,500 | \$ | 32,500 | \$ | - |
|  |  | Project Total | \$ | 50,643 | \$ | 52,781 | \$ | $(2,138)$ |
|  |  |  |  |  |  |  |  |  |
|  | 11 | Safety Equipment |  |  |  |  |  |  |
| 394 | 11.1 | PPE | \$ | 24,402 | \$ | 24,402 | \$ | - |
| 394 | 11.2 | Flash fire coveralls / hood / gloves | \$ | 2,395 | \$ | 2,395 | \$ | - |
| 394 | 11.3 | Supplied Air Respirator | \$ | - | \$ | - | \$ | - |
| 394 | 11.4 | Confined space gas monitor | \$ | - | \$ | - | \$ | - |
|  |  | Project Total | \$ | 26,797 | \$ | 26,797 | \$ | - |
|  |  |  |  |  |  |  |  |  |
|  | 12 | General Office |  |  |  |  |  |  |
| 390 | 12.1 | HVAC | \$ | - | \$ | - | \$ | - |
| 390 | 12.2 | Parking Lot Refurbishment | \$ | - | \$ | - | \$ | - |
| 390 | 12.3 | Office Furniture and Equipment | \$ | 8,134 | \$ | 8,134 | \$ | - |
| 390 | 12.4 | Building Upgrades | \$ | 25,000 | \$ | 25,000 | \$ | - |
|  |  | Project Total | \$ | 33,134 | \$ | 33,134 | \$ | - |
|  |  |  |  |  |  |  |  |  |
|  | 13 | IT equipment |  |  |  |  |  |  |
| 391 | 13.1 | Computers / software | \$ | 27,114 | \$ | 27,114 | \$ | - |
| 391 | 13.2 | Field Laptops | \$ | 2,603 | \$ | 2,603 | \$ | - |
| 391 | 13.3 | Field GPS equipment | \$ | 542 | \$ | 542 | \$ | - |
| 391 | 13.4 | CADD Software replacement | \$ | - | \$ | - | \$ | - |
| 391 | 13.5 | Blank | \$ | - | \$ | - | \$ | - |
| 391 | 13.6 | Printer and Computer Replacement | \$ | 8,134 | \$ | 8,134 | \$ | - |
| 391 | 13.7 | Accounting and Billing System Upgrade | \$ | - | \$ | - | \$ | - |
| 391 | 13.8 | Enterprise Software (Microsoft and Norton Updates) | \$ | 13,557 | \$ | 13,557 | \$ | - |
| 391 | 13.9 | AS400 Equipment/Software/Licensing Costs | \$ | 65,073 | \$ | 65,073 | \$ | - |
|  |  | Project Total | \$ | 117,023 | \$ | 117,023 | \$ | - |
|  |  |  |  |  |  |  |  |  |
|  | 14 | Major Projects |  |  |  |  |  |  |
| 369 | 14.1 | Blank | \$ | - | \$ | - | \$ | - |
| 380 | 14.2 | Blank | \$ | - | \$ | - | \$ | - |
| 383 | 14.3 | Blank | \$ | - | \$ | - | \$ | - |
| 378 | 14.4 | Blank | \$ | - | \$ | - | \$ | - |
| 369 | 14.5 | Blank | \$ | - | \$ | - | \$ | - |
| 378 | 14.4 |  | \$ | - | \$ | - | \$ | - |
| 369 | 14.5 |  | \$ | - | \$ | - | \$ | - |
|  |  | Project Total | \$ | - | \$ | - | \$ | - |
|  |  |  | \$ | 3,857,958 | \$ | 4,311,239 | \$ | $(453,281)$ |

CORNING NATURAL GAS CORPORATION
STAFF'S CAPITAL BUDGET PROJECT ADJUSTMENTS

| Account | Project Number | Project Name | Historic Additions |  |  |  |  |  | 3 Year Historic Average of Additions |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | 2008 |  | 009 |  | 2010 |  |
| 392 | 9 | Transportation Equipment | \$ | 100,636 | \$ | 32,012 | \$ | 106,602 | \$ 79,750 |
| 394 | 10 | Tools and Equipment | \$ | 88,604 | \$ | 15,533 | \$ | 47,791 | \$ 50,643 |






## Corning Natural Gas

CASE 11-G- 0280

## STAFF PROPOSED TARIFFS

|  | Staff Proposed Tariffs | Rate Codes | Corning-Current Tariffs | Hammondsport - Current Tariffs | Bath - Current Tariffs |
| :---: | :---: | :---: | :---: | :---: | :---: |
| SC 1 | Residential | RI, RO, TI, TO, VRO, HR, HRO, HZ, HZO | SC 1 - Residential | SC 1-Residential |  |
| SC 2 | Large General Service/Industrial | BR | SC 2 - Industrial Customer |  | Bath EG\&W - Firm |
| SC 3 | General Service - Non Residential | MI, MO, VMO, XI, XO, CI, CO, VCO, BI, BO, HC, HCO, HOF, HCZ, HIF, II, IO | SC 3 A- Resale by Public Utility Corporation | SC 2 - General non residential |  |
| SC 4 | For Future Use |  |  |  |  |
| SC 5 | Lighting | GL01, GLO2 (Fixed Charge Code) | SC 5 - Outdoor Gas Lighting |  |  |
| SC6 | Firm Trans min 5000 mcf | CT, CTO, MT, MTO, PT, РTO, HT,НTO | SC 6 -Firm Transportation to retail customers served by SC 1 with min vol of 5,000 Mcf Annually <br> SC 9 - Firm Transportation for wholesale to public utility SC 16 - Third Party Suppliers - Delivery to Transportation Customers <br> SC 8 - Firm Transportation to end use customer of a wholesale customer served by SC 3 or 9 | SC 4 - Transportation <br> SC 5 - Firm Transportation that qualifies for SC 1 or 2 |  |
| SC7 | Firm Trans min 25000 mcf | IT, ITO, BC3, BC4 | SC 7 - Industrial Transportation min 25000 |  | SC 3 - Firm Transportation Applicable to an End-Use Customer Served by SC1 SC 4 - Firm Transportation Applicable to an End-Use Customer Served by SC2 |
| SC8 | IT and Supplemental Service |  |  | $\text { SC } 4-I T$ <br> SC 3 Interruptible Large |  |
| SC9 | Duel Fuel for Electric Gen |  | SC 18 - Interruptible transportation for electric generation having dual fuel and capacity >50 MW | SC 8 - Interruptible transportation for electric generation having dual fuel and capacity $>50 \mathrm{MW}$ |  |
| SC10 | Duel Fuel Transportation | HTF,OTF,SC5 | SC 10- Large Volume Dual Fuel Transportation to retail customers served by SC 2 with min vol of $25,000 \mathrm{Mcf}$ Annually |  |  |
| SC11 | Contracts | DPT, GP, WK, MP, AB | SC 11 - Negotiated Contracts <br> SC 17 - Sale of gas |  |  |
| SC 12 | Capacity Assignment |  | SC 12 - Capacity Assignment |  |  |
| SC 13 | General Service - Economic Development |  | SC 13-General Service - Economic Development | SC 6 - General Service Economic Development | SC 6 - General Service Economic Development |
| SC14 A | Aggregate Residential Transportation | ARO, HA | SC 14 - Agg Firm Trans | SC 7- Aggregate Firm Transportation |  |
| SC 14B | Aggregate Commercial Transportation | HAC, ACO, AMO |  |  |  |
| SC 15 | Storage Services |  | SC 15 - Storage Service |  |  |
| SC 16 | Non-Res DG |  | SC 19 - Non-residential DG | SC 9 - Non-residential DG |  |

## CORNING NATURAL GAS <br> CASE 11-G-0820

Staff's Proposed Lost and Unaccounted for Gas Factor of Adjustment

|  |  |  |  | FACTOR OF <br> ADJUSTMENT <br> (FOA) |  |
| :--- | ---: | ---: | ---: | ---: | :---: |
| 2010 | Total Gas In | Total Gas Out | Loss \% | 1.0067 |  |
| 2009 | $7,900,189$ | $8,996,599$ | $0.6676 \%$ | 1.0134 |  |
| 2008 | $8,740,169$ | $7,796,015$ | $1.3186 \%$ | 1.0039 |  |
|  |  | $8,706,368$ | $0.3867 \%$ |  |  |
|  |  |  |  | 1.0080 |  |
|  |  |  | Standard Dev | 0.0049 |  |
|  |  | $2 \times$ Standard Dev | 0.0097 |  |  |
|  |  | Bottom of Band |  |  |  |

## NYS DEPARTMENT OF PUBLIC SERVICE

## STAFF WHITE PAPER ON LOST AND UNACCOUNTED FOR (LAUF) GAS

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## EXECUTIVE SUMMARY

The purpose of this White Paper is to revisit the issue of the recovery of the cost of lost and unaccounted for (LAUF) gas. The White Paper addresses proposals for standardizing the annual LAUF gas calculation methodology for all NY utilities and updating the current LAUF incentive mechanism within existing regulations. ${ }^{1}$ Staff anticipates that the recommendations developed in this white paper will guide the treatment of LAUF in future rate cases.

With respect to the incentive mechanism we have examined:

- Whether the incentive to reduce LAUF provided by the fixed factor of adjustment has reached its economically justifiable limit and, if so, is there ways to re-structure the fixed factor of adjustment mechanism which maintains the gains in LAUF reduction thus far realized without backsliding.
- Ways of eliminating the financial swings caused by year to year variation in the commodity cost of gas when a utilities' annual factor of adjustment is relatively stable.
- And finally, re-structuring the fixed factor of adjustment mechanism in a way that alternative suppliers of the gas commodity are able to arrange for delivery of the appropriate level of gas supplies to serve their customers.

As part of our examination, information requests were sent to all the major gas local distribution companies (LDCs) including Central Hudson Gas \& Electric Corporation (CHG\&E), Consolidated Edison Company of New York, Inc. (Con Edison), KeySpan Gas East Corporation (KEDLI), National Fuel Gas Distribution Corporation (NFGDC), New York state Electric \& Gas Corporation (NYSEG), Niagara Mohawk Power Corporation (NMPC), Orange and Rockland Utilities, Inc. (O\&R), Rochester Gas and Electric Corporation (RG\&E), and The Brooklyn Union Gas Company dba KeySpan Gas Corporation of NY (KEDNY) to get a comprehensive view of each LDC's overall

[^1]pipeline system, LAUF calculation, and billing system. The Staff Team also met with each of the LDCs individually to discuss the responses to all the information requests.

Staff's recommends that the LAUF factor calculation and incentive be standardized based on total city gate receipts and total system deliveries. The only permitted adjustment to the receipts and deliveries should be the exclusion of dedicated lines where one city gate serves one customer. Further a dead band should be established around the factor of adjustment for the LAUF incentive to recognize the inherent uncertainty and natural variability in gas measurement. Lastly, the annual inequity of the over or under delivery of gas to serve firm transportation due to the fixed factor of adjustment being greater than or less than the actual factor of adjustment should be eliminated. The elimination of this inequity is to be achieved by surcharging or refunding all customers for the over or under delivered gas associated with the disparity at the LDC's average commodity cost of gas.

## BACKGROUND

The Purchased Gas Adjustment (changed to Gas Adjustment Clause (GAC) in 1973) was first approved by the New York Public Service Commission in 1953. The adjustment was designed so that variations in the cost of purchased gas could be reflected on the customers' bills without the necessity of filing new rate schedules. In 1975, an annual reconciliation was instituted to insure that the GAC recoveries equaled the GAC purchased gas costs.

Prior to 1990, LDCs in New York were permitted full recovery of actual gas expense, regardless of the disparity between the amount of gas metered into the LDC's system and the amount of gas metered out of the LDC's system. This disparity is referred to as lost and unaccounted for (LAUF) gas or simply LAUF.

In Case 21656, the Commission implemented new rules and regulations (effective September 20, 1990) concerning the recovery of actual purchased gas expense, to be adopted and become effective December 1, 1990. The new rules and regulations adopted included the creation of a factor of adjustment, fixed for the annual reconciliation, such that the cost of gas is adjusted to reflect a level of purchased gas commensurate with the actual sales and the fixed factor of adjustment. The regulations required that the fixed
factor of adjustment be determined in rate proceedings and continue until a new factor is established in the next rate proceeding.

In 1999, the GAC rules were further revised by the Commission in Case 97-G1178 (effective April 13, 1999) to reflect the restructuring of the gas industry, to clarify some existing rules, and to reflect more accurate. As a consequence, customers buying their gas supplies from marketers were subject to similar rules regarding the recovery of LAUF and the fixed factor of adjustment was also applied to volumes brought on to the LDCs’ systems by their marketers.

The establishment of the fixed factor of adjustment in the annual reconciliation of gas costs created an incentive to the LDCs to reduce LAUF since the fixed factor of adjustment set an allowed level of gas purchases based on the amount of gas sales, regardless the amount of gas purchases. To the extent that the actual gas purchases exceeded the allowed gas purchases, the LDC absorbed the cost of the extra gas purchases. Conversely, to the extent that the allowed purchases exceeded the actual purchases, the LDCs kept the gas cost recoveries for those purchases that were not necessary. With the advent of the fixed factor of adjustment, LDCs realized a gain from every reduction in LAUF through either a reduced penalty, when the actual factor of adjustment exceeded the fixed factor of adjustment, or an increased benefit, when the actual factor of adjustment was less than the fixed factor of adjustment.

The impact of the incentive, from the creation of the factor of adjustment, can be observed when the average factor of adjustment is compared between 1997 and today. In 1997, the factor of adjustment averaged 1.0348 for seven gas LDCs and currently the factor of adjustment averages 1.0183 for those same seven gas utilities. The reduction from 1.0348 to 1.0138 , when applied to the $\$ 3$ billion of cost for gas provided last year by all the gas LDCs, translates to an annual savings of $\$ 48$ million in gas costs for the full service customers of the LDCs and equivalent savings in gas costs for the customers of marketers.

Generally the factor of adjustment has been set based on historical multi-year averages. Recently, the historical multi-year averages have become relatively stable with any year to year variation being a consequence of how the data is collected. This trend
suggests that the LDCs have or are approaching the optimum performance in minimizing LAUF as provided for in rates which limits any potential incentive.

However, the inherent year to year variation in the fix factor of adjustment is a source of financial volatility rather than an incentive. This variation of the measured factor of adjustment creates significant yearly financial swings while the net LAUF benefit/penalty over the total period is de minimis.

A primary goal of a revised approach to LAUF is to remove the financial volatility while retaining the financial incentive to minimize LAUF. Removing the financial volatility requires decoupling the LAUF incentive from the natural variability of LAUF measurement.

Natural variability is defined as the variation in LAUF measurement that would exist with zero LAUF. That variability includes both the offset of the average from zero and the standard deviation of the measurements around that average.

The natural variability of each LDC is a function of each LDC's system and how it calculates LAUF. We will begin our investigation with an examination of each LDC's system and then follow with a discussion of differences among the LDCs in LAUF calculation.

## LDC SYSTEM SUMMARY

Each LDC's system is unique in its connection to the interstate pipelines, its system's history and age, and its customer base. All these system characteristics affect LAUF and therefore staff examined the differences between the LDCs. Table 1 below lists the information regarding the city gates, local production and dedicated line customers on each LDC gas distribution system. For the purposes of this summary, local production stations are separated as a source of supply. All other supply sources are considered as a city gate station.

Table 1. LDC's pipeline information

| Company | City Gates | Local <br> Production <br> Stations | Dedicated <br> Lines |
| :--- | :--- | :--- | :--- |
| CHG\&E | 5 | $2^{*}$ | - |
| Con Edison | 23 | - | - |
| KEDLI | 6 | - | - |
| KEDNY | 11 | $1^{* *}$ | - |
| NFGDC | 133 | 888 | 5 |
| NMPC | 19 | - | 2 |
| NYSEG | 75 | 6 | - |
| O\&R | 5 | - | - |
| RG\&E | 13 | 2 | - |

* The local production of CHG\&E is from LPG plants. Both are in process of retirement.
${ }^{* *}$ APC Landfill is the supply source of additional gas coming into KEDNY's system.

As can be seen in Table 1, NFGDC has the most complex system in terms of receipt points with over 133 city gates and 888 local gas producing stations providing supply into its gas distribution system. NYSEG has the most widespread system with 75 city gates distributed across the state serving numerous discrete territories. All other LDCs have less than 25 city gates serving their respective territories. However Con Edison, KEDLI, and KEDNY have the most complex system in terms of operation as the three companies can be considered as distribution subsystems of the New York facility with 16 city gates, one internal supply from landfill gas, and three peaking LNG plants.

NFG and NMPC have five and two dedicated line customers (single customers fed directly from an interstate pipeline) respectively. No other NY LDCs have dedicated line customers.

Con Edison, KEDLI, and KEDNY operate the joint New York facilities which are the transmission system which permits any of the three LDCs to deliver natural gas to any of the LDCs’ 16 city gates from interstate. Ten of those city gates are to Con Edison with three city gates each to NGLI and NGNY.

There are three metered bidirectional interconnects which provide gas exchange between the three LDCs as determined by system demands. At any moment these three interconnects can be a receipt point or delivery point for the three LDCs. Also, there are approximately five metered one-way interconnects for areas served by one LDC but supplied by one of the other LDCs.

For the three LDCs there is no metering between the transmission system and the LDCs' distribution systems. As a consequence, the transmission system LAUF is estimated by the LDCs. The three LDCs assume a transmission LAUF of zero on the NY Facilities system. Con Edison makes the same assumption for all customers served from their transmission system. For KEDNY and KEDLI, transmission LAUF is set to the negotiated level, which is approximately $1 \%$.

NFGDC system is unique with the 888 local gas producing stations supplying its distribution system. Likewise NFGDC's 133 city gates might seem unique in its high number, but the high number is a consequence of its transmission system being an interstate pipeline, in most instances National Fuel Supply. NFGDC’s 133 city gates are comparable to Con Ed's 82 or so regulator stations off their transmission system.

NYSEG is unique because its system is comprised of numerous isolated systems across New York State. Its 75 city gates are located as far north as Plattsburgh, as far south as Goshen, as far west as Lockport, and as far east as Brewster. Gas is supplied to NYSEG's system from the interstate pipeline and other New York State LDCs and local producers.

CHG\&E, KEDNY, KEDLI, OR, and RG\&E's systems are all similar in nature. A limited number of city gates provide supply to contiguous, compact service areas. The distribution systems of these LDCs are typically branched off the interstate pipelines.

## Calculation of LAUF

Loss Percentage versus Factor of Adjustment (FOA) Percentage ${ }^{\underline{2}}$
The calculation of LAUF involves the total volume of gas entering into and being disposed of on the LDC's distribution system. All LDCs report LAUF as a percentage. That percentage is calculated in two ways, NYSEG and NMPC divide LAUF by disposition to get their reported percentage and all other LDCs divide LAUF by send out ${ }^{3}$ to get their reported percentage. While both percentages can be used to calculate the factor of adjustment, the two percentages are not the same and require different formulas to obtain the corresponding factor of adjustment.

For clarity, the two percentages should be distinguishable by name. For consistency, only one percentage should be used for reporting purposes. LAUF divided by send out shall be referred to as loss percentage and LAUF divided by dispositions shall be referred to as FOA percentage. FOA percentage shall be the reported percentage as the FOA percentage is more directly related to the factor of adjustment. The factor of adjustment equals 1 plus the FOA percentage ${ }^{4}$.

## Determination of LAUF

Each LDC has a distinct approach for determining LAUF. Within their distinct approaches, each LDC makes various adjustments to the total send out and total disposition to arrive at the send out and disposition used in their LAUF calculation. Table 5 below lists the adjustments made by each LDC to determine their send out and disposition as part of their LAUF calculation.

[^2]Table 2. Adjustments to total send out and total disposition by LDCs.

| Company | Total Send out | Total Disposition |
| :---: | :---: | :---: |
| CHG\&E | $\begin{aligned} & \hline \text { City Gates }(+) \\ & \text { Propane }(+) \\ & \text { Line Pack }(+/-) \\ & \text { Conversion }(+/-) \end{aligned}$ | $\begin{aligned} & \hline \text { Firm Sales }(+) \\ & \text { ISS }(+) \\ & \text { Transportation(+) } \\ & \text { Company Use }(+) \end{aligned}$ |
| Con Edison | Marketer Deliveries (+) Company Deliveries ( + ) NY Facilities*(+/-) Generator Deliveries** (-) Slippage (+/-) / LNG(+/-) Heater Fuel (-) | Firm/Trans Sales (+) <br> IT/IS Sales (+) <br> Company Use (+) |
| KEDLI | City Gates ( + ) <br> NY Facilities *(+/-) <br> Generator Deliveries ** $(-)$ <br> Transport PP (-) | Generation Sales(-) <br> Res/TC/Int Sales (+) <br> Trans (+) / IT SC7 (+) <br> Unbilled Sales (+) <br> Company Use (+) |
| KEDNY | $\begin{aligned} & \text { City Gates }(+) \\ & \text { NY Facilities }{ }^{*}(+/-) \\ & \text { Generator Deliveries** (-) } \\ & \text { LNG (+/-) } \\ & \text { IT-PP }(-) \end{aligned}$ | Generation Sales(-) <br> Res/Firm/TC Sales (+) <br> IS/IT(+) <br> Unbilled Sales(+) <br> Company Use(+) |
| NFGDC | City Gates (+) <br> Net Storage Inj (+-) <br> Storage Adj(+/-) <br> Non-GAC Sales (-) <br> Company Use (-) | GAC Sales (1.01937) <br> Transportation (+) <br> Banked Gas (-) |
| NMPC | $\begin{aligned} & \text { CityGates (+) } \\ & \text { Cogen } 7(-) \\ & \text { SC } 4(-) \end{aligned}$ | Firm Sales (+) <br> Cogen 7 (-) / SC 4 (-) <br> Transportation (+) <br> Company Use (+) |
| NYSEG | $\begin{aligned} & \text { City Gates (+) } \\ & \text { Company Use (-) } \end{aligned}$ | Firm Billed Sales (+) ISS $(+) /$ NGV $(+)$ Non-Daily/Daily Metered |
| O\&R | $\begin{aligned} & \text { City Gates (+) } \\ & \text { SC } 8(-) \\ & \text { NYSEG Adj }(-) \end{aligned}$ | Firm Sales (+) <br> NYSEG Adjustments(-) <br> Company Use(+) IS-SC8 (-) |
| RGE | City Gates (+) <br> Local Purchases (+) | Firm Sales (+) <br> Company Use (+) <br> Transportation (+) |

${ }^{(+)}$suggests that this item is added (included) to the total send out or dispositions.
$(-)$ suggests that this item is deducted (excluded) from total send out or dispositions.
*Gas received into the NY facilities by one LDC which is delivered to another LDC.
${ }^{* *}$ Generator deliveries for Con Edison for the LAUF calculation are set at generator sales.
Generator deliveries for KEDNY and KEDLI for the LAUF calculation are set at negotiated levels.

The total send out consists mostly of city gate receipts, local production stations, and gas coming into the pipeline system from storage. The total dispositions consists of mostly sales from various service class and company use. As shown above, each LDC has many unique adjustments made to their total disposition and total send outs. The different adjustments made by each LDC are discussed in detail in the next section.

## Gas for Company Use

Examples of gas for company use include: gas used by heaters at gate and regulator stations, gas used to heat office buildings, and gas used at compressor stations. Each LDC accounts for these company uses differently. For ease of reference, gas used for heaters at gate/regulator stations will be referred to as "heater gas" and gas used at compressor stations will be referred to as "compressor gas" in this report. Table 2 shows how "company use" is reflected in the LAUF factor calculation (whether in disposition or in send out $)^{5}$ and whether heater and compressor gas are included as part of company use.

For all LDCs in NY State, gas used for heating buildings is considered as the main source of company use. The treatment of heater gas and compressor varies with each LDC, as shown Table 3.

[^3]Table 3. Gas for company use.

| Company | Company Use | Heater Gas at: |  | Gas for |
| :---: | :---: | :---: | :---: | :---: |
|  |  | City Gate | Regulator Stations | Compressors |
| CHG\&E | Disposition (+) | 16 Unaccounted for | - | 1 Unaccounted for |
| Con Edison | Disposition (+) | 2 Send out ${ }^{1}$ | - | 1 Send out |
| KEDLI | Disposition (+) | 2 Send out | 5 Metered ${ }^{2}$ | 1 Metered $^{2}$ |
| KEDNY | Disposition (+) | 3 Send out | Company Use | - |
| NFGDC | Send outs (-) | 3 Company Use | - | 1 Company Use |
| NMPC | Disposition (+) | 2 Unaccounted For | 36 Unaccounted For | - |
| NYSEG | Send outs (-) | - | - | 1 Unaccounted for |
| O\&R | Disposition (+) | See Table 3 | - | - |
| RG\&E | Disposition (+) | 1 Company Use | - | - |

${ }^{1}$ Con Edison also has one gas heater that is metered but unaccounted for in the LAUF calculation based on 2010 GAC filing.
${ }^{2}$ KEDLI gas use at regulators is metered but not accounted for.
Only NFGDC and NYSEG account for company use by reducing send out by metered company use volumes. This treatment assigns no losses to company use. All other utilities account for company use as a disposition where the company is treated like a typical customer.

CHG\&E and NMPC have unmetered heater gas usages and thus those volumes are part of loss and unaccounted for gas. CON EDISON KEDLI and KEDNY deducted heater gas volumes from total send out and exclude them for the LAUF calculation. KEDLI has five regulator stations that use heater gas. Those volumes are metered, but they are not reflected in the LAUF calculation. KEDNY includes heater gas at regulator stations in company use. Both RG\&E and NFGDC have less than three city gate stations that use heater gas. They both include those usage volumes as part of company use. NYSEG does not have any city gate stations that use heater gas.

O\&R's treatment of heater gas is more complex and inconsistent. Table 4 shows how $O \& R$ is accounting for heater gas at different city gate stations.

Table 4. O\&R's heater gas use at city gate stations.

| Interstate Pipeline | Location | Metered? | Treatment of Gas |
| :--- | :--- | :--- | :--- |
| Tennessee | Pearl River | Yes | Company Use |
| Tennessee | Tappan | Yes | Company Use |
| Algonquin | Suffern | Yes | Company Use |
| Millenium | Suena Vista | No | Unaccounted For |
| Algonquin | Sloatsburg Point | No | Unaccounted For |
| Millenium | Greenwood Lake | Yes | Credit from |
| Millenium | Minisink | Yes | Millenium |
| Millenium | Huguenot | No | Company Use |
| Millenium | Sparrowbush | NA | Credit from |
| Columbia | Westtown | Yes | Millenium |
| Millenium | Warwick | Yes | Credit from |
| Millenium | Tuxedo | No | Millenium |
| Millenium |  | Credit from |  |

As can be seen in Table 4, five of the thirteen city gates in O\&R gas distribution systems use heater gas and the usage volumes are appropriately included in company usage. O\&R receives a quarterly credit from the Millennium interstate pipeline for heater gas at five of the remaining city gates, two of which are based on metered usage and three of which are based on estimated unmetered usage. Millennium applies the credit by providing additional gas into O\&R's storage. Heater fuel gas is unmetered at two of the remaining city gate stations. Therefore, system LAUF contains the volumes associated with these two stations. The last city gate, Sparrowbush, uses heater fuel gas upstream from the city gate, thus they are not part of the LDC's pipeline system.

Aside from gas usages at regulator and city gate stations to heat the facility and the natural gas in the pipeline, utilities also use gas as fuel for compressors to achieve required delivery pressures ${ }^{6}$. This usage may be small but needs to be properly
${ }^{6}$ An example is to increase pressure at natural gas vehicles (NGV) fueling stations.
accounted for. The treatment of compressor gas by each utility was shown in Table 2. NYSEG and CHG\&E each have one compressor station that use gas that is unaccounted for. NFGDC includes compressor gas in company use, while CON EDISON deducts compressor gas volumes from total send out. KEDLI has one compressor station that uses gas. This volume is metered but not included in the LAUF calculation. All other utilities do not have compressor gas.

## Line pack and Heat Content Factor Adjustment

As shown in Table 5, CHG\&E adjusts the total send out to reflect heat content factor adjustments and line pack adjustments. The line pack adjustment is intended to compensate for the effect of temperature and pressure on the amount of gas. CH is the only NY utility which makes an adjustment for line pack in its LAUF calculations.

Prior to January 2010, CHG\&E used a monthly average for the CCF to BTU conversion factor, which did not accurately reflect the actual heating content billed by the interstate pipeline which uses a daily Ccf to BTU conversion factor. A heat content factor adjustment was made to reconcile the differences between the two approaches. In January 2010 CHG\&E adopted the interstate pipeline approach eliminating the need for the adjustment. CHG\&E is the only NY utility which makes a heat content factor adjustment in its LAUF calculations.

## Dedicated Line Customers

NFGDC and NMPC are the two LDCs that have dedicated line customers. NMPC has two dedicated line customers, one excluded from the LAUF calculation and one included in the LAUF calculation. NFGDC has five dedicated line customers, all of which are included in the LAUF calculation.

## Excluded Customers

Con Edison, KEDLI and KEDNY exclude several special contract electric generation customers from the system LAUF calculation. These customers must provide for deliveries at a negotiated system loss rate. These customers are offered a negotiated LAUF factor, as they are served off of the company's transmission system. However, Con Edison excludes electric generation send out from the LAUF calculation at a zero
loss factor while both KEDNY and KEDLY exclude electric generation at the negotiated LAUF factor.

The three companies that operate the NY Facilities system treat each other as customers of the system. As part of the New York Facilities’ agreement, gas transported by Con Edison, KEDLI and KEDNY across the system for each other is excluded from send out and disposition at a zero LAUF factor.

## Factors Affecting LAUF

There are many factors, common to some or all of the LDCs, that can impact actual LAUF. This section discusses these factors, the LDCs affected, and their impacts on the LAUF calculation.

## Meter Issues/Error

The natural gas industry uses four types of gas meters: diaphragm (or bladder), rotary, turbine and orifice. ${ }^{7}$ All these meters require periodic adjustments to maintain accuracy within the allowed $+/-2 \%$.

Diaphragm meters are commonly used for residential and small commercial utility customers. These meters are generally very accurate when measuring small volumes of gas. Rotary meters are highly affected by temperature and pressure and therefore rely on reading adjustments due to temperature and pressure. Turbine meters measure the speed of the gas moving through the meters to calculate the flow. Quality and quantity of the flow through the meter affects the accuracy. Orifice type meters rely on switching of orifice plates used at different set flow rates to achieve an acceptable accuracy. All of these meters introduce error into the LAUF calculation, because over
${ }^{7}$ Diaphragm Meter - A meter consisting of chambers formed by movable diaphragms, in which the gas flow is directed by internal valves. The chambers alternately fill and expel gas, producing a near continuous flow through the meter.

Orifice Meter - A gas meter consisting of a straight length of pipe inside which a precisely known orifice affects the flow.

Rotary Meter - A meter which is comprised of two figure "8" shaped lobes with rotors (also known as impellers or pistons) which spin in precise alignment. With each turn, they move a specific quantity of gas through the meter.

Turbine meter - A meter comprised of a small internal turbine which measures the speed of the gas, which is then transmitted to a counter.
time, measurements by these devices can vary from the allowed accuracy parameters. By regulation, LDC customer meters are allowed a meter reading variance of $+/-2 \% .{ }^{8}$

Similarly, meters at a LDCs city gate are allowed a meter reading variance of +/$2 \%{ }^{9}$. For any given month the actual gas supply receipts at the city gate meter may be +/- $2 \%$ higher or lower than the amounts reflected in the meter read. The Pipelines which deliver the gas supply invoice the LDC per the city gate meter read, but the actual volumes received into the system may be less or more within the allowed tolerance band. This impacts the accuracy of the system receipts. This factor essentially carries into the LAUF calculation as another source of error that could swing the result either way based on its impact to company system receipts.

LDC meter accuracy at city gate receipt points may also be affected by flow volumes. Meter accuracy can be compromised if the gas flow volumes are below the normal designed operating range of the installed meter. As a result the gas leaking into the system can result in a lower loss factor or even possibly create the appearance of net positive gas production on the LDC's distribution system. This situation is more pronounced in summer periods when there is no gas being consumed by customers for space heating purposes. As an example, NYSEG has identified eighteen supply receipt meters where low usage volumes during summer months can possibly affect the meter accuracy, since the meters were designed for larger flow volumes [Case 09-G-0669].

The design, age, and size of the city gates can also impact the accuracy of metering. The majority of city gates are controlled and operated by interstate pipelines. Generally these city gates have a "cascading" type design for their metering where valves automatically open or close to combine or split the gas flow to one or more meters. The design for the operation and control of these valves affect the accuracy in determining where in its accuracy range it operates.

The age of the metering station also affects the accuracy as the newer the station meters the newer the technology and the better the accuracy. The size of the station is

[^4]important to accuracy as well. While the volumes at each of these city gates may be significant to the LDCs total system volume, they often are insignificant to the total system volume of the interstate pipeline. Replacement or upgrading of the city gate to improve the metering accuracy may not be economically for the interstate pipeline.

## Meter Reading Issues

An LDC's meter reading schedule can affect a utility's LAUF. Some LDCs' customers' meters are read on a bi-monthly basis instead of a monthly basis. An increase in the time between meter reads increases the variance between measured system receipts and measured system deliveries.

To recognize the timing difference between receipt and delivery meter reads, some LDCs adjusts receipts to be aligned with deliveries while other LDCs adjust deliveries to be aligned with receipts. Some LDCs choose to make no adjustments for the timing difference as they consider either the variance insignificant or the adjustments ineffective.

## Therm Billing

All gas meters measure volumes (typically Ccf). The conversion of volumes to energy content (typically Therms) introduces additional variance. Pipelines provide the utilities with the data for volumes delivered and its associated heat content but the bill is based on the heat content ${ }^{10}$. The heat content is determined by periodic sampling of the gas at the city gate.

Utilities that bill their customers based on heat content introduce addition inaccuracy in accounting for LAUF. Their billing relies on the conversion of the metered volumes to heat content. This conversion is not based on heat content measurement at the customers' meters but rather at an assumed heat content.

Many LDCs have multiple city gates that receive natural gas from various production areas with differing heat content. To the extent these various gas supplies combine on the

[^5]LDCs system, the heat content of the gas volume measured at a customer's meter will be different from the heat content at the city gates. These LDCs try to limit this disparity by calculating a heat content conversion for various zones (generally referred to as "therm zones") within its distribution system using heat content measurements within the distribution system as a measurement of the heat content of the gas flowing to the customers within the zones. The conversion factor for each Therm zone is determined by an assumed weighted average of the conversion factors for the city gates serving that zone.

The type of billing by LDC is shown in Table 6. For those LDCs billing in therms, the table also provides their respective therm zones.

Table 5. Type of billing by companies.

| Company | Billing | Therm <br> Zones |
| :--- | :--- | :---: |
| CHG\&E | Ccf | - |
| Con Edison | Therms | 5 |
| KEDLI | Therms | 3 |
| KEDNY | Therms | 8 |
| NFGDC | Ccf | - |
| NMPC | Therms | 14 |
| NYSEG | Therms | 21 |
| O\&R | Ccf | - |
| RG\&E | Therms | 2 |

## Condition of the Utility's Distribution System - Leaks

The age of the distribution system affects LAUF. Natural deterioration over time results in leaks. However, technological advances in the quality of piping materials and their installation methods have reduced the rate of deterioration in newer systems.

As an example, cast iron and steel piping installed without corrosion protective measures, and certain vintage plastic piping is prone to leaks due to the effects of corrosion and cracking. Certain New York State LDC’s were built after technology and methodologies were developed to minimize the effects of corrosion and cracking.

Typically, LDCs with newer distribution systems have lower LAUF than that of LDC’s with older vintage distribution systems. However, the LAUF of the older vintage systems will approach the LAUF of the newer distribution systems as the cast iron and bare steel are replaced with either corrosion resistant plastic or corrosion protected steel.

## Transmission Load

Some of the New York State LDCs have large customers that take service directly from the LDC transmission facilities. The gas delivered to the city gates for the customers connected to the LDC transmission facilities usually includes a specified amount of gas for system losses. However, this amount may or may not represent actual losses as transmission losses are unknown. This may affect the distribution system LAUF by introducing an additional amount of gas into the system that may or may not cover actual system losses.

Of the large use customers that are directly fed by the LDC's high pressure transmission facilities, the amount of gas brought to the city gate for system losses is typically a negotiated percent of each customer delivered volumes. The percentage has no measurement basis as the transmission system is not isolated from the distribution system by meters. The amount of gas out of the transmission system into the distribution system is not a meter measurement, but an assumption.

## Dedicated Lines

There are currently two LDCs serving individual customers from a dedicated line which is distinctly separate from the distribution system. For the LDCs with dedicated line customers, the LAUF calculation currently includes all system receipts and dispositions for the dedicated line customers. Since these dedicated lines have no physical tie to the utility distribution system, inclusion of their send out and dispositions distort the LAUF calculation.

## Theft of Service

Theft of service which is the tampering with utility equipment and/or bypassing the utility meter to steal natural gas contributes to the LDC’s LAUF. Utilities make gas delivery adjustments for discovered theft of service and the adjustment amount is
included in the LAUF calculation. However, these adjustments usually represent an estimate for the amount of gas these customers have used during an estimated period of theft. In some cases, the period of theft extends over several reconciliation periods. This results in deliveries from prior periods being included in the LAUF calculation. This inherently introduces another factor of error into the LAUF calculation.

## DISCUSSION

New York State utilities reconcile their purchased gas costs to gas cost recoveries annually. In this reconciliation, the utility's annual cost of gas reflects the level of purchased gas commensurate with actual sales plus a fixed factor of adjustment for LAUF gas. The fixed factor of adjustment is determined in the utility's prior rate proceeding. Utilities can take actions to minimize sources of LAUF gas. Accordingly, a utility absorbs costs associated with LAUF gas to the extent that its actual gas loss rate is greater than the loss rate associated with the fixed factor of adjustment established in its base rate proceeding. Conversely, a utility may retain the benefit if its actual loss rate is lower than the fixed rate. This mechanism provides an economic incentive for utilities to minimize their actual loss rate. Gas utilities calculate their actual LAUF annually, based on the 12 months ended August 31. However, as previously discussed, there are numerous methods used to determine the amount of LAUF. Below are recommendations to standardize the LAUF calculations of all NY Gas LDCs.

## Standardization of LAUF Calculations

The goal of standardization of LAUF calculations is to arrive at a method that provides a meaningful and useful measurement of the overall system performance while limiting the effect of the natural variability of the data which goes into the measurement. The natural variability of the data is due to factors such as weather, economy, and the calendar ${ }^{11}$. The weather and economic conditions change the year to year load distribution among the electric generation, industrial, commercial, and residential customers. The different calendars along with the weather and economy impact the year to year mismatch between actual and measured end user usage. Additional variability is

[^6]introduced by adjustments in the LAUF calculation, and should be avoided when possible.

Each LDC has unique system characteristics such as: number of city gates, metering arrangement at those city gates, load factors at those city gates, electric generation load, customers composition and load contribution behind each city gate, number of city gates serving each load area, physical system characteristics (length, size, type of pipe, age, and pressures), type of end user meters, and meter reading schedule. All these characteristics contribute to significant differences between LDCs in their actual measured LAUF performance. Therefore, standardization of LAUF calculations will not result in the ability to compare LDCs based on the factor of adjustment.

The raw data used to determine LAUF is inherently adjusted and manipulated as part of the measurement process. Meter readings are a product of calculations which translate physical measurements to volumetric usage which introduces a varying degree of error. LDCs, which bill on energy content, further adjust the volumetric usage to energy usage with additional error inherent in the assumed conversion factor.

The amount of gas metered into the system and out of the system, based on actual meter reads within the annual reconciliation period, should be how LAUF is determined. The standardization of the LAUF calculation to total metered into the system and total metered out of the system should be used to provide the measurement used to determine the LAUF incentive. Basing the LAUF incentive on total metered in and total metered out is the correct approach. Further, all natural gas is intended for an end user where LAUF increases the ultimate cost to society, whether it be through costs to heat a home, to generate electricity, to manufacture products, or to provide a service.

## Total Gas Metered Into the System

The amount of gas metered into the system shall be defined as the final billed quantity of gas delivered to the LDC system; except receipts for dedicated line customers as discussed below. The final billed amount can reflect rebilling due to metering disputes. Delivered quantities can be from interstate pipelines, intrastate pipelines and facilities, local producers, and other LDCs.

## Total Gas Metered Out of the System

The amount of gas metered out of the system shall be defined as the final billed quantity of gas out of the LDC system plus any metered gas for company use; except dedicated line customers' billed deliveries as discussed below. The final billed amount recognizes that some bills are based on estimates and that billing errors can require rebilling. Delivered quantities can be to end users, interstate pipelines, intrastate pipelines and facilities, and other LDCs.

## Allowed Adjustments

## Dedicated Lines

The only adjustments to the gas metered in and gas metered out shall be the metered in and metered out gas to customers served by dedicated lines. Since dedicated line customers are separate from the distribution system, the volumes associated with these customers can be excluded from the LAUF factor calculation by deducting the metered in amount from total send out. Including dedicated line customers in the system LAUF calculation can cause unnecessary variations in the system LAUF.

## Disallowed Adjustments

The following adjustments shall be discontinued for the purpose of determining the LAUF incentive. While these adjustments attempt to achieve a more accurate LAUF, Staff believes ultimately these adjustments introduce further variability with little additional accuracy in the LAUF determination. Discontinuing these adjustments in LAUF calculations does not preclude any LDC from continuing their use for operational reasons.

## Line pack and Conversion Factor

As discussed in the previous section, CHG\&E is the only NY utility that currently adjusts LAUF calculation to reflect line pack. Table 7 shows the impact of line pack on LAUF for the three most recent annual gas reconciliation periods.

Table 6. Impact of line pack on LAUF for the three most recent annual reconciliations.

|  |  |  |  | Natural <br> Gas |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Period <br> (Twelve | Total <br> Unadjusted <br> Months <br> ending) | City Gate <br> Receipts | Plus: <br> Propane | Less: <br> Line <br> pack | Plus: <br> Conversion | w/ Line <br> pack | Disposition | LAUF <br> w/ Line <br> pack | LAUF w/o <br> Line pack |
| Aug-08 | $16,095,611$ | 1,034 | 1,712 | $(341)$ | $16,094,592$ | $15,936,740$ | $0.9808 \%$ | $0.9913 \%$ |  |
| Aug-09 | $16,547,636$ | 1,368 | $(3,030)$ | 5 | $16,552,039$ | $16,391,335$ | $0.9709 \%$ | $0.9528 \%$ |  |
| Aug-10 | $18,883,540$ | 1,504 | $(304)$ | $(55)$ | $18,885,293$ | $18,798,357$ | $0.4603 \%$ | $0.4587 \%$ |  |

Staff recommends that line pack should be excluded from the calculation in order to further simplify and standardize the calculation. As can be seen in Table 7, for the twelve months period ending in August 2009, when line pack was most significant of the three years, the line pack adjustment represents less than $0.02 \%$ of the annual throughput. Elimination line pack for that period results in an increase of loss percentage by $0.0181 \%$, a negligible difference.

Not only does line pack have minimal effects on the LAUF calculation, the determination of line pack may be subjective. The relationship between pressure and line pack is based on assumed constants while the system is dynamic and ever changing.

Staff also recommends eliminating the conversation factor adjustment used by CHG\&E. As previously discussed in the earlier section, since January 2010, CHG\&E uses a daily volume to heat content conversion factor, thus eliminating the need for conversion factor adjustment.

## Excluded Customers

As discussed above, KEDLI, KEDNY and Con Edison exclude customers from the system LAUF calculation. Keyspan - Long Island (KEDLI) and Keyspan-New York (KEDNY) exclude special contract electric generation customers from the system LAUF calculation. These customers must provide deliveries at a negotiated LAUF or loss percentage. Over the past three years approximately $50 \%$ and $20 \%$ of the system throughput has been excluded from the system LAUF calculation for KEDLI and

KEDNY respectively. Con Edison also excludes special contract electric generation customers from the system LAUF calculation. These customers also must provide deliveries at a negotiated LAUF or loss percentage. Over the past three years approximately 50\% Con Edison's the system throughput has been excluded from the system LAUF calculation.

All these customers are served off the LDC's transmission system. Due to the transmission system operating at high pressure, the transmission system is assumed to have a lower LAUF percentage, than the utility distribution system LAUF percentage, since transmission system leaks are more readily detectable and require immediate repair due to the large pressure differential. However, as mentioned previously, the amount of LAUF for the transmission system is not known as no distinct metered boundary exists between the transmission system and the distribution system. Therefore system receipts and deliveries for transmission customers should be included in the LAUF calculation.

## Company Use

As discussed previously, Company use is the volume of natural gas used by the company; which includes: gas used by heaters at gate and regulator stations, gas used to heat office buildings, and gas used at compressor stations. The treatment of heater and compressor gas varies depending on each LDC. Some LDC adjusts total send outs to reflect heater and compressor gas usage, while some include them as part of company use as a disposition. This study initiated an internal investigation within the LDCs and found that they neglect to account for some heater and compressor gas usage.

All metered volumes for Company use should be included in the LAUF factor calculation. Gas for company use should be included in the metered out gas, like any other end user, to be fair and consistent with other sales customers. Gas for company use should only be excluded from the metered in gas if the usage occurs before the city gate. Some LDCs have heater gas usage that is unmetered and unaccounted for. Unmetered company use should remain as LAUF as long as it continues to be unmetered.

Theft of Service

Some LDCs make adjustment to account for the volumes associated with theft of service recoveries. No adjustment for theft of service should be made to the metered out quantities. These amounts are estimated and are often out of period which distort LAUF. The degree that the estimates are over or under the actual is unknown. However GAC revenues recovered from theft of service should continue to be part of the GAC recovery. The benefit to LDCs for recovery of theft of service will be in lower LAUF going forward and higher historical LAUF, undistorted by possible out of period volumes.

## Incentive Mechanism Review

One of the objectives of Staff's review of LAUF is to determine if the LAUF incentive mechanism is appropriate as currently structured. Since the LAUF mechanism was established, the natural gas industry has undergone significant changes. Retail competition began in the mid-1980's where larger customers were given the option to purchase gas directly from suppliers rather than their LDCs. A proceeding instituted by the Commission in 1993 culminated in unbundling and small customer aggregation programs. The outcome was that commodity service was unbundled from delivery service, which allowed marketers to offer commodity service to small customers as an aggregated group. Given these changes in the natural gas industry, the current LAUF incentive mechanism may no longer be appropriate.

Further safety incentive mechanisms have also become a standard part of rate plans. These safety mechanisms require timely response to reported gas leaks, timely repair of gas leaks based on their severity, continuous leak surveys, and a mandatory replacement rate of leak prone pipe. All these safety requirements provide incentives for LDC action which reduces LAUF. The LAUF mechanism might be better restructured to maintain the gains in LAUF reduction while allowing these other incentive mechanisms to drive any further gains.

## Incentive Mechanism Components

There are two components which affect the magnitude of the current incentive mechanism for each utility: the difference between the actual and allowed losses and the commodity cost of gas. A historical analysis on system loss amounts for all NY utilities was performed. The review included calculations for three years, and indicated that
during that time period actual system losses are stable. The actual system FFA for all major NY utilities can be seen in Figure 1 below.

Figure 1. Actual Factor of Adjustment for Major NY Utilities.


A review of the commodity costs of gas over the same three year period shows greater variation. The futures market prices, can be seen in Figure 2, which shows the NYMEX settlement prices at the Henry Hub.

Figure 2. NYMEX Natural Gas Closing Price


Date

These fluctuations in the market price can and have caused dramatic changes in NY utilities commodity cost of gas. All NY utilities experienced a significant drop in their commodity cost of gas for the reconciliation period ending 8/31/2010 as compared to the reconciliation period ending $8 / 31 / 09$, as shown in the above figure. For some utilities, commodity costs in 2010 were less than half those of 2009. Based on the variations in the commodity cost, utilities experience revenue fluctuations due to the LAUF incentive.

The commodity part of a customer's bill for natural gas represents a significant portion of the customer's bill. Even with the significant variation in commodity prices the past three years, the commodity portion has always been more than $50 \%$ of a customer's annual bill. Recovery of the LDC's return constitutes a small percent of the delivery portion of a natural gas customer's bill. The commodity portion relative to the return portion of a customer's bill coupled with the natural variability of LAUF results in significant swings to the LDC’s annual return even with a relative stable actual factor of adjustments measured each year.

The commodity price and the natural variability of LAUF are beyond the control of the utility. Revenue fluctuations due to circumstances beyond the control of the utility should be limited; however, performance standards should not be compromised. Staff believes that implementation of a dead band around the LAUF target will dampen these revenue fluctuations, while maintaining current LAUF performance.

## Dead band

A dead band should be designed to avoid the revenue impact of natural variability. For actual utility losses within the tolerance band, the utility would recover actual commodity costs. In the event actual utility losses are outside the tolerance band, the utility would earn an incentive or incur a penalty, to the outer limit of the tolerance band.

With regard to the size of the dead band, we recommend that this dead band be two standard deviations around the average FOA percentage. The standard deviation of the average FOA percentage is limit to $0.5 \%$ should any LDC have standard deviation of great than $0.5 \%$. Two standard deviations were chosen because it would result in the likelihood of any one year being outside that range due to natural variability being less than 1 in 6 for a three year period. The maximum range for the band is $\pm 1.0 \%$ from the five year average.

## Negative Losses

Staff must address negative losses because NYSEG ${ }^{12}$ has experienced consistent negative losses for the past 3 years. Negative losses are physically impossible. However, consistent year to year calculated negative losses are possible when the offset ${ }^{13}$ between the set of meters reading gas in and the set of meters reading gas out is negative and the natural variability is less than that offset. Additionally, natural variability in the LAUF can produce negative losses in some years for LDCs whose offset is positive.

We recommend that there should be no LAUF incentive for an actual factor of adjustment less than 1.0 in any reconciliation year. It does not make sense to reward an

[^7]LDC for a physical impossibility. To compensate for disallowing LAUF incentives for actual factor of adjustments below 1.0 , we recommend that top of the dead band equal 1 plus four standard deviations when the bottom of the dead band is less than 1. The LAUF incentive should be calculated from the top of the dead band for penalty situations and the bottom of the dead band for reward situations.

Additionally, we recommend that 1.0 be the minimum fixed factor of adjustment. It does not make sense to require ESCOs to deliver less gas to the city gate than they sell at the burner tip.

## System Performance Adjustment Mechanism (SPAM)

The inequity related to the over or under delivery of gas to serve firm transportation due to the fixed factor of adjustment being greater than or less than the actual factor of adjustment should be eliminated. We recommend that the inequity be eliminated by the implementation of a surcharge/refund for the commodity cost of the gas for the over or under delivered gas.

This surcharge/refund should be called the system performance adjustment mechanism (SPAM). All firm customers shall be surcharged for additional gas beyond the tariff allowance for losses and refunded for the reduced gas below the tariff allowance when the actual losses are more or less, respectively, than the tariff allowance. The additional gas shall be valued at the LDC's average commodity cost of gas. The limit of the amount surcharge shall be to the dead band.

Implementation of the SPAM is necessitated for the following reasons: 1) by the creation of the dead band, 2) by limiting the minimum fixed factor of adjustment to 1.0, and 3) by the impact of the increasing percentage of firm sales being transportation sales. Without the SPAM, full service and transportation customers would not be treated the same.

The dead band permits the Company to recover from, or refund to, full service customers for actual losses within the dead band. Correspondingly, the SPAM permits the Company to recover from, or refund to, transportation customers for actual losses within the dead band.

For negative losses, the Company recovers from full service customers only the gas costs associated with actual losses. Correspondingly, the SPAM refunds to transportation customers for actual losses below a factor of adjustment of 1.

Lastly, the SPAM addresses the effect of increased migration to transportation service. Without SPAM, as migration increases, fewer full service customers either pay for the extra losses or benefit from the reduced losses from a growing number of transportation customers. At the extreme, the magnitude of this cost or benefit can exceed the commodity cost of gas for full service customers. Appendix A shows how the amount to surcharge/refund to maintain equity grows as the percentage of firm sales as transportation service increases.

The SPAM should be applied to both full service and transportation customers through a delivery charge adjustment. In effect this will separate the gas cost recovery between recovery from the full service customers for the fixed factor of adjustment and recovery from all firm customers for any deviation of the actual factor of adjustment from the fixed factor of adjustment.

SPAM addresses the issues of setting delivery requirements for energy supply companies (ESCOs) serving transportation customers, providing proper market signals, and limiting the fixed factor of adjustment to a minimum of 1 . In cases where the gas measurement into the system is less than the gas measurement out of the system, all customers will be refunded for the gas not needed to meet the system deliveries.

The one instance where the SPAM will operate outside the dead band is when the losses are negative. In this situation, the SPAM assures that all customers receive the savings as LAUF incentives are not provided for negative losses.

## Transportation Sales Impact on the LAUF Incentive

Implementation of SPAM allows full recovery of commodity cost from firm customers within the dead band. Outside the dead band, in the current LAUF mechanism, the company assumes the commodity costs of gas for full service customers while full service customers assumes the commodity cost of gas for transportation customers.

In the examples shown in Appendix B, the combined penalty/(incentive) for full service and transportation customers for a factor of adjustment outside the dead band is \$3 million. Under the existing LAUF mechanism, the Company's LAUF incentive equals the $\$ 3$ million times the percentage of firm sales that are full service. For migration rates of $5 \%, 40 \%$ and $95 \%$, the LAUF incentive is $\$ 2.85$ million, $\$ 1.8$ million and $\$ 0.15$ million, respectively. This demonstrates that the LAUF incentive decreases as the amount of full service sales decrease relative to firm sales.

We recommend that the LAUF incentive equal the combined incentives for full service and transportation customers. This can be accomplished by adding the two incentives from a detailed allocation of commodity costs as shown in Appendix B and can also be approximated in the existing LAUF mechanism by dividing the current incentive by the percent of firm sales that are full service sales.

## Summary of Recommendations

After conducting a statewide review of the recovery of the cost of lost and unaccounted for (LAUF) gas for each LDC, Staff makes recommendations pertaining to the setting of utility specific fixed FOAs and the SPAM.

## Fixed FOA Recommendations

1. We recommend that the LAUF calculation, for incentive purposes, be based on a system wide LAUF calculation. The LAUF calculation should be total metered into the system divided by total metered out of the system with no adjustments, other than conversion from volumes to energy, for systems based on therm billing. The only meter readings to be excluded are dedicated lines where the receipts and deliveries are excluded.

We make this recommendation for the following reasons:
a) The minimization of losses benefits everyone through lower electric generation costs, lower production costs of manufacturers, lower operation costs of businesses, lower costs to residences, and lower environmental impact from reduced natural gas losses.
b) Every adjustment introduces additional error, uncertainty, variability in the LAUF calculation. Metering in itself contains uncertainty, error, and
variability. The financial impacts of variability are minimized if the variability is minimized.

Appendix A provides the system wide factor of adjustment for the 2008 to 2010 annual reconciliation periods as well as the cumulative factor of adjustment for the entire three year period for all the major utilities. The cumulative factor of adjustment ranges from 0.99648 for NYSEG to 1.02241 for NFGDC. The factor of adjustment for any one year ranges from 0.99264 for NYSEG in 2010 to 1.02295 for NFGDC in 2010.
2. We recommend that the lowest tariff FOA be 1.0000 .

We make this recommendation for the following reasons:
1.) Physically, delivery of more gas than the amount of gas received is not possible. A multi-year average for actual factor of adjustment less than 1.0000 is a result of factors, such as meter error and conversion from volume metering to energy billing.
2.) A requirement to bring in fewer units than units to be sold is not reasonable.
3.) Certain LDCs have already experienced actual factor of adjustment for the distribution system being less than 1.0000 for multiple years and guidance is necessary in these instances.

## SPAM Recommendations

1. We recommend the institution of a system performance adjustment mechanism (SPAM) charge as a delivery adjustment charge or as part of an existing delivery charge to recover or refund gas costs for actual LAUF greater or lesser than the tariff LAUF within the dead band.

We make this recommendation for the following reasons:
a) To remove the subsidy between full service and transportation customers where full service customers use transportation customers' gas when losses are less than the tariff LAUF or transportation customers use full service customers' gas when losses exceed the tariff LAUF.
b) Increasing migration to transportation service produces in an increasing impact of the subsidy volume on full service customers.
c) The limiting of the tariff FOA to a minimum of 1.0000 creates a persistent subsidy to full service customers from transportation customers for those LDCs measuring actual FOA consistently below 1.0000 with the type of metering currently in service. This recommendation removes this biased subsidy.
2. We recommend that the LAUF incentive include the costs/savings outside the dead band for both full service and transportation customers. We make this recommendation for the following reasons:
a) Currently full service customers assume the cost or savings of the added or avoided gas for transportation customers outside the dead band.
b) Those costs or savings were part of the LAUF incentive for those transportation customers as full service customers.
c) The result of customer migration to transportation service should not be a reduction of the LAUF incentive to the Company and an increase in costs to full service customers.
d) It makes the LAUF incentive independent of customer migration to transportation service and avoids the trivialization of the LAUF incentive due to significant migration.
3. We recommend that a dead band of two standard deviations of the previous five year's LAUF percentages be set around tariff LAUF. The LAUF incentive is calculated using the top of the dead band when LAUF is above the dead band. The LAUF incentive is calculated using the bottom of the dead band when LAUF is below the dead band. We make this recommendation for the following reasons:
a) Factors, such as meter error, conversion from volume metering to energy billing, billing schedule variation year to year, and estimated meter reads, provide variability in the LAUF calculation which is unavoidable. Year to year variability creates year to year variability in financial impact to the

LDC as the commodity cost of gas for the LDC is significant compared to the LDC's net margin. Over a multi-year period, the net LAUF incentive can be small while any one year's LAUF incentive can be large.
b) Setting the dead band on standard deviations recognize that each LDC’s system is unique with its own inherent variability.
c) Setting the dead band at two standard deviations assure that the inherent variability would not trigger any LAUF incentive for more than $80 \%$ of any three year rate plan from inherent variability.
d) Calculation of the LAUF incentive from the dead band limits would further reduce the financial impact to only that variability beyond the natural variability.
4. We recommend that no LAUF incentive be given for an actual factor of adjustment below 1.000. We make this recommendation for the following reasons:
a) Physically, delivery of more gas than the amount of gas received is not possible. An actual factor of adjustment below 1.0000 is a result of factors such as meter inaccuracy conversion from volume metering to energy billing, billing schedule variation year to year, and estimated meter reads.
b) It does not seem reasonable to provide a LAUF incentive for an actual LAUF which is possible only through meter inaccuracy or operational timing mismatches.
5. We recommend that the top of the band be set at one plus four standard deviations when the bottom of the band is limited to 1.0000 . We make this recommendation for the following reason:

The recommendation is consistent with recommendation \#3. Once the lower band is at 1.0000 and no LAUF incentive below an actual factor of adjustment of 1.0000 is allowed, it provides symmetry to provide no LAUF incentive until
actual factor of adjustment is above the upper band corresponding to when the lower band is 1.000 .

For illustration purposes, the Table 7, shown below, has taken the system wide factor of adjustments for the 2008 to 2010 annual reconciliation periods from Appendix A and calculated the average and standard deviation for each LDC's three years of corresponding FOA percentages. The target factor of adjustment is set to 1 plus the average FOA percentage with the bottom of the band equal to the target less two standard deviations and the top of the band equal to the target plus two standard deviations.

Table 7. Proposed system wide factor of adjustment.

|  | System Wide FOA Incentive |  |  | FOA \% |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | BOTTOM | FOA | TOP | 3-Year Average | Standard <br> Deviation |
| CHG\&E | 1.00203 | 1.00801 | 1.01399 | 0.801\% | 0.299\% |
| Con Edison | 1.00962 | 1.01249 | 1.01535 | 1.249\% | 0.143\% |
| KEDLI | 1.01027 | 1.01438 | 1.01849 | 1.438\% | 0.206\% |
| KEDNY | 1.00915 | 1.01484 | 1.02052 | 1.484\% | 0.284\% |
| NMPC | 1.01092 | 1.01517 | 1.01941 | 1.517\% | 0.212\% |
| NFGDC | 1.02147 | 1.02242 | 1.02337 | 2.242\% | 0.048\% |
| NYSEG | 1.00000 | 1.00000 | 1.01419 | -0.359\% | 0.355\% |
| O\&R | 1.01117 | 1.01555 | 1.01993 | 1.555\% | 0.219\% |
| RG\&E | 1.00414 | 1.00773 | 1.01131 | 0.773\% | 0.179\% |

NYSEG had the lowest average LAUF percentage of -.359\% and NFGDC had the largest average LAUF percentage of $2.242 \%$ for the three years. NFGDC has the smallest standard deviation of $0.048 \%$ and NYSEG has the highest at $0.355 \%$. NYSEG's target factor of adjustment is 1.00000 and the top of the band is 1.0 plus four standard deviations as its average LAUF percentage is negative. The bottom of the band ranges from a low of 1.00000 for NYSEG to a high of 1.02147 for NFGDC. The top of the band ranges from a low of 1.01131 for RGE and a high of 1.02337 for NFGDC. For all LDCs shown, the top of the band would not have triggered a penalty in the 2008 to 2010 period.

The bottom of the dead band would have triggered a benefit for NYSEG in all three years if the dead band was not limited to actual factor of adjustments greater than 1.0000.

## APPENDIX

## A. System wide factor of adjustment for the past 3 annual reconciliation periods.

Table 8. System wide FOA for 2008.

|  | 2008 |  | Out |
| :---: | ---: | ---: | ---: |
|  | In | FOA |  |
| CHG\&E | $16,224,252$ | $16,064,347$ | 1.00995 |
| Con Edison | $350,724,739$ | $346,926,326$ | 1.01095 |
| KEDLI | $178,048,628$ | $175,422,682$ | 1.01497 |
| KEDNY | $199,971,083$ | $197,568,736$ | 1.01216 |
| NMPC | $134,586,140$ | $132,778,776$ | 1.01361 |
| NFGDC | $91,590,430$ | $89,594,163$ | 1.02228 |
| NYSEG | $55,783,175$ | $55,800,599$ | 0.99969 |
| O\&R | $29,965,086$ | $29,460,387$ | 1.01713 |
| RG\&E | $50,581,904$ | $50,091,373$ | 1.00979 |
| Total | $1,107,475,437$ | $1,093,707,388$ | 1.01259 |

Table 9. System wide FOA for 2009.

|  | 2009 |  | Out |
| :---: | ---: | ---: | ---: |
|  | In | FOA |  |
| CHG\&E | $16,689,317$ | $16,532,083$ | 1.00951 |
| Con Edison | $342,251,200$ | $337,597,551$ | 1.01378 |
| KEDLI | $169,508,701$ | $166,826,303$ | 1.01608 |
| KEDNY | $198,184,968$ | $194,714,856$ | 1.01782 |
| NMPC | $138,414,152$ | $136,022,439$ | 1.01758 |
| NFGDC | $90,578,319$ | $88,625,863$ | 1.02203 |
| NYSEG | $56,511,385$ | $56,687,119$ | 0.99690 |
| O\&R | $27,374,469$ | $27,021,826$ | 1.01713 |
| RG\&E | $51,272,015$ | $50,937,088$ | 1.00658 |
| Total | $1,090,784,526$ | $1,074,965,128$ | 1.01472 |

Table 10. System wide FOA for 2010

|  | 2010 |  | FOA |
| :---: | ---: | ---: | ---: |
|  | In | Out | 1.00457 |
| CHG\&E | $19,019,534$ | $18,933,046$ | 1.01273 |
| Con Edison | $334,762,589$ | $330,554,395$ | 1.01209 |
| KEDLI | $193,047,279$ | $190,740,485$ | 1.01453 |
| KEDNY | $190,211,612$ | $187,487,666$ | 1.01430 |
| NMPC | $136,543,433$ | $134,617,859$ | 1.02295 |
| NFGDC | $85,234,809$ | $83,322,415$ | 0.99264 |
| NYSEG | $52,482,585$ | $52,871,569$ | 1.01713 |
| O\&R | $25,090,357$ | $24,683,972$ | 1.00681 |
| RG\&E | $47,524,160$ | $47,202,688$ | 1.01261 |
| Total | $1,083,916,358$ | $1,070,414,095$ |  |

Table 11. Average System wide FOA form 2008 to 2010.

|  | 2008-2010 |  |  |
| :---: | ---: | ---: | ---: |
|  | In | Out | FOA |
| CHG\&E | $54,728,385$ | $54,398,176$ | 1.00607 |
| Con Edison | $1,011,776,378$ | $998,706,341$ | 1.01309 |
| KEDLI | $555,603,259$ | $548,307,273$ | 1.01331 |
| KEDNY | $578,608,192$ | $569,690,189$ | 1.01565 |
| NMPC | $411,501,018$ | $405,258,157$ | 1.01540 |
| NFGDC | $261,047,937$ | $255,270,693$ | 1.02263 |
| NYSEG | $161,476,556$ | $162,430,257$ | 0.99413 |
| O\&R | $77,555,183$ | $76,389,769$ | 1.01526 |
| RG\&E | $146,320,335$ | $145,342,464$ | 1.00673 |
| Total | $3,258,617,243$ | $3,215,793,318$ | 1.01332 |

## B. Sample calculation using the proposed FOA

Table 12. Sample SPAM calculation - 95\% firm sales/5\% firm transportation

| Situation | Send out (MDth) | Sales (MDth) | Firm <br> Full <br> Service <br> (MDth) | Trans <br> (MDth) | Factor of Adjustment |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | Bottom of Band | Tariff | Top of Band | Actual |
| High Out of Band | 129,500 | 125,000 | 95,000 | 5,000 | 1.01 | 1.02 | 1.03 | 1.036 |
| High In Band | 128,750 | 125,000 | 95,000 | 5,000 | 1.01 | 1.02 | 1.03 | 1.030 |
| At Tariff | 127,500 | 125,000 | 95,000 | 5,000 | 1.01 | 1.02 | 1.03 | 1.020 |
| Low In Band | 126,250 | 125,000 | 95,000 | 5,000 | 1.01 | 1.02 | 1.03 | 1.010 |
| Low Out of Band | 125,500 | 125,000 | 95,000 | 5,000 | 1.01 | 1.02 | 1.03 | 1.004 |
|  |  | Full Service |  |  |  | Transportation |  |  |
| Situation | Commodity <br> Cost <br> (\$) <br> (000) | $\begin{gathered} \hline \text { Commodity } \\ \text { with no } \\ \text { losses } \\ \text { (\$) } \\ (000) \\ \hline \end{gathered}$ | $\begin{gathered} \text { Tariff } \\ (\$) \\ (000) \end{gathered}$ | Surcharge/ (Refund) (\$) (000) | Penalty / (Incentive) <br> (\$) <br> (000) | $\begin{gathered} \text { Delivered } \\ (\$) \\ (000) \end{gathered}$ | $\begin{gathered} \begin{array}{c} \text { Surcharge/ } \\ \text { (Refund) } \\ (000) \end{array} \\ \hline \end{gathered}$ | Penalty/ (Incentive) (000) |
| High Out of Band | 492,500 | 475,000 | 9,500 | 4,750 | 2,850 | 25,500 | 250 | 150 |
| High In Band | 489,500 | 475,000 | 9,500 | 4,750 | - | 25,500 | 250 | - |
| At Tariff | 484,500 | 475,000 | 9,500 | - | - | 25,500 | - | - |
| Low In Band | 479,500 | 475,000 | 9,500 | $(4,750)$ | - | 25,500 | (250) | - |
| Low Out of Band | 476,500 | 475,000 | 9,500 | $(4,750)$ | $(2,850)$ | 25,500 | (250) | (150) |

Table 13. Sample SPAM calculation - 60\% firm sales/40\% firm transportation

| Situation | Send out (MDth) | Sales (MDth) | Firm Full Service | $\begin{gathered} \text { Trans } \\ \text { (MDth) } \end{gathered}$ | Factor of Adjustment |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | Bottom of Band | Tariff | Top of Band | Actual |
| High Out of Band | 129,500 | 125,000 | 60,000 | 40,000 | 1.01 | 1.02 | 1.03 | 1.036 |
| High In Band | 128,750 | 125,000 | 60,000 | 40,000 | 1.01 | 1.02 | 1.03 | 1.030 |
| At Tariff | 127,500 | 125,000 | 60,000 | 40,000 | 1.01 | 1.02 | 1.03 | 1.020 |
| Low In Band | 126,250 | 125,000 | 60,000 | 40,000 | 1.01 | 1.02 | 1.03 | 1.010 |
| Low Out of Band | 125,500 | 125,000 | 60,000 | 40,000 | 1.01 | 1.02 | 1.03 | 1.004 |
|  |  | Full Service |  |  |  | Transportation |  |  |
| Situation | $\begin{aligned} & \text { Commodity } \\ & \text { Cost } \\ & (\$) \\ & (000) \\ & \hline \end{aligned}$ | Commodity with no losses (\$) (000) | Tariff <br> (\$) <br> (000) |  | Penalty / (Incentive) <br> (\$) <br> (000) | Delivered (\$) (000) | $\begin{gathered} \begin{array}{c} \text { Surcharge/ } \\ \text { (Refund) } \\ (000) \end{array} \\ \hline \end{gathered}$ | Penalty/ (Incentive) (000) |
| High Out of Band | 314,000 | 300,000 | 6,000 | 3,000 | 1,800 | 204,000 | 2,000 | 1,200 |
| High In Band | 311,000 | 300,000 | 6,000 | 3,000 | - | 204,000 | 2,000 | - |
| At Tariff | 306,000 | 300,000 | 6,000 | - | - | 204,000 | - | - |
| Low In Band | 301,000 | 300,000 | 6,000 | $(3,000)$ | - | 204,000 | $(2,000)$ | - |
| Low Out of Band | 298,000 | 300,000 | 6,000 | $(3,000)$ | $(1,800)$ | 204,000 | $(2,000)$ | $(1,200)$ |

Table 14. Sample SPAM calculation - 5\% firm sales/95\% firm transportation

| Situation | Send out (MDth) | Sales (MDth) | Firm <br> Full <br> Service | Trans (MDth) | Factor of Adjustment |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | Bottom of Band | Tariff | Top of Band | Actual |
| High Out of Band | 129,500 | 125,000 | 5,000 | 95,000 | 1.01 | 1.02 | 1.03 | 1.036 |
| High In Band | 128,750 | 125,000 | 5,000 | 95,000 | 1.01 | 1.02 | 1.03 | 1.030 |
| At Tariff | 127,500 | 125,000 | 5,000 | 95,000 | 1.01 | 1.02 | 1.03 | 1.020 |
| Low In Band | 126,500 | 125,000 | 5,000 | 95,000 | 1.01 | 1.02 | 1.03 | 1.010 |
| Low Out of Band | 125,500 | 125,000 | 5,000 | 95,000 | 1.01 | 1.02 | 1.03 | 1.004 |


| Situation | Full Service |  |  |  |  | Transportation |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Commodity Cost <br> (\$) <br> (000) | Commodity with no losses (\$) (000) | Tariff $(\$)$ $(000)$ | Surcharge/ (Refund) (\$) (000) | Penalty / (Incentive) <br> (\$) <br> (000) | Delivered (\$) (000) | Surcharge/ (Refund) <br> (\$) <br> (000) | Penalty/ (Incentive) <br> (\$) <br> (000) |
| High Out of Band | 33,500 | 25,000 | 500 | 250 | 150 | 484,500 | 4,750 | 2,850 |
| High In Band | 30,500 | 25,000 | 500 | 250 | - | 484,500 | 4,750 | - |
| At Tariff | 25,500 | 25,000 | 500 | - | - | 484,500 | - | - |
| Low In Band | 20,500 | 25,000 | 500 | (250) | - | 484,500 | $(4,750)$ | - |
| Low Out of Band | 17,500 | 25,000 | 500 | (250) | (150) | 484,500 | $(4,750)$ | $(2,850)$ |


CORNING
CASE 11-G-0280
REVENUE ALLOCATION - YEAR 1
CORNING NATURAL GAS CASE 11-G-0280



# CORNING NATURAL GAS CORPORATION 

CASE 11-G-0280

## CUSTOMER COSTS VERSUS CUSTOMER CHARGES

Customer Costs - COS Study

|  | \$ per month |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Service Class | Without line 15 |  | With line 15 |  | MI Proposed |  | Option 1 - Tariff Consolidation |  | Option 2 - <br> Allocation based on Inergy Storage |  |
|  | COMPANY | \$ | 27.36 | \$ | 26.64 | \$ | 32.19 | \$ | 26.71 | \$ | 27.39 |
|  | CORNING | \$ | 27.12 | \$ | 26.52 | \$ | 32.13 | \$ | 26.18 | \$ | 27.13 |
|  | BATH | \$ | 308.63 | \$ | 269.19 | \$ | 269.19 | \$ | 298.21 | \$ | 259.25 |
|  | HAMMONDSPORT | \$ | 32.54 | \$ | 28.68 | \$ | 32.46 | \$ | 40.18 | \$ | 33.58 |
| SC 1 - Corning | RESIDENTIAL | \$ | 24.77 | \$ | 24.04 | \$ | 29.18 | \$ | 23.61 | \$ | 24.75 |
| SC 1 - Hsport | RESIDENTIAL | \$ | 28.76 | \$ | 24.91 | \$ | 28.69 | \$ | 31.67 | \$ | 27.93 |
| SC 1 - Corning | COMMERCIAL | \$ | 45.58 | \$ | 44.57 | \$ | 50.39 | \$ | 43.76 | \$ | 45.42 |
| SC 1 - Corning | PUBLIC AUTH | \$ | 56.16 | \$ | 54.42 | \$ | 63.44 | \$ | 60.40 | \$ | 64.38 |
| SC 2 - Hsport | COMMERCIAL | \$ | 37.48 | \$ | 35.16 | \$ | 37.67 | \$ | 48.80 | \$ | 44.48 |
| SC 6 - Corning | COMM TRANS | \$ | 168.53 | \$ | 168.45 | \$ | 202.74 | \$ | 168.45 | \$ | 168.45 |
| SC 4 - Hsport | TRANSPORT | \$ | 117.88 | \$ | 100.72 | \$ | 111.57 | \$ | 363.95 | \$ | 200.05 |
| SC 7 - Corning | INDUST TRANS | \$ | 1,114.77 | \$ | 1,113.16 | \$ | 1,198.88 | \$ | 1,113.33 | \$ | 1,113.09 |
| SC 14 - Corning | RESIDENT AGR | \$ | 25.01 | \$ | 25.01 | \$ | 31.21 | \$ | 25.01 | \$ | 25.01 |
| SC 14 - Corning | COMM AGR | \$ | 73.30 | \$ | 73.27 | \$ | 88.90 | \$ | 73.26 | \$ | 73.28 |
| SC 14 - Corning | PUB AUTH AGR | \$ | 73.46 | \$ | 73.43 | \$ | 89.32 | \$ | 73.43 |  | 73.44 |
| SC 7 - Hsport | RESIDENT AGR | \$ | 28.52 | \$ | 25.41 | \$ | 29.51 | \$ | 31.26 | \$ | 24.73 |
| SC 7 - Hsport | COMM AGR | \$ | 86.77 | \$ | 73.74 | \$ | 83.32 | \$ | 111.28 | \$ | 78.25 |
| TRANS \& SALES | FLEX | \$ | 181.07 | \$ | 161.97 | \$ | 173.61 | \$ | 324.73 | \$ | 213.42 |
| EG\&W - Bath | FIRM | \$ | 303.99 | \$ | 263.16 | \$ | 263.16 | \$ | 271.75 | \$ | 257.99 |
| EG\&W - Bath | TRANS SC3 | \$ | 306.42 | \$ | 270.39 | \$ | 270.39 | \$ | 306.93 | \$ | 258.91 |
| EG\&W - Bath | TRANS SC4 | \$ | 315.48 | \$ | 274.01 | \$ | 274.01 | \$ | 315.96 | \$ | 260.86 |

CORNING NATURAL GAS CORPORATION
CASE 11-G-0280
Staff's Rate Year 1 Forecast Priced Out at Current Rates


## CORNING NATURAL GAS CORPORATION

CASE 11-G-0280
Staff's Rate Year 1 Forecast Priced Out at Current Rates

|  |  | Sales ccf |  | Current Rates /ccf |  | Revenues |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SC 14 R | Aggregation Residential |  |  |  |  |  |
|  | Customer | 2,298 | \$ | 15.25 | \$ | 420,450 |
|  | first 3 | 76,763 |  |  |  |  |
|  | next 47 | 879,223 | \$ | 0.41334 | \$ | 363,418 |
|  | >50 | 1,582,480 | \$ | 0.26118 | \$ | 413,312 |
|  |  | 2,538,467 |  |  |  |  |
|  | Delivery Revenues |  |  |  | \$ | 1,197,180 |
| SC 14 C | Aggregation Commercial |  |  |  |  |  |
|  | Customer | 166 | \$ | 15.25 | \$ | 30,413 |
|  | first 3 | 5,983 |  |  |  |  |
|  | next 47 | 82,834 | \$ | 0.41334 | \$ | 34,238 |
|  | >50 | 1,300,026 | \$ | 0.26118 | \$ | 339,541 |
|  |  | 1,388,842 |  |  |  |  |
|  | Delivery Revenues |  |  |  | \$ | 404,192 |
| SC 14 P | Aggregation Public |  |  |  |  |  |
|  | Customer | 53 | \$ | 15.25 | \$ | 9,699 |
|  | first 3 | 1,604 |  |  |  |  |
|  | next 47 | 18,944 | \$ | 0.41334 | \$ | 7,830 |
|  | >50 | 422,591 | \$ | 0.26118 | \$ | 110,372 |
|  |  | 443,140 |  |  |  |  |
|  | Delivery Revenues |  |  |  | \$ | 127,902 |
| SC 2IF | Industrial Firm |  |  |  |  |  |
|  | Customer |  |  |  |  |  |
|  | first 2,500 | 0 | \$ | 1,220 | \$ | - |
|  | next 12,500 | 0 | \$ | 0.11677 | \$ | - |
|  | next 25,000 | 0 | \$ | 0.10543 | \$ | - |
|  | > 40,000 | 0 | \$ | 0.07553 | \$ | - |
| Negotiated Contracts |  |  |  |  |  |  |
|  |  |  |  |  | \$ | 192,000 |
|  |  |  |  |  | \$ | 171,640 |
|  |  |  |  |  | \$ | 89,217 |
|  |  |  |  |  | \$ | 60,205 |
|  |  |  |  |  | \$ | 583,992 |
|  |  |  |  |  | \$ | 335,860 |
|  | Delivery Revenues |  |  |  | \$ | 1,432,914 |

## CORNING NATURAL GAS CORPORATION

CASE 11-G-0280
Staff's Rate Year 1 Forecast Priced Out at Current Rates

|  |  | Sales ccf |  | t Rates ccf | Revenues |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| HAMMONDSPORT |  |  |  |  |  |  |
| SC 1 | Firm |  |  |  |  |  |
|  | Customer | 406 | \$ | 15.25 | \$ | 74,297 |
|  | 1st 3 | 13,008 |  |  |  |  |
|  | next 47 | 127,158 | \$ | 0.41334 | \$ | 52,560 |
|  | >50 | 197,875 | \$ | 0.26118 | \$ | 51,681 |
|  |  | 338,447 |  |  |  |  |
|  | Delivery Revenues |  |  |  | \$ | 178,537 |
| SC2 C | Commercial |  |  |  |  |  |
|  | Customer | 75 | \$ | 15.25 | \$ | 13,749 |
|  | 1st 500 | 2,470 | \$ | 0.26993 | \$ | 667 |
|  | next 14,500 | 90,611 | \$ | 0.20370 | \$ | 18,457 |
|  | > 15,000 | 27,126 | \$ | 0.19333 | \$ | 5,244 |
|  |  | 120,208 |  |  |  |  |
|  | Delivery Revenues |  |  |  | \$ | 38,117 |
| SC 4 T | Transportation |  |  |  |  |  |
| HT HTO | Customer | 4 | \$ | 15.25 | \$ | 732 |
|  | >x | 180,653 | \$ | 0.12320 | \$ | 22,256 |
|  | Delivery Revenues |  |  |  | \$ | 22,988 |
| $\begin{aligned} & \text { SC } 7 \text { AG R } \\ & \text { HA } \end{aligned}$ | Aggregation Residential |  |  |  |  |  |
|  | Customer | 44 | \$ | 15.25 | \$ | 8,112 |
|  | 1st 3 | 1,482 |  |  |  |  |
|  | next 47 | 16,788 | \$ | 0.41334 | \$ | 6,939 |
|  | >50 | 28,084 | \$ | 0.26118 | \$ | 7,335 |
|  | Delivery Revenues |  |  |  | \$ | 22,386 |
| SC 7 AG C <br> HAC | Aggregation Commercial |  |  |  |  |  |
|  | Customer | 2 | \$ | 15.25 | \$ | 366 |
|  | 1st 3 | 63 |  |  |  |  |
|  | next 47 | 878 | \$ | 0.41334 | \$ | 363 |
|  | >50 | 11,917 | \$ | 0.26118 | \$ | 3,113 |
|  | Delivery Revenues |  |  |  | \$ | 3,841 |
| HTF | Trans Flex |  |  |  |  |  |
|  | Customer | 5 | \$ | 15.25 | \$ | 915 |
|  | >x | 589,236 | \$ | 0.12320 | \$ | 72,594 |
|  | Delivery Revenues |  |  |  | \$ | 73,509 |

## CORNING NATURAL GAS CORPORATION

CASE 11-G-0280
Staff's Rate Year 1 Forecast Priced Out at Current Rates

|  | Sales ccf | Current Rates /ccf |  | Revenues |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| BATH |  |  |  |  |  |
| SC 1 | 2,629,521 | \$ | 0.07737 | \$ | 203,446 |
| SC 2 |  | \$ | 0.07237 | \$ | - |
| SC 3 | 273,184 | \$ | 0.07737 | \$ | 21,136 |
| SC 4 | 1,216,240 | \$ | 0.07237 | \$ | 88,019 |
|  | Sum of Bath Revenues |  |  | \$ | 312,602 |


| TOTAL | 10,494, 791 |
| :--- | :--- | :--- |

Transportation

|  | ccf | /MMBtu | /ccf |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| NYSEG \& others | 4,123,870 |  |  | \$ | 373,648 |

Bath Transportation Charge

|  | Volumes | Rates |  |  |  |
| :--- | ---: | :--- | :--- | :--- | ---: |
| HT \& HTO | 180,653 | $\$$ | 0.4190 | $\$$ | 75,694 |
| HTF,OTF,SC5 | 589,236 | $\$$ | 0.4190 | $\$$ | 246,890 |
|  |  |  |  | $\mathbf{3 2 2 , 5 8 3}$ |  |

Hammondsport @ Line 15 Rate

| all H volumes | Volumes Rate |  |  | \$ | 99,602 |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1,287,349 | \$ | 0.07737 |  |  |
| Virgil Surcharges |  |  |  |  |  |
| Billing Code | Volumes | Surcharge |  |  |  |
| VRO | 76,978 | \$ | 0.3250 | \$ | 25,018 |
| Vmo | 68,014 | \$ | 0.3250 | \$ | 22,105 |
| GP | 397,858 | \$ | 0.1500 | \$ | 59,679 |
|  |  |  |  | \$ | 106,801 |

CORNING NATURAL GAS CORPORATION
CASE 11-G-0280
Staff's Rate Year 2 Forecast Priced Out at Rate Year 1 Proposed Rates


## CORNING NATURAL GAS CORPORATION

CASE 11-G-0280
Staff's Rate Year 2 Forecast Priced Out at Rate Year 1 Proposed Rates

|  |  | Sales ccf | Proposed Rates |  | Revenues |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SC 14 C | Aggregation Commercial |  |  |  |  |  |
|  | Customer | 166 | \$ | 20.25 | \$ | 40,385 |
|  | first 3 | 5,983 |  |  |  |  |
|  | next 47 | 87,851 | \$ | 0.37078 | \$ | 32,573 |
|  | >50 | 1,373,470 | \$ | 0.23429 | \$ | 321,785 |
|  |  | 1,467,304 |  |  |  |  |
|  | Delivery Revenues |  |  |  | \$ | 394,743 |
| SC 14 P | Aggregation Public |  |  |  |  |  |
|  | Customer | 53 | \$ | 20.25 | \$ | 12,879 |
|  | first 3 | 1,604 |  |  |  |  |
|  | next 47 | 18,944 | \$ | 0.37078 | \$ | 7,024 |
|  | >50 | 422,591 | \$ | 0.23429 | \$ | 99,007 |
|  |  | 443,140 |  |  |  |  |
|  | Delivery Revenues |  |  |  | \$ | 118,910 |
| SC 21 F | Industrial Firm |  |  |  |  |  |
|  | Customer |  |  |  |  |  |
|  | first 2,500 |  | \$ | 1,220 | \$ | - |
|  | next 12,500 |  | \$ | 0.11677 | \$ | - |
|  | next 25,000 |  | \$ | 0.10543 | \$ | - |
|  | > 40,000 |  | \$ | 0.07553 | \$ | - |
| Negotiated Contracts |  |  |  |  |  |  |
|  |  |  | \$ | 192,000 |  |  |
|  |  |  | \$ | 174,640 |  |  |
|  |  |  | \$ | 89,217 |  |  |
|  |  |  | \$ | 60,205 |  |  |
|  |  |  | \$ | 583,992 |  |  |
|  |  |  | \$ | 335,860 |  |  |
| Delivery Revenues |  |  |  |  | \$ | 1,435,914 |
| HAMMONDSPORT |  |  |  |  |  |  |
| SC 1 | Firm |  |  |  |  |  |
|  | Customer | 428 | \$ | 16.75 | \$ | 86,039 |
|  | 1st 3 | 13,714 |  |  |  |  |
|  | next 47 | 134,068 | \$ | 0.36864 | \$ | 49,423 |
|  | >50 | 208,628 | \$ | 0.23293 | \$ | 48,597 |
|  |  | 356,411 |  |  |  |  |
|  | Delivery Revenues |  |  |  | \$ | 184,059 |

## CORNING NATURAL GAS CORPORATION

CASE 11-G-0280
Staff's Rate Year 2 Forecast Priced Out at Rate Year 1 Proposed Rates

|  |  | Sales ccf |  | d Rates cff | Revenues |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| HAMMONDSPORT |  |  |  |  |  |  |
| SC2 C | Commercial |  |  |  |  |  |
|  | Customer | 76 | \$ | 20.25 | \$ | 18,543 |
|  | 1st 3 | 225 |  |  |  |  |
|  | next 47 | 3525 | \$ | 0.37078 | \$ | 1,307 |
|  | >50 | 129,553 | \$ | 0.23429 | \$ | 30,352 |
|  |  | 133,303 |  |  |  |  |
|  | Delivery Revenues |  |  |  | \$ | 50,203 |
| SC 4 T | Transportation |  |  |  |  |  |
|  | Customer | 4 | \$ | 50.00 | \$ | 2,400 |
|  | >x | 180,653 | \$ | 0.11425 | \$ | 20,640 |
|  | Delivery Revenues |  |  |  | \$ | 23,040 |
| SC 7 AG R | Aggregation Residential |  |  |  |  |  |
|  | Customer | 44 | \$ | 16.75 | \$ | 8,909 |
|  | 1st 3 | 1,482 |  |  |  |  |
|  | next 47 | 16,788 | \$ | 0.36864 | \$ | 6,189 |
|  | >50 | 28,084 | \$ | 0.23293 | \$ | 6,542 |
|  |  | 46,399 |  |  |  |  |
|  | Delivery Revenues |  |  |  | \$ | 21,640 |
| SC 7 AG C | Aggregation Commercial |  |  |  |  |  |
|  | Customer | 2 | \$ | 20.25 | \$ | 486 |
|  | 1st 3 | 63 |  |  |  |  |
|  | next 47 | 878 | \$ | 0.37078 | \$ | 325 |
|  | >50 | 11,917 | \$ | 0.23429 | \$ | 2,792 |
|  |  | 12,858 |  |  |  |  |
|  | Delivery Revenues |  |  |  | \$ | 3,603 |
| HTF | Trans Flex |  |  |  |  |  |
|  | Customer | 5 | \$ | 50.00 | \$ | 3,000 |
|  | >x | 589,236 | \$ | 0.14915 | \$ | 87,887 |
|  | Delivery Revenues |  |  |  | \$ | 90,887 |

## BATH

SC 1

| Customer | 1 | $\$$ | 1,220 | $\$$ |
| :--- | ---: | ---: | ---: | ---: |
| $>x$ | $2,629,521$ | $\$$ | 0.06621 | $\$$ |
|  |  | 14,640 |  |  |
|  |  | $\$$ | 184,090 |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

## CORNING NATURAL GAS CORPORATION

CASE 11-G-0280
Staff's Rate Year 2 Forecast Priced Out at Rate Year 1 Proposed Rates


## CORNING NATURAL GAS CORPORATION

CASE 11-G-0280
Staff's Rate Year 3 Forecast Priced Out at Rate Year 2 Rates


## CORNING NATURAL GAS CORPORATION

CASE 11-G-0280
Staff's Rate Year 3 Forecast Priced Out at Rate Year 2 Rates


## CORNING NATURAL GAS CORPORATION

CASE 11-G-0280
Staff's Rate Year 3 Forecast Priced Out at Rate Year 2 Rates


Bath Transportation Charge

| Volumes |  | Rates |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| HT \& HTO | 180,653 | \$ | 0.4190 | \$ | 75,694 |
| HTF,OTF,SC5 | 589,236 | \$ | 0.4190 | \$ | 246,890 |
|  |  |  |  | \$ | 322,583 |

## CORNING NATURAL GAS CORPORATION

CASE 11-G-0280
Staff's Rate Year 3 Forecast Priced Out at Rate Year 2 Rates

| Sales <br> ccf | Proposed Rates <br> /ccf | Revenues |
| :---: | :---: | :---: |


| Virgil Surcharges |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Billing Code | Volumes | Surcharge |  |  |  |
| VRO | 76,978 | \$ | 0.3250 | \$ | 25,018 |
| VMO | 68,014 | \$ | 0.3250 | \$ | 22,105 |
| GP | 397,858 | \$ | 0.1500 | \$ | 59,679 |
|  |  |  |  | \$ | 106,801 |

CORNING NATURAL GAS CORPORATION
CASE 11-G-0280
Staff's Rate Year 1 Forecast Priced Out at Rate Year 1 Proposed Rates


CORNING NATURAL GAS CORPORATION
CASE 11-G-0280
Staff's Rate Year 1 Forecast Priced Out at Rate Year 1 Proposed Rates

|  |  | Sales ccf | Proposed Rates /ccf |  | Revenues |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SC 14 C | Aggregation Commercial |  |  |  |  |  |
|  | Customer | 166 |  | 20.25 | \$ | 40,385 |
|  | first 3 | 5,983 |  |  |  |  |
|  | next 47 | 82,834 | \$ | 0.37078 | \$ | 30,713 |
|  | >50 | 1,300,026 | \$ | 0.23429 | \$ | 304,578 |
|  |  | 1,388,842 |  |  |  |  |
|  | Delivery Revenues |  |  |  | \$ | 375,676 |
| SC 14 P | Aggregation Public |  |  |  |  |  |
|  | Customer | 53 | \$ | 20.25 | \$ | 12,879 |
|  | first 3 | 1,604 |  |  |  |  |
|  | next 47 | 18,944 | \$ | 0.37078 | \$ | 7,024 |
|  | >50 | 422,591 | \$ | 0.23429 | \$ | 99,007 |
|  |  | 443,140 |  |  |  |  |
|  | Delivery Revenues |  |  |  | \$ | 118,910 |
| SC 2 IF | Industrial Firm |  |  |  |  |  |
|  | Customer |  |  |  |  |  |
|  | first 2,500 |  | \$ | 1,220 | \$ | - |
|  | next 12,500 |  | \$ | 0.11677 | \$ | - |
|  | next 25,000 |  | \$ | 0.10543 | \$ | - |
|  | > 40,000 |  | \$ | 0.07553 | \$ | - |
| Negotiated Contracts |  |  |  |  |  |  |
|  |  |  | \$ | 192,000 |  |  |
|  |  |  | \$ | 171,640 |  |  |
|  |  |  | \$ | 89,217 |  |  |
|  |  |  | \$ | 60,205 |  |  |
|  |  |  | \$ | 583,992 |  |  |
|  |  |  | \$ | 335,860 |  |  |
|  | Delivery Revenues |  |  |  | \$ | 1,432,914 |
| HAMMONDSPORT |  |  |  |  |  |  |
| SC 1 | Firm |  |  |  |  |  |
|  | Customer | 406 | \$ | 16.75 | \$ | 81,605 |
|  | 1st 3 | 13,008 |  |  |  |  |
|  | next 47 | 127,158 | \$ | 0.36864 | \$ | 46,876 |
|  | >50 | 197,875 | \$ | 0.23293 | \$ | 46,092 |
|  |  | 338,041 |  |  |  |  |
|  | Delivery Revenues |  |  |  | \$ | 174,572 |

## CORNING NATURAL GAS CORPORATION

CASE 11-G-0280
Staff's Rate Year 1 Forecast Priced Out at Rate Year 1 Proposed Rates


BATH

SC 1

| Customer | 1 | $\$$ | 1,220 | $\$$ | 14,640 |
| :--- | ---: | ---: | ---: | ---: | ---: |
| $>x$ | $2,629,521$ | $\$$ | 0.06621 | $\$$ | 174,090 |
|  |  |  | $\$$ | $188, \mathbf{7 3 0}$ |  |

CORNING NATURAL GAS CORPORATION
CASE 11-G-0280
Staff's Rate Year 1 Forecast Priced Out at Rate Year 1 Proposed Rates


CORNING NATURAL GAS CORPORATION
CASE 11-G-0280
Staff's Rate Year 1 Forecast Priced Out at Current Rates


## CORNING NATURAL GAS CORPORATION

CASE 11-G-0280
Staff's Rate Year 1 Forecast Priced Out at Current Rates

| SC 14 R | Aggregation Residential |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Customer | 2,134 | \$ | 18.25 | \$ | 467,386 |
|  | first 3 | 71,305 |  |  |  |  |
|  | next 47 | 816,710 | \$ | 0.39038 | \$ | 318,825 |
|  | >50 | 1,469,965 | \$ | 0.24667 | \$ | 362,596 |
|  |  | 2,357,981 |  |  |  |  |
|  | Delivery Revenues |  |  |  | \$ | 1,148,807 |
| SC 14 C | Aggregation Commercial |  |  |  |  |  |
|  | Customer | 166 | \$ | 25.25 | \$ | 50,356 |
|  | first 3 | 5,983 |  |  |  |  |
|  | next 47 | 87,851 | \$ | 0.38042 | \$ | 33,421 |
|  | >50 | 1,373,470 | \$ | 0.24038 | \$ | 330,153 |
|  |  | 1,467,304 |  |  |  |  |
|  | Delivery Revenues |  |  |  | \$ | 413,930 |
| SC 14 P | Aggregation Public |  |  |  |  |  |
|  | Customer | 53 | \$ | 25.25 | \$ | 16,059 |
|  | first 3 | 1,604 |  |  |  |  |
|  | next 47 | 18,944 | \$ | 0.38042 | \$ | 7,207 |
|  | >50 | 422,591 | \$ | 0.24038 | \$ | 101,582 |
|  |  | 443,140 |  |  |  |  |
|  | Delivery Revenues |  |  |  | \$ | 124,848 |

SC 2 IF Industrial Firm
Customer
first 2,500
next 12,500

| 0 | $\$$ | 1,220 | $\$$ |
| :--- | :--- | ---: | :--- |
| 0 | $\$$ | 0.11677 | $\$$ |
| 0 | $\$$ | 0.10543 | $\$$ |
| 0 | $\$$ | 0.07553 | $\$$ |

Negotiated Contracts

| 1 | $\$$ | 192,000 |
| :--- | ---: | ---: |
| 2 | $\$$ | 174,640 |
| 3 | $\$ 9,217$ |  |
| 4 | $\$$ | 60,205 |
| 5 | $\$$ | 583,992 |
| 6 | $\$$ | 335,860 |
|  |  |  |
| Delivery Revenues | $\mathbf{\$}$ | $\mathbf{1 , 4 3 5 , 9 1 4}$ |

## CORNING NATURAL GAS CORPORATION <br> CASE 11-G-0280 <br> Staff's Rate Year 1 Forecast Priced Out at Current Rates

| HAMMONDSPORT |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SC 1 | Firm |  |  |  |  |  |
|  | Customer | 428 | \$ | 18.25 | \$ | 93,744 |
|  | 1st 3 | 13,714 |  |  |  |  |
|  | next 47 | 134,068 | \$ | 0.39038 | \$ | 52,337 |
|  | >50 | 208,628 | \$ | 0.24667 | \$ | 51,462 |
|  |  | 356,839 |  |  |  |  |
|  | Delivery Revenues |  |  |  | \$ | 197,544 |
| SC2 C | Commercial |  |  |  |  |  |
|  | Customer | 76 | \$ | 25.25 | \$ | 23,122 |
|  | 1st 500 | 13,714 |  |  |  |  |
|  | next 14,500 | 92,036 | \$ | 0.38042 | \$ | 1,341 |
|  | > 15,000 | 27,553 | \$ | 0.24038 | \$ | 31,142 |
|  |  | 133,303 |  |  |  |  |
|  | Delivery Revenues |  |  |  | \$ | 55,605 |
| $\begin{aligned} & \text { SC } 4 \text { T } \\ & \text { HT HTO } \end{aligned}$ | Transportation |  |  |  |  |  |
|  | Customer | 4 | \$ | 75.00 | \$ | 3,600 |
|  | >x | 180,653 | \$ | 0.12058 | \$ | 21,783 |
|  | Delivery Revenues |  |  |  | \$ | 25,383 |
| $\begin{aligned} & \text { SC } 7 \text { AG R } \\ & \text { HA } \end{aligned}$ | Aggregation Residential |  |  |  |  |  |
|  | Customer | 44 | \$ | 18.25 | \$ | 9,707 |
|  | 1st 3 | 1,482 |  |  |  |  |
|  | next 47 | 16,788 | \$ | 0.39038 | \$ | 6,554 |
|  | >50 | 28,084 | \$ | 0.24667 | \$ | 6,928 |
|  | Delivery Revenues |  |  |  | \$ | 23,189 |
| $\begin{aligned} & \text { SC } 7 \text { AG C } \\ & \text { HAC } \end{aligned}$ | Aggregation Commercial |  |  |  |  |  |
|  | Customer | 2 |  | 25.25 | \$ | 606 |
|  | 1st 3 | 63 |  |  |  |  |
|  | next 47 | 878 |  | 0.38042 | \$ | 334 |
|  | >50 | 11,917 |  | 0.24038 | \$ | 2,865 |
|  |  | 12,858 |  |  |  |  |
|  | Delivery Revenues |  |  |  | \$ | 3,805 |
| HTF | Trans Flex |  |  |  |  |  |
|  | Customer | 5 | \$ | 75.00 | \$ | 4,500 |
|  | >x | 589,236 | \$ | 0.15748 | \$ | 92,790 |
|  | Delivery Revenues |  |  |  | \$ | 97,290 |

## CORNING NATURAL GAS CORPORATION <br> CASE 11-G-0280 <br> Staff's Rate Year 1 Forecast Priced Out at Current Rates



TOTAL $\quad \$ \quad 10,936,762$
sum of RDM
Transportation

|  | cf | /MMBtu |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Empire | 611,340 | 0.04 | 0.004 | \$ | 2,445 |
| NYSEG |  | flat |  |  | \$357,153 |
| Stand | 3,512,530 | 0.04 | 0.004 | \$ | 14,050 |
| NYSEG \& others | 4,123,870 |  |  | \$ | 373,648 |

Bath Transportation Charge

|  | Volumes | Rates |  |  |  |
| :--- | :---: | :---: | :--- | :--- | ---: | ---: |
| HT \& HTO | 180,653 | $\$$ | 0.4190 | $\$$ | 75,694 |
| HTF,OTF,SC5 | 589,236 | $\$$ | 0.4190 | $\$$ | 246,890 |
|  |  |  |  | $\mathbf{3 2 2 , 5 8 3}$ |  |

Hammondsport @ Line 15 Rate

|  | Volumes | Rate |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
| all H volumes | $1,287,349$ | $\$$ | 0.07737 | $\mathbf{\$}$ | $\mathbf{9 9 , 6 0 2}$ |

Virgil Surcharges
Billing Code
VRO
VMO
GP
Volumes Surcharge

| 76,978 | $\$$ | 0.3250 | $\$$ | 25,018 |
| ---: | ---: | ---: | ---: | ---: |
| 68,014 | $\$$ | 0.3250 | $\$$ | 22,105 |
| 397,858 | $\$$ | 0.1500 | $\$$ | 59,679 |
|  |  |  | $\$$ | $\mathbf{1 0 6 , 8 0 1}$ |

## CORNING NATURAL GAS CORPORATION

CASE 11-G-0280
Staff's Rate Year 3 Forecast Priced Out at Rate Year 3 Rates


## CORNING NATURAL GAS CORPORATION

CASE 11-G-0280
Staff's Rate Year 3 Forecast Priced Out at Rate Year 3 Rates


## CORNING NATURAL GAS CORPORATION

CASE 11-G-0280
Staff's Rate Year 3 Forecast Priced Out at Rate Year 3 Rates


Bath Transportation Charge

| Volumes |  | Rates |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| HT \& HTO | 180,653 | \$ | 0.4190 | \$ | 75,694 |
| HTF,OTF,SC5 | 589,236 | \$ | 0.4190 | \$ | 246,890 |
|  |  |  |  | \$ | 322,583 |

## CORNING NATURAL GAS CORPORATION

CASE 11-G-0280
Staff's Rate Year 3 Forecast Priced Out at Rate Year 3 Rates

| Sales <br> ccf | Proposed Rates <br> /ccf | Revenues |
| :---: | :---: | :---: |


| Virgil Surcharges |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Billing Code | Volumes | Surcharge |  |  |  |
| VRO | 76,978 | \$ | 0.3250 | \$ | 25,018 |
| VMO | 68,014 | \$ | 0.3250 | \$ | 22,105 |
| GP | 397,858 | \$ | 0.1500 | \$ | 59,679 |
|  |  |  |  | \$ | 106,801 |

## CORNING NATURAL GAS CORPORATION

## CASE 11-G-0280

## STAFF's MERCHANT FUNCTION CHARGE CALCULATION

| COMPONENTS |  | TOTAL | TRUE-UP |
| :---: | :---: | :---: | :---: |
| FORECAST RATE YEAR TOTAL FIRM (CCF) |  | 14,722,021 |  |
| COMMODITY UNCOLLECTIBLES | \$ | 103,249 | TO ACTUAL COMMODITY COSTS |
| RATE |  | 1.100\% | TIMES THE UNCOLLECTIBLE RATE |
| GAS SUPPLY PROCUREMENT | \$ | 80,309 | TO ACTUAL SALES |
| RECORDS AND COLLECTIONS | \$ | 184,231 | TO ACTUAL SALES |
| AVERAGE BALANCE OF GAS IN STORAGE | \$ | 1,619,158 |  |
| OTHER CUSTOMER CAPITAL RATE |  | 3.35\% | TO ACTUAL COMMODITY COSTS |
| SALES CUSTOMERS |  | 80\% | TIMES THE OTHER CUSTOMER |
| RETURN FOR SALES CUSTOMERS | \$ | 43,393 | CAPITAL RATE |
| TOTAL | \$ | 411,183 |  |
| FORECAST RATE PER CCF | \$ | 0.027930 | IN THE ANNUAL RECONCILIATION OF |
| COMMODITY UNCOLLECTIBLES | \$ | 0.0070 | GAS COSTS |
| GAS SUPPLY PROCUREMENT | \$ | 0.0055 |  |
| RECORDS AND COLLECTIONS | \$ | 0.0125 |  |
| RETURN ON GAS IN STORAGE | \$ | 0.0029 |  |
| RETURN ON GAS IN STORAGE TO BE COLLECTED FROM ALL FIRM CUSTOMERS |  |  |  |
| ALL FIRM CUSTOMERS |  | 20\% |  |
| RETURN ALLOCATED TO ALL FIRM CUSTOMERS | \$ | 10,848 |  |
| FIRM SALES \& TRANSPORTATION (CCF) |  | 31,761,510 |  |
| FORECAST RATE PER CCF | \$ | 0.0003 | IN THE DRA ANNUAL RECONCILIATION |

## CORNING NATURAL GAS CORPORATION

 CASE 11-G-0280
## STAFF's WORKPAPER: MFC - COMMODITY UNCOLLECTIBLES

|  | Total |  |  |
| :---: | :---: | :---: | :---: |
| UNCOLLECTIBLE PERCENT | A |  | 1.100\% |
| RATE YEAR GAS EXPENSE | B | \$ | 9,386,316 |
| RATE YEAR COMMODITY UNCOLLECTIBLE | $C=A \times B$ | \$ | 103,249 |

## CORNING NATURAL GAS CORPORATION

CASE 11-G-0280

## STAFF's WORKPAPER: MFC - RETURN ON GAS STORAGE INVENTORY

| AVERAGE OF THE MONTHLY AVERAGES |  | \$ | 1,619,158.00 |  |
| :---: | :---: | :---: | :---: | :---: |
| OTHER CUSTOMER CAPITAL RATE |  |  | 3.35\% |  |
| RETURN |  | \$ | 54,242 |  |
| SALES CUSTOMERS | 80\% | \$ | 43,393 |  |
| ALL FIRM CUSTOMERS | 20\% | \$ | 10,848 |  |
| FIRM SALES |  |  | 14,722,021 | CCF |
| FIRM SALES AND TRANSPORTATION |  |  | 30,877,002 | CCF |
| CONTRACT VOLUMES |  |  | 884,508 | CCF |
| SALES RATE AS PART OF THE MFC |  | \$ | 0.00295 | /CCF |
| ALL FIRM CUSTOMERS AS PART OF THE DRA |  | \$ | 0.00034 | /CCF |

## Corning Natural Gas Corporation CASE 11-G-0252

MFC Example for Corning Linking Period

Separate each of the 4 Components :
Records and Collection - which is reconciled based on sales


Gas Supply Procurement - which is reconciled based on sales

|  | ccf | ccf | gas supply proc. rate | MFC <br> Revenues |  | MFC <br> Revenues |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| May-11 | 578,078 |  | 0.00831 | \$ | 4,804 |  |  |  |  |
| Jun-11 | 268,394 |  | 0.0083 | \$ | 2,230 |  |  |  |  |
| Jul-11 | 223,044 |  | 0.0831 | \$ | 18,535 |  |  |  |  |
| Aug-11 | 194,447 |  | 0.0083 | \$ | 1,616 |  |  |  |  |
| Sep-11 | 195,266 | 195,266 | 0.0083 | \$ | 1,623 | \$ | 1,623 |  |  |
| Oct-11 | 419,039 | 419,039 | 0.0083 | \$ | 3,482 | \$ | 3,482 |  |  |
| Nov-11 | 758,562 | 758,562 | 0.0083 | \$ | 6,304 | \$ | 6,304 |  |  |
| Dec-11 | 1,387,377 | 1,387,377 | 0.0083 | \$ | 11,807 | \$ | 11,807 |  |  |
| Jan-12 | 1,921,210 | 1,921,210 | 0.00851 | \$ | 15,965 | \$ | 15,965 |  |  |
| Feb-12 | 1,741,468 | 1,741,468 | 0.00851 | \$ | 14,820 | \$ | 14,820 |  |  |
| Mar-12 | 1,336,421 | 1,336,421 | 0.00851 | \$ | 11,373 | \$ | 11,373 |  |  |
| Apr-12 | 875,086 | 875,086 | 0.00851 | \$ | 7,447 | \$ | 7,447 | Tar |  |
|  | 9,898,392 | 8,634,429 |  | \$ | 100,005 | \$ | 72,820 | \$ | 123,449 |
| 8 Month Avg Cust X 8 Month Target |  |  |  |  |  | \$ | 107,685 |  |  |
|  | REFUND |  |  |  |  | \$ | $(34,865)$ |  |  |

Note: Sales volumes are only used as an example

# CORNING NATURAL GAS CORPORATION CASE 11-G-0280 <br> Staff's RDM 

## RATE YEAR 1

Corning Residential - RI, RO, TI, VR, TO, HA, HR, \& HRO

| FORECAST USE PER CUSTOMER | 927 CCF |
| :--- | ---: |
| FORECAST AVERAGE NUMBER OF CUSTOMERS | 13,718 |
| FORECAST THROUGHPUT | $12,721,469$ CCF |
| PROPOSED DELIVERY REVENUE | $\$, 281,931$ |
| RDM TARGET PER CUSTOMER | $\$$ |

RATE YEAR 2
Corning Residential - RI, RO, TI, VR, TO, HA, HR, \& HRO

```
FORECAST USE PER CUSTOMER
FORECAST AVERAGE NUMBER OF CUSTOMERS FORECAST THROUGHPUT
PROPOSED DELIVERY REVENUE
RDM TARGET PER CUSTOMER
RATE YEAR 3
Corning Residential - RI, RO, TI, VR, TO, HA, HR, \& HRO
```

\$
\$

FORECAST USE PER CUSTOMER
FORECAST AVERAGE NUMBER OF CUSTOMERS
FORECAST THROUGHPUT
PROPOSED DELIVERY REVENUE
RDM TARGET PER CUSTOMER

927 CCF
13,809
12,803,969 CCF
7,029,433
509.04

## Corning Natural Gas Corporation <br> CASE 11-G-0252

STAFF's RDM LINKING PERIOD EXAMPLE

Corning Residential


Note: Used SEP 2009 - AUG2010 Results as an example


[^0]:    Name of Respondent: L. Mario DiValentino
    Position of Respondent: President, Moonstone Consulting LLC
    Date: August 24, 2011

[^1]:    ${ }^{1} 16$ NYCRR § 720-6.5

[^2]:    ${ }^{2}$ LAUF percentage equals 1 subtracted from 1 minus the loss percentage divided into 1 .
    ${ }^{3}$ Total send out for LAUF calculation is limited to distribution send out for CON EDISON, KEDNY and KEDLI as a result of NY facilities.
    ${ }^{4}$ The factor of adjustment equals 1 divided by the difference of 1 minus the loss percentage.

[^3]:    ${ }^{5}$ Send out is defined as gas entering the LDC's system and disposition is defined as gas exiting the LDC's system.

[^4]:    ${ }^{8} 16$ NYCRR § 228.3.
    ${ }^{9}$ Per pipeline tariffs, all city gate meters are allowed a meter reading variance of $+/-2 \%$ for all pipelines serving NY with the exception of Texas Eastern Pipeline; which has an allowed meter reading variance of +/-1\%.

[^5]:    ${ }^{10}$ Regardless of whether the LDC bills its customers using volumes or heating content, the LDCs themselves are billed on the basis of heating content by the interstate pipelines. However, the city gate meters measures the natural gas flow by volume. Each LDC therefore monitors and verifies the heating contents of the gas delivered by using chromatographs at each city gate or receipt point into the system.

[^6]:    ${ }^{11}$ There are 14 different possible annual calendars which impact billing schedules and volumes due to the number of working days and weekends in a month.

[^7]:    ${ }^{12}$ Case 09-G-0669
    ${ }^{13}$ Two sets of meters will never provide the same measurement. The difference between those two measurements is defined as offset.

