

July 1, 2016

Daniel P. Wolf  
Executive Secretary  
Minnesota Public Utilities Commission  
121 7<sup>th</sup> Place East, Suite 350  
St. Paul, Minnesota 55101-2147

RE: Review of 2014-2015 Annual Automatic Adjustment Reports  
Docket No. G999/AA-15-612 and Natural Gas Utilities' 2014-2015 Purchased Gas  
Adjustment (PGA) True-Up Filings (see attached list)

Dear Mr. Wolf:

Minnesota Rules 7825.2800 through 7825.2830 require natural gas and electric utilities implementing automatic adjustments in the recovery of fuel purchases to file annual automatic adjustment reports.

Attached please find the Minnesota Department of Commerce, Division of Energy Resource's (Department or DOC) *Review of the 2014-2015 Annual Automatic Adjustment Reports* (FYE15 AAA Report) for regulated natural gas utilities in Minnesota.

The Department is available should the Commission have any questions about the FYE15 AAA Report herein provided.

Sincerely,

/s/ MICHELLE ST. PIERRE  
Financial Analyst  
Division of Energy Resources

/s/ ANGELA BYRNE  
Financial Analyst  
Division of Energy Resources

/s/ MICHAEL RYAN  
Rates Analyst  
Division of Energy Resources

MS/AB/MR/lt  
Attachments

**Docket Numbers for 2014-2015 Gas Utility PGA True-Up Filings:**

Docket No. G004/AA-15-794 - Great Plains Natural Gas Company

Docket No. G001/AA-15-796 - Interstate Power and Light-Gas Utility

Docket No. G022/AA-15-797 - Greater Minnesota Gas

Docket No. G008/AA-15-800 - CenterPoint Energy

Docket No. G011/AA-15-801 - Minnesota Energy Resource Corporation (MERC) –  
Albert Lea PGA system

Docket No. G011/AA-15-802 - Minnesota Energy Resource Corporation (MERC) –  
Consolidated PGA system

Docket No. G011/AA-15-803 - Minnesota Energy Resource Corporation (MERC) –  
Northern Natural Gas PGA system

Docket No. G002/AA-15-809 - Northern States Power d/b/a Xcel Energy

REVIEW OF THE 2014-2015  
ANNUAL AUTOMATIC ADJUSTMENT REPORTS

SUBMITTED TO THE  
MINNESOTA PUBLIC UTILITIES COMMISSION



DOCKET No. G999/AA-15-612

JULY 1, 2016

## TABLE OF CONTENTS

Section	Page
EXECUTIVE SUMMARY – NATURAL GAS UTILITIES .....	i
I. BACKGROUND AND OVERVIEW.....	1
A. Overview .....	1
B. Filing Requirements.....	2
C. Natural Gas Prices and Weather.....	2
1. Gas Prices in FYE15.....	2
2. Weather in FYE15 .....	3
D. Gas Utilities Summary .....	3
E. Impacts on Gas Costs and the Recovery of Gas Costs.....	9
II. REVIEW OF OVER-/UNDER-RECOVERIES AND TRUE-UPS .....	14
A. Greater Minnesota Gas, Inc. ....	14
1. Recovery of Gas Costs and True-Up Calculations.....	14
2. Compliance and/or Supplemental Reporting Requirements .....	16
3. Summary and Recommendations .....	17
B. Great Plains Natural Gas Company .....	17
1. Recovery of Gas Costs and True-Up Calculations.....	17
a. North District .....	18
b. South District.....	19
2. Compliance and/or Supplemental Reporting Requirements .....	20
3. Summary and Recommendations .....	21
C. Interstate Power and Light Company-Gas Utility.....	21
1. Recovery of Gas Costs and True-Up Calculations.....	22
2. Compliance and/or Supplemental Reporting Requirements .....	23
3. Summary and Recommendations .....	24
D. Minnesota Energy Resources Corporation (MERC). ....	24
1. Recovery of Gas Costs and True-Up Calculations.....	24
a. MERC-NNG .....	26
b. MERC-Consolidated .....	27
c. MERC-Albert Lea .....	28
2. Compliance and/or Supplemental Reporting Requirements .....	29
3. Summary and Recommendations .....	30
E. CenterPoint Energy .....	31
1. Recovery of Gas Costs and True-Up Calculations.....	31
2. Compliance and/or Supplemental Reporting Requirements .....	33
3. Summary and Recommendations .....	37
F. Xcel Gas.....	37
1. Recovery of Gas Costs and True-Up Calculations.....	37
2. Compliance and/or Supplemental Reporting Requirements .....	40
3. Summary and Recommendations .....	43

III.	ADDITIONAL INFORMATION .....	43
A.	Average Annual Residential Customer Bills .....	43
B.	Annual Average Gas Costs .....	46
C.	Per-Unit Margin Charged to Residential Customers .....	50
D.	Review of Gas Utilities' Peak-Day Demand Profiles .....	51
E.	Daily Delivery Variance Charges .....	54
F.	Revenue from Curtailment and Balancing Penalties Imposed by Regulated Minnesota Gas Utilities.....	58
	1. Curtailment Penalties .....	58
	2. Balancing Penalties .....	59
G.	Peak-Day Pipeline Transportation Sources.....	61
H.	Variety of Gas Suppliers .....	62
I.	Capacity Release.....	63
J.	Annual Auditor Reports.....	64
K.	Lost-And-Unaccounted-For Gas.....	65
L.	Reporting of Contractor Main Strikes and Meter Testing .....	67
	1. Contractor Main Strikes Reports.....	68
	2. Meter Testing Updates .....	68
M.	Minnesota Gas Utilities' Purchasing Practices .....	69
N.	Per-Unit Storage Cost of Gas and Percentage of Storage.....	72
O.	Minnesota Gas Utilities' Hedging Practices .....	74
IV.	SUMMARY OF THE DEPARTMENT'S RECOMMENDATIONS.....	78
A.	Greater Minnesota .....	78
B.	Great Plains.....	78
C.	Interstate Gas.....	79
D.	MERC .....	79
E.	CenterPoint Energy .....	79
F.	Xcel Gas.....	80

## EXECUTIVE SUMMARY – NATURAL GAS UTILITIES

Since 1985, Minnesota Rules 7825.2800 through 7825.2830 have required public utilities that use automatic adjustments to recover energy costs to file annual reports regarding the operation of the automatic adjustments. The reports allow verification of whether utilities are calculating their rate adjustments properly and are implementing these rates in a timely manner. In reviewing the 2014-2015 (FYE15) filings, the Minnesota Department of Commerce, Division of Energy Resources (Department or DOC) incorporated information from prior years' reports, as well as its assessment of the utilities' monthly automatic adjustment filings submitted throughout the FYE15 reporting period.

The Department's FYE15 Annual Automatic Adjustment natural gas report (FYE15 AAA Report) includes analyses of:

- FYE15 automatic adjustment charge calculations filed pursuant to Minnesota Rule 7825.2810, ANNUAL REPORT; AUTOMATIC ADJUSTMENT CHARGES;
- filings to reconcile or "true up" revenues collected by the utilities to actual gas costs incurred by the utilities, as required by Minnesota Rules 7825.2910 and 7825.2700; and
- supplemental annual reporting requirements ordered by the Minnesota Public Utilities Commission (Commission) in miscellaneous or other dockets during the reporting period.

Recovery of energy costs represents an important factor in the rates customers actually pay, particularly for ratepayers of natural gas utilities. One part of the rates that customers pay is a true-up reflecting the difference between the actual costs the utilities incur and the actual revenues they recover. True-ups are based on information from the prior year. For example, an over-recovery of costs from a certain customer class in one year would result in an offsetting decrease in the rates (compared to what would otherwise have been charged) assigned to that customer class in the following year. Since customers use different amounts of gas over time, and because some customers leave or join the utility's system over time, there is likely to be some mismatch between the amounts particular customers pay in a given year and the true-up amount assigned to these customers in subsequent years. While it is not administratively feasible to eliminate such mismatches completely, it is essential that utilities attempt to minimize both over- and under-recoveries.

All of the regulated local distribution natural gas utilities provided the information necessary to meet the filing requirements. For this reporting period, these public utilities are:

- Greater Minnesota Gas, Inc. (Greater Minnesota or GMG);
- Great Plains Natural Gas Company (Great Plains);
- Interstate Power and Light – Gas Utility (Interstate Gas);

- Minnesota Energy Resources Corp. (MERC);<sup>1</sup>
- CenterPoint Energy, a division of CenterPoint Energy Resources Corp. (CenterPoint Energy or CPE); and
- Northern States Power Company d/b/a Xcel Energy - Gas Utility (Xcel Gas).

In this report, the Department reviews these utilities' compliances with Minnesota Rules 7825.2810 and 7825.2910, which governs the filing of annual automatic adjustment reports, and makes a number of specific recommendations to assure compliance with Commission requirements and to improve the usefulness of future annual automatic adjustment reports. These recommendations are listed in Section IV, *Summary of the Department's Recommendations*.

As noted above, several sections of the report are based on the Commission's requirements and contain information in addition to that specifically required by Minnesota Rules. The Department issued information requests and worked with all of the gas utilities to obtain these data. Based on this information, the Department developed analyses on:

- comparisons of total gas costs incurred and recovered;
- average annual residential customer bills;
- average annual gas costs;
- margins charged to residential customers;
- firm peak-day demand profiles, load factors, and reserve margins;
- penalty charges regarding daily nominations of gas supply;
- revenue from curtailment and balancing penalties;
- peak-day pipeline transportation sources and numbers of suppliers;
- revenues from releasing firm pipeline transportation capacity;
- gas utilities' annual auditor reports;
- lost-and-unaccounted-for gas for each utility;
- report on contractor main strikes and meter testing;
- Minnesota gas utilities' purchasing practices;
- cost of gas storage per unit; and
- Minnesota gas utilities' hedging practices.

The Department appreciates the utilities' cooperation in developing the data for these reports. The FYE15 AAA Report builds on the Department's experience and knowledge gained from prior years' reports and is informed by our continuing assessment of the utilities' automatic adjustment filings throughout the reporting period.

In FYE15, average natural gas prices were lower than prices during FYE14. Generally, prices steadily decreased during the reporting period. The Henry Hub price<sup>2</sup> began the reporting

---

<sup>1</sup> Because MERC purchased Interstate Gas on April 30, 2015, this report is the last in which Interstate Gas will be listed as a separate utility.

<sup>2</sup> The Henry Hub is a distribution hub on the natural gas pipeline system that serves as the official delivery location for futures contracts on the New York Mercantile Exchange (NYMEX).

period around \$4.05 per Mcf range in July 2014 and ended the reporting period around \$2.78 per Mcf in June 2015.

Although the industry was relatively unaffected during FYE15 by hurricanes, temperatures during the heating season were colder than normal especially in the period of November 2014 and February 2015, which contributed to significantly higher gas usage in those months. The FYE15 annual temperatures were warmer than normal. Regarding the storage inventory level, following a near record-low at the end of March 2014,<sup>3</sup> the injections were above average due to increasing production and mild weather resulting in lower demand. Natural gas prices and weather are discussed further below.

The FYE15 AAA Report consists of the following sections:

- an overview with background information (Section I);
- an analysis of the gas utility over-/under-recoveries and true-ups (Section II);
- additional information to assist the Commission (Section III); and
- the Department's concluding comments and recommendations (Section IV).

---

<sup>3</sup> March 2014 was just after the polar vortexes, explosion of the TransCanada natural gas pipeline and other energy supply issues.



## I. BACKGROUND AND OVERVIEW

### A. OVERVIEW

The Department concludes that all six<sup>4</sup> regulated Minnesota gas utilities met the annual filing requirements, including provision of information relating to fuel procurement and the annual true-up adjustment. As noted above, these utilities are:

- Greater Minnesota;
- Great Plains;
- Interstate Gas;
- MERC;
- CenterPoint Energy; and
- Xcel Gas.

The Department concludes that the annual filings are complete as originally filed. The Department's report includes the following sections:

- filing requirements;
- summaries of the gas utilities' 2014-2015 (FYE15) automatic adjustment charge calculations filed pursuant to Minnesota Rule 7825.2810;
- analyses of the gas utilities' true-up filings required by Minnesota Rule 7825.2910, subpart 4;
- supplemental reporting requirements ordered by the Commission in miscellaneous filings; and
- reports required by the Commission's previous AAA Report Orders:
  - August 23, 1999 *Order* in Docket No. G,E999/AA-98-1130;
  - March 12, 2001 *Order* in Docket No. G,E999/AA-99-1095;
  - December 18, 2001 *Order* in Docket No. G,E999/AA-00-1027;
  - December 23, 2002 *Order* in Docket No. G,E999/AA-01-838;
  - August 7, 2003 *Order* in Docket No. E,G999/AA-02-950;
  - August 10, 2004 *Order* in Docket No. E,G999/AA-03-1264;
  - December 7, 2005 *Order* in Docket No. E,G999/AA-04-1279;
  - February 28, 2006 *Order* in Docket No. E,G999/AA-05-1403;
  - February 26, 2008 *Order* in Docket No. E,G999/AA-06-1208;
  - December 8, 2008 *Order* in Docket No. E,G999/AA-07-1130;
  - February 12, 2010 *Order* in Docket No. G999/AA-08-1011;
  - April 7, 2011 *Order* in Docket No. G999/AA-09-896;

---

<sup>4</sup> In Docket No. G011,007/GR-10-977, the Commission approved consolidation of MERC's two operating divisions, MERC-PNG and MERC-NMU, into MERC effective January 1, 2013. In that same order, the Commission approved the consolidation of MERC's four PGA systems into two systems effective July 1, 2013. In Docket No. G011/PA-14-107, the Commission approved a new PGA system (MERC-Albert Lea or MERC AL) related to MERC's purchase of IPL's assets.

- April 3, 2012 *Order* in Docket No. G999/AA-10-885;
- October 17, 2013 *Order* in Docket No. G999/AA-11-793;
- November 14, 2013 *Order* in Docket No. G999/AA-12-756 (Docket No. 12-756);
- August 11, 2014 *Order* in Docket No. G999/AA-13-600; and
- August 24, 2015 *Order* in Docket No. G999/AA-14-580.

## B. *FILING REQUIREMENTS*

Minnesota Rule 7825.2810, subparts 1 and 2 contain the following filing requirements for gas utilities:

### Subpart 1

- Paragraph A – Commission-approved base cost of gas;
- Paragraph B – billing amounts in Mcf, Ccf, or Btu for each type of energy cost (e.g., purchased gas, peak shaving, and manufactured gas);
- Paragraph C – billing adjustment amounts;
- Paragraph D – total cost of gas;
- Paragraph E – revenues collected;
- Paragraph F – supplier refunds received; and
- Paragraph G – refunds credited to customers.

### Subpart 2

- Paragraph A – a listing of all variances in effect or requested;
- Paragraph B – identification of all changes in demand contracted;
- Paragraph C – the level of customer-owned gas volumes delivered through the utility's system; and
- Paragraph D – a brief explanation of deviations between gas-cost recovery and actual cost.

In addition to reviewing the basic data, the Department investigated and developed additional data to provide more detailed information to assist the Commission in its review of individual gas utilities' annual automatic adjustment reports.

## C. *NATURAL GAS PRICES AND WEATHER*

### 1. *Gas Prices in FYE15*

As noted above, in FYE15, natural gas prices were lower than prices during FYE14. Generally, Henry Hub prices decreased during the entire reporting period, beginning the reporting period (July 2014) near \$4.05 per Mcf and ending around \$2.78 per Mcf in June 2015, with the lowest price at \$2.61 per Mcf in April 2015 and the highest price at \$4.12 in November 2014. In FYE15, the price of residential propane in Minnesota was lower than

the previous year but still high (approximately \$19-\$21/Mcf) compared to the cost of natural gas.<sup>5</sup>

## 2. *Weather in FYE15*

Compared to 30-year normal weather,<sup>6</sup> the weather in Minnesota for the entire year of FYE15 was warmer than normal except for International Falls and Rochester which were approximately 0.61 and 4.48 percent colder than normal, respectively. The warmer-than-normal annual weather ranged from approximately 0.69 percent warmer at the Minneapolis/St. Paul weather station to approximately 4.56 percent warmer in St. Cloud. Regarding the natural gas storage inventory level, following a near record-low inventory at the end of March 2014, the injections were above average due to increasing production and mild weather resulting in lower demand for natural gas.

The heating season (November 2014 through March 2015) was colder than normal compared to 30-year normal weather except for St. Cloud and Fargo, North Dakota which were approximately 1.23 and 9.43 percent warmer than normal, respectively. The colder-than-normal weather ranged from approximately 1.34 percent colder at the International Falls weather station to approximately 6.80 percent colder in Rochester.

According to Northern Natural Gas Company (NNG) March 2015 *Northern Notes*, for the second consecutive winter, average temperatures were colder than normal in NNG's market area with new all-time monthly peak delivery records being established by NNG. The 2014-2015 heating season was 9 percent colder than normal compared to the record setting 2013-2014 heating season that was 24 percent colder than normal. The winter alternated between colder-than-normal and warmer-than-normal weather. When compared to normal temperatures, November 2014 had the largest deviation from normal during this period, with temperatures that were 40 percent colder than normal. This cold weather was followed by the warmer-than-normal months of December 2014 and January 2015, and then 29 percent colder-than-normal temperatures in February 2015. NNG experienced 36 days of market area deliveries of 4.0 Bcf/day or greater during the 2014-2015 heating season. This amount compares to 49 days of market area deliveries in the 2013-2014 heating season. The next highest total for deliveries of 4.0 Bcf days or greater was 23 during the 2007-2008 heating season.

## D. *GAS UTILITIES SUMMARY*

The Department reviewed the gas utilities' filings to:

- identify systematic patterns of over- or under-recoveries that may be occurring over time;

---

<sup>5</sup> [http://www.eia.gov/dnav/pet/hist/LeafHandler.ashx?n=PET&s=W\\_EPLLPA\\_PRS\\_SMN\\_DPG&f=W](http://www.eia.gov/dnav/pet/hist/LeafHandler.ashx?n=PET&s=W_EPLLPA_PRS_SMN_DPG&f=W)

<sup>6</sup> Based on weather data from 1981 through 2010.

- identify any incorrect calculations of annual true-up adjustment factors;
- identify additional issues that may warrant Commission attention; and
- assess the utilities' compliance with additional annual automatic adjustment report filing requirements, as ordered by the Commission in miscellaneous filings.

As discussed further in Section II, the Department categorized each gas utility's estimated revenue recovery by pipeline system and customer class to allow for full verification of the actual annual fuel costs and the related annual true-up adjustments. The Department reviewed the reasonableness of the utilities' explanations of differences between actual gas costs and gas-cost recovery based on estimated gas costs, as required in Minnesota Rule 7825.2810, subpart 2, paragraph D. Further, since Minnesota Rule 7825.2910 requires that gas utilities "true up" all over- or under-recoveries of gas costs, the Department also verified the accuracy of each utility's annual true-up adjustments.

Gas-cost recovery generally represents the largest component in the rates and bills that customers pay. Further, as noted above, there can be mismatches in the over- or under-charges in a given year and the true-up amounts in the subsequent year. These mismatches affect rates in subsequent years such that an over-recovery for a certain customer class in one year results in an offsetting decrease in the rates (compared to what would otherwise have been charged) assigned to that customer class in the following year. Likewise, an under-recovery in one year increases rates in the subsequent year, compared to rates that would otherwise have been charged. Thus, it is essential that utilities attempt to minimize both over- and under-recoveries.<sup>7</sup> Section II below provides analyses of the true-ups for individual utilities. Table G1 below summarizes the fuel-cost recovery during the FYE15 reporting period for gas utilities.

---

<sup>7</sup> As discussed further in the individual gas utility evaluations, Section II, CenterPoint Energy and Xcel Gas have received Commission approval to add a monthly demand adjustment to their demand cost recovery rate in order to match costs better within the true-up year.

**Table G1<sup>8</sup>: Summary of Gas Utilities' Annual Demand & Commodity Cost Recovery<sup>9</sup>**  
**July 1, 2014 - June 30, 2015**

Utility/System	Gas Cost Recovered (\$)	Incurred Cost of Gas (\$)	Over(Under) Recovery (\$)	Over(Under) Recovery (%)
Greater Minnesota	\$5,188,933	\$5,138,757	\$50,176	0.98%
Great Plains				
North	\$8,424,527	\$8,294,557	\$129,970	1.57%
South	\$10,700,877	\$11,031,735	\$(330,858)	(3.00%)
Interstate Gas	\$ 7,724,747	\$7,741,293	\$(16,546)	(0.21%)
MERC				
CON	\$30,253,907	\$31,485,901	\$ (1,231,994)	(3.91%)
NNG	\$146,798,026	\$144,054,501	\$2,743,525	1.90%
AL	\$359,513	\$492,693	\$ (133,180)	(27.03%)
CenterPoint Energy	\$600,397,474	\$593,338,747	\$7,058,727	1.19%
Xcel Gas	\$331,753,188	\$339,351,066	\$ (7,597,878)	(2.24%)
<b>MN TOTAL</b>	<b>\$1,141,601,192</b>	<b>\$ 1,140,929,250</b>	<b>\$671,942</b>	<b>0.06%</b>

As shown above, five of the nine PGA systems<sup>10</sup> under-recovered gas costs (demand and commodity), ranging from negative 0.21 percent for Interstate Gas's PGA to negative 27.03 percent for MERC's AL PGA.<sup>11</sup> By contrast, MERC's NNG PGA over-recovered gas costs by 1.90 percent. The weighted average for all Minnesota gas utilities was a slight over-recovery of 0.06 percent.<sup>12</sup> The Minnesota total cost of gas for FYE15 was \$1,140,929,250 (about \$1.1 billion) and for FYE14 was \$1,659,257,488 (about \$1.6 billion), which represents a decrease in gas costs of \$518,328,238 (about \$518 million), or approximately 31 percent from the level in FYE14. Table G1a below presents a comparison of FYE15 gas costs to the nominal gas costs in past reporting periods.

<sup>8</sup> The information for Table G1 can be found in each of the utilities' true-ups, which have been included as Department Attachments G5 through G11.

<sup>9</sup> Except for CenterPoint Energy, the recovery in Table G1 includes credits or revenues related to gas costs. CenterPoint Energy's revenues related to gas costs were \$1,489,888 in FYE15. As shown on DOC Attachment G10, CenterPoint Energy's over recovery including these revenues was \$8,548,615, or approximately 1.44 percent.

<sup>10</sup> The Department notes that "gas utility" and "PGA system" are, at times, interchangeable in this Report.

<sup>11</sup> MERC purchased Interstate Gas on April 30, 2015. In Table G1, MERC-AL includes two months of data and Interstate Gas includes ten months of data.

<sup>12</sup> The Minnesota weighted-average amount is calculated by dividing the under-recovery amount by the total cost of gas.

**Table G1a: Summary of Gas Utilities' Annual Fuel Cost-Recovery**

Report Period	Total Cost of Gas	FYE15 Increase/ (Decrease) Compared to Prior Years
FYE15	\$1,140,929,250	
FYE14	\$1,659,257,488	-31%
FYE13	\$1,063,629,628	7%
FYE12	\$899,685,483	27%
FYE11	\$1,228,496,903	-7%
FYE10	\$1,290,861,146	-12%
FYE09	\$1,667,839,793	-32%
FYE08	\$2,183,027,141	-48%
FYE07	\$1,904,701,880	-40%
FYE06	\$2,190,228,230	-48%

Table G1a indicates that the total cost of gas including demand and commodity costs for FYE15 was lower than the cost of natural gas in all of the reporting periods over the last ten years except for FYE12 and FYE13.

Table G2 below summarizes the over- and under-recoveries for each utility over the past ten years, including a ten-year non-weighted average and the cumulative balance percentage over- or under-recovery.

**Table G2: Percent Over-Recovery/(Under-Recovery)  
FYE06-FYE15<sup>13</sup>**

Utility/System	Greater Minnesota	Great Plains		Interstate Gas <sup>14</sup>	MERC			CenterPoint Energy	Xcel Gas
		North <sup>15</sup>	South		CON	NNG	AL <sup>16</sup>		
2005-2006	(1.37)	(4.42)	(3.03)	(2.99)	(1.56)	(1.60)		(1.34)	(1.35)
2006-2007	(6.44)	(4.37)	(3.47)	(1.20)	(2.22)	(4.39)		0.06	0.32
2007-2008	3.25	0.67	(1.56)	1.67	1.94	1.21		(0.44)	(1.75)
2008-2009	(4.96)	(0.36)	(3.34)	5.42	3.85	1.21		1.17	(0.23)
2009-2010	(5.18)	(3.57)	(2.62)	(5.17)	(2.09)	(1.25)		(3.96)	(1.26)
2010-2011	(3.92)	0.45	(1.95)	(0.65)	2.00	2.58		(0.66)	(0.50)
2011-2012	0.58	(7.83)	(4.73)	(5.61)	(2.15)	(6.19)		(4.68)	(3.15)
2012-2013	1.46	(3.66)	(1.86)	3.76	2.82	0.08		(0.84)	(0.36)
2013-2014	(0.27)	(12.09)	(13.57)	5.92	(9.25)	(6.45)		(6.88)	(10.47)
2014-2015	0.98	1.57	(3.00)	(0.21)	(3.91)	1.90	(27.03)	1.19	(2.24)
10-Yr. Avg.	<b>(1.59)</b>	<b>(3.36)</b>	<b>(3.91)</b>	<b>0.09</b>	<b>(1.06)</b>	<b>(1.29)</b>	<b>(27.03)</b>	<b>(1.64)</b>	<b>(2.10)</b>
2014-2015 Cumulative <sup>17</sup>	<b>0.83</b>	<b>0.76</b>	<b>(4.09)</b>	<b>(0.17)</b>	<b>(3.97)</b>	<b>(6.12)</b>	<b>(27.03)</b>	<b>1.08</b>	<b>(2.70)</b>

As shown in Table G2, all of the PGA systems except GMG, Great Plains North, and CenterPoint Energy experienced cumulative under-recoveries during the FYE15. MERC NNG's cumulative over recovery was in excess of five percent.<sup>18</sup>

The ten-year average from FYE06 through FYE15 shows an under-recovery for all of the gas utilities except for Interstate Gas. The Department's analysis of the over- or under-recovery for each utility is presented below in Section II.

Table G3 below provides a summary of the current period's over- or under-recoveries. This table illustrates over- or under-recoveries for firm and interruptible classes as a whole and by pipeline system for equivalent PGA systems during the FYE15 true-up period.

<sup>13</sup> See Department Attachment G2 graph comparing historical true-up adjustments.

<sup>14</sup> MERC purchased Interstate Gas on April 30, 2015. In Table G2, Interstate Gas includes ten months of data.

<sup>15</sup> In February 2004, Great Plains' monthly PGA for the Crookston district was merged with its monthly PGA for the North-4 district to become the North District PGA.

<sup>16</sup> MERC purchased Interstate Gas on April 30, 2015. In Table G2, MERC-AL includes two months of data.

<sup>17</sup> The figures for this column are included in Department Attachment G5 through G11 in each of the utility's true-ups. The cumulative over- or under-recovery is a calculation based on prior years' true-ups and the present year's true-up.

<sup>18</sup> The Department specifies the five percent threshold per Minnesota Rule 7825.2920, subpart 2, concerning adjustment errors.

**Table G3: Percent Over-Recovery/(Under-Recovery)  
FYE15 by Firm and Interruptible Classes**

<b>Utility/System</b>	<b>Firm Percentage<sup>19</sup></b>	<b>Interruptible Percentage</b>	<b>Total Percentage</b>
Greater Minnesota	1.17%	(0.38%)	0.98%
Great Plains			
North	1.57%	1.57%	1.57%
South	(1.89%)	(5.12%)	(3.00%)
Interstate Gas <sup>20</sup>	1.59%	(8.36%)	(0.21%)
MERC			
CON	(2.70%)	(10.57%)	(3.91%)
NNG	2.89%	(8.61%)	1.90%
AL	(26.32%)	(30.06%)	(27.03%)
CenterPoint Energy	1.17%	1.37%	1.19%
Xcel Gas	(1.70%)	(5.70%)	(2.24%)
<b>MN Weighted Avg.</b>	<b>0.42%</b>	<b>(2.52%)</b>	<b>0.06%</b>

Table G3 shows that during the reporting period, one PGA system (MERC-AL) reported a firm under-recovery in excess of five percent of actual costs. MERC purchased Interstate Gas April 30, 2015. Thus, MERC-AL's under-recovery is the result of two months of data for the non-winter months of May and June 2015 and therefore does not represent a year of data; instead, the two months of under-recovery for MERC-AL somewhat offsets the 1.59 percent over-recovery for firm customers of Interstate Gas, based on that ten months of data, and adds to the 8.36 percent under-recovery for interruptible customers. All of the remaining PGA systems reported firm under- or over recoveries of less than five percent.

Table G3 also shows that all PGA systems except Greater Minnesota, Great Plains North, and CenterPoint Energy experienced an under-recovery of interruptible costs in excess of five percent. Great Plains North and CenterPoint Energy experienced an over-recovery of interruptible costs of less than five percent.

The following two sections include the Department's detailed analysis of the significant factors causing the over- and under-recoveries reported in the above tables, as well as summaries of each utility's annual fuel reports, utility-specific reporting requirements, and other items the Department notes for the Commission.

<sup>19</sup> MERC's interruptible figures include the Joint customers' firm requirements since the Joint customers are not considered firm on the peak day.

<sup>20</sup> MERC purchased Interstate Gas on April 30, 2015. In Table G3, Interstate Gas includes ten months of data.



*E. IMPACTS ON GAS COSTS AND THE RECOVERY OF GAS COSTS*

It is normal for utilities to over- or under-recover gas costs. Factors that commonly lead to gas cost over- or under-recovery include:

- weather varying from “normal” weather;
- calculation of the volumetric demand-cost recovery rate;
- capacity release credits;
- deviations between forecasted and actual sales volumes and prices;
- prorating of customer bills; and
- the “three-cent rule” from Minnesota Rule 7825.2700, subp. 3.

Each of these factors is discussed below.

1. **Weather Variance** – Weather is typically the largest factor affecting firm natural gas sales volumes. Therefore, changes in weather can significantly affect the recovery of both demand and commodity gas costs.<sup>21</sup>

There are seven area weather stations used for Minnesota data.<sup>22</sup> The Department compiled weather data from each of those stations as summarized below and in more detail in Attachment G1. Compared to 30-year normal weather from 1981 to 2010,<sup>23</sup> the weather in Minnesota for FYE15 as a whole was warmer than normal across the state except for International Falls and Rochester which were approximately 0.61 and 4.48 percent colder than normal, respectively. For the reporting period, the warmer-than-normal weather ranged from approximately 0.69 percent warmer at the Minneapolis/St. Paul station to approximately 4.56 percent warmer in St. Cloud. However, weather in November 2014 was colder than normal across Minnesota. The FYE15 weather in Minnesota was as follows:

---

<sup>21</sup> Demand gas costs represent the cost of pipeline capacity to transport firm gas supplies. Commodity gas costs represent the cost of the physical natural gas product.

<sup>22</sup> Of the seven National Weather Service stations in our area, five are located in Minnesota (Minneapolis/St. Paul, Rochester, Duluth, International Falls, and St. Cloud), one is located in Fargo, North Dakota (representing Moorhead and other parts of northwestern Minnesota), and one is located in Sioux Falls, South Dakota (representing southwestern Minnesota).

<sup>23</sup> Comparing the reported weather to “normal” weather varies depending on whether a utility uses a thirty-year (1981-2010) average from the National Oceanic and Atmospheric Administration (NOAA) for normal weather data calculations or some other basis to estimate normal weather data calculations.

FYE15 Weather in Minnesota	
Weather Station	Change from normal*
Duluth	-1.78%
International Falls	0.61%
Fargo, No. Dakota	-3.78%
St. Cloud	-4.56%
Minneapolis/St. Paul	-0.69%
Rochester	4.48%
Sioux Falls, So. Dakota	-1.79%

\* Negative indicates warmer than normal (fewer heating degree days)

In contrast, the weather in Minnesota for the heating season November to March was colder than normal compared to 30-year normal weather except for St. Cloud and Fargo, No. Dakota weather station, which were approximately 1.23 and 9.43 percent warmer than normal, respectively. The colder-than-normal weather ranged from approximately 1.34 percent colder at the International Falls weather station to approximately 6.80 percent colder in Rochester as follows:

Winter of 2015 Weather in Minnesota	
Weather Station	Change from normal
Duluth	2.78%
International Falls	1.34%
Fargo, No. Dakota	-9.43%
St. Cloud	-1.23%
Minneapolis/St. Paul	2.44%
Rochester	6.80%
Sioux Falls, So. Dakota	2.83%

In the shoulder months (October and April), conditions at each weather station, except for Rochester (October), were significantly warmer than normal in October 2014 and April 2015.

Recovery of demand costs is affected by weather because the demand portion of utilities' rates is calculated based on test-year or historical weather-normalized firm sales, but is recovered on each unit of firm gas actually sold. Thus, when weather is warmer than normal, utilities may not recover all incurred demand costs due to lower customer use of natural gas. Conversely, utilities may recover more demand costs than they incurred when customers use more gas during the colder-than-normal periods.

Due to the colder-than-normal weather experienced during the winter, all things being equal, demand costs should have been over recovered (interruptible customers are not charged for demand costs). During FYE15, all of the PGA systems over-recovered demand costs except MERC-AL,<sup>24</sup> ranging from an over-recovery of 0.94 percent for Interstate Gas to 38.58

<sup>24</sup> For the MERC-Albert Lea PGA system, there was only two months of data from the time of purchase on April 30, 2015 until the end of the true-up, June 30, 2015.

percent for MERC-NNG. Each PGA system over/ (under) recovered its demand costs by the percentages shown below.

FYE15 Over-/Under Recovery of Demand Costs As Filed <sup>25</sup>	
Greater Minnesota	5.84%
Great Plains North	2.59%
Great Plains South	4.96%
Interstate Gas <sup>26</sup>	0.94%
MERC-Consolidated	23.4%
MERC-NNG	38.58%
MERC-AL	(12.65)%
CenterPoint Energy	1.99%
Xcel Gas	5.56%

In the individual utility true-up evaluations contained in Section II, the effect of weather and other reasons for over- and under-recoveries of demand-costs are discussed in more detail.

Recovery of commodity costs is also affected by weather, as well as price fluctuations. The gas-commodity portion of rates is generally based on price estimates made during the week prior to the beginning of each month. Thus, an unexpected cold period during the middle of a month, following normal weather in the last week in the preceding month, generally will lead to an under-recovery of higher-than-expected gas commodity costs. Conversely, a cold period during the last week of the month followed by normal weather generally leads to an over-recovery of commodity costs if actual commodity gas costs correspondingly decline. Similarly, a prolonged period of either warmer-than-normal or colder-than-normal weather at the beginning of the winter heating season can impact natural gas prices during the remainder of the heating season.

Due to the colder-than-normal weather experienced during the winter, all things being equal, commodity costs should have been under recovered. Also, as discussed above in Section I.C, prices during the heating season were lower and steadily declined. During FYE15, six of the PGA systems under-recovered commodity costs, ranging from 0.30 percent for Interstate Gas to 31.01 percent for MERC-AL.<sup>27</sup> Three PGA systems over-recovered commodity ranging from 0.17 percent for Greater Minnesota to 1.29 percent for Great Plains North. Each PGA system over/ (under) recovered its commodity costs by the percentages shown below.

<sup>25</sup> Except for CenterPoint Energy, the percentages include revenue such as capacity release and curtailment penalty revenue which increased the over recovery percentages.

<sup>26</sup> Interstate Gas figures represent ten months of data. The percentage for Interstate Gas represents Assigned Demand.

<sup>27</sup> For the MERC-Albert Lea PGA system, there were only two months of data from the time of purchase on April 30, 2015 until the end of the true-up, June 30, 2015.

FYE15 Over-/Under-Recovery of Commodity Costs As Filed <sup>28</sup>	
Greater Minnesota	0.17%
Great Plains North	1.29%
Great Plains South	(4.50)%
Interstate Gas	(0.30)%
MERC-Consolidated	(7.14)%
MERC-NNG	(5.28)%
MERC-AL	(31.01)%
CenterPoint Energy	1.07%
Xcel Gas	(3.47)%

## 2. Calculation of the monthly volumetric demand-cost recovery rate

*Changes in demand costs* – In general, demand costs are the costs of reserving pipeline capacity to transport firm gas supplies.<sup>29</sup> Pursuant to Minnesota Rules 7825.2910, subpart 2, gas utilities file a petition for a change in demand to increase or decrease demand, to redistribute demand percentages among classes, or to exchange one form of demand for another. The petition includes a description of the factors contributing to the need for changing demand and the utility's design-day demand by customer class and the change in design-day demand.

*Test-Year Sales Volumes* – Since the current non-gas base rate for most utilities' customers generally does not include a separate demand charge, demand costs are recovered through a volumetric rate on all firm sales through the PGA. This volumetric demand-cost recovery rate is computed by dividing contracted annual demand costs by either the test-year demand volume from a utility's most recent general rate case (which, pursuant to Minnesota Rule 7825.2700, subpart 5, must be used for three years following a utility's rate case) or annual demand volume. Minnesota Rules define the annual demand volume as the actual volume of gas sold during the most recent 12 months (historical), adjusted by an average percentage change in sales computed over the preceding three-year period and normalized for weather.

The demand-cost recovery rate is calculated in the monthly PGA by applying FERC approved natural gas pipeline rates<sup>30</sup> to the Commission's approved demand entitlement level of the utility. Demand entitlements are normally contracted for with the natural gas pipeline on an annual basis with the new levels of demand effective November 1. When demand costs change, application of the monthly PGA demand rate may not result in recovery of one-twelfth of the annual demand costs.<sup>31</sup>

<sup>28</sup> Except for CenterPoint Energy, the percentages include revenue such as balancing penalty revenue. Additionally, commodity costs include storage and balancing costs.

<sup>29</sup> Department Attachment G3 provides a glossary of pipeline demand services and other relevant terminology. Department Attachment G4 provides a chart, by utility, detailing whether pipeline services and other fees are recovered in demand or commodity.

<sup>30</sup> If the natural gas pipeline is intrastate then the Commission approved rates apply.

<sup>31</sup> The following examples of changes that affect the utility's demand costs are changes in the:

- entitlement level;

Further, sales are generally much greater during winter than during summer months. If the recovery of annual demand costs during the winter months is lower due to warmer-than-normal weather during the heating season, there generally will be an under-recovery of demand costs, all else being equal.<sup>32</sup> This under-recovery occurs because the winter months are when the greatest percentage of cost recovery generally occurs.

3. **Capacity Release Credits** – A utility may sell its contracted pipeline capacity (“capacity-release transaction”) if the utility determines that a portion of reserved capacity will not be needed to serve its customers. The Commission requires utilities to return to firm ratepayers all revenue from these capacity-release transactions. The monthly PGA and/or the annual true-up amount are credited, thereby reducing the recovery of demand costs. For those utilities that credit the annual true up amount rather than the monthly PGA, this credit will result in an over-recovery of demand costs on a monthly basis, all else being equal.
4. **Deviations between forecasted and actual sales volumes and prices** – For commodity costs, a common cause of over- or under-recovery is the deviation between monthly forecasts and actual sales volumes and commodity prices. For regulatory purposes, natural-gas commodity costs are usually a pass-through cost for utilities via PGAs, although market conditions will affect the price of natural gas.
5. **Prorating of customer bills** – When a utility reads a customer’s meter in the middle of the month, the registered usage represents consumption from two different PGA (calendar month) periods. Thus, the utility must bill the customer based on an estimate of the consumption that took place during each PGA period. Because this prorated bill will not exactly match the true consumption that took place each month, except by coincidence, over- or under-recoveries typically will result.
6. **The three-cent rule** – Minnesota Rule 7825.2700, subpart 3, specifies that utilities do not need to file monthly PGAs if the change during the month is less than \$0.03 per 1,000,000 BTUs (approximately 1 Mcf). This allowance, if exercised by a utility, would cause an over- or under-recovery of gas costs for that month. However, as requested by the Department, utilities file a monthly PGA report even when the change is less than \$0.03 per Mcf in order to support the utility’s result.

To some extent, all of the above-listed factors may affect gas costs and recovery of gas costs for all of Minnesota’s gas utilities. The following individual gas utility true-up section highlights the items from this list and any particular causes not included in the list that caused notable over- and under-recoveries for each individual gas utility.

- 
- assignment of demand to commodity cost;
  - allocation of costs between jurisdictions; and
  - natural gas pipeline rates approved by FERC.

<sup>32</sup> Likewise, if annual demand costs estimated during the winter months are higher than annual demand costs during other months, there generally will be an over-recovery of demand costs, all else being equal.

## II. REVIEW OF OVER-/UNDER-RECOVERIES AND TRUE-UPS

As discussed above, based on the winter weather being overall colder than normal and all else being equal, the Department would expect the PGA systems to over recover demand and commodity costs. All of the PGA systems except for MERC-Albert Lea<sup>33</sup> over-recovered demand costs from firm customers. However, only three of the PGA systems over-recovered commodity costs. Due to other factors discussed below, six PGA systems under-recovered commodity costs from firm and interruptible customers.

The Department discusses the recovery of gas costs and true-up calculations of each utility's AAA report and true-up filings, along with any general concerns.

### A. GREATER MINNESOTA GAS, INC.

#### 1. Recovery of Gas Costs and True-up Calculations

On August 31, 2015, Greater Minnesota submitted its 2015 *Annual Automatic Adjustment Report* in Docket No. G999/AA-15-612 and its *Annual True-up Report* in G022/AA-15-797. GMG included in its reports the information required by Minnesota Rule 7825.2810. The Department concludes that GMG's filing is complete with respect to Minnesota Rules 7825.2390 through 7825.2920.

For the FYE15 reporting period, GMG reported that it over-recovered its total gas costs by \$50,176, or approximately 0.98 percent, for a cumulative under-recovery of 0.83 percent.<sup>34</sup> By customer class, Greater Minnesota reported under-recoveries for the current reporting period as follows:

**FYE15 Percent Over-Recovery/ (Under-Recovery) by Class<sup>35</sup>**  
(as filed on August 31, 2015 by Greater Minnesota)

Firm	1.17
Agricultural - Interruptible	(1.59)
<u>General - Interruptible</u>	<u>0.88</u>
Total System	0.98

Using the sales volumes forecasted by Greater Minnesota for the FYE16<sup>36</sup> period results in the true-up factors by customer class as shown below.

---

<sup>33</sup> The MERC-Albert Lea or MERC-AL PGA system was not included in this comparison since there was only two months of data from the time of purchase on April 30, 2015 until the end of the true-up, June 30, 2015.

<sup>34</sup> The figure of 0.83 percent represents the cumulative under-recovery of \$42,657, which is the basis for GMG's FYE15 true-up adjustment. For a detailed breakdown of the true-up calculations, please see Greater Minnesota's true-up filing, Docket No. G022/AA-15-797.

<sup>35</sup> A supporting spreadsheet with detailed calculations is contained in Department Attachment G5.

<sup>36</sup> GMG's True-up filing, Attachment A.

**True-Up Factors per Mcf by Class**  
(as filed on August 31, 2015 by Greater Minnesota)

Firm	\$(0.0477)
Agricultural - Interruptible	\$0.2134
General - Interruptible	\$0.0040

The Department's analysis of Greater Minnesota's gas costs shows that Greater Minnesota's over/under-recovery was primarily due to the following demand-cost and commodity-cost factors:

1. **Demand Costs** – Greater Minnesota over-recovered its current demand costs by \$42,511, or approximately 5.84 percent. The demand-cost over recovery includes capacity-release revenue of \$8,814. Without this revenue, there was an over recovery of demand costs of \$33,697 or approximately 4.63 percent. In its *2015 Annual Automatic Adjustment Report*, GMG stated that the over-recovery was due to customer growth.<sup>37</sup>

The Department compared GMG's FYE14 to FYE15 actual firm sales. GMG's actual FYE15 firm sales were 970,070 Mcf<sup>38</sup> which was 70,359<sup>39</sup> or 7.8 percent (70,359/899,711) higher than its FYE14 firm sales of 899,711 Mcf. Based on this analysis, the Department concludes that Greater Minnesota's over-recovery of demand costs appears to be reasonable.

2. **Commodity Costs** – Greater Minnesota over-recovered its current commodity costs by \$7,665, or approximately 0.17 percent. According to GMG,<sup>40</sup> commodity includes \$8,358 of balancing penalty revenue and NNG penalty credits. Without this revenue, GMG under recovered commodity costs by \$693 or approximately 0.02 percent. GMG stated that the commodity recovery rate component is based on estimated purchases prior to the beginning of the month, and to the extent estimated volumes and prices vary from actual purchases, a monthly over- or under-recovery will occur.<sup>41</sup>

The Department concludes that GMG's over-recovery of commodity costs appears to be reasonable.

Based on its review, the Department recommends that the Commission accept GMG's FYE15 true-up.

---

<sup>37</sup> GMG's *Annual Automatic Adjustment Report*, page 4.

<sup>38</sup> GMG's *Annual True up Report*, Attachment C, page 1.

<sup>39</sup> Of this amount, 70,359 Mcf was due to firm customers.

<sup>40</sup> GMG's response to DOC Information Request No. 9.

<sup>41</sup> GMG's *Annual Automatic Adjustment Report*, page 4.

## 2. *Compliance and/or Supplemental Reporting Requirements*

Docket No. G022/M-11-804. In this Docket, the Commission's December 22, 2011 *Order Authorizing New Retail Service* required GMG to provide, each year in its annual AAA report, for each relevant GMG rate class and for each upstream rate schedule used for the purchase for resale service (i.e. for each group of purchase for resale customer) the:

- number of upstream local distribution company (LDC) meters,
- number of retail GMG customers, and
- volume of gas sold to each group of purchase for resale customer.

GMG's New Retail Service is intended to allow more customers to have access to natural gas service. The service is available to customers who do not qualify for new service under another gas utility's main extension tariff, but are willing to pay for GMG's costs of providing natural gas service to them.

The Commission required GMG to provide the information as recommended by Commission Staff in its briefing papers:

Staff also believes a relatively simple additional annual reporting requirement would allow for some basic monitoring of this service and would be helpful. In addition to requiring GMG to provide a reference in its monthly purchased gas adjustment reports to each of the upstream LDC rate schedules that GMG charges purchase for resale customers, staff recommends that in GMG's annual September 1 automatic adjustment of charges reports, the Company provide for each relevant GMG rate class and for each upstream rate schedule used for the purchase for resale service: (1) the number of upstream LDC meters, (2) the number of retail GMG customers, and (3) the volume of gas sold to each group of customers.

GMG provided the required information in its filing.<sup>42</sup> The Department concludes that GMG is in compliance with the filing requirements in Docket No. G022/M-11-804.

Docket No. G999/AA-14-580. The Commission's August 24, 2015 *Order* required all Minnesota regulated natural gas utilities to provide information for the next three AAA reports (2014-2015, 2015-2016, and 2016-2017) on unauthorized gas use for each customer that did not comply with a called interruption during the heating season. On page 5 of its AAA Report, GMG stated that it "did not have any non-compliant interruptible customers that engaged in unauthorized use during a curtailment period; hence GMG has nothing to report." The Department concludes that GMG complied with the reporting requirements in Docket 14-580.

---

<sup>42</sup> GMG's *Annual Automatic Adjustment Report*, pages 4-5.



### 3. *Summary and Recommendations*

The Department concludes that GMG's filing is complete with respect to Minnesota Rules 7825.2390 through 7825.2920. Based on its review, the Department recommends that the Commission:

- accept GMG's FYE15 true-up, Docket No. G001/AA-15-797; and
- allow GMG to implement its true-up, as shown in DOC Attachment G5 of the *AAA Report*.

#### B. *GREAT PLAINS NATURAL GAS COMPANY*

##### 1. *Recovery of Gas Costs and True-Up Calculations*

On August 28, 2015, Great Plains submitted its *2015 Annual Report of Automatic Adjustment of Gas Charges* in Docket No. G999/AA-15-612 and its *Annual True-Up Report* in Docket No. G004/AA-15-794 in compliance with Minnesota Rule 7825.2810. The Department concludes that Great Plains' report is complete with respect to Minnesota Rules 7825.2390 through 7825.2920.

For the FYE15 reporting period, Great Plains North over-recovered its total gas costs by \$129,970, or approximately 1.57 percent, for a cumulative over-recovery of total gas costs of approximately 0.76 percent.<sup>43</sup>

The PGA system for Great Plains South under-recovered total gas cost by \$330,858, or approximately 3.00 percent, for a cumulative under-recovery of 4.09 percent.<sup>44</sup> The Department's analysis indicates that, by district and customer class, Great Plains' over/under-recoveries for the current reporting period as shown below.<sup>45</sup>

---

<sup>43</sup> The figure of 0.76 percent represents the cumulative over-recovery of \$62,846, which is the basis for the August 28, 2015 true-up adjustment. For a detailed breakdown of the true-up calculations, please see Great Plains' true-up filing, Docket No. G004/AA-15-794.

<sup>44</sup> The figure of 4.09 percent represents the cumulative under-recovery of \$451,273, which is the basis for the August 28, 2015 true-up adjustment. For a detailed breakdown of the true-up calculations, please see Great Plains' true-up filing, Docket No. G004/AA-15-794.

<sup>45</sup> The term "North District" refers to the five Minnesota communities served by Great Plains via Viking Gas Transmission Company's (Viking) pipeline. These communities are: Fergus Falls, Pelican Rapids, Breckenridge, Crookston, and Vergas. The term "South District" refers to the thirteen Minnesota communities served by Great Plains via Northern's pipeline. These communities are: Belview, Boyd, Clarkfield, Danube, Dawson, Echo, Granite Falls, Marshall, Montevideo, Redwood Falls, Renville, Sacred Heart, and Wood Lake.

**FYE15 Percent Over-Recovery/ (Under-Recovery)<sup>46</sup>**  
(as filed August 28, 2015 by Great Plains)

<u>Class</u> <sup>47</sup>	<u>North District</u>	<u>South District</u>
Firm	1.57	(1.89)
Small Volume Interruptible	-	(5.21)
Large Volume Interruptible	-	(5.06)
<u>Interruptible</u>	<u>1.57</u>	<u>-</u>
Total System	1.57	(3.00)

Using the sales volumes forecasted by Great Plains for the FYE16 period results in the following true-up factors by district and by customer class:

**True-Up Factors per Mcf**  
(as filed on August 28, 2015 by Great Plains)

<u>Class</u>	<u>North District</u>	<u>South District</u>
Firm	\$(0.0258)	\$0.1679
Small Volume Interruptible	-	\$0.0795
Large Volume Interruptible	-	\$0.2681
Interruptible	\$(0.0682)	-

a. *North District*

The Department's analysis shows that during the reporting period, Great Plains over-recovered its gas costs for the North District by \$129,970, or approximately 1.57 percent. This over-recovery was due to the following demand-cost and commodity-cost factors:

1. Demand Costs – Great Plains over-recovered its demand costs for the North District by \$45,631, or approximately 2.59 percent, during the reporting period. The demand-cost over recovery includes capacity release revenue of \$9,839. Without this revenue, there was an over recovery of demand costs of \$35,792 or approximately 2.02 percent. In addition to mentioning this capacity release revenue, Great Plains stated that the over-recovery of demand costs for the North District was due to the following reasons: <sup>48</sup>
  - Although weather was 4.35 percent warmer than normal for the twelve months ending June 30, 2015, actual volumes exceeded the estimated volumes used in the determination of the per Dth rates utilized in the PGA; and
  - Great Plains recovers demand costs on a volumetric basis,

<sup>46</sup> Supporting spreadsheets with detailed calculations are contained in DOC Attachments G6a and G6b.

<sup>47</sup> Regarding interruptible classes, Great Plains has Small Volume Interruptible (SVI) and Large Volume Interruptible (LVI) classes in the South District, and has a single Interruptible class in the North District.

<sup>48</sup> Great Plains' *Annual Automatic Adjustment Report*, pages 3-4.

while costs are assessed on a fixed monthly basis. Generally, demand costs are under recovered during the summer months, when firm sales volumes are low and over recovered during the winter months when sales volumes are high.

From Great Plains' AAA Report, Exhibit A, page 5, the Department calculated that the weather was approximately 4.38 percent warmer than normal for the winter for Great Plains' North District.<sup>49</sup> However, as Great Plains reports, its sales were higher overall for this area. Based on its analysis, the Department concludes that Great Plains' current over-recovery of demand costs in the North District appears to be reasonable.

2. Commodity Costs – Great Plains' North District over-recovered its commodity costs (including penalty revenue of \$39,804<sup>50</sup>) by \$84,339, or approximately 1.29 percent. Excluding this revenue, the over recovery of commodity was \$44,535, or approximately 0.68 percent.

Based on higher sales despite the warmer-than-normal winter for Great Plains' North District PGA area, the Department concludes that Great Plains' slight over-recovery of commodity costs for the North District appears to be reasonable.

*b. South District*

The Department's analysis shows that during the reporting period, Great Plains under-recovered its total gas costs for the South District by \$330,858, or approximately 3.00 percent. This under-recovery was due to the following demand-cost and commodity-cost factors:

1. Demand Costs – Great Plains over-recovered demand costs for the South District by \$86,628, or approximately 4.96 percent, during the reporting period. Great Plains stated that its over-recovery of demand costs for the South District was due to the following reasons:<sup>51</sup>
  - The weather was 2.73 percent colder than normal for the twelve months ending June 30, 2015 as shown on Exhibit B, page 5.
  - Great Plains recovers demand costs on a volumetric basis, while costs are assessed on a fixed monthly basis. Generally, demand costs are under recovered during the summer months, when firm sales volumes are low and over recovered during the winter months when sales volumes are high.

---

<sup>49</sup> As stated in Section 1, the Fargo, North Dakota weather station was an exception to the colder than normal heating season weather at 9.43 percent warmer than normal weather.

<sup>50</sup> Great Plains' response to DOC Information Request No. 9.

<sup>51</sup> Great Plains' AAA Report, pages 4-5.

From Great Plains' AAA Report, Exhibit B, page 5, the Department calculated that the weather was approximately 2.08 percent colder than normal for the winter for Great Plains' South District PGA area. Based on its analysis, the Department concludes that Great Plains' over-recovery of demand costs in the South District appears to be reasonable.

2. Commodity Costs – Great Plains' South District under-recovered its commodity costs by \$417,486, or approximately 4.50 percent. The commodity-cost under recovery includes balancing penalty revenue of \$24,446. Without this revenue, there was an under recovery of commodity costs of \$441,932 or approximately 4.76 percent.

Based on colder-than-normal winter for Great Plains' South District, the Department concludes that Great Plains' under-recovery of commodity costs for the South District appears to be reasonable.

## 2. Compliance and/or Supplemental Reporting Requirements

Docket No. G999/AA-14-580. In its August 24 *Order*, the Commission granted a variance to allow Great Plains to make the corrections<sup>52</sup> in the FYE15 true-ups as set forth in the body of the *Order* and required that the corrections be reported as a separate line item to the beginning balance of the demand cost of gas in its September 1, 2015 true-up.<sup>53</sup>

For the North District true up, Great Plains did not report the corrections as a separate item but included the corrections in the beginning balance for firm customers.<sup>54</sup> Thus, Great Plains simply reported a lump-sum beginning balance for FYE15 of \$1,287,400.

The Department compared the FYE14 ending balance to the FYE15 beginning balance which showed that Great Plains increased its FYE15 beginning balance under recovery by \$59,424 as follows.

FYE15 Beginning Balance-Firm	\$1,287,400 <sup>55</sup> under recovery
FYE14 Ending Balance-Firm	\$1,227,976 <sup>56</sup> under recovery
Difference	\$59,424

Based on its analysis, the Department concludes that the FYE15 beginning balance for firm of \$1,287,400 is the correct total amount for the North District true up.

For the South District true up, Great Plains also did not report the corrections as a separate

<sup>52</sup> The Department discussed the errors on pages 20-21 of its FYE14 AAA Report.

<sup>53</sup> Order Paragraphs 8 and 10.

<sup>54</sup> See Great Plains' True-up filing, Exhibit A, page 2. Great Plains described the adjustment on pages 4-5 of its AAA Report.

<sup>55</sup> Great Plains' FYE15 true up, Exhibit A, page 2.

<sup>56</sup> Great Plains' FYE14 true up, Exhibit A, page 1.

item but included the corrections in the beginning balance for firm customers.<sup>57</sup> Great Plains simply reported a lump-sum beginning balance for FYE15 of \$1,415,968. Again, the Department compared the FYE14 ending balance to the FYE15 beginning balance which showed that Great Plains decreased its FYE15 beginning balance under recovery by \$9,667 as follows.

FYE15 Beginning Balance-Firm	\$1,415,968 <sup>58</sup> under recovery
FYE14 Ending Balance-Firm	\$1,425,635 <sup>59</sup> under recovery
Difference	\$9,667

Based on its analysis, the Department concludes that the FYE15 beginning balance for firm of \$1,415,968 is the correct total amount for the South District true up.

Docket No. G999/AA-14-580. As noted above, the Commission's August 24, 2015 *Order* also required all Minnesota regulated natural gas utilities to provide information for the next three AAA reports (2014-2015, 2015-2016, and 2016-2017) on unauthorized gas use for each customer that did not comply with a called interruption during the heating season. On page 6 of its AAA Report, Great Plains stated "see Exhibit F for Great Plains' curtailment activities." On its Exhibit F, Great Plains explained that it had one curtailment period during the 2014-2015 heating season and all five customers that were requested to curtail gas usage complied with the request. The Department concludes that Great Plains complied with the reporting requirements in Docket No. 14-580.

Based on its review, the Department recommends that the Commission accept Great Plains' FYE15 true-up.

### 3. *Summary and Recommendations*

The Department concludes that Great Plains' FYE15 annual automatic adjustment report is complete with respect to Minnesota Rules 7825.2390 through 7825.2920. Based on its review, the Department recommends that the Commission:

- accept Great Plains' FYE15 true-ups, Docket No. G004/AA-15-794; and
- allow Great Plains to implement its true-ups, as shown in DOC Attachments G6a and G6b of the *AAA Report*.

#### C. *INTERSTATE POWER AND LIGHT COMPANY-GAS UTILITY*

In its December 8, 2014 *Order Approving Sale Subject to Conditions*, the Commission approved MERC's acquisition of Interstate Gas in Docket No. G001,G011/PA-14-107.

<sup>57</sup> See Great Plains' True-up filing, Exhibit B, page 2. Great Plains described the adjustment on pages 4-5 of its AAA Report.

<sup>58</sup> Great Plains' FYE15 true up, Exhibit A, page 2.

<sup>59</sup> Great Plains' FYE14 true up, Exhibit A, page 1.

Ordering Paragraph 4 required MERC to continue to maintain the Interstate Gas PGA for transitioned Interstate Gas ratepayers until MERC's next general rate case and, at that time, reconcile the two fuel supply systems into one. The sale was closed on April 30, 2015. During this true up period, Interstate Gas reported the required information and true up for the ten months July 2014 through April 2015 up to the time of the sale. After the sale, MERC-AL reported the required information and true up for the two months May and June 2015. Further, MERC-AL's true-up includes Interstate Gas' April 30, 2015 total under-recovery of \$13,043.<sup>60</sup>

1. *Recovery of Gas Costs and True-up Calculations*

Interstate Gas submitted its *2014 Gas Annual Automatic Adjustment Report* on August 29, 2014 in Docket No. G001/AA-14-742 in compliance with Minnesota Rule 7825.2810. The Department concludes that Interstate Gas' filing is complete with respect to Minnesota Rules 7825.2390 through 7825.2920.

For the FYE15 reporting period, Interstate Gas reported that it under-recovered its total gas costs by \$16,547, or approximately 0.21 percent, for a cumulative under-recovery of approximately 0.17 percent.<sup>61</sup> By customer class, Interstate Gas reported over/under-recoveries for the current reporting period as follows:

**FYE15 Percent Over-Recovery/(Under-Recovery)<sup>62</sup>**  
(As filed on August 31, 2015 by Interstate Gas)

Firm	1.59
Small Interruptible	(8.36)
<u>Large Interruptible</u>	<u>0.00</u>
Total System	(0.21)

According to Interstate Gas, "Due to the asset sale, IPL will not be implementing new natural gas purchased gas adjustment (PGA) true-up factors."<sup>63</sup>

The Department's analysis shows that Interstate Gas under-recovered its total gas costs by \$16,547, or approximately 0.21 percent, during the reporting period. This under-recovery was due to the following demand-cost and commodity-cost factors:

1. Demand Costs – Interstate Gas over-recovered its Assigned Demand<sup>64</sup> costs by \$11,329, or approximately 0.94 percent. The demand-cost over-recovery

<sup>60</sup> See MERC-AL's true up report, page 1, line 7 and Interstate's AAA report, Exhibit B, page 2.

<sup>61</sup> The figure of 0.17 percent represents the accumulated under-recovery of \$13,043, and is the actual amount on which the FYE15 true-up adjustment calculations are based. For a detailed breakdown of the true-up calculation, please see Interstate Gas' true-up filing, Docket No. G001/AA-15-796.

<sup>62</sup> A supporting spreadsheet with detailed calculations is contained in Department Attachment G7.

<sup>63</sup> Interstate Gas' AAA Report, page 3.

<sup>64</sup> "Assigned Demand" costs are charged only to firm customers.

includes interruptible penalty revenue of \$3,996 and capacity-release revenue of \$26,355. Without these revenues, there was an under-recovery of demand costs of \$19,022 or approximately 1.53 percent. Interstate Gas stated that the overall under-collection of \$16,547, or approximately 0.21 percent was negligible and closely matches the gas cost and gas recovery.<sup>65</sup>

Based on its analysis, the Department concludes that Interstate Gas' overall under-recovery of Assigned Demand costs appears to be reasonable.

2. Allocated Demand – Interstate Gas under-recovered its total Allocated Demand<sup>66</sup> costs by \$46,539 (\$35,601 to firm + \$10,938 to interruptible) or approximately 16.67 percent. Interstate Gas stated that the “Allocated Demand” costs for the period were under-collected due to other winter reservation charges which Interstate Gas chose not to purchase in advance of the winter but was able to secure reasonably priced reservation contracts during the middle of the winter for February and March 2015. The costs were not included in the monthly PGA so the costs were under collected.<sup>67</sup>

Based on its analysis, the Department concludes that Interstate Gas' under-recovery of Allocated Demand costs appears to be reasonable.

3. Commodity Costs–Interstate Gas over-recovered its commodity costs by \$18,662 (\$123,142 to firm - \$106,480 to interruptible), or approximately 0.30 percent. The commodity-cost over recovery also includes balancing penalty revenue of \$5,195. Without this revenue, there was an over recovery of demand costs of \$13,467 or approximately 0.22 percent.

Based on its analysis, the Department concludes that Interstate Gas' over-recovery of commodity costs appears to be reasonable.

Based on its review, the Department recommends that the Commission accept Interstate Gas' FYE15 true-up. As stated above by Interstate Gas, the Company will not be implementing true-up factors.

## 2. *Compliance and/or Supplemental Reporting Requirements*

Docket No. G999/AA-14-580. As discussed above, the Commission's August 24, 2015 *Order* required all Minnesota regulated natural gas utilities to provide information for the next three AAA reports (2014-2015, 2015-2016, and 2016-2017) on unauthorized gas use for each customer that did not comply with a called interruption during the heating season. Interstate Gas reported the required information by non-compliant customer in its AAA

---

<sup>65</sup> See Exhibit I of Interstate Gas' AAA Report filed in Docket No. G999/AA-14-742.

<sup>66</sup> “Allocated Demand” is shown by class in Interstate Gas' AAA Report. It reflects the portions of demand costs allocated to each class.

<sup>67</sup> Interstate Gas' AAA Report, Exhibit L.

Report, Exhibit A. The Department concludes that Interstate Gas complied with the reporting requirements in Docket No. 14-580.

### 3. *Summary and Recommendations*

The Department concludes that Interstate Gas' filing is complete with respect to Minnesota Rules 7825.2390 through 7825.2920. Based on its review, the Department recommends that the Commission accept Interstate Gas' true-up filing in Docket No. G001/AA-15-79 as shown in Department Attachment G7 of the *AAA Report*.

#### D. *MINNESOTA ENERGY RESOURCES CORPORATION (MERC)*

In its December 8, 2014 *Order Approving Sale Subject to Conditions*, the Commission approved MERC's acquisition of Interstate Gas in Docket No. G001,G011/PA-14-107. Ordering Paragraph 4 required MERC to continue to maintain the Interstate Gas PGA for transitioned Interstate Gas ratepayers until MERC's next general rate case and, at that time, reconcile the two fuel supply systems into one.<sup>68</sup> The sale was closed on April 30, 2015. During this true up period, Interstate Gas reported the required information and true up for the ten months July 2014 through April 2015 up to the time of the sale. After the sale, MERC-AL reported the required information and true up for the two months May and June 2015. Further, MERC-AL's true-up includes Interstate Gas' April 30, 2015 total under-recovery of \$13,043.<sup>69</sup>

#### 1. *Recovery of Gas Costs and True-Up Calculations*

On September 1, 2015, MERC-NNG submitted its 2015 *Annual Automatic Adjustment Report* in Docket No. G011/AA-15-803 in compliance with Minnesota Rule 7825.2810. The Department concludes that MERC-NNG's filing is complete with respect to Minnesota Rules 7825.2390 through 7825.2920.

For the FYE15 reporting period, MERC-NNG over-recovered its total gas costs by \$2,743,525, or approximately 1.90 percent, for a cumulative over-recovery of total gas costs of approximately 1.85 percent.<sup>70</sup>

On September 1, 2015, MERC-Consolidated or MERC-CON submitted its 2015 *Annual Automatic Adjustment Report* in Docket No. G011/AA-15-802 in compliance with Minnesota Rule 7825.2810. The Department concludes that MERC-CON's filing is complete with respect to Minnesota Rules 7825.2390 through 7825.2920.

---

<sup>68</sup> On September 30, 2015, MERC filed a general rate case in Docket No. G011/GR-15-736 which was pending the Commission's decision at the time of filing this report. In that docket, MERC proposed to implement the PGA consolidation on July 1, 2017 following implementation of final rates.

<sup>69</sup> See MERC-AL's true up report, page 1, line 7 and Interstate's AAA report, Exhibit B, page 2.

<sup>70</sup> The figure of 1.85 percent represents the cumulative over-recovery of \$2,667,680, which is the basis for the September 1, 2015 true-up adjustment. For a detailed breakdown of the true-up calculations, please see MERC-NNG's true-up filing, Docket No. G011/AA-15-803.



The PGA system for MERC-CON under-recovered total gas cost by \$1,231,994, or approximately 3.91 percent, for a cumulative under-recovery of 3.97 percent.<sup>71</sup>

On September 1, 2015, MERC-AL submitted its 2015 *Annual Automatic Adjustment Report* in Docket No. G011/AA-15-801 in compliance with Minnesota Rule 7825.2810. The Department concludes that MERC-AL's filing is complete with respect to Minnesota Rules 7825.2390 through 7825.2920.

For the FYE15 reporting period, based on two months of non-heating season data, MERC-AL under-recovered its total gas costs by \$133,180, or approximately 27.03 percent, for a cumulative under-recovery of total gas costs of approximately 29.68 percent.<sup>72</sup>

The Department's analysis indicates that, by customer class and system, MERC's over- or under-recoveries during the current reporting period were as follows:

**FYE15 Percent Over-Recovery/(Under-Recovery)  
by System and Class<sup>73</sup>  
(as filed on September 1, 2015 by MERC)**

<u>Class</u> <sup>74</sup>	<u>NNG</u>	<u>Consolidated</u>	<u>AL</u>
GS	2.89	(2.70)	(26.32)
SVJ/LVJ/SLVJ Demand	0.00	0.00	0.00
SVI/SVJ/LVI/LVJ/SLVI Commodity	(8.63)	(10.63)	(30.06)
Total System	1.90	(3.91)	(27.03)

Using the sales volumes forecasted by MERC for the year ending August 31, 2016 results in the following true-up factors by system and class:

<sup>71</sup> The figure of 3.97 percent represents the cumulative under-recovery of \$1,250,302, which is the basis for the September 1, 2015 true-up adjustment. For a detailed breakdown of the true-up calculations, please see MERC-CON's true-up filing, Docket No. G011/AA-15-802.

<sup>72</sup> The figure of 29.68 percent represents the cumulative over-recovery of \$146,223, which is the basis for the September 1, 2015 true-up adjustment. For a detailed breakdown of the true-up calculations, please see MERC-AL's true-up filing, Docket No. G011/AA-15-801.

<sup>73</sup> Supporting spreadsheets with detailed calculations are contained in DOC Attachments G8 and G9.

<sup>74</sup> MERC has the following classes:

- General Service (GS);
- Small Volume Interruptible (SVI);
- Large Volume Interruptible (LVI);
- Super Large Volume Interruptible (SLVI);
- Small Volume Joint (SVJ);
- Large Volume Joint (LVJ); and
- Super Large Volume Joint (SLVJ).

**True-Up Factors per Mcf  
by System and Customer Class**  
(as filed on September 1, 2015 by MERC)

<u>Class</u>	<u>NNG</u>	<u>Consolidated</u>	<u>AL</u>
GS	\$(0.1703)	\$0.1468	\$(0.0054)
SVJ/LVJ/SLVJ Demand	\$0.0000	\$0.0011	\$0.00
SVI/SVJ/LVI/LVJ/SLVI Commodity	\$0.4343	\$0.7252	\$0.4412

a. *MERC-NNG*

The Department's analysis shows that MERC over-recovered its total gas costs on its NNG System by \$2,743,525, or approximately 1.90 percent during the reporting period. This over-recovery was due to the following demand-cost and commodity-cost factors:

1. Demand Costs – MERC over-recovered its demand costs for the MERC-NNG system by \$9,108,591, or approximately 38.58 percent, with the over-recoveries occurring largely during October 2014 through May 2015. The demand-cost over-recovery also includes NNG capacity-release revenue of \$458,209.<sup>75</sup> Without this revenue, there was an over-recovery of demand costs of \$8,650,382 or approximately 35.94 percent. In addition to mentioning capacity release revenue and curtailment penalty revenues,<sup>76</sup> MERC explained that the over collection of demand costs was predominantly caused by the cost recovery of Bison and Northern Border Pipeline costs being shifted from the demand rate factor to the commodity rate factor per Docket No. G007/M-10-1166 and G011/M-10-1168 dated January 26, 2015.<sup>77</sup> On September 1, 2015, MERC concurrently filed, with the true up, an Excel spreadsheet that provided an analysis of the over and under recoveries.

Based on its review of MERC's analysis of the over and under recoveries, the Department concludes that MERC-NNG's over-recovery of demand costs appears to be reasonable for this time period, but MERC should address in its reply comments how the Company could achieve more accurate recovery of the Bison and Northern Border pipeline costs on a going-forward basis.

2. Commodity Costs –MERC-NNG under-recovered commodity costs by \$6,365,066, or approximately 5.28 percent. The commodity-cost under-recovery also includes revenue of \$730,279 (balancing revenue \$219,324,<sup>78</sup>

<sup>75</sup> MERC-NNG's AAA Report, Schedule I.

<sup>76</sup> MERC-NNG had no DDVC penalty revenue in FYE15.

<sup>77</sup> MERC-NNG's AAA Report, page 3 (in the section that follows the "Procurement of Gas Supply". On January 21, 2015, the Commission issued its Order, effective November 1, 2014, that authorized recovery of the costs of these contracts through in the commodity portion of rates because the contracts are intended to provide benefits to all of MERC's ratepayers.

<sup>78</sup> MERC's response to DOC IRs 7 and 9.

NBPL capacity release \$336,813,<sup>79</sup> and penalty revenue \$174,142<sup>80</sup>). Without these revenues, there was an under-recovery of commodity costs of \$7,095,345, or approximately 5.89 percent. MERC stated that “the under collection of commodity costs was predominantly caused by the cost recovery of Bison and Northern Border Pipeline costs being shifted from the demand rate factor to the commodity rate factor per Docket No. G007/M-10-1166 and G011/M-10-1168 dated January 26, 2015.”<sup>81</sup> On September 1, 2015, MERC concurrently filed with the true up, an Excel spreadsheet that provided an analysis of the over and under recoveries.

Based on its review of MERC’s analysis of the over and under recoveries, the Department concludes that MERC-NNG’s under-recovery of commodity costs appears to be reasonable.

*b. MERC-Consolidated*

The Department’s analysis shows that MERC under-recovered its total gas costs for the Consolidated System by \$1,231,994, or approximately 3.91 percent, during the reporting period. This under-recovery was due to the following demand-cost and commodity-cost factors:

1. Demand Costs – MERC over-recovered its demand costs for the MERC- CON system by \$777,850, or approximately 23.40 percent. The demand-cost over-recovery includes capacity-release revenue of \$13,409<sup>82</sup> and curtailment penalty revenues of \$2,555. Without these revenues, there was an over-recovery of demand costs of \$761,886, or approximately 22.92 percent. In its filing, in addition to mentioning capacity release and curtailment penalty revenues, MERC stated that the “over collection of demand cost was caused by the actual sales being greater than projected sales and actual costs being less than projected costs.”<sup>83</sup> However, this over-recovery again reflects recovery of the Bison and Northern Border pipeline costs as discussed above. On September 1, 2015, MERC concurrently filed with the true up an Excel spreadsheet that provided an analysis of the over and under recoveries.

Based on its review of MERC’s analysis of the over and under recoveries, the Department concludes that MERC- CON’s over-recovery of demand costs appears to be reasonable. Again, MERC should address in its reply comments how the Company could achieve more accurate recovery of the Bison and Northern Border pipeline costs on a going-forward basis.

---

<sup>79</sup> MERC-NNG’s AAA Report, Schedule I.

<sup>80</sup> MERC-NNG’s AAA Report, Schedule J.

<sup>81</sup> See MERC-NNG’s AAA Report, page 3.

<sup>82</sup> MERC- CON’s AAA Report, Schedule I.

<sup>83</sup> See MERC-CON’s AAA Report, page 3.

2. Commodity Costs – MERC-CON under-recovered commodity costs by \$2,009,844, or approximately 7.14 percent. The commodity-cost under-recovery also includes balancing penalty revenue of \$13,003.<sup>84</sup> Without this revenue, there was an under-recovery of commodity costs of \$2,022,847, or approximately 7.18 percent. In its filing, MERC-CON stated that the “under collection was predominantly caused by the difference in projected monthly gas costs compared to actual gas costs.”<sup>85</sup> On September 1, 2015, MERC concurrently filed with the true up, an Excel spreadsheet that provided an analysis of the over and under recoveries.

Based on its review of MERC’s analysis of the over and under recoveries, the Department concludes that MERC- CON’s under-recovery of commodity costs appears to be reasonable.

c. *MERC-Albert Lea*

The Department’s analysis shows that MERC under-recovered its total gas costs for the MERC-AL system by \$133,180, or approximately 27.03 percent, for the relevant two months during the reporting period. This under-recovery was due to the following demand-cost and commodity-cost factors:

1. Demand Costs – MERC under-recovered its demand costs for the MERC- AL system by \$13,507, or approximately 12.65 percent. In its filing, MERC stated that the “under collection of demand cost was predominantly caused by the actual sales being less than projected sales.”<sup>86</sup> On September 1, 2015, MERC concurrently filed with the true up an Excel spreadsheet that provided an analysis of the over and under recoveries.

Based on its review of MERC’s analysis of the over and under recoveries, and the fact that MERC-AL’s demand costs include only two months of data from non-peaking months, the Department concludes that MERC- AL’s under-recovery of demand costs appears to be reasonable. The subsequent AAA Report would provide a better perspective, with twelve months of data.

2. Commodity Costs – MERC-AL under-recovered commodity costs by \$119,673, or approximately 31.01 percent. In its filing, MERC-AL stated that the “under collection was predominantly caused by the difference in projected monthly gas costs compared to actual gas costs.”<sup>87</sup> On September 1, 2015, MERC concurrently filed with the true up, an Excel spreadsheet that provided an analysis of the over and under recoveries.

---

<sup>84</sup> MERC- CON’s AAA Report, Schedule I.

<sup>85</sup> MERC-CON’s AAA Report, page 3.

<sup>86</sup> See MERC-AL’s AAA Report, page 3.

<sup>87</sup> MERC-AL’s AAA Report, page 3.

Based on its review of MERC's analysis of the over and under recoveries, and the fact that MERC-AL's commodity costs include two months of data, the Department concludes that MERC-AL's under-recovery of commodity costs appears to be reasonable.

## 2. *Compliance and/or Supplemental Reporting Requirements*

Docket Nos. G007,011/M-06-1358, G007,011/M-09-262, G007,011/M-11-296, G007,011/M-13-207, and G011/M-15-231. In these dockets, the Commission allowed MERC to recover the costs associated with using financial instruments in securing natural gas supplies through the PGA. The *Orders* in these dockets require MERC to report and provide in future AAA filings data on the relative benefits of price hedging contracts, including the average cost per dekatherm for natural gas purchased using financial instruments compared to the relevant monthly and daily spot index prices, together with the following information:

- a list of each hedging instrument entered into;
- the total contracted volumes, for each instrument; and
- the net gain or loss, including all transaction costs for each instrument in comparison to the appropriate monthly and daily spot prices.

The Commission included various other restrictions in its *Orders* and specifically, in its August 17, 2011 *Order* in Docket Nos. G007,011/M-11-296 and G007,011/M-13-207, required MERC to provide, in its AAA Reports, the full post-mortem analysis of their hedged volumes for the preceding heating season compared to other hedging strategies and the prevailing market prices strategy.

MERC included information regarding these *Order* requirements in its AAA Reports, pages 5 and 6, Schedules L and O and in an Excel spreadsheet filed concurrently with the AAA Report. The Department discusses MERC's hedging costs in Section III, part O, of this *Report*.

Docket No. G999/AA-08-1011. The Commission directed CenterPoint, MERC, and Xcel Gas to provide the Department with the following information about their hedging programs, beginning in fiscal-year 2010:

- a clearly defined and quantified description of the risk (*i.e.*, catastrophic or other type of event) the companies are insuring against by implementing the hedging strategies. The Company also was directed to include a clearly defined and quantified estimate of probability of the events occurring;
- a quantitative analysis of the value of reducing price volatility and managing price risk (the cost and benefit of these programs to all customers and the companies) that includes:

- a comparison of what actual low, average, and high usage customer bills (on a monthly basis) would have been with and without the use of the hedging strategies as implemented during the relevant time period; and
  - a comparison of what these customer bills would have been under budget billing, assuming normal gas usage for low, average, and high-usage customers, and assuming catastrophically high prices; and,
- a quantitative definition of “catastrophically high prices” (in absolute and relative terms), and a bill analysis that shows how these prices would impact low, average, and high-usage customer bills.

MERC included information regarding these *Order* requirements in its AAA Reports, pages 6-12, and in Schedule P. The Department discusses MERC’s hedging costs in Section III, part O, of this *Report*.

Docket No. G999/AA-14-580. The Commission’s August 24, 2015 *Order* required all Minnesota regulated natural gas utilities to provide information for the next three AAA reports (2014-2015, 2015-2016, and 2016-2017) on unauthorized gas use for each customer that did not comply with a called interruption during the heating season. On pages 14-15 of MERC-CON’s AAA Report, MERC stated that there was one occurrence of unauthorized gas use by MERC-CON customers during the time period. MERC reported the required information for that customer and stated that MERC had a discussion with the customer once curtailment penalties were assessed. The Department concludes that MERC complied with the reporting requirements in Docket No. 14-580 on unauthorized gas use.

The Commission’s August 24, 2015 *Order* also granted a variance for MERC to adjust its September 1, 2015 true-up balance for its MERC-NNG classes that were undercharged due to the system assignment error and the farm tap customer error in payments to NNG. Additionally, the Commission granted a variance for MERC to adjust its September 1, 2015 true-up balance for its MERC-CON classes that were overcharged due to the system assignment error by MERC. The Department reviewed the adjustments<sup>88</sup> and concludes that MERC’s implementation is reasonable.

Based on its review, the Department recommends that the Commission accept MERC’s FYE15 true-ups.

### 3. *Summary and Recommendations*

The Department concludes that MERC’s FYE15 annual automatic adjustment reports are complete with respect to Minnesota Rules 7825.2390 through 7825.2920. Based on its review, the Department recommends that the Commission:

---

<sup>88</sup> See MERC-NNG’s and MERC-CON’s true ups, page 1 of 3 and AAA Reports, page 5 Schedule K for detail. The adjustment amounts on MERC’s two Schedule Ks agree with the Department’s June 24, 2015 Response Comments, page 7.

- accept MERC- NNG's true-up filing in Docket No. G011/AA-15-803;
- allow MERC- NNG to implement its true-up, as shown in Department Attachment G8 of the *AAA Report*;
- accept MERC- CON's true-up filing in Docket No. G011/AA-15-802;
- allow MERC- CON to implement its true-up, as shown in Department Attachment G9 of the *AAA Report*;
- accept MERC- AL's true-up filing in Docket No. G011/AA-15-801; and
- allow MERC- AL to implement its true-up, as shown in Department Attachment G8a of the *AAA Report*.

In addition, the Department recommends that MERC address in its reply comments how the Company could achieve more accurate recovery of the Bison and Northern Border pipeline costs on a going-forward basis.

**E. CENTERPOINT ENERGY**

**1. Recovery of Gas Costs and True-Up Calculations**

On September 1, 2015, CenterPoint Energy submitted its 2015 Annual Automatic Adjustment Report in Docket No. G999/AA-15-612 and its Annual True-Up Report in Docket No. G008/AA-15-800 in compliance with Minnesota Rule 7825.2810. The Department concludes that CenterPoint Energy's filing is complete with respect to Minnesota Rules 7825.2390 through 7825.2920.

According to CenterPoint Energy's true-up filing, CenterPoint Energy over-recovered gas costs by \$8,548,615, or approximately 1.44 percent, with a cumulative over-recovery of approximately 1.08 percent<sup>89</sup> of its actual gas cost incurred. By customer class, CenterPoint Energy reported over/ (under)-recoveries for the current reporting period as follows:

**FYE15 Percent Over-Recovery/ (Under-Recovery)<sup>90</sup>**  
(As filed on September 1, 2015 by CenterPoint Energy)

<u>Class</u>	
Small Volume Firm	1.42
Large General Service	(3.77)
Small Volume Dual Fuel	0.56
<u>Large Volume Dual Fuel</u>	<u>3.81</u>
Total System	1.44

Using the rate-case sales volumes by CenterPoint Energy results in the following proposed true-up factors by class.<sup>91</sup>

---

<sup>89</sup> The figure of 1.08 percent represents the cumulative over-recovery of \$6,430,547, which is the basis for the FYE15 true-up factors. For a detailed breakdown of the true-up calculation, please see CenterPoint Energy's true-up filing, Docket No. G008/AA-15-800.

<sup>90</sup> A supporting spreadsheet with detailed calculations is contained in Department Attachment G10.

**True-Up Factors per Dekatherm (Dth)**  
(As filed on September 1, 2015 by CenterPoint Energy)

<u>Class</u>	<u>Factor</u>
Small Volume Firm	\$(0.0877)
Large General Service	\$0.1894
Small Volume Dual Fuel	\$0.0598
Large Volume Dual Fuel	\$0.5158

The Department's analysis of CenterPoint Energy's true-up calculation indicates that the current year's deviation between gas-cost recoveries and actual gas costs was primarily caused by the following factors:

1. Demand Costs – CenterPoint Energy over-recovered its demand costs including propane costs<sup>92</sup> by \$1,697,073, or approximately 2.15 percent. The demand-cost over-recovery includes off-system sales revenue of \$120,118 and curtailment revenue of \$5,296. Without these revenues, there was an over-recovery of demand costs of \$1,571,659 or approximately 1.99 percent. In its filing,<sup>93</sup> CenterPoint Energy stated that the demand-cost over-recovery resulted from weather that was about one percent colder than normal and firm sales that were about 10.8 million DT more than the weather-normalized sales used to calculate the demand recovery factor (actual Firm Cycle sales = 107.3 million DT vs Test Year Firm Sales Forecast for the GR-13-316 Docket = 96.5 million DT.) According to CenterPoint Energy, adjustments to demand from the “demand smoothing” factor brought the demand cost recovery much closer to the demand costs incurred.<sup>94</sup>

The Department refers to its analysis in G008/M-16-228, in which the Department concluded that CenterPoint Energy's demand cost under-recovery has been reasonable, particularly in the last several years.

2. Commodity Costs – CenterPoint Energy over-recovered commodity costs by \$6,851,543, or approximately 1.33 percent. The commodity-cost over-recovery includes off-system sales revenue of \$700,899, damage revenue of \$15,039, and balancing revenue of \$648,537. Without these revenues, there was an over-recovery of demand costs of \$5,487,068 or approximately 1.07 percent. In regard to the over-recovery, CenterPoint Energy stated that “Commodity-cost recovery rates are based on estimated monthly purchases prior to the start of the month, based on the assumption of “normal” weather. To the extent

---

<sup>91</sup> See CenterPoint Energy's true up, page 10 for the sales volumes.

<sup>92</sup> Propane costs of \$135,511 are included in demand costs.

<sup>93</sup> See CenterPoint Energy's AAA Report, page 18.

<sup>94</sup> On May 17, 2016, the Commission issued its Order in Docket No. G008/M-16-228 authorizing CenterPoint a variance to continue using the smoothing tool, with modifications and reporting requirements.



estimated purchases vary from actual purchases, an over or under recovery will occur.”<sup>95</sup>

Based on its analysis, the Department concludes that CenterPoint Energy’s over recovery of commodity costs appears to be reasonable.

## 2. *Compliance and/or Supplemental Reporting Requirements*

Docket Nos. G008/M-00-980, G008/M-03-782, G008/M-05-1196, G008/M-07-1063, G008/M-10-857, and G008/M-13-728 (Demand Adjustment Program). In Docket No. G008/M-00-980, CenterPoint Energy requested a three-year pilot program to add a monthly Demand Adjustment Program (Program) to its demand cost recovery rate charged to firm customers in order to provide a better matching of costs and recoveries within the true-up year. In its October 27, 2000 *Order*, the Commission approved the pilot program and required CenterPoint Energy to provide, in its Annual Automatic Adjustment Report, a summary of what the total annual demand-cost recovery would have been absent the Demand Adjustment, the total amount of Demand Adjustment collected, and the total amount of demand costs that will be trued up.<sup>96</sup> In the above dockets, the Commission approved extensions of the Program. In its December 11, 2013 *Order*,<sup>97</sup> the Commission approved CenterPoint Energy’s request “to remove the one-month lag in sales from its calculation” of the monthly demand adjustment and ordered continuing reporting requirements from the previous dockets.<sup>98</sup>

In Exhibits 3 and 4 of its AAA Report, CenterPoint Energy included the required information.<sup>99</sup> In Table 1, since the inception of the Program, the demand-cost recovery results have been as follows:<sup>100</sup>

---

<sup>95</sup> See CenterPoint Energy’s AAA Report, page 18.

<sup>96</sup> CenterPoint Energy’s Demand Adjustment was not charged to its Viking area customers until consolidation of the PGAs in 2005.

<sup>97</sup> Docket No. G008/M-13-728.

<sup>98</sup> Prior to FYE14, this approach was reported as a hypothetical removal of the one-month lag filed in CenterPoint Energy’s AAA Reports, Exhibit 4.

<sup>99</sup> See CenterPoint Energy’s AAA Report, page 19 for a discussion.

<sup>100</sup> The data in this exhibit does not include “No Surprise Bill©” (NSB) customer data starting with November 2001 until termination of the program in December 2007. NSB customer demand costs were recovered on weather-normalized sales and a fixed recovery rate.

**Table 1: Demand Adjustment Program<sup>101</sup>**

<b>Year</b>	<b><u>With Program Recovery<sup>102</sup></u></b>		<b><u>Without Program</u></b>	
	<b><u>Over/(Under)<sup>103</sup></u></b>	<b><u>Percent</u></b>	<b><u>Over/(Under)</u></b>	<b><u>Percent</u></b>
FYE01	\$(1,859,854)	(1.6)	\$6,060,569	5.2
FYE02	\$2,140,282	2.1	(\$9,835,529)	(9.6)
FYE03	\$195,409	0.2	\$7,784,072	7.9
FYE04	\$(1,167,912)	1.0	\$(1,197,490)	(1.0)
FYE05	\$(934,612)	(0.8)	\$(1,530,385)	(1.3)
FYE06	\$(406,837)	(0.4)	\$(12,087,038)	(10.4)
FYE07	\$7,519,994	7.0	\$(286,342)	(0.3)
FYE08	\$2,511,582	2.9	\$1,322,689	1.5
FYE09	\$3,098,947	4.7	\$4,489,569	6.8
FYE10	\$(5,149,579)	(6.6)	\$(7,327,401)	(9.4)
FYE11	\$1,164,918	1.5	\$3,903,613	5.1
FYE12	\$(4,482,056)	(6.0)	\$(11,272,158)	(15.1)
FYE13	\$7,310,268	10.0	\$5,025,956	6.9
FYE14 <sup>104</sup>	\$688,175 <sup>105</sup>	0.9	\$11,295,219	15.4
FYE15	\$1,882,416	2.4	\$7,712,926	9.8

As shown above, except for FYE07, FYE08, and FYE13, the program provided a better match of costs and recoveries within the true-up year than would have been the case without this program.<sup>106</sup> In FYE15, actual over recovery of \$1,882,416 outperformed the hypothetical over recovery of \$7,712,926. Again, the Department refers to the analysis provided in Docket G008/M-16-228 for further discussion and the Commission's decision to grant an additional variance to allow the demand smoothing adjustment to continue.

As stated above, the Commission required CenterPoint to continue reporting requirements from previous dockets. Table 2, shows the over/ (under) recovery with and without the lag adjustment.

<sup>101</sup> From CenterPoint Energy's AAA Report Exhibits 3 and 4.

<sup>102</sup> Program recovery did not include the lag adjustment until FYE14.

<sup>103</sup> For comparison purposes, the variances are calculated using non-prorated data (*i.e.*, calendar-month data rather than billing-month data).

<sup>104</sup> Beginning in FYE14, the Commission approved CenterPoint Energy's request to adjust the Program for a one-month lag in sales.

<sup>105</sup> This figure was corrected. As of FYE14, the Program recovery includes the lag adjustment.

<sup>106</sup> Regarding FYE07, the Commission modified the pilot program in its December 24, 2007 *Order* to account for capacity-release credits due to the large over recovery in FYE07. The over recovery was larger due to adding capacity-release credits for the first time starting in January 2008. For FYE08, the demand cost adjustment was not in place for three months (October through December of 2007) since CenterPoint Energy's request for a continued variance in Docket No. G008/M-07-1063 was not approved until December 24, 2007. Thus, the results of the FYE08 demand cost adjustment program may not be indicative of what the results would have been over the full eight months of the program.

**Table 2: Demand Adjustment Program  
One-Month Lag Adjustment Results<sup>107</sup>**

<b>Year</b>	<b><u>With Lag Adjustment</u> Over/ (Under) Recovery</b>	<b><u>Without Lag Adjustment</u> Over/ (Under) Recovery</b>
FYE08	\$939,032	\$1,322,689
FYE09	\$3,873,820	\$3,098,947
FYE10	\$(4,394,252)	\$(5,149,579)
FYE11	\$2,306,874	\$1,164,918
FYE12	\$(4,568,677)	\$(4,482,056)
FYE13	\$3,954,396	\$5,025,955
FYE14 <sup>108</sup>	\$688,175	\$(149,278)
FYE15	\$1,882,416	\$(285,002)

In FYE15, the hypothetical without lag adjustment under recovery of \$285,002 outperformed the actual with the lag adjustment over recovery of \$1,882,416. The Department concludes that CenterPoint Energy complied with the filing requirements in the Commission's *Order* in Docket No. G008/M-13-728.

Docket Nos. G008/M-01-540, G008/M-08-777, G008/M-12-166, and G008/M-15-912 (Financial Call Options). In Docket No. G008/M-01-540 (Docket No. 01-540), the Commission granted a variance to allow CenterPoint Energy to recover costs associated with financial call options related to swing gas in place of reservation fees through the PGA. The Commission granted an extension of the variance through June 30, 2010 in Docket No. G008/M-08-777 (Docket No. 08-777). Further, the Commission granted an additional extension of the variance through June 30, 2016 and required compliance reports in Docket No. G008/M-12-166. In Docket No. G008/M-15-912, CenterPoint Energy was granted an extension to its variance to recover the costs associated with certain financial instruments through the PGA through June 30, 2020.

In its November 3, 2004 *Order Granting Open-Ended Variance to Minn. Rules, Parts 7825.2400, 7825.2500, and 7825.2700* (01-540), the Commission required CenterPoint Energy to:

- include information on the call options contracts and swing contracts with reservation fees used during the year and the price paid for natural gas through each of these types of contractual arrangements; and
- compare the cost of the swing gas actually used with the cost for natural gas in the spot market for the day on which the swing gas was actually used.

CenterPoint Energy complied by including a comparison of the cost of swing gas with the costs for natural gas in the spot market in its Exhibit 6A and B of its AAA Report for Docket No. 01-540. CenterPoint Energy's Exhibit 7 lists hedge volumes and Exhibit 8 estimates

<sup>107</sup> From CenterPoint Energy's AAA Report Exhibits 3 and 4.

<sup>108</sup> Beginning in FYE14, this method was used since the Commission approved CenterPoint Energy's request to adjust the Program for a one-month lag.

impacts on customer bills as a result of using hedging products in its supply portfolio during the true-up period.

In its March 6, 2009 *Order* (08-777), the Commission required the following reporting requirements:

- data on the specifics of any price hedging contracts, including a list of each hedging instrument entered into;
- the totals contracted for each instrument; and
- the net gains or losses, including all transaction costs.

CenterPoint Energy complied by including this information in its Exhibit 7 of its AAA Report. The Department concludes that CenterPoint Energy complied with the filing requirements in Docket Nos. 01-540 and 08-777. The Department discusses CenterPoint Energy's hedging costs in Section III, part O, of this *Report*.

Docket No. G999/AA-08-1011. As noted above, the Commission directed CenterPoint Energy, MERC, and Xcel Gas to provide the Department with information about their hedging programs, beginning in fiscal-year 2010. CenterPoint Energy provided this information in pages 19-21, as well as in Exhibit 8 of its Annual Report. The Department concludes that CenterPoint Energy complied with the filing requirements in Docket No. G999/AA-08-1011. The Department discusses CenterPoint Energy's hedging costs in Section III, part O, of this *Report*.

Docket No. G008/GR-08-1075 (Off-System Sales). In Docket No. G008/GR-08-1075 (08-1075), CenterPoint Energy was ordered to return "off system sales" revenues to ratepayers through an initial refund of \$5,912,279 and then continue to refund any off system revenues through subsequent PGA filings. In its November 2, 2009 *Findings of Fact, Conclusions of Law, and Recommendation*, the Commission Ordering Paragraph 72 (d) required CenterPoint Energy to "include a separately identified calculation of the over/under recovery of the off-system sales credits to ratepayers and of the incentive" in its annual AAA filing. Ordering Paragraph 72 (c) required that the off-system sales be split between commodity and demand gas costs (*i.e.*, storage exchange and swing sales would be a demand cost credit and other point exchanges would be a commodity cost credit).

CenterPoint Energy included the required information on pages 9 and 13 of its annual True-Up filing. Upon review of this information, the Department concludes that CenterPoint Energy's incentive on off system sales<sup>109</sup> and allocations among classes were calculated correctly. Thus, the Department concludes that CenterPoint is in compliance with the filing requirements in Docket No. 08-1075.

---

<sup>109</sup> In Docket No. G008/GR-08-1075, the Commission allowed CenterPoint Energy to earn an incentive equal to the approved overall rate of return on its off-system sales. On page 13 of its True-Up filing, CenterPoint Energy's incentive totaled \$68,042 (\$889,059 - \$821,017). Thus, CenterPoint Energy used the approved overall rate of return approved of 7.65 percent (\$68,042/\$889,059).

Docket No. G999/AA-14-580. The Commission's August 24, 2015 *Order* required all Minnesota regulated natural gas utilities to provide information for the next three AAA reports (2014-2015, 2015-2016, and 2016-2017) on unauthorized gas use for each customer that did not comply with a called interruption during the heating season. On pages 15-16 of its AAA Report, CenterPoint Energy stated that "As shown above in Exhibit 10, the 2014-2015 heating season included a very small number of interruptible customers that used unauthorized gas, and the amount of unauthorized gas used was also extremely small." Regarding the utility's communication with each customer on the noncompliance with interruptions, CenterPoint Energy stated:

The Company intends to contact the customers prior to the beginning of the next heating season to discuss their unauthorized gas usage in the heating season and reiterate the importance of their being able to curtail their natural gas usage when called upon. For the 2015-2016 gas year and beyond, the Company will ensure that these contacts are made promptly after any curtailment event.

In addition, in early September, the Company will be sending its annual Curtailment Contact Information form to all interruptible customers, where it asks customers to update their curtailment contact information and also emphasizes the importance of interruptible customers being able to curtail their gas usage when called upon.

The Department concludes that CenterPoint Energy complied with the reporting requirements in Docket No. 14-580.

Based on its review, the Department recommends that the Commission accept CenterPoint Energy's FYE15 true-up.

### 3. *Summary and Recommendations*

The Department concludes that CenterPoint Energy's FYE15 annual automatic adjustment report is complete with respect to the filing requirements in Minnesota Rules 7825.2390 through 7825.2920. Based on its review, the Department recommends that the Commission:

- accept CenterPoint Energy's FYE15 true up, Docket No. G008/AA-15-800; and
- allow CenterPoint Energy to implement its true up, as shown in Department Attachment G10 of the *AAA Report*.

## F. XCEL GAS

### 1. *Recovery of Gas Costs and True-Up Calculations*

On September 1, 2015, Xcel Gas submitted its annual true-up filing, Docket No. G002/AA-14-736 in compliance with Minnesota Rule 7825.2810. Based on its review, the Department concludes that Xcel Gas' filing is complete with respect to Minnesota Rules 7825.2390 through 7825.2920.

According to Xcel Gas' September 1, 2015 true-up filing, it under-recovered gas costs by \$7,597,878, or approximately 2.24 percent, during the reporting period, with a cumulative under-recovery of approximately 2.70 percent.<sup>110</sup> By customer class, Xcel Gas reported under-recoveries for the current reporting period as follows:

**FYE15 Percent Over-Recovery/(Under-Recovery)<sup>111</sup>**  
(As filed on September 1, 2015 by Xcel Gas)

<u>Class</u>	
Residential	(1.32)
Commercial/Industrial (C/I)	(1.98)
Demand Billed	(4.56)
Small Interruptible (SVI)	(4.44)
<u>Medium &amp; Large Interruptible (M&amp;LVI)</u>	<u>(6.10)</u>
Total	(2.24)

Using the sales volumes forecasted by Xcel for the year ending August 31, 2016<sup>112</sup> results in the following true-up factors by class, as calculated by Xcel Gas in its September 1, 2015 filing:

**True-Up Factors per Dekatherm (Dth) by Class**  
(As filed on September 1, 2015 by Xcel Gas)

<u>Class</u>	
Residential	\$0.0665
C/I	\$0.0925
Demand Billed Commodity	\$(0.1499)
Demand Billed Demand	\$0.2776
SVI	\$0.2369
M&LVI	\$0.3950

The Department's analysis of Xcel Gas' September 1, 2015 true-up calculation shows that the current year's deviation between Xcel Gas' gas-cost recoveries and actual gas costs was primarily caused by the following factors:

---

<sup>110</sup> The figure of 2.70 percent represents the cumulative under-recovery of \$9,148,211, which is the basis for the true-up adjustments. For a detailed breakdown of the true-up calculations, please see Xcel Gas' true-up filing, Docket No. G002/AA-15-809.

<sup>111</sup> Supporting spreadsheets with detailed calculations are contained in Department Attachment G11.

<sup>112</sup> Xcel Gas' true up, Schedule B, page 2.

1. Demand Costs including Demand Billed costs: Xcel Gas over-recovered Minnesota demand costs by \$2,564,173, or approximately 5.56 percent. The demand-cost over recovery also includes interruptible curtailment penalty revenue of \$877,589 and capacity-release revenue of \$242,538. Without these revenues, there was an over recovery of demand costs of \$1,444,046 or approximately 3.13 percent. According to Xcel Gas, actual FYE15 sales were approximately 11.06 percent higher than forecasted sales in the monthly PGA, resulting in the over-recovery of demand costs.<sup>113</sup>

As discussed further below, Xcel Gas has a Monthly Demand Cost True-Up Mechanism, approved in Docket No. G002/M-03-843. This mechanism is designed to offset swings in revenue collection caused by deviations from the forecasted normal weather. The mechanism credited an additional \$1,980,283 of demand costs from customers during the FYE15 heating season due to weather and the cap on the amount of the adjustment per month. Xcel Gas states that without the mechanism its over-recovery of demand costs would have been approximately 9.85 percent.<sup>114</sup>

The Department concludes that Xcel Gas' demand cost over-recovery appears to be reasonable.

2. Commodity Costs (including peak-shaving costs) – During FYE15 Xcel Gas under-recovered commodity costs by \$10,162,051, or about 3.47 percent. The commodity-cost under recovery also includes balancing penalty revenue of \$279,033. Without this revenue, there was an under recovery of commodity costs of \$10,441,084 or approximately 3.56 percent. Xcel Gas stated that the under-recovery was due to:<sup>115</sup>

...deviations between monthly forecasted prices and actual wholesale commodity gas prices. The price deviations between monthly price estimates and actual unit cost were the result of price volatility in the wholesale natural gas commodity market. On an average unit basis, the under-recovery is approximately 1.4 cents per therm. Because customer consumption varies by class from month to month and price deviation varies from month to month, individual classes had varying results.

---

<sup>113</sup> Xcel Gas' AAA Report, Attachment B, Schedule 3, page 3.

<sup>114</sup> Xcel Gas' AAA Report, Attachment B, Sch. 3, p. 3 and true up, Schedule I.

<sup>115</sup> Xcel Gas' AAA Report, Attachment B, Schedule 3, page 4.

Based on its analysis, the Department concludes that Xcel Gas' under recovery of commodity costs appears to be reasonable. Thus, the Department recommends that the Commission accept Xcel Gas' FYE15 true-up.

## 2. *Compliance and/or Supplemental Reporting Requirements*

Docket No. G002/M-94-103. The Commission required Xcel Gas to return all past, present, and future capacity release revenue from all sources to firm customers using Federal Energy Regulatory Commission (FERC) Account 805.1. Based on Xcel Gas' true up Schedule H, Xcel Gas complied with the Commission's *Order* by returning capacity-release revenue from all sources to firm customers.

Docket No. G002/M-98-1429. The Commission required Xcel Gas to return to ratepayers, in the same manner as penalties are handled, all "additional charge" money (curtailment penalty revenue) received by Xcel Gas under Section 5, sheet 8, of its tariffs for large firm transportation customers' failure to restrict the use of gas. Xcel Gas indicated, in on page 2 of its AAA report, that no firm transportation customers incurred "additional charges" for unauthorized use of gas, and Xcel Gas did not receive any "additional charges" monies during the current true-up period.

Docket Nos. G002/M-01-1336, G002/M-03-1627, G002/M-08-46, G999/AA-06-1208, G002/M-12-519, and G002/M-16-88 (Hedging). Xcel Gas requested to continue its PGA rule variance to recover hedging costs through the PGA in Docket No. G002/M-16-88. As a condition of approving and extending rule variances to allow Xcel Gas to include the costs of financial-hedging instruments in its PGAs, the Commission required Xcel Gas to identify the following, separately, in future AAA reports:

- data on the relative benefits of price-hedging contracts, including the average cost per dekatherm for natural gas purchased under financial instruments compared to the comparable monthly and daily spot index prices;
- a list of each hedging instrument entered into;
- the total volumes contracted for, for each instrument;
- the net gain or loss, including all transaction costs for each instrument in comparison to the appropriate monthly and daily spot index prices; and
- a schedule of hedging costs.

Xcel Gas complied by submitting the required information in its Attachment A, Schedule 5, and Attachment G, Schedule 2 of its AAA report and Schedule H of Xcel's true-up filing. The Department discusses Xcel Gas' hedging costs in Section III, part O, of this *Report*.

Docket Nos. G002/M-03-843, G002/M-06-681, G002/M-08-456, G002/M-11-203, and G002/M-14-171 (Demand Cost Mechanism). On June 11, 2004, the Commission approved a Monthly Demand-Cost True-Up Mechanism, with requirements, and granted Xcel Gas a variance to Minnesota Rule 7825.2700, subpart 5 until September 30, 2006. The Monthly



Demand-Cost True-Up Mechanism was implemented in October 2004. In the above dockets, the Commission approved extensions of the program until September 30, 2017.

The mechanism should result in billing rates that are:

- Lower than rates without the mechanism when there is colder-than-normal weather (when natural gas consumption and customer bills are high); and
- Higher than without the mechanism when there is warmer-than-normal weather (when natural gas consumption and customer bills are low).

The Demand Cost Mechanism is adjusted by capacity release as approved in Docket No. G002/M-11-203. The mechanism in place includes caps on the monthly amount. For October, April, and May the cap is 25 percent of the demand-cost recovery rate. The cap for November through March is 125 percent of the levelized demand rate minus the actual demand-cost recovery rate. With respect to annual filings, the Commission required Xcel Gas to identify (by customer class) the monthly demand true-up revenues and summarize the following for each firm non-demand billed customer class in Xcel Gas' annual true-up filings:

- the annual demand-cost recovery absent the adjustments;
- the total annual adjustment recovery; and
- the remaining current year demand-cost recovery true-up balance.

Xcel Gas' FYE15 true-up filing, Schedule (I), includes the required information on the Demand Cost Mechanism results. Since the inception of this program, the demand-cost recovery results have been as follows:

Year	With Program Recovery		Without Program	
	Over/(Under) <sup>116</sup>	Percent	Over/(Under)	Percent
FYE05	\$(652,620)	(1.1)	\$(3,719,363)	(6.0)
FYE06	\$(3,190,837)	(6.0)	\$(6,327,057)	(11.9)
FYE07	\$4,350,806	8.3	\$703,577	1.3
FYE08	\$2,628,294	6.1	\$3,496,826	8.1
FYE09	\$2,433,476	5.5	\$3,595,452	8.1
FYE10	\$341,457	(0.74)	\$846,099	(1.82)
FYE11	\$1,784,013	3.71	\$2,538,677	5.27
FYE12	\$(4,963,775)	(9.96)	\$(7,529,571)	(15.11)
FYE13	\$2,376,086	4.74	\$2,069,183	4.12
FYE14	\$7,394,847	15.11	\$10,989,489	22.45
FYE15	\$2,525,679	5.52	\$4,505,962	9.85

As shown above, except for FYE07 and FYE13, the program continues to match costs better within the true-up year than would have been the case without this program. In FYE15 actual over recovery of \$2,525,679 outperformed the hypothetical over recovery of

<sup>116</sup> For comparison purposes, the variances are calculated using non-prorated data (i.e., calendar month rather than billing month data). Excludes Demand Billed Demand.

\$4,505,962. The Department concludes that Xcel Gas complied with the filing requirements in the Commission's *Order* in Docket No. G002/M-03-843.

Docket No. G999/AA-08-1011. As noted above, the Commission directed CenterPoint, MERC, and Xcel Gas to provide the Department with information about their hedging programs, beginning in fiscal-year 2010. Xcel Gas provided this required information in Attachment G, Schedules 3, 4, and 5 in its AAA Report filing. The Department discusses Xcel Gas' hedging costs in Section III, part O, of this *Report*.

Docket No. G002/M-09-852 and E.G002/M-15-618. On February 18, 2010 in Docket G002/M-09-852, the Commission approved Xcel Gas' variance for a natural gas Capacity Utilization Program for its gas distribution and electric generation business units as a three-year pilot program and required Xcel Gas to report in the AAA each individual transaction showing quantities and cost, the specific accounting entries and a brief explanation of the transaction. The variance expired on February 18, 2013. In Docket No. E.G002/M-15-618, the Commission accepted Xcel's agreement to continue to report on the transactions related to the Capacity Utilization Plan annually in its AAA Report and included both the gas and electric transactions.

During the FYE15, the Capacity Utilization Program resulted in net savings to Xcel Gas of approximately \$23,042 and Xcel electric of approximately \$93,810 from avoided storage fees. Xcel Gas explained that "Due to the timing of the petition and approval of the variance to continue the Capacity Utilization Program, there were no instances of capacity utilization during the 2014-2015 period."<sup>117</sup>

The Department concludes that Xcel Gas is in compliance with the filing requirements in Docket Nos. G002/M-09-852 and E.G002/M-15-618.

Docket No. G999/AA-14-580. The Commission's August 24, 2015 *Order* required all Minnesota regulated natural gas utilities to provide information for the next three AAA reports (2014-2015, 2015-2016, and 2016-2017) on unauthorized gas use for each customer that did not comply with a called interruption during the heating season. Xcel Gas provided information on this requirement in its Attachment G, pages 11-13, and in Attachment G, Schedule 8 of its AAA Report. Xcel Gas stated on page 12:

With only four control days in the 2014-2015 heating season, we feel that there is not sufficient data to determine if the higher penalty of \$5/therm has been effective in deterring customers from using unauthorized gas. Further studies in subsequent years are necessary to determine whether or not customer behavior has been sufficiently influenced. Additionally, specific communications with non-compliant customers should also have a positive impact on compliance.

---

<sup>117</sup> Xcel Gas' AAA Report Attachment G, page 9.

The Department concludes that Xcel Gas complied with the Commission's Order in Docket No. 14-580 on unauthorized gas use.

### 3. *Summary and Recommendations*

The Department concludes that Xcel Gas' filing is complete with respect to Minnesota Rules 7825.2390 through 7825.2920. Based on its review, the Department recommends that the Commission:

- accept Xcel Gas' FYE15 true-up, Docket No. G002/AA-15-809; and
- allow Xcel Gas to implement its true-up, as shown in Department Attachment G11 of the *AAA Report*.

## III. **ADDITIONAL INFORMATION**

### A. *AVERAGE ANNUAL RESIDENTIAL CUSTOMER BILLS*

Using data supplied by the utilities in their responses to Department Information Request No. 1, the Department compared the average annual bills of residential customers for each regulated gas utility in Minnesota. This information is summarized in Graph 1 below and in Department Attachment G13. As in previous reports, and for comparison purposes, the Department developed a typical residential customer's annual bill for each utility, by system, based on the following:

- customer charge;
- per-unit energy consumption rate; and
- average customer consumption of 140 Mcf per year.<sup>118</sup>

In general, a residential customer pays a fixed monthly customer charge and a per-unit energy consumption rate. The per-unit energy consumption rate can be broken down into gas costs and non-gas costs. The level of non-gas costs (referred to as the margin, or gross margin) is approved by the Commission in the utilities' most recent general rate case.<sup>119</sup>

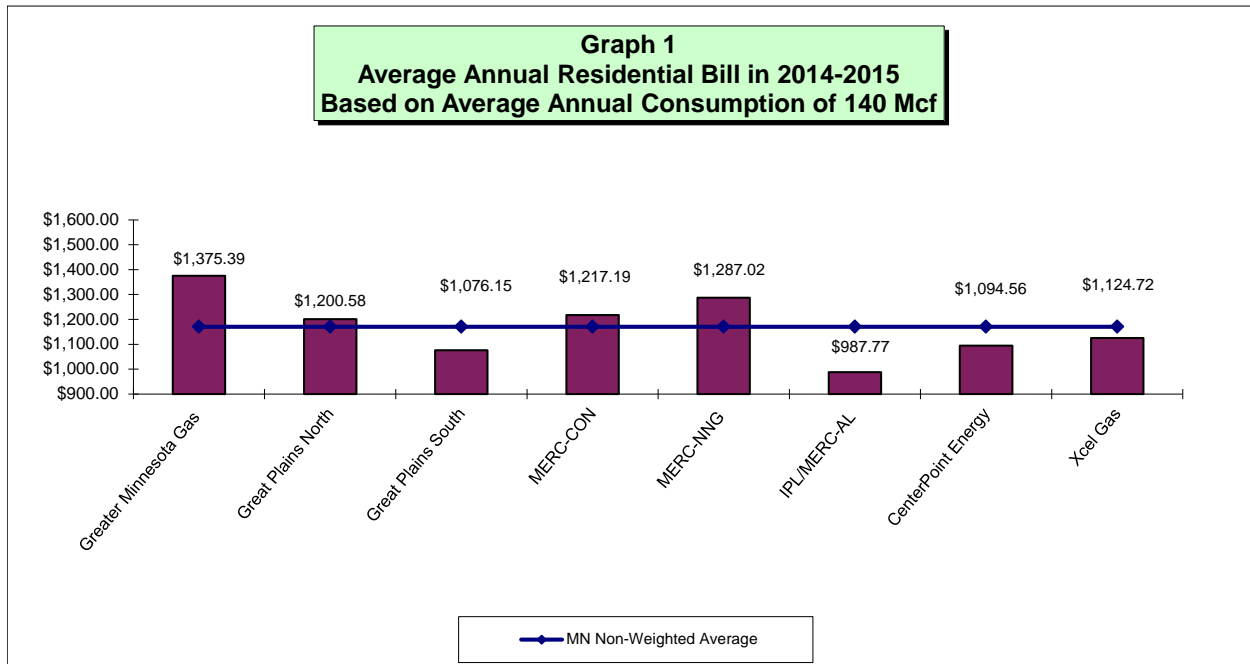
The gas cost for a firm customer includes both demand costs and commodity costs. The demand cost is the amount a utility pays for the right to reserve pipeline capacity or transportation. Demand levels change only with Commission approval of changes

---

<sup>118</sup> The Department notes that the residential non-weighted average consumption of gas has been lower than 140 Mcf due to decreases in overall natural gas consumption in recent years. The Department continues to use the level of 140 Mcf to allow for comparisons of information among the various years of the Department's AAA reports.

<sup>119</sup> See Section III, part C, for a discussion of margins. Please note that the margins used to calculate total average annual bill are the average rate for the reporting period.

proposed in a miscellaneous demand-entitlement filing.<sup>120</sup> However, as interstate pipelines change the rates that they charge or the cost of gas rates change, Minnesota gas utilities automatically pass on these rate changes to their customers through the PGAs.



Graph 1 shows that, based on a consumption level of 140 Mcf, average annual residential bills<sup>121</sup> range from a high of \$1,375.39 for customers served by GMG to a low of \$987.77 for customers served by IPL/MERC-AL.<sup>122</sup>

Table G4 below shows the actual average residential bills and average use for each system during the present reporting period using the data supplied in response to Department Information Request No. 1.

<sup>120</sup> Minnesota LDCs generally file demand entitlement petitions on, or about, July or August 1 of each calendar year. However, demand entitlement filings during other parts of the year also occur.

<sup>121</sup> Amounts shown in Graph 1 are not actual averages for customers on any system, since actual averages for each utility depend on actual average consumption levels. Graph 1 is intended to provide a baseline usage comparison that does not vary between years since consumption is held constant at 140 Mcf.

<sup>122</sup> The data reflects 10 months of IPL and 2 months of MERC; MERC purchased IPL on April 30, 2016.

**Table G4: Average Annual Residential Bill and Average Use per Utility for the FYE15 Reporting Period**

Utility	System	Average Usage Rankings <sup>123</sup>	Average Use <sup>124</sup> (Mcf)	Annual Bill Rankings	Total Annual Bill (\$)	Average Cost per Mcf <sup>125</sup> (\$)	Annual Customer Charges (\$)
Greater Minnesota		3	87.0	8	\$893.32	\$10.27	\$102.00
Great Plains	North	2	80.3	3	\$721.88	\$8.99	\$78.00
	South	1	72.4	1	\$594.18	\$8.21	\$78.00
MERC	CON	4	87.4	6	\$803.35	\$9.19	\$114.82
	NNG	6	89.4	7	\$862.99	\$9.66	\$114.82
IPL/MERC	AL <sup>126</sup>	7	91.4	2	\$665.51	\$7.28	\$60.00
CenterPoint Energy		8	92.4	5	\$759.21	\$8.22	\$108.45
Xcel Gas		5	89.0	4	\$754.37	\$8.48	\$108.00

As shown in Table G4, based on actual consumption, CenterPoint Energy experienced the highest average consumption (92.4 Mcf), and GMG had the highest average annual residential bill (\$893.32) during FYE15.<sup>127</sup>

<sup>123</sup> The rankings throughout this report are listed in the format from lowest to highest (e.g., average use, cost, and rate).

<sup>124</sup> The average annual usage amount reported in response to Department Information Request No. 1 is not weather normalized but reflects the different heating degree days based on location.

<sup>125</sup> The average cost per Mcf may be different from the annual bill shown in column (6) divided by the average use shown in column (4) due to rounding of the average usage.

<sup>126</sup> The data reflects 10 months of IPL and 2 months of MERC; MERC purchased IPL on April 30, 2016.

<sup>127</sup> From FYE98 through FYE04, MERC-NMU (then Aquila-NMU) experienced both the highest average consumption and corresponding highest average residential bill. MERC-NMU's average consumption and corresponding average bill were as follows:

FYE98	..... 138 Mcf.....	\$834.26;
FYE99	..... 114 Mcf.....	\$649.02;
FYE00	..... 116 Mcf.....	\$720.24;
FYE01	..... 153 Mcf.....	\$1,338.20;
FYE02	..... 141 Mcf.....	\$841.33;
FYE03	..... 157 Mcf.....	\$1,127.90; and
FYE04	..... 147 Mcf.....	\$1,220.25.

Since FYE04, the following utilities had the highest consumption and average residential bills, respectively:

FYE05 Great Plains Crookston.....	90 Mcf	\$961.40
FYE06 Greater Minnesota RS-2....	93 Mcf	\$1,167.74

Regarding the information provided in Graph 1, Table G4, and Department Attachment G13, the Department notes that costs that utilities incur often are determined by a number of factors, such as: load factor, number of customers, mix of firm and interruptible customers, number of available pipeline systems, weather, past contracts with pipelines and suppliers that are still in effect, access to storage, and provisions of pipeline service as approved by the FERC (e.g., imbalance penalties).

Second, the non-gas portion of the rate (base rate) is developed independently in a general rate case, and utilities file their rate cases at times chosen by the utility. Base rates reflect the cost, based on the test year, of delivering natural-gas service. These non-gas costs are affected by the service territory, customer mix and density, timing of the rate case, and other factors. The Department highlights some of these differences between utilities in the following sections.

**B. ANNUAL AVERAGE GAS COSTS**

Table G5 below compares the total system annual averages of both the PGA recovered and the actual incurred commodity costs. The figures in Table G5 represent the per-Mcf<sup>128</sup> commodity costs incurred by the utilities and passed on to ratepayers in the monthly PGAs, as reported in the utilities' true-up filings. Certain tables in this report provide the Minnesota weighted average and the Minnesota non-weighted average amounts. The Department includes the non-weighted average since the weighted average is dominated by Minnesota's largest natural gas provider, CenterPoint Energy.

---

FYE07 Greater Minnesota RS-2.....	95 Mcf	\$1,060.31
FYE08 CenterPoint Northern and Great Plains Crookston.....	100 Mcf	\$1,205.75
FYE09 CenterPoint Energy and Great Plains Crookston .....	97 Mcf	\$1,045.63
FYE10 CenterPoint Energy/Interstate Gas and GMG .....	88 Mcf	\$819.99
FYE11 CenterPoint Energy and GMG .....	95 Mcf	\$977.39
FYE12 MERC-NMU and GMG .....	77 Mcf	\$735.34
FYE13 CenterPoint Energy and GMG .....	94 Mcf	\$916.96
FYE14 CenterPoint Energy and GMG .....	106 Mcf	\$1,154.10
FYE15 CenterPoint Energy and GMG .....	92 Mcf	\$893.32

<sup>128</sup> The Department uses Mcf (one thousand cubic feet) in certain areas of its tables to represent units even though the units may actually be Dth (heat-adjusted Mcf).

**Table G5: FYE15  
Total Weighted Average Cost of Commodity  
PGA Recovered Versus Actual Incurred<sup>129</sup>**

Utility	System	Recovered PGA Commodity Rate \$/Mcf	Actual Annual Commodity Rate \$/Mcf	Percent Over/ (Under) Recovery
Greater Minnesota		\$ 3.9467	\$ 3.9399	0.17%
Great Plains	North	\$ 3.8073	\$ 3.7588	1.29%
	South	\$ 3.7887	\$ 3.9670	(4.50%)
Interstate Gas		\$ 3.9750	\$ 3.9632	0.30%
MERC	CON	\$ 4.3769	\$ 4.7132	(7.14%)
MERC	NNG	\$ 4.4852	\$ 4.7354	(5.28%)
MERC	AL	\$ 2.7821	\$ 4.0326	(31.01%)
CenterPoint Energy		\$ 4.2050	\$ 4.1606	1.07%
Xcel Gas		\$ 4.0018	\$ 4.1455	(3.47%)
<b>Weighted MN Average</b>		<b>\$ 4.1677</b>	<b>\$ 4.2256</b>	<b>(1.37%)</b>
<b>Non-Weighted MN Average</b>		<b>\$ 3.9299</b>	<b>\$ 4.1574</b>	<b>(5.47%)</b>

Table G5 demonstrates that most of the PGA systems under-recovered commodity costs. All of the PGA systems that over-collected were within 1.29 percent of the actual annual commodity rate. During the reporting period, excluding MERC-AL, MERC Consolidated had the greatest under-recovery of commodity costs, with an under-recovery of approximately 7.14 percent. The MERC-AL PGA system was not included in this comparison since there was only two months of data from the time of purchase on April 30, 2015 until the end of the true-up, June 30, 2015.

Table G5a below shows the FYE15 increase or decrease in the Minnesota non-weighted average commodity costs over previous years' costs back to FYE99. The figures below are nominal costs and are not adjusted for either inflation or weather conditions. Based on these data, during FYE15, the actual Minnesota non-weighted average commodity cost of gas was \$4.1574 per Mcf, which represents an approximately 24 percent decrease in prices from the FYE14 reporting period.

<sup>129</sup> The numbers used and the detailed calculations are contained in Department Attachment G15.

Table G5a: Non-Weighted Average Commodity Costs

Reporting Period	Rate (Mcf)	Percent Increase (Decrease) Vs. Prior Years
FYE15	\$4.1574	
FYE14	\$5.4831	(24%)
FYE13	\$3.4442	21%
FYE12	\$3.5238	18%
FYE11	\$4.3001	(3%)
FYE10	\$4.7259	(12%)
FYE09	\$6.1826	(33%)
FYE08	\$7.4936	(45%)
FYE07	\$7.6177	(45%)
FYE06	\$8.8345	(53%)
FYE05	\$6.3167	(34%)
FYE04	\$5.3364	(22%)
FYE03	\$4.7441	(12%)
FYE02	\$2.6524	57%
FYE01	\$6.0288	(31%)
FYE00	\$2.5356	64%
FYE99	\$1.9876	109%

As shown above in Table G5, the analysis of “PGA Recovered versus Actual Incurred” commodity costs provides only a partial picture of a utility’s gas-purchasing operations. The Department also used the demand cost information submitted by the utilities in their annual true-up reports to develop a “total system” average cost of gas analysis as shown below in Table G6. The comparison of total costs per Mcf experienced by each utility presents another useful analytical tool to compare recovered versus actual gas costs. Below is a summary of the actual total system gas costs experienced during the reporting period by Minnesota gas utilities.



**Table G6: FYE15  
Total System Gas Costs (Demand and Commodity)<sup>130</sup>**

Utility	PGA Recovered (\$/Dth)	Rank	Current-Period Actual incurred Gas Cost (\$/Dth)	Rank	Actual Over/(Under) (\$/Dth)	Percentage Over/(Under) Recovery
Greater Minnesota	\$ 4.6343	3	\$ 4.5895	1	\$ 0.0448	0.98%
Great Plains						
North	\$ 4.8474	5	\$ 4.7726	3	\$ 0.0748	1.57%
South	\$ 4.5717	2	\$ 4.7131	2	\$ (0.1414)	(3.00%)
Interstate Gas	\$ 4.8958	7	\$ 4.9063	6	\$ (0.0105)	(0.21%)
MERC						
CON	\$ 5.0634	8	\$ 5.2696	8	\$ (0.2062)	(3.91%)
NNG	\$ 5.7715	9	\$ 5.6637	9	\$ 0.1079	1.90%
AL	\$ 3.7565	1	\$ 5.1481	7	\$ (1.3916)	(27.03%)
CenterPoint Energy	\$ 4.8560	6	\$ 4.7990	5	\$ 0.0571	1.19%
Xcel Gas	\$ 4.6901	4	\$ 4.7975	4	\$ (0.1074)	(2.24%)
<b>MN Weighted Avg.</b>	<b>\$ 4.9068</b>		<b>\$ 4.9039</b>		<b>\$ 0.0029</b>	<b>0.06%</b>
<b>MN Non-Weighted Avg.</b>	<b>\$ 4.7874</b>		<b>\$ 4.9621</b>		<b>\$(0.1747)</b>	<b>(3.52%)</b>

Total system PGA-recovered and actual-incurred gas costs, as shown in Table G6, provide a comparison of the utilities' total system gas costs (demand and commodity). The first observation that can be garnered from this table is that five of the nine PGA systems under-recovered total gas costs during the reporting period. Of those utilities that under-recovered gas costs, MERC-AL under-recovered in excess of five percent due to two months of data was reported after MERC's purchase of Interstate Gas on April 30, 2015. The next highest under-recovery was reported by MERC-CON at 3.91 percent. The highest over-recovery was reported by MERC-NNG at 1.90 percent. MERC-NNG had the highest actual gas cost and Greater Minnesota had the lowest actual gas cost.

Table G6a below shows the FYE15 increase or decrease in Minnesota non-weighted average total system gas costs over each of the previous years' rates. The figures below are nominal costs and are not adjusted for either inflation or weather conditions. Based on these data, during FYE15, the actual Minnesota non-weighted average total system cost of gas was \$4.9621 per Mcf, representing an approximately 20 percent decrease from the FYE14 reporting period.

<sup>130</sup> The numbers reported in Table G6 are from the true-up filing submitted by each utility. The numbers and the detailed calculations used are contained in Department Attachments G12, G12a, and G16 through G18.

**Table G6a: Non-Weighted Average Total System Gas Costs**

Reporting Period	Rate (Dth)	Percent Increase (Decrease) Vs. Prior Years
FYE15	\$4.9621	
FYE14	\$6.2268	(20%)
FYE13	\$4.3327	15%
FYE12	\$4.7892	4%
FYE11	\$5.3295	(7%)
FYE10	\$5.7062	(13%)
FYE09	\$6.9548	(29%)
FYE08	\$8.3613	(41%)
FYE07	\$7.8131	(36%)
FYE06	\$9.7936	(49%)
FYE05	\$7.2930	(32%)
FYE04	\$6.2626	(21%)
FYE03	\$5.5635	(11%)
FYE02	\$3.4941	42%
FYE01	\$6.8382	(27%)
FYE00	\$3.4529	44%
FYE99	\$2.8627	73%

**C. PER-UNIT MARGIN CHARGED TO RESIDENTIAL CUSTOMERS**

Using data collected from information requests to all gas utilities, the Department developed a list of the annual FYE15 per-unit margins charged by each utility, by pipeline system, to residential customers. Margins are approved by the Commission only at the time of a general rate case. Table G7 below presents the Department's summary of the per-unit margins as of June 30, 2015.

**Table G7: FYE15  
Actual Per-Unit Margin Rate by PGA System Charged to Residential Customers**

Utility	System	Non-Gas Margin (\$/Mcf)
Greater Minnesota <sup>131</sup>		\$4.4433
Great Plains <sup>132</sup>	North	\$1.7867
	South	\$1.4027
Interstate Gas <sup>133</sup>		\$2.0109
MERC <sup>134</sup>	CON	\$2.2169
	NNG	\$2.2169
CenterPoint Energy <sup>135</sup>		\$1.8470
Xcel Gas <sup>136</sup>		\$1.8591
<b>MN Non-Weighted Avg.</b>		<b>\$2.2229</b>

As shown on Table G7, GMG and MERC have the highest residential non-gas margins. The Department notes that GMG is a relatively small company and, thus, its fixed costs are spread over fewer customers. The two lowest residential non-gas margins are for Great Plains South and CenterPoint Energy.

#### *D. REVIEW OF GAS UTILITIES' PEAK-DAY DEMAND PROFILES*

The Department used data from responses to Department Information Requests to develop a summary of each gas utility's peak-day demand profile, load factor, and reserve margin. Table G9 below presents a summary of this information.

<sup>131</sup> Greater Minnesota's most recent rate case was filed in Docket No. G022/GR-09-962. Greater Minnesota's non-gas margin rates were last changed as of November 1, 2010.

<sup>132</sup> Great Plains' most recent rate case was filed in Docket No. G004/GR-04-1487. The non-gas margins for Great Plains' two systems have been updated based on changes in the Conservation Improvement Program (CIP) tracker account.

<sup>133</sup> Interstate Gas' non-gas margin is the rate prior to the April 30, 2015 sale in Docket No. G001,011/PA-14-107.

<sup>134</sup> MERC's non-gas margins changed effective January 1, 2014 pursuant to the Commission's approval of interim rates in MERC's most recent rate case, Docket No. G011/GR-13-617.

<sup>135</sup> CenterPoint Energy's non-gas margins changed effective October 1, 2013 pursuant to the Commission's approval of interim rates in CenterPoint Energy's most recent rate case, Docket No. G008/GR-13-316.

<sup>136</sup> Xcel Gas' non-gas margin rates were changed with the implementation of final rates on May 1, 2010 in rate case Docket No. G002/GR-09-1153.

**Table G9<sup>137</sup>: FYE15  
Firm Peak-Day Demand Profiles**

Utility/System	Firm Design Day Demand (Mcf)	Firm Peak-Day Demand Deliverability (Mcf)	Annual Firm Throughput (Mcf)	Annual Firm Load Factor <sup>138</sup> %	Reserve Margin <sup>139</sup> %
Greater Minnesota <sup>140</sup>	8,969	10,859	970,070	31.65%	21.07%
Great Plains <sup>141</sup>					
North	14,812	15,500	1,424,916	28.15%	4.64%
South	16,312	17,145	1,412,020	25.40%	5.11%
Interstate Gas <sup>142</sup>	12,915	14,219	1,267,931	33.79%	10.10%
MERC					
Consolidated <sup>143</sup>	48,706	51,459	4,807,824	28.79%	5.65%
NNG <sup>144</sup>	261,002	266,385	21,803,847	30.83%	2.06%
CenterPoint Energy <sup>145</sup>	1,290,000	1,344,418	107,321,500	30.64%	4.22%
Xcel Gas <sup>146</sup>	706,935	749,325	73,019,076	37.13%	6.00%
<b>MN Totals</b>	<b>2,359,651</b>	<b>2,469,310</b>	<b>212,027,184</b>	<b>32.53%<sup>147</sup></b>	<b>4.65%<sup>148</sup></b>

As shown above, Minnesota's gas utilities exhibit a firm load factor between approximately 25.40 percent for Great Plains South and approximately 37.13 percent for Xcel Gas. Also, the reserve-margin percentage, which includes each utility's contracted transportation and peak-shaving capacity, was approximately 4.65 percent during the reporting period. This level represents a decrease in the statewide reserve margin of 0.09 percent over the 4.74 percent figure reported in the last AAA Report. As shown in the table above, the reserve

<sup>137</sup> See Department Attachment G20.

<sup>138</sup> The load factor equals the daily average firm throughput (annual firm throughput [from Table G9] divided by 365) divided by actual firm peak-day demand (from Table G10).

<sup>139</sup> The reserve margin equals (using values from Table G9) the firm peak-day demand entitlement minus firm design-day demand divided by firm design-day demand.

<sup>140</sup> Regarding the 2014-2015 period, the reserve margin is further discussed in Docket No. G022/M-14-651.

<sup>141</sup> Regarding the 2014-2015 period, the reserve margins are discussed further in Docket No. G004/M-14-563.

<sup>142</sup> Regarding the 2014-2015 period, the reserve margin is further discussed in Docket No. G001/M-14-560.

<sup>143</sup> Regarding the 2014-2015 period, the reserve margin is further discussed in Docket No. G011/M-14-661.

<sup>144</sup> Regarding the 2014-2015 period, the reserve margins are discussed further in Docket No. G011/M-14-660.

<sup>145</sup> Regarding the 2014-2015 period, the reserve margin is further discussed in Docket No. G008/M-14-561.

<sup>146</sup> Regarding the 2014-2015 period, the reserve margin is further discussed in Docket No. G002/M-14-654.

<sup>147</sup> This percent represents the weighted average of Minnesota gas utilities' load factors.

<sup>148</sup> This percent represents the weighted average of Minnesota gas utilities' reserve margins.

margins range from approximately 2.06 percent for MERC-NNG to approximately 21.07 percent for Greater Minnesota.

The Department supports the continuation of the Commission's requirement that the reserve margins be included in the annual automatic adjustment report since the information is useful for comparison purposes. However, the Department conducted no analysis of the reserve margins in the current filing, but only reported the information in a standardized way. Each utility's reserve margin is analyzed by the Department, and approved by the Commission, in conjunction with that utility's annual demand-entitlement filing.

The Department also used data from responses to information requests to compare each gas utility's firm peak-day demand deliverability to its actual firm peak-day use. Table G10 below presents a summary of this information.

**Table G10: FYE15  
Comparison of Firm Peak-Day Demand Usage**

Utility/System	Firm Peak Day Demand Deliverability <sup>149</sup> (Mcf)	Actual Firm Peak Day Usage (Mcf)	Actual Firm Requirement (%)	Actual Peak Date
Greater Minnesota	10,859	8,396	77%	02/18/15
Great Plains				
North	15,500	13,868	89%	02/18/15
South	17,145	15,231	89%	01/04/15
Interstate Gas	14,219	10,279	72%	01/07/15
MERC				
Consolidated	51,459	45,751	89%	01/04/15
NNG	266,385	193,753	73%	01/04/15
CenterPoint Energy	1,344,418	959,660	71%	02/18/15
Xcel Gas	761,354	530,339	70%	01/12/15
<b>MN Totals</b>	<b>2,469,310</b>	<b>1,785,732</b>	<b>72%</b>	

As Table G10 reflects, all of the regulated gas utilities in Minnesota were able to meet their actual firm peak-day FYE15 sendout within their proposed demand entitlement levels. The peak day for Minnesota regulated gas utilities occurred on multiple days during the 2014-2015 heating season as indicated above. The utilities had an aggregate peak-day usage or sendout of 1,785,732 Mcf. The companies planned for an aggregate peak of 2,469,310 Mcf, implying that approximately 72 percent of the planned peak-day sendout was actually

<sup>149</sup> Demand deliverability includes contracted firm transportation, on-line storage capacity, and the maximum daily injection capacity of peak-shaving facilities.

used during FYE15. This amount result represents a 7 percent decrease in the peak-day usage compared to the previous heating season.

*E. DAILY DELIVERY VARIANCE CHARGES*

As mentioned previously, in choosing a reasonable balance of pipeline services, a utility will determine the amount of entitlements and other related pipeline services required to meet the needs of its firm customers reliably. Each utility is required to “nominate” (tell the pipeline) the daily amount of its expected gas use within a certain degree of accuracy. These nominations, and a utility’s overall blend of services, determine the utility’s ability to provide reliable service on a daily basis, especially during extreme weather fluctuations. In general, when a utility does not nominate its daily amounts (or cannot schedule the amount of capacity needed because of portfolio limitations) within a given percentage of the firm entitlement level actually used, it faces additional pipeline charges (or penalties).

Interstate pipelines (e.g., Northern Natural Gas Co., Viking Gas Transmission Co.) impose balancing penalties on their shippers, such as Minnesota utilities, when these shippers do not nominate their daily capacity amounts within a given percentage of the actual entitlement level used. On NNG’s system, these charges (or penalties) are known as positive, negative, or punitive daily delivery variance charges (DDVCs). Northern changed its DDVC rate structure effective October 1, 2009.<sup>150</sup> The current Northern DDVC cost structure for gas taken in excess of nominated levels is as follows:

---

<sup>150</sup> See Northern Natural Gas Company’s FERC Gas Tariff, Fifth Revised Vol. No. 1, 82 Revised Sheet No. 53, superseding Volume 1, 81 Revised Sheet No. 53, effective October 1, 2009.

**Table G11: NNG's DDVC Structure<sup>151</sup>**

Type	Current Charge
Negative DDVC	0.40 <sup>152</sup>
Positive DDVC	\$1.00 <sup>153</sup>
Punitive DDVC	5 x SMS Rate <sup>154</sup>
Positive/Critical DDVC:	
- First 2%	\$15.00
- Next 3 %	\$22.00
Punitive/Critical DDVC:	
- Level I (5 - 10% above)	\$56.50
- Level II (more than 10% above)	\$113.00

The Commission previously ordered each regulated gas utility to provide a listing of the pipeline penalties each utility incurred.<sup>155</sup> Table G12 below provides a summary of the pipeline penalties incurred during the FYE15 reporting period.

---

<sup>151</sup> System Overrun Limitation (SOL) and System Underrun Limitation (SUL) are parameters or boundaries that limit the use of System Management Service (SMS) service on days which Northern's system integrity is threatened and SBA provisions are not adequate in maintaining pipeline operations. See Northern Natural Gas' Tariff Sixth Revised Sheet 292.

<sup>152</sup> On non-SOL/SUL/Critical days, the rate is the maximum November-March Market Area TI rate during the November-March period and the maximum April-October TI rate during the April-October period.

<sup>153</sup> *Id.*

<sup>154</sup> *Id.*

<sup>155</sup> See Docket Nos. G004/M-94-21, G004/M-94-22, G001/M-93-1171, G007/M-94-20, G008/M-93-1233, G008/M-93-1234, G008/M-94-853, G002/M-93-1149, G011/M-93-1093, and G012/M-93-1251.

**Table G12<sup>156</sup>: FYE15  
Daily Delivery Variance Charges (DDVC)<sup>157</sup>  
Incurred By Utility**

Utility/System	DDVC (Mcf)	DDVC (\$)	Total Gas Costs (\$)	Percent of Total Costs Represented By Penalties (%)
Greater Minnesota	17,090	\$140	\$5,138,756	0.0027%
Great Plains	24,036	\$4,095	\$19,326,292	0.0212%
Interstate Gas	2,296	\$1,293	\$7,741,294	0.0167%
MERC				
Consolidated	0	\$0	\$31,485,900	0.0000%
NNG	22,887	\$21,563	\$144,054,499	0.0150%
CenterPoint Energy	118,242	\$53,882	\$593,338,748	0.0091%
Xcel Gas <sup>158</sup>	31,911	\$40,865	\$339,351,067	0.0120%
<b>MN Totals</b>	<b>216,462</b>	<b>\$121,838</b>	<b>\$1,140,436,556</b>	<b>0.0107%</b>

As shown above, the penalties incurred by the gas utilities range from \$0 for MERC-Consolidated to \$53,882 for CenterPoint Energy. On a percentage basis, the penalties range from 0 percent MERC-Consolidated to approximately 0.0212 percent for Great Plains.

In their responses to the Department's Information Request No. 7, utilities identified the amount of each type of DDVC imposed. Table G13 below provides a summary of the type of DDVC penalty incurred during the FYE15 reporting period.

<sup>156</sup> Table G12 summarizes the data provided in Department Attachment G14.

<sup>157</sup> Viking's charges are called are overrun charges rather than DDVC's. Further, Viking does not have a punitive charge category.

<sup>158</sup> Xcel's charges are overrun charges on the Viking system rather than DDVCs on NNG's system.



**Table G13<sup>159</sup>: FYE15  
Amount of DDVCs Incurred by Type**

Utility/System	Positive & Negative	Punitive	Total	Percent of Total MN DDVCs
Greater Minnesota	\$140	\$0	\$140	0.11%
Great Plains	\$4,095	\$0	\$4,095	3.36%
Interstate Gas	\$1,293	\$0	\$1,293	1.06%
MERC				
Consolidated	\$0	\$0	\$0	0.00%
NNG	\$21,563	\$0	\$21,563	17.70%
CenterPoint Energy	\$53,882	\$0	\$53,882	44.22%
Xcel Gas	\$40,865	\$0	\$40,865	33.54%
<b>MN Totals</b>	<b>\$121,838</b>	<b>\$0</b>	<b>\$121,838</b>	<b>100%</b>

As shown above, all Minnesota regulated gas utilities except MERC-Consolidated incurred some type of DDVC during the FYE15. Total DDVC penalties for all gas utilities decreased by \$47,444 (from \$169,282 for FYE14 to \$121,838 for FYE15), or approximately 28 percent, from the amount reported in FYE14. No utilities experienced punitive penalties during FYE15. The Department notes that NNG's Penalty Charge Credits received by each utility and included in the true ups for FYE15 are separately shown below Table G15a.

The Department recognizes that nominations require careful analysis and consistent forecasting methods. Major decisions regarding nominations must be made by 11:30 a.m. the day before the gas day.<sup>160</sup> An intraday nomination is a nomination electronically submitted after the initial nomination. Intraday nominations may be used to nominate new market or supply and can be used to request increases or decreases in total flow, changes to receipt points, or changes in delivery points of scheduled gas.<sup>161</sup> There are three opportunities to make intraday nominations:

- by 6:00 p.m. the day before the gas day (to be effective at 9:00 a.m. on the gas day);
- by 10:00 a.m. on the gas day (to be effective at 5:00 on that day); and
- by 5:00 p.m. on the gas day (to be effective at 9:00 p.m. on that day).

The Department also recognizes that a certain level of positive and negative DDVCs is a natural result of daily weather fluctuation, advance nomination decisions, and limited

<sup>159</sup> Table G13 summarizes the data provided in Department Attachment G14.

<sup>160</sup> See Northern Natural Gas Company's FERC Gas Tariff, Fifth Revised Vol. No. 1, Fifth Revised Sheet No. 257, issued August 1, 2002.

<sup>161</sup> *Id.* Northern reserves the right to limit acceptance of an intraday nomination on a non-discriminatory basis if system integrity will be placed in jeopardy.

opportunities to make intraday nominations. Moreover, a utility's ability to make appropriate intraday nominations can be limited by the information the utility has from customers about expected gas use on a particular day. Nevertheless, the Department encourages utilities to continue to use the various available tools to minimize DDVC penalties, such as using pipeline storage facilities and peak-shaving plants or curtailing interruptible customers as discussed further below.

*F. REVENUE FROM CURTAILMENT AND BALANCING PENALTIES IMPOSED BY REGULATED MINNESOTA GAS UTILITIES*

As discussed above in Section III, part E, utilities must nominate and use interstate pipeline capacity in a responsible manner or face penalties. Thus, utilities established guidelines for responsible system use by transportation and interruptible customers, with penalties for those customers who do not use the gas system in a responsible manner.

All of Minnesota's regulated gas utilities have received Commission approval to implement a number of changes in tariff language that:

- add several special conditions on nominations, balancing, and gas use during curtailments;
- introduce penalties to discourage customers from using gas when service is interrupted; and
- encourage customers to nominate and balance gas supplies responsibly.

Curtailment penalties and balancing penalties are discussed below.

*1. Curtailment Penalties*

Curtailment penalties are fines imposed by regulated Minnesota gas utilities on interruptible customers who fail to curtail or interrupt their use of natural gas supplies when requested to do so by the utility. It is important that interruptible customers who do not use the gas system in a responsible manner be held financially accountable. When interruptible customers choose to take service under an interruptible tariff, they accept the potential of curtailment in return for lower prices than are charged firm customers. That is, interruptible customers do not pay for demand/capacity costs. If an interruptible customer fails to curtail when notified, the utility (not the individual interruptible customer) may face pipeline penalties too, which, in turn, would raise rates to all customers. Conceptually, failure to curtail also could jeopardize reliable gas service to firm customers. Therefore, the Commission approved utility tariffs under which, if interruptible customers fail to respond to curtailment notices, they are charged curtailment penalties.

Below is a summary of the revenue from curtailment penalties imposed on interruptible customers during FYE15.

**Table G14<sup>162</sup>: FYE15  
Revenue from Curtailment Penalties**

<b>Utility/System</b>	<b>Total Penalties (\$)</b>	<b>Percent of Total Penalties (%)</b>	<b>Total Costs Incurred<sup>163</sup> (\$)</b>	<b>Penalties as a Percent of Total Costs Incurred (%)</b>
Greater Minnesota	\$0	0.00%	\$5,138,756	0.0000%
Great Plains	\$0	0.00%	\$19,326,292	0.0000%
Interstate Gas	\$3,996	0.45%	\$7,741,294	0.0516%
MERC				
Consolidated	\$2,555	0.29%	\$31,485,900	0.0081%
NNG	\$0	0.00%	\$144,054,499	0.0000%
AL	\$0	0.00%	\$492,694	0.0000%
CenterPoint Energy	\$5,926	0.67%	\$593,338,748	0.0010%
Xcel Gas	\$877,589	98.60%	\$339,351,067	0.2586%
<b>MN Total</b>	<b>\$890,066</b>	<b>100.00%</b>	<b>\$1,140,929,250</b>	<b>0.0780%</b>

As shown above, four utilities imposed curtailment penalties on interruptible (or dual-fuel) customers. Penalties as a percent of total costs ranged from 0 percent (multiple utilities) to 0.2586 percent for Xcel Gas. For the reporting period, the total amount of curtailment penalties was \$890,066. This amount is a decrease of \$2,361,416 from the FYE14 figure of \$3,251,482. The Department notes that revenues from curtailment penalties identified above are to be returned to all sales customers as a credit to demand cost in the annual true-ups.

The dramatic decrease in curtailment penalty revenue versus FYE14 is due to the extreme weather conditions during the 2013-2014 heating season, which led to a high number of interruption events compared to recent history. This level of curtailment penalty revenue for one year indicated that a significant amount of unauthorized gas was used during called curtailment events. The 2014-2015 heating season was moderate and therefore, utilities had less need to impose curtailment penalties.

## *2. Balancing Penalties*

Balancing penalties are fines imposed by regulated Minnesota utilities on transportation customers who fail to nominate the daily amount of expected gas use within a certain

<sup>162</sup> The penalties listed in Table G14 are taken from the utilities' responses to Department Information Request No. 8.

<sup>163</sup> The figures listed in the column entitled "Total Costs Incurred" in Table G14 are taken from the gas utilities' true-up filings. Total costs incurred include both demand and commodity costs.

degree of accuracy. For the same reasons cited above for interruptible customers, transportation customers must be held financially accountable if they do not use the gas system in a responsible manner. If a transportation customer fails to nominate correctly, the utility (not the individual transportation customer)<sup>164</sup> may face pipeline penalties, which, all else being equal, in turn raises rates to all customers. Northern considers transportation gas as “the first through the meter” (*i.e.*, the pipeline considers transportation gas to be in balance, and shifts any remaining imbalance to sales customers). To avoid having sales customers subsidize transportation customers, utilities impose balancing penalties on specific transportation customers for their imbalances and credit other customers with the resulting revenues.

Table G15 below contains a summary of the revenues generated from balancing penalties imposed on transportation customers and credited to firm sales customers during FYE15.

**TABLE G15<sup>165</sup>: FYE15  
Revenue from Balancing Penalties**

Utility/System	Balancing Penalty Rev. (\$)	Penalty Rev. as a Percent of Total Penalties (%)	Total Gas Costs Incurred <sup>166</sup> (\$)	Penalty Rev. as a Percent of Total Costs Incurred (%)
Greater Minnesota	\$6,068	0.73%	\$5,138,756	0.1181%
Great Plains	\$64,250	7.76%	\$19,326,292	0.3324%
Interstate Gas	\$0	0.00%	\$7,741,294	0.0000%
MERC				
Consolidated	\$13,003	1.57%	\$31,485,900	0.0413%
NNG	\$23,618	2.85%	\$144,054,499	0.0164%
AL	\$0	0.00%	\$492,694	0.0000%
CenterPoint Energy	\$648,537	78.34%	\$593,338,748	0.1093%
Xcel Gas	\$72,352	8.74%	\$339,351,067	0.0213%
<b>MN Total</b>	<b>\$827,828</b>	<b>100.00%</b>	<b>\$1,140,929,250</b>	<b>0.0726%</b>

As shown above, the revenue from balancing penalties imposed on transportation customers by gas utilities ranges from \$0 reported revenues (Interstate Gas) to \$648,537 (CenterPoint Energy). The percent of total costs ranges from zero percent (Interstate Gas) to 0.3324 percent (Great Plains). The total amount of balancing penalties was \$827,828,

<sup>164</sup> This situation is generally the case except for transportation customers who sign “End-User Balancing Agreements” with the interstate pipeline. In such cases, the interstate pipeline directly monitors gas use and directly bills the transportation customer any imbalance charges.

<sup>165</sup> The data provided in Table G15 is taken from the response to Department Information Request No. 9.

<sup>166</sup> The figures listed in the column entitled “Total Costs Incurred” in Table G15 are taken from the gas utilities’ Annual True-Up filings. Total costs incurred include demand and commodity costs.

which is \$719,537 less than last year's amount of \$1,547,365.<sup>167</sup> In addition to the above revenue from balancing penalties, NNG pays an annual Penalty Charge Credit to all shippers on its system. The credits reported as received by each utility for FYE15 were as follows:

**TABLE G15a<sup>168</sup>: FYE15 NNG Penalty Charge Credits by Utility**

Greater Minnesota	\$2,290
Great Plains	\$0
Interstate Gas	\$5,195
MERC	
Consolidated	\$0
NNG	\$195,706
AL	\$0
CenterPoint Energy	\$0
Xcel Gas	\$206,681
<b>MN Total</b>	<b>\$409,872</b>

#### G. *PEAK-DAY PIPELINE TRANSPORTATION SOURCES*

In its analysis of gas supply peak-day reliability, the Department considered two factors: (1) the various pipeline companies that deliver gas to Minnesota gas utilities, and (2) the number of suppliers currently serving each gas utility (discussed in the next section). Table G16 below shows the variety and contribution of pipelines supplying peak-day firm transportation capacity to Minnesota utilities. The peak-day capacity for FYE15 was 2,574,633 Mcf, which is an increase of approximately 1.11 percent (28,353 Mcf) from FYE14.

<sup>167</sup> This figure includes the NNG Penalty Charge Credits.

<sup>168</sup> The data provided in Table G15a is taken from the response to Department Information Request No. 9.

**Table G16<sup>169</sup>: FYE15  
Summary of Utilities' Gas Supply Transportation Sources  
Total Minnesota Peak Quantity**

Pipeline	Peak-Day Quantity (Mcf per day)	Peak -Day Quantity Percent of Total
Northern Natural Gas Co.	1,781,877	69.21%
Viking Gas Transmission Co.	177,827	6.91%
Great Lakes Pipeline Co.	26,368	1.02%
Other Pipelines	41,961	1.63%
Peak Shaving & Online Storage	546,600	21.23%
<b>MN TOTAL</b>	<b>2,574,633</b>	<b>100.00%</b>

The percentage of peak-day capacity provided by each of the above sources remains relatively unchanged from the amounts in FYE14. Northern provides by far the greatest amount of peak-day capacity to Minnesota utilities, with approximately 69.21 percent of the total peak-day capacity. Depending on the specific situation of each utility, the number of different pipelines transporting gas to a particular utility for Minnesota ratepayers ranges from one to five. While some utilities may have greater options than others in their ability to decrease costs by choice of pipeline sources, pipeline differentiation does not appear to impact service reliability.

#### *H. VARIETY OF GAS SUPPLIERS*

The number of gas suppliers used during the heating season varies by utility, ranging from 0 to 56 for long-term firm supplies, 2 to 56 for firm spot supplies, and from 0 to 38 for interruptible sources. Table G17 below shows the number of long-term firm, firm spot, and interruptible suppliers used by each utility during the 2014-2015 heating season.

---

<sup>169</sup> The data provided in Table G16 is taken from the response to Department Information Request No. 4.

**Table G17<sup>170</sup>: FYE15  
Number of Suppliers**

Utility	Firm Long-Term Suppliers	Firm Spot Suppliers	Interruptible Suppliers
Greater Minnesota	0	6	6
Great Plains	1	2	3
Interstate Gas <sup>171</sup>	4	13	0
MERC <sup>172</sup>	56	56	0
CenterPoint	38	38	38
Xcel Gas	8	27	0

In choosing suppliers, all utilities reported that they carefully review the history and performance of potential gas suppliers. Among the criteria considered are reliability, stability, flexibility, reputation, financial condition, communications quality, price, and non-performance penalties. Most of the utilities then proceed on a trial-and-error basis with a selected supplier, assessing whether the supplier may be relied upon for firm sales requirements. After the utilities are satisfied with the supplier's performance, they sign contracts with particular suppliers based on the lowest bids.

#### *I. CAPACITY RELEASE*

Capacity release allows gas utilities with transportation entitlements on a pipeline to relinquish unused and unnecessary capacity for variable periods of time and under various conditions. The Commission typically requires utilities to return to ratepayers all revenues from capacity-release transactions through the annual true-up process.<sup>173</sup> Below is a summary of capacity releases and the associated revenues returned to ratepayers during the true-up period.

<sup>170</sup> Table G17 is based on the utilities' responses to Department Information Request No. 4.

<sup>171</sup> Interstate Gas does not distinguish between spot and interruptible suppliers.

<sup>172</sup> MERC provided the number of suppliers that in which they can purchase gas. MERC also stated that no interruptible gas is purchased.

<sup>173</sup> See Docket Nos. G004/M-94-21, G004/M-94-22, G001/M-93-1219, G007/M-94-20, G008/M-93-1233, G008/M-93-1234, G008/M-94-853, G002/M-93-1149, G011/M-95-182, and G012/M-93-1251.

**Table G18<sup>174</sup>: FYE15  
Capacity Release**

Utility/System	Capacity Release (Mcf)	Capacity Release (\$)	Revenue Per Mcf (\$)	Total Gas Costs Incurred <sup>175</sup> (\$)	Revenue as a Percent of Total Gas Costs (%)
Greater Minnesota	25,520	\$8,814	\$0.3454	\$5,138,756	0.1715%
Great Plains					
North	178,891	\$9,839	\$0.0550	\$8,294,557	0.1186%
South	0	\$0	\$0.0000	\$11,031,735	0.0000%
Interstate Gas	181,500	\$26,355	\$0.1452	\$7,741,294	0.3404%
MERC					
Consolidated	4,602,927	\$13,409	\$0.0029	\$31,485,900	0.0426%
NNG	6,455,762	\$795,022	\$0.1231	\$144,054,499	0.5519%
AL	0	\$0	\$0.0000	\$492,694	0.0000%
CenterPoint Energy	5,963,608	\$123,291	\$0.0207	\$593,338,748	0.0208%
Xcel Gas	4,013,233	\$242,538	\$0.0604	\$339,351,067	0.0715%
<b>MN Total</b>	<b>21,421,441</b>	<b>\$1,219,268</b>	<b>\$0.0569</b>	<b>\$1,140,929,250</b>	<b>0.1069%</b>

Table G18 shows the large diversity in Minnesota for capacity-release transactions, capacity portfolios, and individual situations of each gas utility. The revenue from capacity release ranges from \$0 for Great Plains South and MERC-AL to \$795,409 for MERC-NNG. As a percent of total gas costs, the capacity-release revenues ranged from 0 percent for Great Plains and MERC-AL to 0.5519 percent for MERC-NNG. Utilities returned a total of \$1,219,268 to ratepayers in the true ups in FYE15 compared to the FYE14 amount of \$1,744,087. Although the revenue decreased in FYE15, the total volumetric capacity-release figures increased from 17,810,284 Mcf to 21,421,441 Mcf between the FYE14 and FYE15 reporting periods (i.e. more capacity was released, but at a lower price). This increase in capacity release volume correlates with Table G10, as actual firm capacity requirement was 72 percent of total capacity on the peak day.

#### J. ANNUAL AUDITOR REPORTS

All regulated utilities are required by Minnesota Rule 7825.2820 to submit an independent auditor's report by September 1 of each year that evaluates the accounting for automatic adjustments for the prior year. Regarding Commission-ordered audit requirements,

<sup>174</sup> The data listed in Table G18 is based on the utilities' responses to Department Information Request No. 6.

<sup>175</sup> The data listed in the column entitled "Total Cost Incurred" is taken from the gas utilities' AAA filings. Total costs incurred include demand and commodity costs.



beginning with the FYE99 AAA report, the Commission has annually required that the gas utilities meet with their independent auditors prior to the auditors' examinations concerning the companies' AAA reports, to review audit procedures and Minnesota Rule 7825.2820.<sup>176</sup> Additionally, the Commission requires gas utilities to direct their independent auditors to include, as one of their procedures, an examination of any significant variations between purchased volumes (per invoices) and sales volumes per the general ledger sales journal.<sup>177</sup> The Commission also requires all gas utilities to continue to have independent auditors verify in writing in their AAA reports that the actual amounts included in the true-up calculations agree with the utilities' accounting books and records.<sup>178</sup>

All gas utilities submitted auditor's reports in compliance with Minnesota Rule 7825.2820. The Department reviewed each auditor's report filed and notes that there were no exceptions indicated by the auditors.

#### K. *LOST-AND-UNACCOUNTED-FOR GAS*

Ordering Paragraph 5 in the Commission's April 7, 2011 *Order* in the FYE10 AAA Report requested that the Department continue to develop and report a summary and comparison of each regulated natural gas utility's lost-and-unaccounted-for (LUF) gas percentages and to include a table or attachment that includes the data used in the calculations of the LUF percentages.

Using the formula from the U.S. Department of Transportation, Pipeline and Hazardous Material Safety Administration's Form 7100.1-1 to calculate the LUF percentages,<sup>179</sup> the Department developed a comparison of LUF gas by utility. Table G19 below presents the Department's summary of LUF gas percentages for the period July 1 2014 to June 30, 2015 for Minnesota jurisdictional volumes.

---

<sup>176</sup> See Docket Nos. G,E999/AA-98-1130, G,E999/AA-99-1095, G,E999/AA-00-1027, G,E999/AA-01-838, G,E999/AA-02-950, and G,E999/AA-03-1264.

<sup>177</sup> See Docket No. G,E999/AA-97-1212.

<sup>178</sup> See Docket No. G,E999/AA-96-940.

<sup>179</sup> The formula is as follows: [(purchased gas + produced gas) minus (customer use + utility use + appropriate adjustments)] divided by (purchased gas + produced gas) equals percent unaccounted.

**Table G19<sup>180</sup>: FYE15  
Lost-and-Unaccounted-For Gas**

<b>Utility/System</b>	<b>Revenue as a Percent of Total Gas Costs (%)</b>
Greater Minnesota	0.80%
Great Plains	
North	1.09%
South	0.93%
MERC	
Consolidated	5.37%
NNG	(0.78%)
Interstate Gas/AL <sup>181</sup>	0.13%
CenterPoint Energy	1.15%
Xcel Gas	2.46%
<b>MN Weighted Avg.</b>	<b>1.50%</b>

A negative LUF number means that a utility, in effect, “found” gas. As shown in Table G19 above, MERC-NNG reported negative LUF during the reporting period. As shown in Table G19, the LUF gas ranged from a negative 0.78 percent for MERC-NNG to a positive 5.37 percent for MERC-Consolidated. The Minnesota weighted average was 1.50 percent.

In its MERC-CON AAA Report, pages 13-14, MERC stated the following about MERC-CON’s 5.37 percent LUF:

When MERC submitted its 2014 AAA Report in Docket No. G999/AA/14-580, MERC indicated that it was continuing to evaluate the LUF calculations. Throughout the end of 2014 and up to the filing date of this report, MERC examined its LUF calculation methodology, which involved tracing of the AAA Report gas accounting procedures MERC has in place. In its effort to validate its procedures MERC discovered the Deer River PGA assignment error and the GLGT Pipeline metering error but did not find evidence indicating that MERC’s significant transport load was affecting the LUF calculations. The LUF calculations submitted concurrently with this report in Utility Information Request No. 10, issued by the Department, account for the adjustment of volumes associated with the Deer River PGA assignment error and the GLGT Pipeline metering

<sup>180</sup> See Attachment G19 for detailed calculations.

<sup>181</sup> Interstate Gas for 10 months and MERC-AL for two months.

error for the current AAA period. MERC will continue to work with the Department and Commission to ensure it AAA LUF reporting methodology is as accurate as possible.

In its MERC-NNG AAA Report, page 14, MERC stated similar information but added the following about MERC-NNG's negative 0.78 percent LUF:

The LUF calculations submitted concurrently with this report in Utility Information Request No. 10, issued by the Department, account for the adjustment of volumes associated with the Deer River PGA assignment error and the farm tap reporting error for the current AAA period. In addition, MERC has recently discovered a gas cost reporting procedure that impacts the LUF calculation. Specifically, MERC's monthly imbalance for each PGA system (the difference between the monthly quantity of gas delivered to MERC's distribution system and the monthly quantity of gas used by MERC customers) is reported on a one month lag. This reporting lag creates a monthly variance between purchase gas volumes and customer use volumes. MERC's response to Utility Information Request No. 10 includes an LUF calculation identifying the impact of this reporting lag. MERC will continue to work with the Department and Commission to ensure it AAA LUF reporting methodology is as accurate as possible.

As discussed above in Section II.D.2., the Department reviewed MERC's adjustments for the FYE14 correction of errors and has no further concerns. Further, the Department reviewed MERC's response to DOC Information Request No. 10 and concludes that MERC's "Imbalance to Storage Lag" adjustments are reasonable. Thus, the Department concludes that MERC's FYE15 LUF percentages are reasonable along with the other utilities.

#### *L. REPORTING OF CONTRACTOR MAIN STRIKES AND METER TESTING*

In its October 11, 2012, *Order Accepting Progress Reports and Meter Testing Plans* in Docket No. G999/AA-10-885, the Commission required all gas utility companies to file, as part of their annual AAA reports, a schedule reflecting the contractor main strikes during the corresponding annual period billings to at-fault contractors. The Commission specifically required that the schedules reflect the date, party involved, repair cost amount, and gas lost amount for each incident. Additionally, the Commission required the utilities to file any updates regarding meter testing within an annual period in their AAA reports starting in 2012.

### 1. *Contractor Main Strikes Reports*

Regarding contractor main strikes reports, all of the gas utilities filed the required information.<sup>182</sup> The Department reviewed the reports. In its FYE14 AAA Report, the Department stated that the reports would be more meaningful if the total gas cost charged for main strikes during the period reconciled to the amount in the true up and also if the reports provide the allocation of the gas costs credited to each class in its true up. All of the utilities except MERC totaled the gas cost charged for main strikes and indicated how the contractor main strike revenue was treated in the true up. The Department requests that MERC provide in its Reply Comments for each of its PGA systems, the total gas cost charged for main strikes and indicate how the contractor main strike revenue was treated in its FYE15 true ups.

### 2. *Meter Testing Updates*

Regarding meter testing updates, all of the gas utilities filed the required information with their AAA Reports.

GMG stated:

GMG's meter testing program has not changed since its comprehensive meter testing plan was approved by the Commission. GMG continues to sample and test at least 20 meters annually. No material problems have been identified during meter testing that demonstrate any trends in meter accuracy or systemic bias by type or size of meter.

Great Plains explained that the 2015 revisions to its Gas Distribution Standards, Section 7, did not affect the meter testing plan. Great Plains provided a red-line copy of its tariff in its Exhibit E. The Department reviewed the revisions and confirms that the revisions did not affect the meter testing plan.

Interstate Gas stated that it "has not made any changes to its Gas Meter Inspection and Testing Program since that filing [Docket No. G001/AA10-885]."<sup>183</sup>

MERC stated for all of its PGA systems:

During the time period of January 1, 2014 through December 31, 2014, MERC tested 5,349 meters as part of its meter testing program. Of those meters tested, 4,809 (90%) tested between 98% and 102% accurate, 386 meters (7%) tested

---

<sup>182</sup> See GMG's AAA Report, page 5, Great Plains' AAA Report, Exhibit D, Interstate Gas' AAA Report, Exhibit Q, page 1, MERC's AAA Reports, Schedule Q, CenterPoint Energy's AAA Report, Exhibit 9 and Xcel Gas' AAA Report, Attachment G, Schedule 7.

<sup>183</sup> Interstate Gas' AAA Report, Exhibit Q, page 1.

greater than 102% accurate, 101 meters (2%) tested less 98% accurate and 53 meters (1%) had no test due to the meter being damaged.<sup>184</sup>

In its FYE14 AAA Report, the Department requested that in MERC's future meter testing reports, it provide the meter testing results on a calendar year basis starting with the year 2014. The Department appreciates that MERC followed through on this request.

CenterPoint Energy stated:

CenterPoint Energy continued its meter testing and management program in 2014. Meter samples and tests are conducted over a two year period and the current interval (2013-2014) is being reviewed. All of the meter lots evaluated are passing the accuracy expectations. CNP exchanged 8,356 'failed' meters during 2014 and year to date 4,829 meters have been exchanged during 2015. This work is ahead of the overall replacement plan. The work plan for 2016 has targeted about 4,000 additional meters to be exchanged as previously identified meter groups requiring attention.<sup>185</sup>

Xcel Gas stated that "There were no changes regarding meter testing within the annual reporting period of July 1, 2014 and June 30, 2015."<sup>186</sup>

The Department concludes that the utilities complied with the Commission's Order.

#### *M. MINNESOTA GAS UTILITIES' PURCHASING PRACTICES*

In its August 11, 2014 *Order* in Docket No. 13-600, as part of Order Point No. 3, the Commission requested the Department to provide a review of gas purchasing practices to be included in future annual automatic adjustment reports. Specifically, the Commission requested a discussion of the Department's portfolio analysis (gas purchasing practices) and storage rates analysis (discussed in Section N).

The Department analyzes gas procurement in various ways throughout the year, for example:

- review of the utilities' PGAs and filing of subsequent reports;
- individual meetings with utilities regarding their respective procurement plans for the upcoming year; and
- annual winter pricing recap presentations by the utilities for the Commission.

---

<sup>184</sup> MERC-NNG's and MERC-CON's AAA Reports, page 13, and MERC-AL's AAA Report, page 12.

<sup>185</sup> CenterPoint Energy's AAA Report, page 21.

<sup>186</sup> Xcel Gas' AAA Report, Attachment G, page 11.

The Department notes that purchasing practices differ between utilities based on resources available. CenterPoint Energy, MERC, and Xcel Gas use hedging. Great Plains North does not have access to storage, and GMG procures storage only for balancing purposes. Utilities that have peak shaving facilities are CenterPoint Energy and Xcel Gas.<sup>187</sup> GMG uses outside sources to assist in managing its gas resource portfolio.<sup>188</sup> Thus, each gas supply portfolio is unique to the utility.

As discussed in Section I, the weather in FYE15, was warmer than normal with some exceptions across the state. However, the weather during the heating season was colder than normal. Additionally, natural gas prices were lower in FYE15 than in FYE14 and decreased during the entire reporting period. At a high level, ranking the annual non-weighted averages of the various types of gas purchase prices by the Minnesota regulated gas utilities creates the following order of prices from lowest to highest for the FYE15:<sup>189</sup>

- 1) Monthly index-priced gas<sup>190</sup> at \$3.8080 per Mcf;
- 2) Daily spot-priced gas<sup>191</sup> at \$3.9195 per Mcf; and
- 3) Daily index-priced gas<sup>192</sup> at \$4.0673 per Mcf.

To show the various purchasing approaches, the following table compares the percentages of each type of gas purchase (*i.e.*, monthly index-priced gas, daily index-priced gas, monthly spot-priced gas, daily spot-priced gas) to each utility's total portfolio for the FYE15 heating season.

---

<sup>187</sup> Department Information Request No. 12.

<sup>188</sup> GMG's AAA Report, page 2.

<sup>189</sup> The data is taken from the response to Department Information Request No. 5. Hedging costs are included in the cost of monthly index-priced gas for CenterPoint Energy, MERC, and Xcel Gas.

<sup>190</sup> Monthly index-priced gas refers to gas purchased under a term contract longer than one day that establishes the price at which the gas will be purchased each month of the contract based upon indexes published on the first day of each month for gas purchased at a major trading point (e.g., Demarc, Ventura) and delivered to the utility's city gate.

<sup>191</sup> Daily spot-priced gas purchases refers to gas purchased on the daily spot market, at market prices under a contract that is in effect for only one day or purchase, and delivered to the utility's city gate.

<sup>192</sup> Daily index-priced gas refers to gas purchased under a term contract at a price that is based on and varies with a daily index price at a major trading point (e.g., Demarc, Ventura) and is delivered to the utility's city gate.

**Table G20<sup>193</sup>: FYE15  
Portfolio Composition for the Heating Season  
(Components as a Percent of Actual Purchases)**

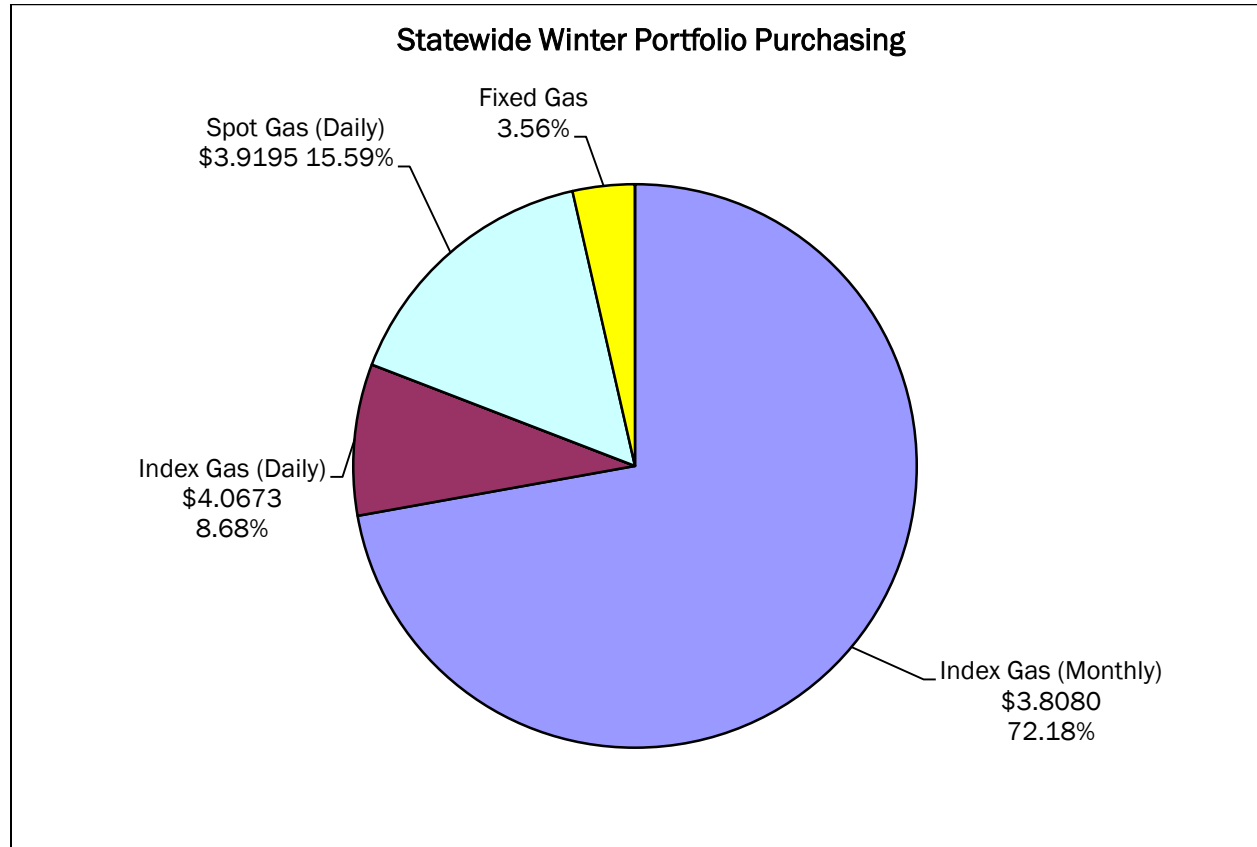
Utility/System	All Gas Purchases	Index Gas (Monthly)	Index Gas (Daily)	Spot Gas (Monthly)	Spot Gas (Daily)	Fixed Gas
Greater Minnesota	100.00%	97.21%	2.79%	0.00%	0.00%	0.00%
Great Plains						
North	100.00%	74.34%	0.00%	0.00%	25.66%	0.00%
South	100.00%	50.99%	0.00%	0.00%	49.01%	0.00%
Interstate Gas	100.00%	82.20%	0.00%	0.00%	17.80%	0.00%
MERC						
Consolidated	100.00%	78.99%	2.68%	0.00%	18.33%	0.00%
NNG	100.00%	80.08%	12.66%	0.00%	7.25%	0.00%
CenterPoint Energy	100.00%	51.54%	19.71%	0.00%	0.30%	28.45%
Xcel Gas	100.00%	62.06%	31.58%	0.00%	6.35%	0.00%

Monthly index-priced gas as a percent of the winter portfolio ranged from a low of approximately 50.99 percent (Great Plains South) to a high of 97.21 percent (Greater Minnesota). Of the utilities that purchased daily index-priced gas during the heating season, the percent of the portfolio ranged from a low of 2.68 percent (MERC-CON) to a high of 31.58 percent (Xcel Gas). None of the utilities bought monthly spot gas during the heating season. All of the utilities bought daily spot gas in the winter ranging from a low of 0.30 percent (CenterPoint Energy) to a high of 49.01 percent (Great Plains South). CenterPoint Energy was the only utility that bought fixed price gas at 28.45 percent of its winter portfolio. Comparing Table G20 to Table G5, which shows the actual annual commodity rates, Greater Minnesota purchased the highest percentage of monthly index priced gas and had the lowest annual average commodity cost per Mcf at \$3.7588.

Using the annual purchase prices and non-weighted average heating season percentages for FYE15, Graph 2 below illustrates the following statewide regulated natural gas utilities' portfolio make-up:

<sup>193</sup> The information for Table G20 can be found in each of the utility's response to Department Information Request No. 5(c).

Graph 2



In sum, Minnesota gas utilities relied most heavily on monthly index-priced gas, daily spot-priced gas, and daily index-priced gas as the Minnesota weather was colder than normal for the winter but warmer than normal for the 12 months ending June 30, 2015 and market prices decreased steadily during the FYE15.<sup>194</sup>

*N. PER-UNIT STORAGE COST OF GAS AND PERCENTAGE OF STORAGE*

Using data from Department Information Request No. 11, the Department compared the non-weighted average FYE15 per-unit storage cost of gas for the individual utilities.<sup>195</sup> Additionally, using data from Department Information Request No. 5(c), the third column shows, by utility, the percentage of storage used, or withdrawn, during the reporting period compared to the utility’s total gas portfolio. The results are shown below in Table G21.

<sup>194</sup> Storage gas is not shown in Table G20 since storage gas includes all methods, or types, of purchased gas. Thus, storage gas is a subset of total gas purchases and its price is determined by the cost of various types of purchased gas.

<sup>195</sup> Both CenterPoint Energy and Xcel Gas confirmed that, although they consider their storage detail to be trade secret, their total storage rate is public information. Further, Xcel Gas confirmed that its storage percentage is public information.



**Table G21<sup>196</sup>: FYE15  
Actual Per Unit Storage Cost and Percentage of Storage**

<b>Utility/System</b>	<b>Storage Costs (\$/Mcf)</b>	<b>Percent of Winter Portfolio Comprised of Storage (%)</b>
Greater Minnesota <sup>197</sup>	\$0.00	0.00%
Great Plains North <sup>198</sup>	\$0.00	0.00%
South	\$4.15	19.14%
Interstate Gas	\$4.41	25.99%
MERC		
Consolidated	\$4.09	17.42%
NNG	\$4.26	33.58%
AL <sup>199</sup>	\$0.00	0.00%
CenterPoint Energy	\$4.56	18.40%
Xcel Gas	\$4.31	26.77%
<b>MN Weighted Avg.</b>	<b>\$4.43</b>	
<b>MN Non-Weighted Avg.</b>	<b>\$4.30</b>	

Table G21 indicates that the actual storage costs, for utilities that used storage for purposes other than balancing, ranged from a low of \$4.09 per Mcf for MERC-Consolidated to a high of \$4.56 per Mcf for CenterPoint Energy. The Minnesota non-weighted average cost of storage was \$4.30 per Mcf. Additionally, the percentage of storage gas withdrawn during the winter as part of the utility's total winter volumes ranged from a low of 17.42 percent for MERC-CON to a high of 33.58 percent for MERC-NNG. Thus, 33.58 percent of MERC-NNG's total portfolio for FYE15 was storage gas withdrawn at an average cost of \$4.26 per Mcf.

Certain qualifications should be considered when comparing storage costs. For instance, a trade-off between price and reliability applies to storage supplies. Gas supplies in storage fields are often a step removed from gas-producing fields and gathering facilities, thereby providing a greater reliability of supplies during sustained cold periods that may affect wells in the production fields. While gas injected into storage during the non-heating season generally costs less than gas purchased during the heating season (excluding outside factors affecting the natural gas industry that may lead to unusual price fluctuations, which occurred during FYE09), the added cost of using storage facilities and services may result in

<sup>196</sup> The storage costs listed in this table relate to total storage costs for the entire reporting period, while the portfolio percentages relate solely to those used during the five-month heating season.

<sup>197</sup> GMG's storage is primarily used for balancing.

<sup>198</sup> Storage is not available for Great Plains North.

<sup>199</sup> MERC-AL includes two months of data during FYE15.

a higher final per-unit price of the storage gas than gas purchased during the heating season directly from the supplier. However, utilities have more control in using their own storage gas during peak situations. Therefore, the trade-off between price and reliability should be an important consideration in each utility's gas portfolio decisions.

## O. MINNESOTA GAS UTILITIES' HEDGING PRACTICES

In its August 11, 2014 *Order Accepting Gas Utilities' Annual Reports and 2012-2013 True-Up Proposals and Setting Further Requirements* in Docket No. 13-600, the Commission requested that the Department provide a review of hedging practices in its review of future annual automatic adjustment reports. Additionally, at its February 4, 2016 Commission Agenda meeting regarding CenterPoint Energy's hedging variance filing in Docket No. G008/M-15-912, the Commission expressed interest in taking a closer look at utility hedging practices given the current state of the natural gas market. On June 28, 2016, the Commission held a Planning Meeting to discuss hedging. A presentation was provided by the utilities that participate in hedging (CenterPoint, MERC, and Xcel).

### Background

The goal of hedging is to use appropriate strategies to minimize the risk of cost increases for any given level of reduced volatility. In a sense, a hedge is an insurance policy that, for a fee, protects utilities (and their ratepayers) against a specific (unfavorable) event occurring during the term of a policy. (An example of such an event is when Hurricane Katrina devastated Southern States, including areas where natural gas facilities were located. Natural gas costs skyrocketed immediately.) Hedging can be used to reduce gas price risk by generating a payment in the event that the market price of natural gas moves in an unfavorable (and unpredicted) direction. There are a number of hedging tools/instruments available in the derivative market such as futures contracts, commodity swaps, "costless" collars, and options.<sup>200</sup>

Three Minnesota LDCs have received Commission approval to recover the costs of financial hedging through their PGAs: CenterPoint Energy, MERC, and Xcel Gas. The Commission also orders financial hedging restrictions based on utility-specific circumstances and information. A more thorough analysis is performed for CPE, MERC, and Xcel Gas in the utilities' respective variance filings, which allow these companies to recover hedging costs through their PGA filings.

Weather and various supply issues play a significant role in the commodity price of natural gas, especially during the heating season of November through March. As previously discussed in Section 1.C. *Natural Gas Prices and Weather*, the 2014-2015 heating season was overall colder than normal but alternated on a monthly basis. Further, the natural gas prices steadily decreased during the entire reporting period. Some other supply issues during FYE15 included the gas storage inventory level, following a near record-low inventory

---

<sup>200</sup> Definitions and examples of each tool are provided in the glossary that is included as Attachment G3.

at the end of March 2014, injections were above average from April 2014 through March 2015 due to increasing production and mild weather resulting in lower demand for natural gas and the lack of weather impacts on production (hurricanes).

Based on the 2014-2015 heating season, the Department would expect that CPE, MERC, and Xcel Gas would experience no or minimal cost savings and/or gains on the hedge portion of their purchase portfolios. The following discussion reviews the performance of each utility's hedging program against this expectation.

## **MERC**

MERC uses a 40%/30%/30% hedging strategy to mitigate price volatility and provide reasonably priced natural gas; 40 percent of normal winter requirements purchased at fixed price, 30 percent purchased using financial derivatives, and 30 percent purchased at market rates.<sup>201</sup> This strategy is not one to guarantee the lowest priced gas but a strategy to mitigate price volatility, provide reasonably priced natural gas and ensure reliability.<sup>202</sup>

In Docket No. G011/M-15-231, MERC was granted an extension to its variance to recover the costs associated with certain financial instruments through the PGA through June 30, 2017. For details on previous variance dockets and compliance requirements, please see Section II.D.2 *Compliance and/or Supplemental Reporting Requirements*.

For the 2014-2015 heating season, MERC fulfilled its 40 percent of fixed price requirements through a combination of pipeline storage and financial Futures, 30 percent of financial derivatives through Call Options backed physically by FOM index supply, and 30 percent of its market rate requirements at first of month (FOM) index and in the spot market.<sup>203</sup>

In its response to the Department's Information Request No. 15(H), MERC stated that there were no changes to the financial hedging program compared to FYE14.

MERC's hedges provided a financial loss in FYE15 mainly due to the lower prices experienced in the winter months except for December 2014. Since there were no external factors that caused a price spike, this outcome is to be expected. The Department concludes that MERC accomplished its intended purpose of providing reasonable price protection on a portion of its winter gas supplies, based on the information the company had at the time it executed its hedges.

## **CenterPoint Energy**

CenterPoint Energy's policy is to provide price stabilization for a portion of its winter supply through hedge gas purchases and storage gas, to provide protection against volatile gas

---

<sup>201</sup> MERC's 2015 Annual Automatic Adjustment Report, page 2.

<sup>202</sup> *Id.*, page 3.

<sup>203</sup> *Id.*, page 2.

prices. The level of stabilization to be achieved is re-determined each year based on analysis that incorporates regulatory guidelines (as to volumes and costs), winter price projections, and available portfolio assets.<sup>204</sup>

In Docket No. G008/M-15-912, CenterPoint Energy was granted an extension to its variance to recover the costs associated with certain financial instruments through the PGA through June 30, 2020. For details on previous variance dockets and compliance requirements, please see Section II.E.2 *Compliance and/or Supplemental Reporting Requirements*.

Regarding its hedging strategy for the 2014-2015 winter season, CPE stated,<sup>205</sup>

Natural gas prices (as represented by First of Month Ventura prices) peaked in December, but were lower than summer months' pricing the other months. Monthly settle prices for Ventura receipts averaged \$4.34 for summer 2014 and \$3.76 for winter 2014-2015. Contract storage allows for the purchase of gas during summer months when prices are typically lower, and withdrawal for system use during winter months resulting in a natural price hedge. Although the summer-winter differential this past year did not provide savings from FOM market based rates, they continued to provide valuable upside price protection from any daily swings in Ventura swing supplies. Storage also provided the usual operational benefits it always provides. Storage volumes (pipeline and on-system combined) represented 22.2% of the winter system supplies. Physical base load gas purchases containing price protections were made over several months during the summer using multiple RFP's. CenterPoint Energy used 18.3 Bcf of purchased gas (19.0% of system supplies) with call and put options in combination to form collars to allow the price paid by CenterPoint Energy to float down (participate downward) with the market when prices dropped. CenterPoint Energy also used 6.8 Bcf (7.1% of system supplies) with call options alone to further stabilize supply prices. Lastly, CenterPoint Energy purchased 1.0 Bcf (1.0%) of fixed price gas. Those volumes total 26.0 Bcf of total supply and, when combined with 21.4 Bcf of storage volumes (including 1.2 of Underground storage classified as peaking volumes), provide stabilized prices for 49% of winter gas supplies. In addition to providing price stability, the price hedges also provide catastrophic price protection against price fly-ups during

---

<sup>204</sup> CenterPoint Energy's *Annual Automatic Adjustment Report*, page 2.

<sup>205</sup> *Id.*, pages 5-6.

unforeseen events such as upstream pipeline ruptures and prolonged extremely cold weather.

According to CenterPoint Energy, hedged gas purchases added approximately \$8 million (or \$0.08 per dekatherm) to CenterPoint Energy's customer's costs during the winter period when compared to buying gas at actual First of Month index pricing.<sup>206</sup>

In its response to the Department's Information Request No. 15(H), CenterPoint Energy stated that the only significant change in its hedging program from the previous year was that the level of purchases hedge increased from 17.9 Bcf last year to 26 Bcf this year.

CenterPoint Energy's hedges provided a financial loss in FYE15 due to the lower prices experienced in the winter months; again, since there was no external factor causing prices to spike, this outcome is to be expected. The Department concludes that CenterPoint Energy accomplished its intended purpose of providing reasonable price protection on a portion of its winter gas supplies, based on the information the company had at the time it executed its hedges.

### **Xcel Gas**

The overall goal of Xcel's Price Volatility Mitigation Plan is to reduce the exposure to and the magnitude of gas price spikes at a reasonable cost to its customers. The goal of the plan is not to attempt to outguess the market or to speculate on the future direction of energy prices.<sup>207</sup> The purpose of Xcel's seasonal strategy is to reduce the potential risk of short-term upsets in the wholesale gas markets and the resulting gas price spikes.<sup>208</sup>

In Docket No. G002/M-16-88 (Docket 16-88), Xcel Gas was granted an extension to its variance to recover the costs associated with certain financial instruments through the Purchased Gas Adjustment (PGA) through June 30, 2020. For details on previous variance dockets and compliance requirements, please see Section II.F.2 *Compliance and/or Supplemental Reporting Requirements*.

In its response to the Department's Information Request No. 15(H), Xcel Gas stated that there were no changes to the financial hedging program for the period July 1, 2014 through June 30, 2015.

Xcel Gas' hedges provided a financial loss in FYE15 due to the lower prices experienced in the winter months, which is to be expected as noted above. The Department concludes that Xcel Gas accomplished its intended purpose of providing reasonable price protection on a portion of its winter gas supplies, based on the information the company had at the time it executed its hedges.

---

<sup>206</sup> *Id.*, page 7.

<sup>207</sup> Xcel Gas' *Annual Automatic Adjustment of Charges Report*, Attachment A, Schedule 5, page 2.

<sup>208</sup> *Id.*, page 3.

## Conclusion and Recommendations

As discussed above, each of the utilities experienced losses due to hedging during FYE15. While this is a loss to ratepayers given the lack of an adverse event during this time period, ratepayers had protection in place in case such an event occurred. Moreover, the Department observes that the natural gas purchases covered by hedges were only a portion of the total winter requirements purchased. The ultimate goal of hedging is to reduce price volatility on a percentage of the utilities' purchase portfolios, not to speculate or make money on commodity prices.

The Department concludes that the utilities' hedging programs performed as expected. The Department recommends that each utility that hedges (including physical and financial) continue to provide a post-mortem analysis, in a format similar to what was provided in this docket, in subsequent AAA filings.

## IV. SUMMARY OF THE DEPARTMENT'S RECOMMENDATIONS

The Department includes a number of specific recommendations for future annual automatic adjustment reports to ensure full compliance with Commission Orders and Minnesota Rules 7825.2700 and 7825.2910, and to improve accountability. The Department summarizes its recommendations below.

1. The Department recommends that the Commission accept the FYE15 annual reports as filed by the gas utilities as being complete as to Minnesota Rules 7825.2390 through 7825.2920.
2. The Department recommends each utility that hedges (including physical and financial) continue to provide a post-mortem analysis, in a format similar to what was provided in this docket, in subsequent AAA filings.

### A. GREATER MINNESOTA

The Department recommends that the Commission:

- accept GMG's FYE15 true-up as filed in Docket No. G022/AA-15-797; and
- allow GMG to implement its true-ups, as shown in DOC Attachment G5 of the AAA Report.

### B. GREAT PLAINS

The Department recommends that the Commission:

- accept Great Plains' FYE15 true-ups, Docket No. G004/AA-15-794; and

- allow Great Plains to implement its true-ups, as shown in DOC Attachments G6a and G6b of the *AAA Report*.

C. *INTERSTATE GAS*

The Department recommends that the Commission:

- accept Interstate Gas' FYE15 true-up filing in Docket No. G001/AA-15-796 as shown in Department Attachment G7 of the *AAA Report*.

D. *MERC*

The Department recommends that the Commission:

- accept MERC- NNG's FYE15 true-up filing in Docket No. G011/AA-15-803;
- allow MERC- NNG to implement its true-up, as shown in Department Attachment G8 of the *AAA Report*;
- accept MERC- CON's FYE15 true-up filing in Docket No. G011/AA-15-802;
- allow MERC- Consolidated to implement its true-up, as shown in Department Attachment G9 of the *AAA Report*;
- accept MERC- AL's FYE15 true-up filing in Docket No. G011/AA-15-801; and
- allow MERC- AL to implement its true-up, as shown in Department Attachment G8a of the *AAA Report*.

The Department requests that MERC provide in its Reply Comments how the Company could achieve more accurate recovery of the Bison and Northern Border pipeline costs on a going-forward basis. In addition, the Department requests that MERC provide, for each of its PGA systems, the total gas cost charged for main strikes and indicate how the contractor main strike revenue was treated in its FYE15 true ups.

E. *CENTERPOINT ENERGY*

The Department recommends that the Commission:

- accept CenterPoint Energy's FYE15 true up, Docket No. G008/AA-15-800; and
- allow CenterPoint Energy to implement its true up, as shown in Department Attachment G10 of the *AAA Report*.

F. XCEL GAS

The Department recommends that the Commission:

- accept Xcel Gas' FYE15 true-up, Docket No. G002/AA-15-809; and
- allow Xcel Gas to implement its true-up, as shown in Department Attachment G11 of the *AAA Report*.



**RECORDED UNWEIGHTED HEATING DEGREE DAYS**

Source: U of M Monthly Heating & Cooling Summary Tables

<http://www.climate.umn.edu/cawap/edds/edds.asp>

<b>ANNUAL DATA</b>										
Weather Station	Normals 1971-2000	Normals 1981-2010	SEASON 2009-2010	SEASON 2010-2011	SEASON 2011-2012	SEASON 2012-2013	SEASON 2013-2014	SEASON 2014-2015	2014-2015 vs. Normal (71-00)	2014-2015 vs. Normal (81-10)
DULUTH	9,709	9,444	8,540	9,514	7,635	9,366	10,342	9,276	-4.46%	-1.78%
INTERNATIONAL FALLS	10,216	10,221	9,483	10,303	8,424	10,713	11,511	10,283	0.66%	0.61%
FARGO, ND	9,019	8,802	8,314	9,311	6,840	9,403	9,679	8,469	-6.10%	-3.78%
ST CLOUD	8,744	8,532	7,904	8,716	6,744	8,872	9,524	8,143	-6.87%	-4.56%
MPLS/ST PAUL	7,805	7,580	7,007	7,708	5,924	7,708	8,597	7,528	-3.55%	-0.69%
ROCHESTER	8,150	7,722	7,516	7,927	6,066	7,825	8,917	8,068	-1.01%	4.48%
SIOUX FALLS, SD	7,683	7,706	7,690	8,057	6,058	7,884	8,320	7,568	-1.50%	-1.79%

**RECORDED UNWEIGHTED HEATING DEGREE DAYS**

<b>November 1--March 31</b>										
Weather Station	Normals 1971-2000	Normals 1981-2010	SEASON 2009-2010	SEASON 2010-2011	SEASON 2011-2012	SEASON 2012-2013	SEASON 2013-2014	SEASON 2014-2015	2014-2015 vs. Normal (71-00)	2014-2015 vs. Normal (81-10)
DULUTH	7,169	6,952	7,097	7,097	5,716	6,822	8,028	7,145	-0.33%	2.78%
INTERNATIONAL FALLS	7,728	7,589	6,992	7,776	6,165	7,747	8,869	7,691	-0.48%	1.34%
FARGO, ND	7,145	7,589	6,683	7,545	5,534	7,226	7,849	6,873	-3.81%	-9.43%
ST CLOUD	6,853	6,665	6,251	7,005	5,340	6,731	7,724	6,583	-3.94%	-1.23%
MPLS/ST PAUL	6,295	6,108	5,729	6,399	4,864	6,040	7,117	6,257	-0.60%	2.44%
ROCHESTER	6,437	6,136	6,003	6,484	4,862	6,052	7,297	6,553	1.80%	6.80%
SIOUX FALLS, SD	6,157	6,105	6,161	6,538	4,882	6,037	6,813	6,278	1.97%	2.83%

**RECORDED UNWEIGHTED HEATING DEGREE DAYS**

Source: U of M Monthly Heating & Cooling Summary Tables

<http://www.climate.umn.edu/cawap/edds/edds.asp>

Base 65	Weather Station:	MONTHLY DATA		REPORTING			
		Month	Normals 1971-2000	Normals 1981-2010	PERIOD 2013-2014	2014-2015 vs. Normal (71-00)	2014-2015 vs. Normal (81-10)
	<b>DULUTH</b>	July	67	63	40	-40.30%	-36.51%
		August	100	86	37	-63.00%	-56.98%
		September	328	298	227	-30.79%	-23.83%
		October	662	678	622	-6.04%	-8.26%
		November	1,120	1,088	1,289	15.09%	18.47%
		December	1,599	1,556	1,403	-12.26%	-9.83%
		January	1,775	1,699	1,668	-6.03%	-1.82%
		February	1,435	1,399	1,667	16.17%	19.16%
		March	1,240	1,210	1,118	-9.84%	-7.60%
		April	788	762	675	-14.34%	-11.42%
		May	413	426	409	-0.97%	-3.99%
		June	182	179	121	-33.52%	-32.40%
	<b>TOTALS</b>		9,709	9,444	9,276		

Base 65	Weather Station:	MONTHLY DATA		REPORTING			
		Month	Normals 1971-2000	Normals 1981-2010	PERIOD 2013-2014	2014-2015 vs. Normal (71-00)	2014-2015 vs. Normal (81-10)
	<b>INTERNATIONAL FALLS</b>	July	52	70	103	98.08%	47.14%
		August	96	111	111	15.63%	0.00%
		September	354	353	322	-9.04%	-8.78%
		October	712	743	696	-2.25%	-6.33%
		November	1,206	1,184	1,379	14.34%	16.47%
		December	1,751	1,714	1,463	-16.45%	-14.64%
		January	1,942	1,878	1,811	-6.75%	-3.57%
		February	1,540	1,530	1,869	21.36%	22.16%
		March	1,289	1,283	1,169	-9.31%	-8.89%
		April	767	772	759	-1.04%	-1.68%
		May	370	419	452	22.16%	7.88%
		June	138	164	149	7.97%	-9.15%
	<b>TOTALS</b>		10,217	10,221	10,283		

Base 65	Weather Station:	MONTHLY DATA		REPORTING			
		Month	Normals 1971-2000	Normals 1981-2010	PERIOD 2013-2014	2014-2015 vs. Normal (71-00)	2014-2015 vs. Normal (81-10)
	<b>MOORHEAD</b>	July	16	16	20	25.00%	25.00%
	In FYE14, changed from Fargo, ND to Moorhead since Moorhead is reported on U of M tables whereas Fargo is not reported there.	August	34	34	12	-64.71%	-64.71%
		September	239	220	160	-33.05%	-27.27%
		October	603	606	507	-15.92%	-16.34%
		November	1,131	1,086	1,301	15.03%	19.80%
		December	1,609	1,578	1,409	-12.43%	-10.71%
		January	1,802	1,728	1,554	-13.76%	-10.07%
		February	1,435	1,410	1,635	13.94%	15.96%
		March	1,168	1,152	974	-16.61%	-15.45%
		April	646	626	540	-16.41%	-13.74%
		May	265	273	333	25.66%	21.98%
		June	71	73	24	-66.20%	-67.12%
	<b>TOTALS</b>		9,019	8,802	8,469		

## RECORDED UNWEIGHTED HEATING DEGREE DAYS

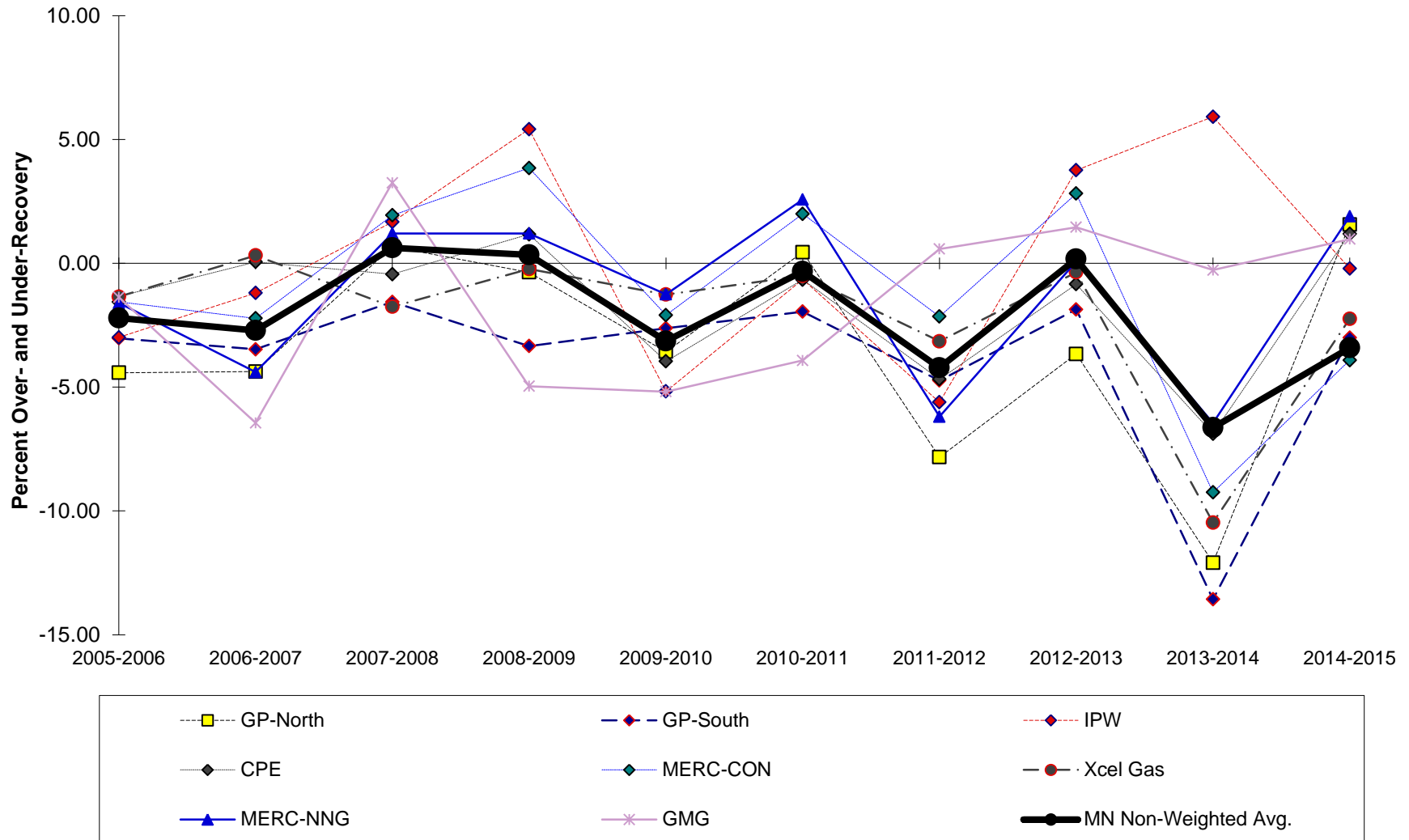
Base 65	Weather Station:	MONTHLY DATA		REPORTING			2014-2015 vs.	
		Month	Normals 1971-2000	Normals 1981-2010	PERIOD 2013-2014	Normal (71-00)	Normal (81-10)	2014-2015 vs. Normal (81-10)
	<b>ST CLOUD</b>	July	18	17	7	-61.11%	-58.82%	
		August	46	41	2	-95.65%	-95.12%	
		September	247	228	152	-38.46%	-33.33%	
		October	593	599	515	-13.15%	-14.02%	
		November	1,071	1,040	1,256	17.27%	20.77%	
		December	1,557	1,522	1,262	-18.95%	-17.08%	
		January	1,735	1,655	1,495	-13.83%	-9.67%	
		February	1,372	1,344	1,569	14.36%	16.74%	
		March	1,118	1,104	1,001	-10.47%	-9.33%	
		April	630	617	551	-12.54%	-10.70%	
		May	278	287	305	9.71%	6.27%	
		June	79	78	28	-64.56%	-64.10%	
	<b>TOTALS</b>		<b>8,744</b>	<b>8,532</b>	<b>8,143</b>			

Base 65	Weather Station:	MONTHLY DATA		REPORTING			2014-2015 vs.	
		Month	Normals 1971-2000	Normals 1981-2010	PERIOD 2013-2014	Normal (71-00)	Normal (81-10)	2014-2015 vs. Normal (81-10)
	<b>MPLS/ST PAUL</b>	July	6	5	7	16.67%	40.00%	
		August	17	14	-	-100.00%	-100.00%	
		September	172	154	124	-27.91%	-19.48%	
		October	504	507	483	-4.17%	-4.73%	
		November	971	939	1,179	21.42%	25.56%	
		December	1,433	1,404	1,253	-12.56%	-10.75%	
		January	1,608	1,531	1,418	-11.82%	-7.38%	
		February	1,266	1,236	1,501	18.56%	21.44%	
		March	1,017	998	906	-10.91%	-9.22%	
		April	552	530	451	-18.30%	-14.91%	
		May	215	218	199	-7.44%	-8.72%	
		June	43	44	7	-83.72%	-84.09%	
	<b>TOTALS</b>		<b>7,804</b>	<b>7,580</b>	<b>7,528</b>			

Base 65	Weather Station:	MONTHLY DATA		REPORTING			2014-2015 vs.	
		Month	Normals 1971-2000	Normals 1981-2010	PERIOD 2013-2014	Normal (71-00)	Normal (81-10)	2014-2015 vs. Normal (81-10)
	<b>ROCHESTER</b>	July	14	11	22	57.14%	100.00%	
		August	34	27	3	-91.18%	-88.89%	
		September	205	177	180	-12.20%	1.69%	
		October	541	521	540	-0.18%	3.65%	
		November	994	936	1,202	20.93%	28.42%	
		December	1,460	1,406	1,273	-12.81%	-9.46%	
		January	1,632	1,530	1,481	-9.25%	-3.20%	
		February	1,301	1,253	1,594	22.52%	27.21%	
		March	1,050	1,011	1,003	-4.48%	-0.79%	
		April	597	553	514	-13.90%	-7.05%	
		May	262	245	236	-9.92%	-3.67%	
		June	60	52	20	-66.67%	-61.54%	
	<b>TOTALS</b>		<b>8,150</b>	<b>7,722</b>	<b>8,068</b>			

Base 65	Weather Station:	MONTHLY DATA		REPORTING			2014-2015 vs.	
		Month	Normals 1971-2000	Normals 1981-2010	PERIOD 2013-2014	Normal (71-00)	Normal (81-10)	2014-2015 vs. Normal (81-10)
	<b>SIOUX FALLS, SD</b>	July	7	8	15	114.29%	87.50%	
		August	19	23	3	-84.21%	-86.96%	
		September	170	173	130	-23.53%	-24.86%	
		October	509	536	450	-11.59%	-16.04%	
		November	985	972	1,166	18.38%	19.96%	
		December	1,423	1,421	1,256	-11.74%	-11.61%	
		January	1,554	1,499	1,369	-11.90%	-8.67%	
		February	1,222	1,218	1,386	13.42%	13.79%	
		March	973	995	1,101	13.16%	10.65%	
		April	551	562	431	-21.78%	-23.31%	
		May	224	248	255	13.84%	2.82%	
		June	45	51	6	-86.67%	-88.24%	
	<b>TOTALS</b>		<b>7,682</b>	<b>7,706</b>	<b>7,568</b>			

**Regulated Minnesota Gas Utilities  
 Present Year Percent  
 Over-Recovery/(Under -Recovery) as Filed**



## GLOSSARY

<i>TERMS AND ACRONYMS</i>	<i>DEFINITION</i>
<i>ACA</i> .....	<i>Annual Charge Assessment</i> is a charge paid to the Federal Energy Regulatory Commission (FERC) to defray the agency's administrative costs.
<i>Brokered Reservation Charge</i> .....	This demand component of the Purchased Gas Adjustment (PGA), which is reservation charges paid to the supplier of natural gas for transportation and other costs incurred to reserve upstream pipeline capacity to get gas.
<i>CI</i> .....	<i>Commercial/Industrial.</i>
<i>DDVC</i> .....	<i>Daily Delivery Variance Charge</i> - Shippers are required to take actual daily volumes at their delivery point(s) as close to daily scheduled volumes as possible. In the event that actual daily volumes vary from daily scheduled volumes, Shippers are subject to Daily Delivery Variance Charges (DDVC) after a tolerance has been considered.
<i>LGS</i> .....	<i>Large General Service.</i>
<i>LMS</i> .....	<i>Load Management Service</i> is Viking's no-notice service used to provide additional tolerances for shippers, beyond the allowed 5 percent tolerance.
<i>LVDF</i> .....	<i>Large Volume Duel Fuel.</i>
<i>LVI</i> .....	<i>Large Volume Interruptible.</i>
<i>MDQ</i> .....	<i>Maximum Daily Quantity.</i>
<i>PGA (LDCs)</i> .....	<i>Local Distribution Company's Purchased Gas Adjustment</i> is a mechanism used by regulated utilities to recover its cost of energy. Minnesota Rules 7825.2390 through 7825.2920 enable regulated gas (and electric) utilities to adjust rates on a monthly basis to reflect changes in its cost of energy delivered to customers based upon costs authorized by the Minnesota Public Utilities

Commission in the utility's most recent general rate case.

- SBA**.....*System Balancing Agreements* are contracts between Northern Natural Gas (Northern) and shippers on its system who agree to use their facilities and supplies to maintain Northern's system integrity. Costs to Northern for such services are recovered with a surcharge.
- SMS** .....*System Management Service* is Northern's no-notice service which provides additional tolerances for shippers, beyond the allowed 5% tolerance.
- SOL**.....*System Overrun Limitation* is a parameter or boundary that limits the use of SMS service on days which Northern's system integrity is threatened and SBA provisions are not adequate in maintaining pipeline operations.
- SVDF** .....*Small Volume Dual Fuel*.
- SVF** .....*Small Volume Firm*.
- SVI** .....*Small Volume Interruptible*.
- Throughput Services** .....*Throughput Services* may be defined as the Total Aggregate MDQ for a shipper in Northern's Market Area. This Total Aggregate MDQ is the total of the individual MDQs of TF12-B, TF12-V, and TF5. A shipper's Total Aggregate MDQ is per contract with Northern; however, the three individual MDQs (used for billing purposes) are subject to limitations. First, TF5 cannot exceed 30 percent of Total Aggregate MDQ. Next, the remainder is split between TF12-B and TF12-V on the contract's anniversary date, with the TF12-B equaling total town border station (TBS) deliveries for the previous May through September. Thus, TF12-V would equal Total Aggregate MDQ less TF5 and TF12-B. These services are available in the Market Area only.

<i>TERMS AND ACRONYMS</i>	<i>DEFINITION</i>
<b>TF12-B</b> .....	<i>Transportation - Firm for 12 months - Base Level. See Throughput Services.</i>
<b>TF12-V</b> .....	<i>Transportation - Firm for 12 months - Variable Level. See Throughput Services.</i>
<b>TF5</b> .....	<i>Transportation - Firm for 5 months. See Throughput Services.</i>
<b>TFX</b> .....	<i>Transportation - Firm (Negotiable terms) is available to any shipper to acquire firm transportation services where the service needed is not conducive to the parameters set out under Throughput Services.</i>
<b>TI</b> .....	<i>Transportation - Interruptible.</i>

**Hedging Terms and Examples**

<i>TERMS AND ACRONYMS</i>	<i>DEFINITION</i>
<b>Futures Contracts</b>	Firm commitments to make or accept delivery of a specified quantity and quality of a commodity during a specific month in the future at a price agreed upon at the time the commitment is made.
<b>Futures Contract Example</b>	<p>Party A expects to need gas in January and wants to make sure that they do not have to pay more than \$5.60. Party A buys a contract for January gas at \$5.60 to lock in the price.</p> <p>As the strike date approaches, the futures price should – and usually does – converge towards the bidweek prices. If the bidweek price for gas at Henry Hub is \$6.15, the purchaser buys physical gas for \$6.15 and sells the future contract back at the prevailing future market price, around \$6.15 per MMBtu. Party A has a gain of \$0.55 per MMBtu on the future transaction. The gain on the futures contract offsets the fact that Party A was forced to buy gas at \$6.15 per MMBtu. When the cost of the gas is combined with the “gain” on the future contract, the “net” gas cost is \$5.60 per MMBtu, which was the locked in price.</p>

*TERMS AND ACRONYMS*

*DEFINITION*

---

If, however, the bidweek price for gas is \$5.25 per MMBtu, the purchaser will buy their gas for \$5.25 and take a \$0.35 loss on the futures contract. Nevertheless, the “net” cost remains \$5.60 per MMBtu because the loss is “offset” by the fact that Party A can buy the gas at a lower price.

**Gas Prices**

*Citygate Price*

The price for gas delivered at the citygates. Citygates are the transfer point or measuring station at which upstream pipelines connect to the LDC’s distribution system.

*Retail Price*

The price charge to the ultimate consumer.

*Spot Prices*

The price for a one-time, open market transaction for immediate delivery of the specific quantity of product at a specific location where the commodity is purchased “on the spot” at current market rates.

*Wellhead Price*

The price of crude oil or natural gas at the mouth of the well.

**Hedging**

A trade designed to reduce risk. Usually done by covering future commitments at a fixed price in the future, through either options or futures contract.

**Marginal Prices**

The price of the next increment of supply. Published data generally presents daily averages for weekdays (excluding holidays).

**Non-commercial Open Interest**

The net non-commercial open interest represents total “long” open interest contracts minus total “short” positions held by non-commercial customers. It represents a reasonable proxy for speculative positions in natural gas futures markets. Natural gas prices tend to increase when net non-commercial open interest is above zero and to decrease when net non-commercial open interest is below zero.



*TERMS AND ACRONYMS*

*DEFINITION*

---

**Open Interest**

The number of open or outstanding contracts for which an individual or entity is obligated to an exchange because that individual or entity has not yet made an offsetting sale or purchase, an actual contract delivery, or in the case of options, exercised the option.

**Options**

A contract between two parties in which one party has the right, but not the obligation, to buy or sell an underlying asset.

*Call Option*

An option that gives the holder the right (but not the obligation) to buy a futures contract at a fixed price, on or before a specified date. The grantor of the option is obliged to sell the futures contract at the fixed price if the holder exercises the option.

**Call Option Example**

Party A buys a call option for the month of May with a strike price of \$5.10 for \$0.26 to insure against a large price increase. If the May price is \$5.50 per MMBtu, the value of the option is \$0.40. Party A can sell the option at the strike date for a net gain of \$0.14. Party A would then buy the physical gas of the market price of \$5.50 per MMBtu for a net gas cost of \$5.36.

If the May price drops to \$4.00 per MMBtu, the value of the option is zero and Party A loses the entire initial cost of the option for a net loss of \$0.26. Party A would then buy the physical gas at the market price of \$4.00 per MMBtu for a net cost of \$4.26 per MMBtu which is well below the strike price of the option.

*Put Option*

An option that gives the holder the right (but not the obligation) to sell a specified futures contract at a fixed price, on or before a specified date. The grantor of the option has the obligation to take delivery of the futures contract if the option is exercised.

*Strike Price*

The price at which an option holder has the right to buy or sell and underlying commodity/derivative.

*TERMS AND ACRONYMS*

*DEFINITION*

---

*Risk-free Rate*

The rate of interest that can be earned without assuming any risk.

*Out-of-the-Money Option*

An option which has no intrinsic value. A put option is out-of-the-money when its strike price is below the value of the underlying futures contract. A call option is out-of-the-money when its strike price is above that of the underlying futures contract.

**Price Collar**

A contract between a buyer and seller of a commodity whereby the buyer is assured that he will not have to pay more than some maximum price and whereby the seller is assured of receiving some minimum price. Under the terms of a collar, no payment is made when the index price falls within the dead band. A payment is made when the cash price falls outside the “dead band” based upon the difference in the index price and the limit of the dead band. The other party charges an origination fee for the collar.

**Price Collar Example**

A purchaser, wanting to insure against large price increases, buys a three-month collar at \$6.00 per MMBtu with a \$0.15 spread around the \$6.00 price. If the cash price is between \$5.85 and \$6.15, no payment is made on the collar. Over the three-month period, the index price for physical gas averages \$6.25 per MMBtu. The purchaser buys gas at index, but is paid \$0.10 on the collar for a net cost of gas of \$6.15. If the index price averages \$5.70, the purchaser buys at index but has to pay \$0.15 on the collar for a net cost of gas of \$5.85 per MMBtu. If the average of index price over the three-month period falls between \$5.85 and \$6.15, no payment is made for the collar.

*TERMS AND ACRONYMS*

*DEFINITION*

---

**Price Range**

The spread of prices during a specific period. In markets with a uniform product and an open bidding process (e.g., the stock market), the range is often defined as the average spread between the bid price and the ask price during a specific time period. For markets without a uniform product, and where bid and ask prices are not typically available (such as natural gas markets for all locations with the possible exception of the NYMEX Henry Hub contract), the range is typically measured as the difference between the daily high price and the daily low price.

**Commodity Swap**

A contract between two parties. A swap differs from a futures contract in that it specifies “marker” price that does not vary during the term of the contract. The contract obligates the parties to make payment equal to the difference between the cash price and the “trigger” price. If the cash price is above the “trigger” price, the seller of the swap pays the buyer, if the cash price is below the “trigger,” buyer pays the seller.

The terms of settlement can be negotiated between the parties, thus there are an almost infinite variety of swaps. For natural gas swaps, it is particularly valuable to commercial interests to be able to enter in swap at specific locations along the gas pipeline system (i.e., interconnects, citygates, and pipeline receipt and delivery points, etc.)

**Commodity Swap Example**

A purchaser wanting to lock in a \$6.00 price for gas at Ventura over the next 3 months signs a swap agreement with another party.

Over the three-month period, the index price averages \$6.25 per MMBtu. The purchaser buys the physical gas at the index price of \$6.25 and is paid \$0.25 on the swap for a “net” gas cost of \$6.00. If however, the price averages \$5.70 per MMBtu, the purchaser buys at the index price but has to pay \$0.30 per MMBtu to the other party under the terms of the swap. The net gas cost remains \$6.00 per MMBtu.

<u>Throughput Services</u>	<u>CPE</u>	<u>Great Plains No.</u>	<u>Great Plains So.</u>	<u>GMG</u>	<u>Interstate</u>	<u>MERC NNG</u>	<u>MERC-CON</u>	<u>MERC AL</u>	<u>Xcel Gas</u>
NNG TF-12	D		D	D	D	D		D	D
NNG TF-5	D		D	D	D	D		D	D
NNG TFX	D	D	D	D	D	D		D	D
Viking FT-A	D	D	D				D		D
Great Lakes FT							D		D
ANR FTS-1									D
WBI FT									D
Centra FT							D		
<u>Balancing, Storage, Reservation Fees</u>									
Balancing SMS, LMS <b>2/</b>	A	A	A	C	A	C	C	C	C
NNG storage FDD	A		A		A	D/C	<b>1/</b>	D/C	<b>1/</b>
NGPL storage	A								
BP Canada storage									
Niska storage									
ANR storage									A
AECO storage							D/C	<b>1/</b>	
Other supplier or producer reservation fees	A				A				

D=Demand cost

A=Costs are allocated to firm and interruptible classes costs

C=Commodity cost

**1/** The Commission's Aug. 6, 2014 Order in Docket Nos. G007/M-07-1402, G011/M-07-1403, G011/M-07-1404, and G011/M-07-1405 approved moving storage into commodity as of Nov. 1, 2014. Thus, there were four months of costs in demand and eight months of costs in commodity.

**2/** The Commission's November 14, 2013 *Order Accepting Gas Utilities' Automatic Adjustment Reports and True-up Proposals, and Setting Further Requirements* in Docket No. 12-756 required all regulated gas utilities to prospectively recover balancing service costs, and credit the utility's penalty revenues and the pipeline's revenue credits, to the commodity portion of the PGA effective with the earliest true-up filing (for revenues) or the earliest monthly PGA (for costs) that can reasonably be implemented.

**Greater Minnesota Gas, Inc.**  
**2014-2015 True Up**  
**Docket No. G022/AA-15-797**  
**As Filed on August 31, 2015**

Docket No. G999/AA-15-612  
DOC Attachment G5  
Page 1 of 3

**Ten Year Summary of Gas-Cost Recovery**

Year Ended 6/30	Present Year Percent Over (Under) Recovery	Cumulative Percent Over (Under) Recovery
2005-2006	-1.37%	
2006-2007	-6.44%	
2007-2008	3.25%	
2008-2009	-4.96%	
2009-2010	-5.18%	
2010-2011	-3.92%	
2011-2012	0.58%	
2012-2013	1.46%	
2013-2014	-0.27%	
2014-2015	<b>0.98%</b>	<b>0.83%</b>
10 Year Average	-1.59%	

**Recovery By Class**

	(1)	(2)	(3) (1) - (2)	(4) (3) / (2)	(5)
	COST RECOVERY	COST INCURRED	PRESENT YEAR OVER/(UNDER) COLLECTION (\$)	PRESENT YEAR OVER/(UNDER) COLLECTION (%)	PREVIOUS TRUE-UP OVER/(UNDER) ENDING BALANCE
FIRM	\$4,560,300	\$4,507,723	\$52,577	1.17%	(\$1,222)
AGRICULTURAL - INTERRUPTIBLE	\$316,132	\$321,248	(\$5,116)	-1.59%	(\$3,291)
GENERAL - INTERRUPTIBLE	\$312,501	\$309,786	\$2,715	0.88%	(\$3,006)
<b>TOTAL</b>	<b>\$5,188,933</b>	<b>\$5,138,757</b>	<b>\$50,176</b>	<b>0.98%</b>	<b>(\$7,519)</b>

	(6) (3)+(5)	(7) (6)/(2)	(8) Estimated Sales (Mcf)	(9) (6)/(8) True Up (Refund)/Collection
	CUMULATIVE OVER/(UNDER) BALANCE	CUMULATIVE %		
FIRM	\$51,355	1.14%	1,077,580	(\$0.0477)
AGRICULTURAL - INTERRUPTIBLE	(\$8,407)	-2.62%	39,400	\$0.2134
GENERAL - INTERRUPTIBLE	(\$291)	-0.09%	72,300	\$0.0040
<b>TOTAL</b>	<b>\$42,657</b>	<b>0.83%</b>	<b>1,189,280</b>	

**Greater Minnesota Gas, Inc.**  
**2014-2015 True Up**  
**Docket No. G022/AA-15-797**  
**As Filed on August 31, 2015**

Docket No. G999/AA-15-612  
DOC Attachment G5  
Page 2 of 3

<b>RECOVERY BY CLASS</b>	(1)	(2)	(3) (1) - (2)	(4) (3) / (2)
	COST RECOVERY	COST INCURRED	PRESENT YEAR OVER/(UNDER) COLLECTION (\$)	PRESENT YEAR OVER/(UNDER) COLLECTION (%)
<u>RESIDENTIAL - FIRM</u>				
DEMAND COST	\$395,147	\$378,768	\$16,379	4.32%
COMMODITY COST	\$1,954,396	\$1,895,419	\$58,977	3.11%
TOTAL	<u>\$2,349,543</u>	<u>\$2,274,187</u>	<u>\$75,356</u>	<u>3.31%</u>
<u>COMMERCIAL - FIRM</u>				
DEMAND COST	\$15,745	\$15,072	\$673	4.47%
COMMODITY COST	\$77,579	\$74,481	\$3,098	4.16%
TOTAL	<u>\$93,324</u>	<u>\$89,553</u>	<u>\$3,771</u>	<u>4.21%</u>
<u>INDUSTRIAL - FIRM</u>				
DEMAND COST	\$338,955	\$313,845	\$25,110	8.00%
COMMODITY COST	\$1,662,168	\$1,712,513	(\$50,345)	-2.94%
TOTAL	<u>\$2,001,123</u>	<u>\$2,026,358</u>	<u>(\$25,235)</u>	<u>-1.25%</u>
<u>FLEX RATE - FIRM</u>				
DEMAND COST	\$19,975	\$19,626	\$349	1.78%
COMMODITY COST	\$96,335	\$97,999	(\$1,664)	-1.70%
TOTAL	<u>\$116,310</u>	<u>\$117,625</u>	<u>(\$1,315)</u>	<u>-1.12%</u>
<u>AG. - INTERRUPTIBLE</u>				
DEMAND COST	\$0	\$0	\$0	0.00%
COMMODITY COST	\$316,132	\$321,248	(\$5,116)	-1.59%
TOTAL	<u>\$316,132</u>	<u>\$321,248</u>	<u>(\$5,116)</u>	<u>-1.59%</u>
<u>IND. - INTERRUPTIBLE</u>				
DEMAND COST	\$0	\$0	\$0	0.00%
COMMODITY COST	\$128,993	\$134,816	(\$5,823)	-4.32%
TOTAL	<u>\$128,993</u>	<u>\$134,816</u>	<u>(\$5,823)</u>	<u>-4.32%</u>
<u>FLEX RATE - INTERRUPTIBLE</u>				
DEMAND COST	\$0	\$0	\$0	0.00%
COMMODITY COST	\$183,508	\$174,970	\$8,538	4.88%
TOTAL	<u>\$183,508</u>	<u>\$174,970</u>	<u>\$8,538</u>	<u>4.88%</u>

**Greater Minnesota Gas, Inc.**  
**2014-2015 True Up**  
**Docket No. G022/AA-15-797**  
**As Filed on August 31, 2015**

Docket No. G999/AA-15-612  
DOC Attachment G5  
Page 3 of 3

<b>RECOVERY BY COMPONENT</b>	(1)	(2)	(3) (1) - (2)	(4) (3) / (2)
	COST RECOVERY	COST INCURRED	PRESENT YEAR OVER/(UNDER) COLLECTION (\$)	PRESENT YEAR OVER/(UNDER) COLLECTION (%)
<b>DEMAND COST:</b>				
Residential - Firm	\$395,147	\$378,768	\$16,379	4.32%
Commercial - Firm	\$15,745	\$15,072	\$673	4.47%
Industrial - Firm	\$338,955	\$313,845	\$25,110	8.00%
Flexible Rate - Firm	\$19,975	\$19,626	\$349	1.78%
Agricultural - Interruptible	\$0	\$0	\$0	0.00%
Industrial - Interruptible	\$0	\$0	\$0	0.00%
Flexible Rate - Interruptible	\$0	\$0	\$0	0.00%
<b>TOTAL</b>	<b>\$769,822</b>	<b>\$727,311</b>	<b>\$42,511</b>	<b>5.84%</b>
<b>COMMODITY COSTS:</b>				
Residential - Firm	\$1,954,396	\$1,895,419	\$58,977	3.11%
Commercial - Firm	\$77,579	\$74,481	\$3,098	4.16%
Industrial - Firm	\$1,662,168	\$1,712,513	(\$50,345)	-2.94%
Flexible Rate - Firm	\$96,335	\$97,999	(\$1,664)	-1.70%
Agricultural - Interruptible	\$316,132	\$321,248	(\$5,116)	-1.59%
Industrial - Interruptible	\$128,993	\$134,816	(\$5,823)	-4.32%
Flexible Rate - Interruptible	\$183,508	\$174,970	\$8,538	4.88%
<b>TOTAL</b>	<b>\$4,419,111</b>	<b>\$4,411,446</b>	<b>\$7,665</b>	<b>0.17%</b>
<b>DETAIL OF DEMAND RECOVERY</b>				
Viking Zone 1	\$159,817	\$165,671	(\$5,854)	-3.53%
TFX-5	\$509,129	\$487,472	\$21,657	4.44%
TFX- 7	\$75,434	\$57,942	\$17,492	30.19%
TFX - 12	\$19,933	\$19,096	\$837	4.38%
TF Capacity Release	\$0	(\$8,814)	\$8,814	-100.00%
SMS Demand	\$5,508	\$5,943	(\$435)	-7.32%
<b>TOTAL</b>	<b>\$769,821</b>	<b>\$727,310</b>	<b>\$42,511</b>	<b>5.84%</b>

**Great Plains Natural Gas North  
District 2014-2015 True-Up  
Docket No. G004/AA-15-794  
As Filed on August 28, 2015**

Docket No. G999/AA-15-612  
DOC Attachment G6a  
Page 1 of 3

**Ten Year Summary of Gas Cost Recovery:**

	<u>Year Ended 6/30</u>	<u>Present Year Percent Over (Under) Recovery</u>	<u>Cumulative Percent Over (Under) Recovery</u>
GP-North	2005-2006	-4.42%	
GP-North	2006-2007	-4.37%	
GP-North	2007-2008	0.67%	
GP-North	2008-2009	-0.36%	
GP-North	2009-2010	-3.57%	
GP-North	2010-2011	0.45%	
GP-North	2011-2012	-7.83%	
GP-North	2012-2013	-3.66%	
GP-North	2013-2014	-12.09%	
GP-North	2014-2015	<b>1.57%</b>	<b>0.76%</b>
	10-Year Average	-3.36%	

**Recovery By Class**

	<u>(1)</u>	<u>(2)</u>	<u>(3)</u>	<u>(4)</u>	<u>(5)</u>
			<u>(1)-(2)</u>	<u>(3)/(2)</u>	
			Present Year Over/(Under) Recovery	Present Year Over/(Under) Recovery	Prior Year True-Up Over/(Under) Beginning Balance
	Cost Recovery	Cost Incurred			
FIRM	\$6,174,574	\$6,079,291	\$95,283	1.57%	(\$1,287,400)
INTERRUPTIBLE	\$2,249,953	\$2,215,266	\$34,687	1.57%	(\$364,765)
<b>Total</b>	<b>\$8,424,527</b>	<b>\$8,294,557</b>	<b>\$129,970</b>	<b>1.57%</b>	<b>(\$1,652,165)</b>

	<u>(6)</u>	<u>(7)</u>	<u>(8)</u>	<u>(9)</u>	<u>(10)</u>
		<u>(3)+(5)+(6)</u>	<u>(7)/(2)</u>		
	Prior Year Recovery	Cumulative True-Up Over/(Under) Ending Balance	Cumulative %	Projected Sales (Mcf)	True Up Per Mcf (Refund)/Collection
FIRM	\$1,220,978	\$28,861	0.47%	1,118,320	(\$0.0258)
INTERRUPTIBLE	\$364,063	\$33,985	1.53%	498,580	(\$0.0682)
<b>Total</b>	<b>\$1,585,041</b>	<b>\$62,846</b>	<b>0.76%</b>		



Great Plains Natural Gas North  
District 2014-2015 True-Up  
Docket No. G004/AA-15-794  
As Filed on August 28, 2015

Docket No. G999/AA-15-612  
DOC Attachment G6a  
Page 2 of 3

		(1)	(2)	(3)	(4)
				(1)-(2)	(3)/(2)
<b>Detail of Current Costs by Class</b>				PRESENT YEAR	PRESENT YEAR
FIRM		COST RECOVERY	COST INCURRED	OVER/(UNDER) RECOVERY (\$)	OVER/(UNDER) COLLECTION (%)
	Viking				
	FT-A	\$309,890	\$297,264	\$12,626	4.25%
	FT-A (Zone 1-1; Zone 1-2)	\$87,707	\$86,777	\$930	1.07%
	Seasonal FT-A Reservation Charge	\$35,070	\$34,711	\$359	1.03%
	TFX Seasonal	\$123,417	\$121,455	\$1,962	1.62%
	TFX Winter	\$802,496	\$790,697	\$11,799	1.49%
	TFX Summer	\$421,340	\$408,393	\$12,947	3.17%
	BP Seasonal Gas Contract	\$20,589	\$27,049	(\$6,460)	-23.88%
	LMS Demand	\$6,999	\$5,370	\$1,629	30.34%
	TFX Capacity Release		(\$9,839)	\$9,839	-100.00%
	Total Demand	\$1,807,508	\$1,761,877	\$45,631	2.59%
	Commodity Cost	\$4,367,066	\$4,317,414	\$49,652	1.15%
	<b>TOTAL</b>	<b>\$6,174,574</b>	<b>\$6,079,291</b>	<b>\$95,283</b>	<b>1.57%</b>
	INTERRUPTIBLE				
	Commodity Cost	\$2,245,252	\$2,209,899	\$35,353	1.60%
	LMS Demand	\$4,701	\$5,367	(\$666)	-12.41%
	<b>TOTAL</b>	<b>\$2,249,953</b>	<b>\$2,215,266</b>	<b>\$34,687</b>	<b>1.57%</b>

**Great Plains Natural Gas North  
District 2014-2015 True-Up  
Docket No. G004/AA-15-794  
As Filed on August 28, 2015**

Docket No. G999/AA-15-612  
DOC Attachment G6a  
Page 3 of 3

<b>Recovery by Class</b>		(1)	(2)	(3)	(4)
		COST RECOVERY	COST INCURRED	(1)-(2) PRESENT YEAR OVER/(UNDER) RECOVERY (\$)	(3)/(2) PRESENT YEAR OVER/(UNDER) RECOVERY (%)
<b>FIRM</b>					
	Demand	\$1,807,508	\$1,761,877	\$45,631	2.59%
	Commodity	\$4,367,066	\$4,317,414	\$49,652	1.15%
	Total	\$6,174,574	\$6,079,291	\$95,283	1.57%
<b>INTERRUPTIBLE</b>					
	LMS Demand	\$4,701	\$5,367	(\$666)	-12.41%
	Commodity	\$2,245,252	\$2,209,899	\$35,353	1.60%
	Total	\$2,249,953	\$2,215,266	\$34,687	1.57%
<b>Recovery by Component</b>		(1)	(2)	(3)	(4)
		COST RECOVERY	COST INCURRED	(1)-(2) PRESENT YEAR OVER/(UNDER) RECOVERY (\$)	(3)/(2) PRESENT YEAR OVER/(UNDER) RECOVERY (%)
<b>Demand</b>					
	Firm	\$1,807,508	\$1,761,877	\$45,631	2.59%
	Total	\$1,807,508	\$1,761,877	\$45,631	2.59%
<b>Commodity</b>					
	Firm	\$4,367,066	\$4,317,414	\$49,652	1.15%
	LMS Demand	\$4,701	\$5,367	(\$666)	-12.41%
	Interruptible	\$2,245,252	\$2,209,899	\$35,353	1.60%
	Total	\$6,617,019	\$6,532,680	\$84,339	1.29%

Great Plains Natural Gas South District  
2014-2015 True-Up  
Docket No. G004/AA-15-794  
As Filed by Great Plains on August 28, 2015

Docket No. G999/AA-15-612  
DOC Attachment G6b  
Page 1 of 3

**Ten Year Summary of Gas Cost Recovery:**

	<u>Year Ended 6/30</u>	<u>Present Year Percent Over (Under) Recovery</u>	<u>Cumulative Percent Over (Under) Recovery</u>
GP-South	2005-2006	-3.03%	
GP-South	2006-2007	-3.47%	
GP-South	2007-2008	-1.56%	
GP-South	2008-2009	-3.34%	
GP-South	2009-2010	-2.62%	
GP-South	2010-2011	-1.95%	
GP-South	2011-2012	-4.73%	
GP-South	2012-2013	-1.86%	
GP-South	2013-2014	-13.57%	
GP-South	2013-2014	<b>-3.00%</b>	<b>-4.09%</b>
	10-Year Average	-3.91%	

**RECOVERY BY CLASS**

	<u>(1)</u>	<u>(2)</u>	<u>(3)</u>	<u>(4)</u>	<u>(5)</u>
			<u>(1)-(2)</u>	<u>(3)/(2)</u>	
			Present Year Over/(Under) Recovery	Present Year Over/(Under) Recovery	Prior Year True-Up Over/(Under) Beginning Balance
	Cost Recovery	Cost Incurred			
FIRM	\$7,111,973	\$7,249,335	(\$137,362)	<b>-1.89%</b>	(\$1,415,968)
Small Vol. Interrupt.	\$1,272,719	\$1,342,719	(\$70,000)	<b>-5.21%</b>	(\$264,014)
Large Vol. Interrupt.	\$2,316,185	\$2,439,681	(\$123,496)	<b>-5.06%</b>	(\$309,439)
<b>Total</b>	<b>\$10,700,877</b>	<b>\$11,031,735</b>	<b>(\$330,858)</b>	<b>-3.00%</b>	<b>(\$1,989,421)</b>

	<u>(6)</u>	<u>(7)</u>	<u>(8)</u>	<u>(9)</u>	<u>(10)</u>
		<u>(3)+(5)+(6)</u>	<u>(7)/(2)</u>		
	Prior Year Recovery	Cumulative True-Up Over/(Under) Ending Balance	Cumulative %	Projected Sales (Mcf)	True Up Per Mcf (Refund)/Collection
FIRM	\$1,295,953	(\$257,377)	<b>-3.55%</b>	1,533,270	<b>\$0.1679</b>
Small Vol. Interrupt.	\$314,174	(\$19,840)	<b>-1.48%</b>	249,480	<b>\$0.0795</b>
Large Vol. Interrupt.	\$258,879	(\$174,056)	<b>-7.13%</b>	649,140	<b>\$0.2681</b>
<b>Total</b>	<b>\$1,869,006</b>	<b>(\$451,273)</b>	<b>-4.09%</b>		

Great Plains Natural Gas South District  
2014-2015 True-Up  
Docket No. G004/AA-15-794  
As Filed by Great Plains on August 28, 2015

Docket No. G999/AA-15-612  
DOC Attachment G6b  
Page 2 of 3

		(1)	(2)	(3)	(4)
				(1)-(2)	(3)/(2)
<b>Detail of Current Costs by Class</b>				PRESENT YEAR OVER/(UNDER) RECOVERY (\$)	PRESENT YEAR OVER/(UNDER) RECOVERY (%)
FIRM		COST RECOVERY	COST INCURRED		
	Northern				
	TF12 Base	\$493,171	\$474,437	\$18,734	3.95%
	TF12 Variable	\$289,481	\$284,445	\$5,036	1.77%
	TF5 (November - March)	\$276,899	\$258,359	\$18,540	7.18%
	TFX	\$417,561	\$393,978	\$23,583	5.99%
	TFX Negotiated Contract	\$127,239	\$134,459	(\$7,220)	-5.37%
	FT-A Viking	\$161,489	\$157,430	\$4,059	2.58%
	SMS	\$16,868	\$14,165	\$2,703	19.08%
	FDD-1 Reservation	\$102,267	\$100,905	\$1,362	1.35%
	FDD-1 Demand Charges	\$58,173	\$30,977	\$27,196	87.79%
	Propane Peaking Facilities Credit	(\$110,310)	(\$102,945)	(\$7,365)	7.15%
	Commodity Costs	\$5,279,135	\$5,503,125	(\$223,990)	-4.07%
	TOTAL	\$7,111,973	\$7,249,335	(\$137,362)	-1.89%
	SVI				
	Commodity Costs	\$1,253,449	\$1,310,838	(\$57,389)	-4.38%
	SMS included in commodity	\$5,541	\$6,847	(\$1,306)	-19.07%
	FDD-1 Demand Charge	\$13,729	\$25,034	(\$11,305)	-45.16%
	Adjustments		\$0	\$0	#DIV/0!
	TOTAL	\$1,272,719	\$1,342,719	(\$70,000)	-5.21%
	LVI				
	Commodity Costs	\$2,281,764	\$2,390,022	(\$108,258)	-4.53%
	SMS	\$9,894	\$13,117	(\$3,223)	-24.57%
	FDD-1 Demand Charge	\$24,527	\$36,542	(\$12,015)	-32.88%
	TOTAL	\$2,316,185	\$2,439,681	(\$123,496)	-5.06%

Great Plains Natural Gas South District  
 2014-2015 True-Up  
 Docket No. G004/AA-15-794  
 As Filed by Great Plains on August 28, 2015

Docket No. G999/AA-15-612  
 DOC Attachment G6b  
 Page 3 of 3

Recovery by Class		(1)	(2)	(3)	(4)
				(1)-(2)	(3)/(2)
		COST RECOVERY	COST INCURRED	PRESENT YEAR OVER/(UNDER) RECOVERY (\$)	PRESENT YEAR OVER/(UNDER) RECOVERY (%)
FIRM					
	Demand	\$1,832,838	\$1,746,210	\$86,628	4.96%
	Commodity	\$5,279,135	\$5,503,125	(\$223,990)	-4.07%
	Total	\$7,111,973	\$7,249,335	(\$137,362)	-1.89%
INTERRUPTIBLE					
	Commodity	\$3,588,904	\$3,782,400	(\$193,496)	-5.12%
	Total	\$3,588,904	\$3,782,400	(\$193,496)	-5.12%
Recovery by Component		(1)	(2)	(3)	(4)
				(1)-(2)	(3)/(2)
		COST RECOVERY	COST INCURRED	PRESENT YEAR OVER/(UNDER) RECOVERY (\$)	PRESENT YEAR OVER/(UNDER) RECOVERY (%)
Demand					
	Firm	\$1,832,838	\$1,746,210	\$86,628	4.96%
	Total	\$1,832,838	\$1,746,210	\$86,628	4.96%
Commodity					
	Firm	\$5,279,135	\$5,503,125	(\$223,990)	-4.07%
	Interruptible	\$3,588,904	\$3,782,400	(\$193,496)	-5.12%
	Total	\$8,868,039	\$9,285,525	(\$417,486)	<b>-4.50%</b>

**Interstate Gas  
2014-2015 True Up Docket  
No. G001/AA-15-796 As  
filed on August 31, 2015**

Docket No. G999/AA-15-612  
DOC Attachment G7  
Page 1 of 3

**Ten Year Summary of Gas-Cost Recovery:**

Year ended 6/30	PRESENT YEAR PERCENT OVER (UNDER) RECOVERY	CUMULATIVE PERCENT OVER (UNDER) RECOVERY
2005-2006	-2.99%	
2006-2007	-1.20%	
2007-2008	1.67%	
2008-2009	5.42%	
2009-2010	-5.17%	
2010-2011	-0.65%	
2011-2012	-5.61%	
2012-2013	3.76%	
2013-2014	5.92%	
2014-2015	<b>-0.21%</b>	<b>-0.17%</b>
10-Year Average	0.09%	

**Recovery By Class**

	(1)	(2)	(3) (1) - (2)	(4) (3) / (2)	(5)
	COST RECOVERY	COST INCURRED	PRESENT YEAR OVER/(UNDER) COLLECTION (\$)	PRESENT YEAR OVER/(UNDER) COLLECTION (%)	PRIOR YR OVER/(UNDER) BALANCE + SMS REALLOCATED
RATE 511-FIRM	\$6,438,455	\$6,337,584	\$100,870	1.59%	\$11,327
RATE 524-SMALL INTERRUPTIBLE	\$1,286,292	\$1,403,709	(\$117,418)	-8.36%	(\$7,822)
RATE 526-LARGE INTERRUPTIBLE	\$0	\$0	\$0	0%	\$0
<b>TOTAL</b>	<b>\$7,724,746</b>	<b>\$7,741,294</b>	<b>(\$16,547)</b>	<b>-0.21%</b>	<b>\$3,504</b>

	(6) (3)+(5)	(7) (6)/(2)	(8) Estimated Sales (Mcf)	(9) (6)/(8)
	OVER/(UNDER) COLLECTION	CUMM %	True-Up (Refund)/Collection	
TOTAL	\$112,197	1.77%	0	N/A
	(\$125,240)	-8.92%	0	N/A
	\$0	N/A	0	N/A
<b>TOTAL</b>	<b>(\$13,043)</b>	<b>-0.17%</b>	<b>0</b>	

**Interstate Gas  
2014-2015 True Up Docket  
No. G001/AA-15-796 As  
filed on August 31, 2015**

Docket No. G999/AA-15-612  
DOC Attachment G7  
Page 2 of 3

<b>RECOVERY BY CLASS</b>	(1)	(2)	(3) (1) - (2)	(4) (3) / (2)
	COST RECOVERY	COST INCURRED	PRESENT YEAR OVER/(UNDER) COLLECTION (\$)	PRESENT YEAR OVER/(UNDER) COLLECTION (%)
<b>RATE 511-FIRM</b>				
ASSIGNED DEMAND COST	\$1,220,232	\$1,208,903	\$11,329	0.94%
ALLOCATED DEMAND COST	\$182,823	\$218,424	(\$35,601)	-16.30%
COMMODITY COST	\$5,035,400	\$4,910,257	\$125,142	2.55%
<b>TOTAL</b>	<b>\$6,438,455</b>	<b>\$6,337,584</b>	<b>\$100,870</b>	<b>1.59%</b>
<b>RATE 524-SMALL INTERRUPTIBLE</b>				
ALLOCATED DEMAND COST	\$49,822	\$60,760	(\$10,938)	-18.00%
COMMODITY COST	\$1,236,469	\$1,342,950	(\$106,480)	-7.93%
<b>TOTAL</b>	<b>\$1,286,292</b>	<b>\$1,403,709</b>	<b>(\$117,418)</b>	<b>-8.36%</b>
<b>RATE 526-LARGE INTERRUPTIBLE</b>				
ALLOCATED DEMAND COST	\$0.00	\$0.00	\$0.00	0.00%
COMMODITY COST	\$0.00	\$0.00	\$0.00	0.00%
<b>TOTAL</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>0.00%</b>
<b>RECOVERY BY COMPONENT</b>				
ASSIGNED DEMAND COST:				
RATE 511-FIRM	\$1,220,232	\$1,208,903	\$11,329	0.94%
RATE 524-SMALL INTERRUPTIBLE	\$0	\$0	\$0	0.00%
RATE 526-LARGE INTERRUPTIBLE	\$0	\$0	\$0	0.00%
<b>SUB TOTAL ASSIGNED</b>	<b>\$1,220,232</b>	<b>\$1,208,903</b>	<b>\$11,329</b>	<b>0.94%</b>
ALLOCATED DEMAND COST:				
RATE 511-FIRM	\$182,823	\$218,424	(\$35,601)	-16.30%
RATE 524-SMALL INTERRUPTIBLE	\$49,822	\$60,760	(\$10,938)	-18.00%
RATE 526-LARGE INTERRUPTIBLE	\$0	\$0	\$0	0.00%
<b>SUB TOTAL ALLOCATED</b>	<b>\$232,645</b>	<b>\$279,184</b>	<b>(\$46,539)</b>	<b>-16.67%</b>
COMMODITY COSTS:				
RATE 511-FIRM	\$5,035,400	\$4,910,257	\$125,142	2.55%
RATE 524-SMALL INTERRUPTIBLE	\$1,236,469	\$1,342,950	(\$106,480)	-7.93%
RATE 526-LARGE INTERRUPTIBLE	\$0	\$0	\$0	0.00%
<b>SUB TOTAL COMMODITY</b>	<b>\$6,271,869</b>	<b>\$6,253,207</b>	<b>\$18,662</b>	<b>0.30%</b>
<b>TOTAL</b>	<b>\$7,724,746</b>	<b>\$7,741,294</b>	<b>(\$16,547)</b>	<b>-0.21%</b>

**Interstate Gas  
2014-2015 True Up Docket  
No. G001/AA-15-796 As  
filed on August 31, 2015**

Docket No. G999/AA-15-612  
DOC Attachment G7  
Page 3 of 3

<b>FIRM</b>	Cost Incurred	Cost Recovery	Over (Under)	Collection %	Over (Under) Collection
<b>ASSIGNED DEMAND</b>					
TF-12 Base	\$210,235	\$237,922		\$27,687	13.17%
TF-12 Variable	\$635,438	\$625,338	(\$10,100)		-1.59%
TF-5 & TFX	\$364,127	\$322,838	(\$41,288)		-11.34%
Interruptible Penalties	(\$3,996)	\$0		\$3,996	-100.00%
SMS Demand	\$29,455	\$34,135		\$4,680	15.89%
Capacity Release	(\$26,355)	\$0		\$26,355	-100.00%
<b>Subtotal Assigned Demand</b>	<b>\$1,208,903</b>	<b>\$1,220,232</b>		<b>\$11,329</b>	<b>0.94%</b>
<b>ALLOCATED DEMAND</b>					
CenterPoint Res.	\$0	\$4,523		\$4,523	#DIV/0!
Great Lakes Res.	\$0	\$1,662		\$1,662	#DIV/0!
Other Res.	\$58,029	\$0	(\$58,029)		-100.00%
FDD Reservation	\$82,703	\$87,423		\$4,721	5.71%
FDD Capacity	\$79,380	\$87,423		\$8,043	10.13%
Balancing	(\$1,688)	\$1,791		\$3,478	-206.09%
<b>Subtotal Allocated Demand FIRM</b>	<b>\$218,424</b>	<b>\$182,823</b>	<b>(\$35,601)</b>		<b>-16.30%</b>
Commodity FIRM	\$4,910,257	\$5,035,400		\$125,142	2.55%
<b>Total demand and commodity FIRM</b>	<b>\$6,337,584</b>	<b>\$6,438,455</b>		<b>\$100,870</b>	<b>1.59%</b>
<b>SVI</b>					
<b>ALLOCATED DEMAND</b>					
CenterPoint Res.	\$0	\$1,934		\$1,934	#DIV/0!
Great Lakes Res.	\$0	\$711		\$711	#DIV/0!
Other Res.	\$14,224	\$0	(\$14,224)		-100.00%
SMS Demand	\$7,220	\$3,575	(\$3,644)		-50.48%
FDD Reservation	\$20,272	\$21,580		\$1,308	6.45%
FDD Capacity	\$19,458	\$21,580		\$2,122	10.91%
Balancing	(\$414)	\$442		\$856	-206.90%
Subtotal Allocated Demand SVI	\$60,760	\$49,822	(\$10,938)		-18.00%
Subtotal Allocated Demand FIRM	\$218,424	\$182,823	(\$35,601)		-16.30%
<b>Total Allocated Demand SVI + FIRM</b>	<b>\$279,184</b>	<b>\$232,645</b>	<b>(\$46,539)</b>		<b>-16.67%</b>
Commodity SVI	\$1,342,950	\$1,236,469	(\$106,480)		-7.93%
Commodity FIRM	\$4,910,257	\$5,035,400		\$125,142	2.55%
<b>Total Commodity SVI + FIRM</b>	<b>\$6,253,207</b>	<b>\$6,271,869</b>		<b>\$18,662</b>	<b>0.30%</b>
<b>Total demand and commodity SVI</b>	<b>\$1,403,709</b>	<b>\$1,286,292</b>	<b>(\$117,418)</b>		<b>-8.36%</b>



**SUMMARY OF GAS COST RECOVERY:**

	Year Ended 6/30	AS FILED PRESENT YEAR PERCENT OVER/ (UNDER) RECOVERY	CUMULATIVE PERCENT OVER/ (UNDER) RECOVERY
MERC-PNG	2006	-1.60%	
MERC-PNG	2007	-4.39%	
MERC-PNG	2008	1.21%	
MERC-PNG	2009	1.21%	
MERC-PNG	2010	-1.25%	
MERC-PNG	2011	2.58%	
MERC-PNG	2012	-6.19%	
MERC-PNG	2013	0.08%	
MERC-Northern System	2014	-6.45%	
MERC-Northern System	2015	<b>1.90%</b>	<b>1.85%</b>
	10-YEAR AVERAGE	-1.29%	

**RECOVERY BY CLASS**

	(1)	(2)	(3)	(4) (3) / (2)	(5)
	COST RECOVERY	COST INCURRED	PRESENT YEAR OVER/(UNDER) COLLECTION (\$)	PRESENT YEAR OVER/(UNDER) COLLECTION (%)	PRESENT YEAR TRUE-UP OVER/(UNDER) BEGINNING BALANCE
GS	\$135,481,070	\$131,671,959	\$3,809,111	<b>2.89%</b>	\$61,963
SVJ/LVJ/SLV Demand	\$31,092	\$31,091	\$1	<b>0.00%</b>	(\$1)
SVI/SVJ/LVI/LVJ/SLVI Commodity	\$11,285,864	\$12,351,451	(\$1,065,587)	<b>-8.63%</b>	(\$137,807)
	<b>\$146,798,026</b>	<b>\$144,054,501</b>	<b>\$2,743,525</b>	<b>1.90%</b>	<b>(\$75,845)</b>

	(6) (3) + (5)	(7) (6) / (2)	(8) ESTIMATED SALES (DTH)	(9) TRUE-UP FACTORS (REFUND)/COLLECT
	CURRENT YEAR TRUE-UP OVER/(UNDER) ENDING BALANCE	CUMULATIVE %	ESTIMATED SALES (DTH)	TRUE-UP FACTORS (REFUND)/COLLECT
GS	\$3,871,074	2.94%	\$22,725,455	<b>(\$0.1703)</b>
SVJ/LVJ/SLV Demand	\$0	0.00%	\$1,995	<b>\$0.0000</b>
SVI/SVJ/LVI/LVJ/SLVI Commodity	(\$1,203,394)	-9.74%	\$2,770,697	<b>\$0.4343</b>
	<b>\$2,667,680</b>	<b>1.85%</b>	<b>25,498,147</b>	

		(1)	(2)	(3)	(4)
				(1) - (2)	(3) / (2)
<b>RECOVERY BY CLASS</b>					
General Service (GS)					
		COST RECOVERY	COST INCURRED	PRESENT YEAR OVER/(UNDER) COLLECTION (\$)	PRESENT YEAR OVER/(UNDER) COLLECTION (%)
	DEMAND	\$32,686,711	\$23,578,121	\$9,108,590	38.63%
	COMMODITY	\$102,794,359	\$108,093,838	(\$5,299,479)	-4.90%
	TOTAL	\$135,481,070	\$131,671,959	\$3,809,111	2.89%
Small & Large Volume Interruptible (SVI/LVI)					
		COST RECOVERY	COST INCURRED	PRESENT YEAR OVER/(UNDER) COLLECTION (\$)	PRESENT YEAR OVER/(UNDER) COLLECTION (%)
	DEMAND	\$0	\$0	\$0	0.00%
	COMMODITY	\$11,220,794	\$12,280,932	(\$1,060,138)	-8.63%
	TOTAL	\$11,220,794	\$12,280,932	(\$1,060,138)	-8.63%
Small & Large Volume Joint, Super Large Volume (SVJ/LVJ/SLV)					
		COST RECOVERY	COST INCURRED	PRESENT YEAR OVER/(UNDER) COLLECTION (\$)	PRESENT YEAR OVER/(UNDER) COLLECTION (%)
	DEMAND	\$31,092	\$31,091	\$1	0.00%
	COMMODITY	\$65,070	\$70,519	(\$5,449)	-7.73%
	TOTAL	\$96,162	\$101,610	(\$5,448)	-5.36%
<b>RECOVERY BY COMPONENT</b>					
		RECOVERY	COST INCURRED	PRESENT YEAR OVER/(UNDER) RECOVERY	PRESENT YEAR OVER/(UNDER) RECOVERY
DEMAND	GS	\$32,686,711	\$23,578,121	\$9,108,590	38.63%
DEMAND	SVI/LVI	\$0	\$0	\$0	0.00%
DEMAND	SVJ/LVJ/SLV	\$31,092	\$31,091	\$1	0.00%
	TOTAL	\$32,717,803	\$23,609,212	\$9,108,591	38.58%
COMMODITY	GS	\$102,794,359	\$108,093,838	(\$5,299,479)	-4.90%
COMMODITY	SVI/LVI	\$11,220,794	\$12,280,932	(\$1,060,138)	-8.63%
COMMODITY	SVJ/LVJ/SLV	\$65,070	\$70,519	(\$5,449)	-7.73%
	TOTAL	\$114,080,223	\$120,445,289	(\$6,365,066)	-5.28%

**SUMMARY OF GAS COST RECOVERY:**

Year Ended 6/30	AS FILED	CUMULATIVE
	PRESENT YEAR PERCENT OVER/ (UNDER) RECOVERY	PERCENT OVER/ (UNDER) RECOVERY
-Albert Lea (MERC purchased IPL 4/30/15) 2015	-27.03%	-29.68%
AVERAGE	-27.03%	

**RECOVERY BY CLASS**

	(1)	(2)	(3)	(4) (3) / (2)	(5)
	COST RECOVERY	COST INCURRED	PRESENT YEAR OVER/(UNDER) COLLECTION (\$)	PRESENT YEAR OVER/(UNDER) COLLECTION (%)	PRESENT YEAR TRUE-UP OVER/(UNDER) IPL's BALANCE
GS	\$294,114	\$399,181	(\$105,067)	-26.32%	\$112,197
SVJ/LVJ/SLVJ Demand	\$0	\$0	\$0	0.00%	\$0
SVI/SVJ/LVI/LVJ/SLVI Commodity	\$65,399	\$93,512	(\$28,113)	-30.06%	(\$125,240)
	<b>\$359,513</b>	<b>\$492,693</b>	<b>(\$133,180)</b>	<b>-27.03%</b>	<b>(\$13,043)</b>

	(6) (3) + (5)	(7) (6) / (2)	(8) ESTIMATED SALES (DTH)	(9) TRUE-UP FACTORS (REFUND)/COLLECT
	CURRENT YEAR TRUE-UP OVER/(UNDER) ENDING BALANCE	CUMULATIVE %		
GS	\$7,130	1.79%	\$1,313,744	(\$0.0054)
SVJ/LVJ/SLV Demand	\$0	0.00%	\$0	#DIV/0!
SVI/SVJ/LVI/LVJ/SLVI Commodity	(\$153,353)	-163.99%	\$347,598	\$0.4412
	<b>(\$146,223)</b>	<b>-29.68%</b>	<b>1,661,342</b>	

		(1)	(2)	(3)	(4)
				(1) - (2)	(3) / (2)
<b>RECOVERY BY CLASS</b>					
General Service (GS)					
		<b>COST RECOVERY</b>	<b>COST INCURRED</b>	<b>PRESENT YEAR OVER/(UNDER) COLLECTION (\$)</b>	<b>PRESENT YEAR OVER/(UNDER) COLLECTION (%)</b>
	DEMAND	\$93,253	\$106,760	(\$13,507)	-12.65%
	COMMODITY	\$200,861	\$292,421	(\$91,560)	-31.31%
	<b>TOTAL</b>	<b>\$294,114</b>	<b>\$399,181</b>	<b>(\$105,067)</b>	<b>-26.32%</b>
Small & Large Volume Interruptible (SVI/LVI)					
		<b>COST RECOVERY</b>	<b>COST INCURRED</b>	<b>PRESENT YEAR OVER/(UNDER) COLLECTION (\$)</b>	<b>PRESENT YEAR OVER/(UNDER) COLLECTION (%)</b>
	DEMAND	\$0	\$0	\$0	0.00%
	COMMODITY	\$65,399	\$93,512	(\$28,113)	-30.06%
	<b>TOTAL</b>	<b>\$65,399</b>	<b>\$93,512</b>	<b>(\$28,113)</b>	<b>-30.06%</b>
Small & Large Volume Joint, Super Large Volume (SVJ/LVJ/SLV)					
		<b>COST RECOVERY</b>	<b>COST INCURRED</b>	<b>PRESENT YEAR OVER/(UNDER) COLLECTION (\$)</b>	<b>PRESENT YEAR OVER/(UNDER) COLLECTION (%)</b>
	DEMAND	\$0	\$0	\$0	0.00%
	COMMODITY	\$0	\$0	\$0	#DIV/0!
	<b>TOTAL</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>0.00%</b>
<b>RECOVERY BY COMPONENT</b>					
		(1)	(2)	(3)	(4)
				(1) - (2)	(3) / (2)
		<b>RECOVERY</b>	<b>COST INCURRED</b>	<b>PRESENT YEAR OVER/(UNDER) RECOVERY</b>	<b>PRESENT YEAR OVER/(UNDER) RECOVERY</b>
DEMAND	GS	\$93,253	\$106,760	(\$13,507)	-12.65%
DEMAND	SVI/LVI	\$0	\$0	\$0	0.00%
DEMAND	SVJ/LVJ/SLV	\$0	\$0	\$0	0.00%
	<b>TOTAL</b>	<b>\$93,253</b>	<b>\$106,760</b>	<b>(\$13,507)</b>	<b>-12.65%</b>
COMMODITY	GS	\$200,861	\$292,421	(\$91,560)	-31.31%
COMMODITY	SVI/LVI	\$65,399	\$93,512	(\$28,113)	-30.06%
COMMODITY	SVJ/LVJ/SLV	\$0	\$0	\$0	0.00%
	<b>TOTAL</b>	<b>\$266,260</b>	<b>\$385,933</b>	<b>(\$119,673)</b>	<b>-31.01%</b>

TEN YEAR SUMMARY OF GAS-COST RECOVERY:

	Year ended 6/30	AS FILED PRESENT YEAR PERCENT OVER/ (UNDER) RECOVERY	CUMULATIVE PERCENT OVER/ (UNDER) RECOVERY
MERC-NMU	2005-2006	-1.56%	
MERC-NMU	2006-2007	-2.22%	
MERC-NMU	2007-2008	1.94%	
MERC-NMU	2008-2009	3.85%	
MERC-NMU	2009-2010	-2.09%	
MERC-NMU	2010-2011	2.00%	
MERC-NMU	2011-2012	-2.15%	
MERC-NMU	2012-2013	2.82%	
MERC-Consolidated	2013-2014	-9.25%	
MERC-Consolidated	2014-2015	<b>-3.91%</b>	<b>-3.97%</b>
	10-YEAR AVERAGE	-1.06%	

RECOVERY BY CLASS

	(1)	(2)	(3)	(4)	(5)
			PRESENT YEAR OVER/(UNDER) COLLECTION (\$)	PRESENT YEAR OVER/(UNDER) COLLECTION (%)	PRESENT YEAR TRUE-UP OVER/(UNDER) BEGINNING BALANCE
	COST RECOVERY	COST INCURRED			
GS	\$25,922,053	\$26,642,285	(\$720,232)	-2.70%	(\$7,785)
SVJ Demand	\$29,809	\$29,809	\$0	0.00%	(\$5)
SVI/SJV/LVI Commodity	\$4,302,045	\$4,813,807	(\$511,762)	-10.63%	(\$10,518)
	<b>\$30,253,907</b>	<b>\$31,485,901</b>	<b>(\$1,231,994)</b>	<b>-3.91%</b>	<b>(\$18,308)</b>
	(6)	(7)	(8)	(9)	
	(3) + (5)	(6) / (2)	Estimated Sales (Dth)	True-Up Factors (Refund)/Collection	
	CURRENT YEAR TRUE-UP OVER/(UNDER) ENDING BALANCE	CUMULATIVE %			
GS	(\$728,017)	-2.73%	4,957,989	\$0.1468	
SVJ Demand	(\$5)	-0.02%	4,640	\$0.0011	
SVI/SJV/LVI Commodity	(\$522,280)	-10.85%	720,222	\$0.7252	
	<b>(\$1,250,302)</b>	<b>-3.97%</b>	<b>5,682,850</b>		

RECOVERY BY CLASS		(1)	(2)	(3)	(4)
				(1) - (2)	(3) / (2)
		COST RECOVERY	COST INCURRED	PRESENT YEAR OVER/(UNDER) COLLECTION (\$)	PRESENT YEAR OVER/(UNDER) COLLECTION (%)
General Service (GS)	DEMAND	\$4,071,987	\$3,294,137	\$777,850	23.61%
	COMMODITY	\$21,850,066	\$23,348,148	(\$1,498,082)	-6.42%
	TOTAL	\$25,922,053	\$26,642,285	(\$720,232)	-2.70%
SVI/SJV/LVI	DEMAND	\$29,809	\$29,809	\$0	0.00%
	COMMODITY	\$4,302,045	\$4,813,807	(\$511,762)	-10.63%
	TOTAL	\$4,331,854	\$4,843,616	(\$511,762)	-10.57%
RECOVERY BY COMPONENT		(1)	(2)	(3)	(4)
				(1) - (2)	(3) / (2)
		RECOVERY	COST INCURRED	OVER/(UNDER) RECOVERY	PERCENT OVER/(UNDER) RECOVERY
DEMAND	General Service (GS)	\$4,071,987	\$3,294,137	\$777,850	23.61%
DEMAND	SVI/SVJ/LVJ	\$29,809	\$29,809	\$0	0.00%
	TOTAL	\$4,101,796	\$3,323,946	\$777,850	23.40%
COMMODITY	General Service (GS)	\$21,850,066	\$23,348,148	(\$1,498,082)	-6.42%
COMMODITY	SVI/SVJ/LVJ	\$4,302,045	\$4,813,807	(\$511,762)	-10.63%
	TOTAL	\$26,152,111	\$28,161,955	(\$2,009,844)	-7.14%

**CenterPoint Energy**  
**2014 - 2015 True-Up**  
**Docket No. G008/AA-15-800**  
**As Filed on September 1, 2015**

Docket No. G999/AA-15-612  
DOC Attachment G10  
Page 1 of 2

**TEN YEAR SUMMARY OF GAS-COST RECOVERY:**

Year Ended 6/30	PRESENT YEAR PERCENT OVER/ (UNDER) RECOVERY	CUMULATIVE PERCENT OVER/ (UNDER) RECOVERY
2005-2006	-1.34%	
2006-2007	0.06%	
2007-2008	-0.44%	
2008-2009	1.17%	
2009-2010	-3.96%	
2010-2011	-0.66%	
2011-2012	-4.68%	
2012-2013	-0.84%	
2013-2014	-6.88%	
2014-2015	<b>1.44%</b>	<b>1.08%</b>
10-YEAR AVERAGE	-1.61%	

**RECOVERY BY CLASS**

	(1)	(2)	(3)	(4) (5) / (2)	(5)	(6)	(7) (5) / (2)
	Cost Recovery	Cost Incurred	Present Year Over/(Under) Collection (\$)	NetPresent Year Over/(Under) Collection (%)	Credits Against Present Gas Costs	Net Present Year Over/(Under) Collection (\$)	NetPresent Year Over/(Under) Collection (%)
SVF	\$529,880,791	\$523,765,536	\$6,115,255	1.17%	\$1,308,949	\$7,424,204	1.42%
LGS	\$157,310	\$163,972	(\$6,662)	-4.06%	\$485	(\$6,177)	-3.77%
SVDF	\$46,713,223	\$46,573,411	\$139,812	0.30%	\$120,132	\$259,944	0.56%
LVDF	\$23,646,150	\$22,835,828	\$810,322	3.55%	\$60,322	\$870,644	3.81%
	<b>\$600,397,474</b>	<b>\$593,338,747</b>	<b>\$7,058,727</b>	<b>1.19%</b>	<b>\$1,489,888</b>	\$8,548,615	<b>1.44%</b>
	(8)	(9) (5) + (7)	(10) (8) / (2)	(11)	(12) - (8) / (10)		
	Prior Year True Up Over/(Under) Balance	Cumulative Over/(Under) Collection (\$)	CUMULATIVE %	Estimated Sales (DT)	True-Up Factors (Refund)/Collection		
SVF	\$1,894,263	\$9,318,467	1.78%	106,218,300	(\$0.0877)		
LGS	(\$965)	(\$7,142)	-4.36%	37,700	\$0.1894		
SVDF	(\$970,135)	(\$710,191)	-1.52%	11,878,600	\$0.0598		
LVDF	(\$3,041,231)	(\$2,170,587)	-9.51%	4,208,100	\$0.5158		
	<b>(\$2,118,068)</b>	<b>\$6,430,547</b>	<b>1.08%</b>	<b>122,342,700</b>			

**CenterPoint Energy**  
**2014 - 2015 True-Up**  
**Docket No. G008/AA-15-800**  
**As Filed on September 1, 2015**

Docket No. G999/AA-15-612  
DOC Attachment G10  
Page 2 of 2

		<u>(1)</u>	<u>(2)</u>	<u>(3)</u>	<u>(4)</u>
<b>RECOVERY BY CLASS</b>				<u>(1) - (2)</u>	<u>(3) / (2)</u>
				PRESENT YEAR OVER/(UNDER)	PRESENT YEAR OVER/(UNDER)
		COST RECOVERY	COST INCURRED	COLLECTION (\$)	COLLECTION (%)
SMALL VOLUME FIRM					
	DEMAND	\$80,487,110	\$78,781,625	\$1,705,485	2.16%
	PROPANE	\$0	\$135,495	(\$135,495)	-100.00%
	COMMODITY	\$449,393,681	\$444,848,416	\$4,545,265	1.02%
	<b>TOTAL</b>	<b>\$529,880,791</b>	<b>\$523,765,536</b>	<b>\$6,115,255</b>	<b>1.17%</b>
LARGE GENERAL SERVICE					
	DEMAND	\$11,197	\$9,512	\$1,685	17.71%
	PROPANE	\$0	\$16	(\$16)	-100.00%
	COMMODITY	\$146,113	\$154,444	(\$8,331)	-5.39%
	<b>TOTAL</b>	<b>\$157,310</b>	<b>\$163,972</b>	<b>(\$6,662)</b>	<b>0.00%</b>
SMALL VOLUME DUAL FUEL					
	COMMODITY	\$46,713,223	\$46,573,411	\$139,812	0.30%
	<b>TOTAL</b>	<b>\$46,713,223</b>	<b>\$46,573,411</b>	<b>\$139,812</b>	<b>0.30%</b>
LARGE VOLUME DUAL FUEL					
	COMMODITY	\$23,646,150	\$22,835,828	\$810,322	3.55%
	<b>TOTAL</b>	<b>\$23,646,150</b>	<b>\$22,835,828</b>	<b>\$810,322</b>	<b>3.55%</b>
		<u>(1)</u>	<u>(2)</u>	<u>(3)</u>	<u>(4)</u>
<b>RECOVERY BY COMPONENT</b>				<u>(1) - (2)</u>	<u>(3) / (2)</u>
		RECOVERY	COST INCURRED	OVER/(UNDER)	OVER/(UNDER)
				RECOVERY	RECOVERY
	DEMAND SVF	\$80,487,110	\$78,781,625	\$1,705,485	2.16%
	DEMAND LGS	\$11,197	\$9,512	\$1,685	17.71%
	PROPANE SVF	\$0	\$135,511	(\$135,511)	-100.00%
	<b>TOTAL</b>	<b>\$80,498,307</b>	<b>\$78,926,648</b>	<b>\$1,571,659</b>	<b>1.99%</b>
	COMMODITY SVF	\$449,393,681	\$444,848,416	\$4,545,265	1.02%
	COMMODITY LGS	\$146,113	\$154,444	(\$8,331)	-5.39%
	COMMODITY SVDF	\$46,713,223	\$46,573,411	\$139,812	0.30%
	COMMODITY LVDF	\$23,646,150	\$22,835,828	\$810,322	3.55%
	<b>TOTAL</b>	<b>\$519,899,167</b>	<b>\$514,412,099</b>	<b>\$5,487,068</b>	<b>1.07%</b>
<b>TOTAL DEMAND AND COMMODITY</b>		<b>\$600,397,474</b>	<b>\$593,338,747</b>	<b>\$7,058,727</b>	<b>1.19%</b>



**XCEL Gas**  
**2014-2015 True Up Docket**  
**No. G002/AA-15-809**  
**As Filed September 1, 2015**

Docket No. G999/AA-15-612  
DOC Attachment G11  
Page 1 of 2

**Ten Year Summary of Gas-Cost Recovery:**

**Excludes Over/Under-Recoveries associated with fixed price programs terminated in 2006-2007 (Docket No. G002/CI-07-541).**

Year ended 6/30	Present Year Percent Over/(Under) Recovery	Cumulative Percent Over/(Under) Recovery
2005-2006	-1.35%	
2006-2007	0.32%	
2007-2008	-1.75%	
2008-2009	-0.23%	
2009-2010	-1.26%	
2010-2011	-0.50%	
2011-2012	-3.15%	
2012-2013	-0.36%	
2013-2014	10.47%	
2014-2015	<b>-2.24%</b>	<b>-2.70%</b>
10-YEAR AVG	-0.01%	

**Recovery by Class**

	(1)	(2)	(3) (1) - (2)	(4) (3) / (2)	(5)
	Cost Recovery	Cost Incurred	Present Year Over/(Under) Collection (\$)	Present Year Over/(Under) Collection (%)	Present Year True-Up Over/(Under) Beginning Balance
Residential	\$177,818,730	\$180,203,518	(\$2,384,788)	<b>-1.32%</b>	(\$40,812)
Commercial/Industrial Firm	\$97,704,763	\$99,682,422	(\$1,977,659)	<b>-1.98%</b>	\$90,867
Demand Billed Demand	\$1,574,154	\$1,535,660	\$38,494	<b>2.51%</b>	(\$4,257)
Demand Billed Commodity	\$11,357,519	\$12,014,314	(\$656,795)	<b>-5.47%</b>	(\$201,149)
Small Interruptible	\$10,576,799	\$11,067,884	(\$491,085)	<b>-4.44%</b>	(\$85,823)
Medium & Large Interruptible	\$32,721,223	\$34,847,268	(\$2,126,045)	<b>-6.10%</b>	(\$1,309,159)
<b>TOTAL</b>	<b>\$331,753,188</b>	<b>\$339,351,066</b>	<b>(\$7,597,878)</b>	<b>-2.24%</b>	<b>(\$1,550,333)</b>
	(6)	(7)	(8) (7)/(2)	(9)	(10)
	Prior Period Adj. Over/(Under)	Total Over/(Under) Collection	Cumulative %	Estimated Sales Therms	True-Up Factors (Therms) (Refund)/Collection
Residential	\$0	(\$2,425,600)	<b>-1.35%</b>	364,888,889	<b>\$0.00665</b>
Commercial/Industrial Firm	\$0	(\$1,886,792)	<b>-1.89%</b>	204,018,966	<b>\$0.00925</b>
Demand Billed Demand	\$0	\$34,237	<b>2.23%</b>	2,283,916	<b>(\$0.01499)</b>
Demand Billed Commodity	\$0	(\$857,944)	<b>-7.14%</b>	30,906,654	<b>\$0.02776</b>
Small Interruptible	\$0	(\$576,908)	<b>-5.21%</b>	24,353,467	<b>\$0.02369</b>
Medium & Large Interruptible	\$0	(\$3,435,204)	<b>-9.86%</b>	86,968,930	<b>\$0.03950</b>
<b>TOTAL</b>	<b>\$0</b>	<b>(\$9,148,211)</b>	<b>-2.70%</b>	<b>682,514,168</b>	

**XCEL Gas**  
**2014-2015 True Up Docket**  
**No. G002/AA-15-809**  
**As Filed September 1, 2015**

Docket No. G999/AA-15-612  
DOC Attachment G11  
Page 2 of 2

**Recovery by Class**

		(1)	(2)	(3)	(4)
				(1) - (2)	(3) / (2)
				Present Year Over/(Under) Collection (\$)	Present Year Over/(Under) Collection (%)
Residential TU Sch. D, page 3 TU Sch. D, page 4	Demand	Cost Recovery	Cost Incurred		
		\$30,628,662	\$28,723,631	\$1,905,031	6.63%
	Commodity & Peak Shaving	\$147,190,068	\$151,479,887	(\$4,289,819)	-2.83%
	TOTAL	\$177,818,730	\$180,203,518	(\$2,384,788)	-1.32%
Commercial/Industrial Firm TU Sch. D, page 3 TU Sch. D, page 4	Demand	Cost Recovery	Cost Incurred	Present Year Over/(Under) Collection (\$)	Present Year Over/(Under) Collection (%)
		\$16,481,371	\$15,860,723	\$620,648	3.91%
	Commodity & Peak Shaving	\$81,223,392	\$83,821,699	(\$2,598,307)	-3.10%
	TOTAL	\$97,704,763	\$99,682,422	(\$1,977,659)	-1.98%
Demand Billed TU Sch. D, page 3 TU Sch. D, page 4	Demand	Cost Recovery	Cost Incurred	Present Year Over/(Under) Collection (\$)	Present Year Over/(Under) Collection (%)
		\$1,574,154	\$1,535,660	\$38,494	2.51%
	Commodity & Peak Shaving	\$11,357,519	\$12,014,314	(\$656,795)	-5.47%
	TOTAL	\$12,931,673	\$13,549,974	(\$618,301)	-4.56%
Small Interruptible TU Sch. D, page 4	Commodity & Peak Shaving	Cost Recovery	Cost Incurred	Present Year Over/(Under) Collection (\$)	Present Year Over/(Under) Collection (%)
		\$10,576,799	\$11,067,884	(\$491,085)	-4.44%
	TOTAL	\$10,576,799	\$11,067,884	(\$491,085)	-4.44%
Medium & Large Interruptible TU Sch. D, page 4	Commodity & Peak Shaving	Cost Recovery	Cost Incurred	Present Year Over/(Under) Collection (\$)	Present Year Over/(Under) Collection (%)
		\$32,721,223	\$34,847,268	(\$2,126,045)	-6.10%
	TOTAL	\$32,721,223	\$34,847,268	(\$2,126,045)	-6.10%
<b>Recovery by Component</b>				OVER/(UNDER)	OVER/(UNDER)
		RECOVERY	COST INCURRED	RECOVERY	(%)
Demand	Residential	\$30,628,662	\$28,723,631	\$1,905,031	6.63%
Demand	Commercial/Industrial Firm	\$16,481,371	\$15,860,723	\$620,648	3.91%
Demand	Demand Billed	\$1,574,154	\$1,535,660	\$38,494	2.51%
	TOTAL DEMAND	\$48,684,187	\$46,120,014	\$2,564,173	5.56%
Commodity	Residential	\$147,190,068	\$151,479,887	(\$4,289,819)	-2.83%
Commodity	Commercial/Industrial Firm	\$81,223,392	\$83,821,699	(\$2,598,307)	-3.10%
Commodity	Demand Billed	\$11,357,519	\$12,014,314	(\$656,795)	-5.47%
Commodity	Small Interruptible	\$10,576,799	\$11,067,884	(\$491,085)	-4.44%
Commodity	Medium & Large Interruptible	\$32,721,223	\$34,847,268	(\$2,126,045)	-6.10%
	TOTAL COMMODITY	\$283,069,001	\$293,231,052	(\$10,162,051)	-3.47%

**Attachment G12  
COMMODITY COSTS  
Total Weighted Average Cost of Commodity  
PGA Recovered Versus Actual Incurred <sup>2</sup>**

PGA System	Recovered PGA Commodity Rate	Rankings	Difference Btwn Recovered PGA Commodity Rate (\$/Mcf) And Mn Weighted Avg		Difference Btwn Recovered PGA Commodity Rate (\$/Mcf) And Mn Non-Weighted Avg		Actual Annual Commodity Rate	Rankings	Difference Btwn Actual Annual Commodity Rate (\$/Mcf) And Mn Weighted Avg		Difference Btwn Actual Annual Commodity Rate (\$/Mcf) And Mn Non-Weighted Avg		Percent Over/(Under) Recovery	Rankings
	\$/Mcf		\$/Mcf	%	\$/Mcf	%			\$/Mcf	%	\$/Mcf	%		
Greater Minnesota	\$ 3.9467	4	\$ (0.2210)	-5.30%	\$ 0.0169	0.43%	\$ 3.9399	2	\$ (0.2857)	-6.76%	\$ (0.2175)	-5.23%	0.17%	1
Great Plains North***	\$ 3.8073	3	\$ (0.3604)	-8.65%	\$ (0.1225)	-3.12%	\$ 3.7588	1	\$ (0.4668)	-11.05%	\$ (0.3985)	-9.59%	1.29%	4
Great Plains South	\$ 3.7887	2	\$ (0.3790)	-9.09%	\$ (0.1412)	-3.59%	\$ 3.9670	4	\$ (0.2586)	-6.12%	\$ (0.1903)	-4.58%	-4.50%	6
Interstate Gas	\$ 3.9750	5	\$ (0.1927)	-4.62%	\$ 0.0452	1.15%	\$ 3.9632	3	\$ (0.2624)	-6.21%	\$ (0.1942)	-4.67%	0.30%	2
MERC-Consolidated	\$ 4.3769	8	\$ 0.2092	5.02%	\$ 0.4470	11.37%	\$ 4.7132	8	\$ 0.4876	11.54%	\$ 0.5559	13.37%	-7.14%	8
MERC-NNG	\$ 4.4852	9	\$ 0.3175	7.62%	\$ 0.5553	14.13%	\$ 4.7354	9	\$ 0.5098	12.06%	\$ 0.5781	13.90%	-5.28%	7
MERC-AL	\$ 2.7821	1	\$ (1.3856)	-33.25%	\$ (1.1477)	-29.21%	\$ 4.0326	5	\$ (0.1931)	-4.57%	\$ (0.1248)	-3.00%	-31.01%	9
CenterPoint Energy****	\$ 4.2050	7	\$ 0.0373	0.89%	\$ 0.2751	7.00%	\$ 4.1606	7	\$ (0.0650)	-1.54%	\$ 0.0032	0.08%	1.07%	3
Xcel Gas	\$ 4.0018	6	\$ (0.1659)	-3.98%	\$ 0.0719	1.83%	\$ 4.1455	6	\$ (0.0802)	-1.90%	\$ (0.0119)	-0.29%	-3.47%	5
<b>Weighted MN Average</b>	<b>\$ 4.1677</b>						<b>\$ 4.2256</b>						<b>-1.37%</b>	
<b>Non-Weighted MN Average</b>	<b>\$ 3.9299</b>						<b>\$ 4.1574</b>						<b>-5.47%</b>	
<b>Standard Deviation</b>	<b>\$ 0.4929</b>						<b>\$ 0.3426</b>							

\*\*\*NOTE: Great Plains' Crookston district merged with the North-4 district in February 2004 and became the North district.

\*\*\*\*NOTE: CenterPoint Energy's Northern area merged with the Viking area in July 2005 and became Northern and Viking area combined.

<sup>2</sup> The numbers reported in this table are from the Annual Automatic Adjustment filing submitted by each utility.

The numbers used and the detailed calculations are contained in Attachment G15.

Attachment G12a  
 Total System Gas Costs<sup>2</sup>

PGA System	PGA Recovered	Actual Total Gas Sales (MMBtu)	PGA Recovered (\$/MMBtu)	Rankings	Difference Btwn PGA Recovered And Mn Weighted Avg		Difference Btwn PGA Recovered And Mn Non-Weighted Avg		Actual Incurred Total Gas Cost	Actual Total Gas Sales (MMBtu)	Current-Period Actual Incurred Gas Cost (\$/MMBtu)	Rankings	Difference Btwn Current-Period Actual Incurred Gas Cost And Mn Weighted Avg		Difference Btwn Current-Period Actual Incurred Gas Cost And Mn Non-Weighted Avg		Actual Over/(Under) (\$/MMBtu)	Percent Over/(Under) Recovery
					\$/MMBtu	%	\$/MMBtu	%					\$/MMBtu	%	\$/MMBtu	%		
	(1)	(2)	(3) = (1)/(2)						(4)	(5)	(6) = (4)/(5)						(7) = (3) - (6)	(8) = (7)/(6)
Greater Minnesota Gas	\$ 5,188,933	1,119,685	\$ 4.6343	3	\$ (0.2725)	-5.55%	\$ (0.1531)	-3.20%	\$ 5,138,757	1,119,685	\$ 4.5895	1	\$ (0.3145)	-6.41%	\$ (0.3727)	-7.51%	\$ 0.0448	0.98%
Great Plains North***	\$ 8,424,527	1,737,965	\$ 4.8474	5	\$ (0.0595)	-1.21%	\$ 0.0599	1.25%	\$ 8,294,557	1,737,965	\$ 4.7726	3	\$ (0.1314)	-2.68%	\$ (0.1896)	-3.82%	\$ 0.0748	1.57%
Great Plains South	\$ 10,700,877	2,340,670	\$ 4.5717	2	\$ (0.3351)	-6.83%	\$ (0.2157)	-4.51%	\$ 11,031,735	2,340,670	\$ 4.7131	2	\$ (0.1909)	-3.89%	\$ (0.2491)	-5.02%	\$ (0.1414)	-3.00%
Interstate Gas	\$ 7,724,747	1,577,824	\$ 4.8958	7	\$ (0.0110)	-0.22%	\$ 0.1084	2.26%	\$ 7,741,293	1,577,824	\$ 4.9063	6	\$ 0.0024	0.05%	\$ (0.0558)	-1.12%	\$ (0.0105)	-0.21%
MERC-Consolidated	\$ 30,253,907	5,975,063	\$ 5.0634	8	\$ 0.1566	3.19%	\$ 0.2760	5.76%	\$ 31,485,901	5,975,063	\$ 5.2696	8	\$ 0.3656	7.46%	\$ 0.3074	6.20%	\$ (0.2062)	-3.91%
MERC-NNG	\$ 146,798,026	25,434,903	\$ 5.7715	9	\$ 0.8647	17.62%	\$ 0.9841	20.56%	\$ 144,054,501	25,434,903	\$ 5.6637	9	\$ 0.7597	15.49%	\$ 0.7015	14.14%	\$ 0.1079	1.90%
MERC-AL	\$ 359,513	95,704	\$ 3.7565	1	\$ (1.1503)	-23.44%	\$ (1.0309)	-21.53%	\$ 492,693	95,704	\$ 5.1481	7	\$ 0.2442	4.98%	\$ 0.1860	3.75%	\$ (1.3916)	-27.03%
CenterPoint Energy****	\$ 600,397,474	123,639,190	\$ 4.8560	6	\$ (0.0508)	-1.03%	\$ 0.0686	1.43%	\$ 593,338,747	123,639,190	\$ 4.7990	5	\$ (0.1050)	-2.14%	\$ (0.1632)	-3.29%	\$ 0.0571	1.19%
Xcel Gas	\$ 331,753,188	70,735,507	\$ 4.6901	4	\$ (0.2168)	-4.42%	\$ (0.0974)	-2.03%	\$ 339,351,066	70,735,507	\$ 4.7975	4	\$ (0.1065)	-2.17%	\$ (0.1647)	-3.32%	\$ (0.1074)	-2.24%
<b>Mn Weighted Average</b>	<b>\$ 1,141,601,192</b>	<b>232,656,511</b>	<b>\$ 4.9068</b>						<b>\$ 1,140,929,250</b>	<b>232,656,511</b>	<b>\$ 4.9039</b>						<b>\$ 0.0029</b>	<b>0.06%</b>
<b>Mn Non-Weighted Average</b>			<b>\$ 4.7874</b>								<b>\$ 4.9621</b>						<b>\$ (0.1747)</b>	<b>-3.52%</b>
<b>Standard Deviation</b>			<b>\$ 0.5252</b>								<b>\$ 0.3382</b>							

\$5.3003

\*\*\*NOTE: Great Plains' Crookston district merged with the North-4 district in February 2004 and became the North district.  
 \*\*\*\*NOTE: CenterPoint Energy's Northern area merged with the Viking area in July 2005 and became Northern and Viking area combined.  
 2 The numbers reported in this table are from the Annual Automatic Adjustment filing submitted by each utility.  
 The numbers used and the detailed calculations tie to Attachment G15 and G16.

**AVERAGE RESIDENTIAL BILLS ANALYSIS**  
**ATTACHMENT G13 (SUPPORTING GRAPH 1, TABLE G4 AND TABLE G7)**  
July 1, 2014 - June 30, 2015

Company	Tariff Rate Designation	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)		
		2013-2014	2014-2015					2013-2014	2014-2015					2013-2014	2014-2015				
		Annual Customer Charge (\$)	Annual Customer Charge (\$)	\$ Diff (2) - (1)	% Diff (3)/(1)	Average Combined Commodity and Demand Charges (\$/Mcf)	Average Combined Commodity and Demand Charges (\$/Mcf)	\$ Diff (6) - (5)	% Diff (7)/(5)	Average Non-Gas Commodity Margin (\$/Mcf)	Average Non-Gas Commodity Margin (\$/Mcf)	\$ Diff (10) - (9)	% Diff (11)/(9)	Average True-Up (\$/Mcf)	Average True-Up (\$/Mcf)	\$ Diff (14) - (13)	% Diff (15)/(13)		
Greater Minnesota Gas	RS-1	\$102.00	\$102.00	\$0.00	0.00%	\$6.0543	\$4.6295	(\$1.4247)	-23.53%	\$4.4433	\$4.4433	\$0.0000	0.00%	\$0.0445	\$0.0228	(\$0.0217)	-48.71%		
Great Plains North	N60	\$78.00	\$78.00	\$0.00	0.00%	\$6.3993	\$5.2513	(\$1.1480)	-17.94%	\$1.7864	\$1.7867	\$0.0003	0.01%	\$0.4645	\$0.9805	\$0.5160	111.10%		
Great Plains South	S60	\$78.00	\$78.00	\$0.00	0.00%	\$5.4795	\$4.9237	(\$0.5558)	-10.14%	\$1.4024	\$1.4027	\$0.0003	0.02%	\$0.0756	\$0.8032	\$0.7276	962.65%		
MERC-CON	3H801/3HS01	\$108.55	\$114.82	\$6.27	5.78%	\$5.4168	\$4.9814	(\$0.4354)	-8.04%	\$2.1022	\$2.2169	\$0.1147	5.46%	(\$0.2572)	\$0.6757	\$0.9329	-362.76%		
MERC-NNG	01 / 2HS012HS	\$108.55	\$114.82	\$6.27	5.78%	\$6.2139	\$5.7637	(\$0.4502)	-7.25%	\$2.1022	\$2.2169	\$0.1147	5.46%	(\$0.0033)	\$0.3922	\$0.3955	-11865.00%		
IPL/MERC-AL	10	\$60.00	\$60.00	\$0.00	0.00%	\$4.8527	\$4.9678	\$0.1151	2.37%	\$1.9769	\$2.0109	\$0.0340	1.72%	\$0.2228	(\$0.3517)	(\$0.5745)	-257.89%		
CenterPoint Energy	Residential	\$99.51	\$108.45	\$8.94	8.98%	\$5.4134	\$4.7189	(\$0.6945)	-12.83%	\$2.0034	\$1.9849	(\$0.0185)	-0.92%	\$0.0330	\$0.3398	\$0.3068	928.71%		
Xcel Gas	101	\$108.00	\$108.00	\$0.00	0.00%	\$5.4210	\$4.8396	(\$0.5814)	-10.73%	\$1.8591	\$1.8591	\$0.0000	0.00%	(\$0.0048)	\$0.5636	\$0.5684	-11842.01%		
<b>MN NON-WEIGHTED AVERAGE</b>		\$92.83	\$95.51	\$2.69	2.89%	\$5.78	\$5.01	(\$0.7661)	-13.26%	\$2.21	\$2.24	\$0.0307	1.39%	\$0.0254	\$0.4283	\$0.4029	1586.32%		

**AVERAGE RESIDENTIAL BILLS ANALYSIS**  
**ATTACHMENT G13 (SUPPORTING GRAPH 1, TABLE G4 AND TABLE G7)**  
**July 1, 2014 - June 30, 2015**

Company	Tariff Rate Designation	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)	(25)	(26)	(27)	(28)	(29)	(30)	(31)	(32)		
		2013-2014	2014-2015					2013-2014	2014-2015					2013-2014	2014-2015				
		Average Total Cost of Gas (\$/Mcf) (6)+(10)+(14)	Average Total Cost of Gas (\$/Mcf) (6)+(10)+(14)	\$ Diff (18) - (17)	% Diff (19)/(17)	Average Use (Mcf)	Average Use (Mcf)	Mcf Diff (22) - (21)	% Diff (23)/(21)	Total Average Customer Use (Mcf)	Total Average Customer Use (Mcf)	Mcf Diff (26) - (25)	% Diff (27)/(25)	Average Number of Customers	Average Number of Customers	Customer Diff (30) - (29)	% Diff (31)/(29)		
Greater Minnesota Gas	RS-1	\$10.5420	\$9.0956	(\$1.4464)	-13.72%	8.32	7.25	(1.07)	-12.83%	99.80	87.00	(12.80)	-12.83%	4,643	5,137	493.58	10.63%		
Great Plains North	RS-1	\$8.6502	\$8.0185	(\$0.6317)	-7.30%	7.58	6.69	(0.88)	-11.66%	90.90	80.30	(10.60)	-11.66%	8,120	8,181	61.08	0.75%		
Great Plains South	RS-1	\$6.9575	\$7.1296	\$0.1721	2.47%	7.13	6.03	(1.09)	-15.32%	85.50	72.40	(13.10)	-15.32%	9,937	9,997	59.33	0.60%		
MERC-CON	GS	\$7.2618	\$7.8741	\$0.6122	8.43%	8.40	7.29	(1.12)	-13.28%	100.84	87.44	(13.39)	-13.28%	28,479	29,323	844.08	2.96%		
MERC-NNG	GSTP	\$8.3128	\$8.3728	\$0.0600	0.72%	8.48	7.45	(1.03)	-12.15%	101.71	89.36	(12.35)	-12.15%	162,682	164,399	1,716.92	1.06%		
IPL/MERC-AL		\$7.0524	\$6.6269	(\$0.4255)	-6.03%	7.56	7.61	0.06	0.77%	90.67	91.37	0.70	0.77%	9,303	9,176	(127.67)	-1.37%		
CenterPoint Energy	Residential	\$7.4498	\$7.0437	(\$0.4061)	-5.45%	8.80	7.70	(1.10)	-12.51%	105.60	92.39	(13.21)	-12.51%	752,407	760,426	8,018.75	1.07%		
Xcel Gas	Res	\$7.2753	\$7.2623	(\$0.0130)	-0.18%	8.49	7.42	(1.07)	-12.61%	101.85	89.00	(12.84)	-12.61%	407,523	411,200	3,677.75	0.90%		
<b>MN NON-WEIGHTED AVERAGE</b>		<b>\$8.0105</b>	<b>\$7.6779</b>	<b>(\$0.3325)</b>	<b>-4.15%</b>	<b>8.21</b>	<b>7.18</b>	<b>(1.03)</b>	<b>-12.60%</b>	<b>98.57</b>	<b>86.16</b>	<b>(12.42)</b>	<b>-12.60%</b>	<b>172,888</b>	<b>174,730</b>	<b>1,842.38</b>	<b>1.07%</b>		

AVERAGE RESIDENTIAL BILLS ANALYSIS  
ATTACHMENT G13 (SUPPORTING GRAPH 1, TABLE G4 AND TABLE G7)  
July 1, 2014 - June 30, 2015

Company	Tariff Rate Designation	(33)	(34)	(35)	(36)	(37)	(38)	(39)	(40)	(41)	(42)	(43)	(44)
		2013-2014	2014-2015			2013-2014	2014-2015			2013-2014	2014-2015		
		Average Total Monthly Bill (\$) [(2)/12]+[(18)*(22)]	Average Total Monthly Bill (\$) [(2)/12]+[(18)*(22)]	\$ Diff (34) - (33)	% Diff (35)/(33)	Average Total Annual Bill (\$) (2)+[(18)*(26)]	Average Total Annual Bill (\$) (2)+[(18)*(26)]	\$ Diff (38) - (37)	% Diff (39)/(37)	Average Total Annual Bill at 140 Mcf/Year (\$) (1)+[(18)*140]	Average Total Annual Bill at 140 Mcf/Year (\$) (1)+[(18)*140]	\$ Diff (42) - (41)	% Diff (43)/(41)
Greater Minnesota Gas	RS-1	\$96.17	\$74.44	-\$21.73	-\$0.23	\$1,154.10	\$893.32	-\$260.77	-\$0.23	\$1,577.89	\$1,375.39	-\$202.50	-\$0.13
Great Plains North	RS-1	\$72.03	\$60.16	-\$11.87	-\$0.16	\$864.30	\$721.88	-\$142.42	-\$0.16	\$1,289.03	\$1,200.58	-\$88.44	-\$0.07
Great Plains South	RS-1	\$56.07	\$49.52	-\$6.56	-\$0.12	\$672.87	\$594.18	-\$78.68	-\$0.12	\$1,052.05	\$1,076.15	\$24.09	\$0.02
MERC-CON	GS	\$70.07	\$66.95	-\$3.12	-\$0.04	\$840.80	\$803.35	-\$37.45	-\$0.04	\$1,125.21	\$1,217.19	\$91.99	\$0.08
MERC-NNG	GSTP	\$79.50	\$71.92	-\$7.59	-\$0.10	\$954.04	\$862.99	-\$91.05	-\$0.10	\$1,272.34	\$1,287.02	\$14.67	\$0.01
IPL/MERC-AL		\$58.29	\$55.46	-\$2.83	-\$0.05	\$699.44	\$665.51	-\$33.94	-\$0.05	\$1,047.33	\$987.77	-\$59.56	-\$0.06
CenterPoint Energy	Residential	\$73.85	\$63.27	-\$10.58	-\$0.14	\$886.22	\$759.21	-\$127.01	-\$0.14	\$1,142.48	\$1,094.56	-\$47.92	-\$0.04
Xcel Gas	Res	\$70.75	\$62.86	-\$7.88	-\$0.11	\$848.98	\$754.37	-\$94.61	-\$0.11	\$1,126.54	\$1,124.72	-\$1.82	\$0.00
<b>MN NON-WEIGHTED AVERAGE</b>		\$73.57	\$63.07	-\$10.50	-14.27%	\$882.88	\$756.85	-\$126.03	-14.27%	\$1,214.29	\$1,170.42	-\$43.87	-3.61%

Attachment G14  
Daily Delivery Variance Charges (DDVC)  
Supporting Tables G12 and G13

Docket No. G999/AA-15-612  
DOC Attachment 14  
Page 1 of 1

Source IR 7

<b>DDVC Volumes (MMbtu)</b>			
Company	Positive & Negative	punitive	total
Greater Minnesota	17,090	-	17,090
Great Plains	24,036	-	24,036
Interstate	2,296	-	2,296
CPE	118,242	-	118,242
MERC-CON	-	-	-
Xcel Gas-MN	31,911	-	31,911
MERC-AL	150	-	-
MERC-NNG	22,887	-	22,887
MN Totals	216,612	-	216,462

In its response, GMG's total vols. of 7,580 mcf do not agree with the detail.

<b>DDVC (\$)</b>				<b>Percent of Total Costs Incurred</b>			
Company	Positive & Negative	punitive	total	Actual Incurred Gas Cost (\$)	Positive & Negative	punitive	total
Greater Minnesota	\$140	\$0	\$140	\$5,138,756	0.0027%	0.0000%	0.0027%
Great Plains	\$4,095	\$0	\$4,095	\$19,326,292	0.0212%	0.0000%	0.0212%
Interstate	\$1,293	\$0	\$1,293	\$7,741,294	0.0167%	0.0000%	0.0167%
CPE	\$53,882	\$0	\$53,882	\$593,338,748	0.0091%	0.0000%	0.0091%
MERC-CON	\$0	\$0	\$0	\$31,485,900	0.0000%	0.0000%	0.0000%
Xcel Gas-MN	\$40,865	\$0	\$40,865	\$339,351,067	0.0120%	0.0000%	0.0120%
MERC-AL	\$38	\$0	\$38	\$492,694	0.0077%	0.0000%	0.0077%
MERC-NNG	\$21,563	\$0	\$21,563	\$144,054,499	0.0150%	0.0000%	0.0150%
MN Totals	\$121,876	\$0	\$121,876	\$1,140,929,250	0.0107%	0.0000%	0.0107%

Source: IR 7

Note: Xcel's and GP's charges are overrun charges on the Viking pipeline system rather than DDVCs on NNG's pipeline system.



**Attachment G15**  
**TOTAL COMMODITY COSTS 1**  
**Rate Class: ALL CLASSES**

PGA System	Actual Total Gas Sales (Mcf) (1)	Recovered Annual PGA Commodity Costs (\$) (2)	Recovered PGA Commodity Rate (\$/Mcf) (3) = (2)/(1)	Actual Total Gas Sales (Mcf) (4)	Actual Total Annual Commodity Costs (\$) (5)	Actual Annual Commodity Rate (\$/Mcf) (6) = (5)/(4)	% Change (7) = (3-6)/(6)
Greater Minnesota	1,119,685	\$ 4,419,111	\$ 3.9467	1,119,685	\$ 4,411,446	\$ 3.9399	0.17%
Great Plains North	1,737,965	\$ 6,617,019	\$ 3.8073	1,737,965	\$ 6,532,680	\$ 3.7588	1.29%
Great Plains South	2,340,670	\$ 8,868,039	\$ 3.7887	2,340,670	\$ 9,285,525	\$ 3.9670	-4.50%
Interstate Gas	1,577,824	\$ 6,271,869	\$ 3.9750	1,577,824	\$ 6,253,207	\$ 3.9632	0.30%
MERC-Consolidated***	5,975,063	\$ 26,152,111	\$ 4.3769	5,975,063	\$ 28,161,955	\$ 4.7132	-7.14%
MERC-NNG***	25,434,903	\$ 114,080,223	\$ 4.4852	25,434,903	\$ 120,445,289	\$ 4.7354	-5.28%
MERC-AL***	95,704	\$ 266,260	\$ 2.7821	95,704	\$ 385,933	\$ 4.0326	-31.01%
CenterPoint Energy****	123,639,190	\$ 519,899,167	\$ 4.2050	123,639,190	\$ 514,412,099	\$ 4.1606	1.07%
Xcel Gas	70,735,507	\$ 283,069,001	\$ 4.0018	70,735,507	\$ 293,231,052	\$ 4.1455	-3.47%
<b>MN Weighted Average</b>	232,656,511	\$ 969,642,800	\$ 4.1677	232,656,511	\$ 983,119,186	\$ 4.2256	-1.37%
<b>MN Non-Weighted Average</b>		\$	\$ 3.9299		\$	\$ 4.1574	-5.47%

\*\*\*NOTE: MERC's four PGA systems (NMU, PNG, GL, VIK) were consolidated into two PGA systems (MERC-CON and MERC-NNG) effective July 1, 2013.

\*\*\*\*NOTE: CenterPoint Energy's Northern area merged with the Viking area in July 2005 and became Northern and Viking area combined.

1 Recovered and Actual Annual PGA Commodity Costs (columns 2 and 5) are from the Annual True-Up filings submitted by each utility.

**Attachment G16**  
**Current-Year Total System Demand and Commodity Costs<sup>1</sup>**  
**Rate Class: ALL CLASSES**

PGA System	PGA Recovered	Actual Total Gas Sales (MMBtu)	PGA Recovered (\$/MMBtu)	Rankings	Actual Incurred Total Gas Cost	Actual Total Gas Sales (MMBtu)	Current-Period Actual Incurred Gas Cost (\$/MMBtu)	Rankings	Actual Over(Under) (\$/MMBtu)	Percent Over(Under) Recovery
	(1)	(2)	(3) = (1)/(2)		(4)	(5)	(6) = (4)/(5)		(7) = (3) - (6)	(8) = (7)/(6)
Greater Minnesota	\$ 5,188,933	1,119,685	\$ 4.6343	3	\$ 5,138,757	1,119,685	\$ 4.5895	1	\$ 0.0448	0.98%
Great Plains North***	\$ 8,424,527	1,737,965	\$ 4.8474	5	\$ 8,294,557	1,737,965	\$ 4.7726	3	\$ 0.0748	1.57%
Great Plains South	\$ 10,700,877	2,340,670	\$ 4.5717	2	\$ 11,031,735	2,340,670	\$ 4.7131	2	\$ (0.1414)	-3.00%
Interstate Gas	\$ 7,724,747	1,577,824	\$ 4.8958	7	\$ 7,741,293	1,577,824	\$ 4.9063	6	\$ (0.0105)	-0.21%
MERC-Consolidated	\$ 30,253,907	5,975,063	\$ 5.0634	8	\$ 31,485,901	5,975,063	\$ 5.2696	8	\$ (0.2062)	-3.91%
MERC-NNG	\$ 146,798,026	25,434,903	\$ 5.7715	9	\$ 144,054,501	25,434,903	\$ 5.6637	9	\$ 0.1079	1.90%
MERC-AL	\$ 359,513	95,704	\$ 3.7565	1	\$ 492,693	95,704	\$ 5.1481	7	\$ (1.3916)	-27.03%
CenterPoint Energy	\$ 600,397,474	123,639,190	\$ 4.8560	6	\$ 593,338,747	123,639,190	\$ 4.7990	5	\$ 0.0571	1.19%
Xcel Gas	\$ 331,753,188	70,735,507	\$ 4.6901	4	\$ 339,351,066	70,735,507	\$ 4.7975	4	\$ (0.1074)	-2.24%
<b>Mn Weighted Average</b>	<b>\$ 1,141,601,192</b>	<b>232,656,511</b>	<b>\$ 4.9068</b>		<b>\$ 1,140,929,250</b>	<b>232,656,511</b>	<b>\$ 4.9039</b>		<b>\$ 0.0029</b>	<b>0.06%</b>
<b>Mn Non-Weighted Average</b>			<b>\$ 4.7874</b>				<b>\$ 4.9621</b>		<b>\$ (0.1747)</b>	<b>-3.52%</b>
<b>Standard Deviation</b>			<b>0.5252</b>				<b>0.3382</b>			

\*\*\*NOTE: Great Plains' Crookston district merged with the North-4 district in February 2004 and became the North district.

\*\*\*\*NOTE: CenterPoint Energy's Northern area merged with the Viking area in July 2005 and became NNG and Vik. area combined.

<sup>1</sup> The numbers reported in this table are from the true ups filing submitted by each utility.  
The numbers used and the detailed calculations are contained in Attachment G12a.

**Attachment G17**  
**Current-Year Total Demand and Commodity Costs<sup>1</sup>**  
**Rate Class: FIRM**

PGA System	PGA Recovered	Actual Total Gas Sales (MMBtu)	PGA Recovered (\$/MMBtu)	Rankings	Actual Incurred Total Gas Cost	Actual Total Gas Sales (MMBtu)	Current-Period Actual Incurred Gas Cost (\$/MMBtu)	Rankings	Actual Over(Under) (\$/MMBtu)	Percent Over(Under) Recovery
	(1)	(2)	(3) = (1)/(2)		(4)	(5)	(6) = (4)/(5)		(7) = (3) - (6)	(8) = (7)/(6)
Greater Minnesota	\$ 4,560,300	970,070	\$ 4.7010	2	\$ 4,507,723	970,070	\$ 4.6468	1	\$ 0.0542	1.17%
Great Plains North	\$ 6,174,574	1,148,654	\$ 5.3755	8	\$ 6,079,291	1,148,654	\$ 5.2925	6	\$ 0.0830	1.57%
Great Plains South	\$ 7,111,973	1,412,020	\$ 5.0367	5	\$ 7,249,335	1,412,020	\$ 5.1340	5	\$ (0.0973)	-1.89%
Interstate Gas *****	\$ 6,438,455	1,267,029	\$ 5.0815	6	\$ 6,337,584	1,267,029	\$ 5.0019	4	\$ 0.0796	1.59%
MERC-Consolidated*** 2	\$ 25,922,053	4,976,950	\$ 5.2084	7	\$ 26,642,285	4,976,950	\$ 5.3531	7	\$ (0.1447)	-2.70%
MERC-NNG*** 2	\$ 135,481,070	22,871,938	\$ 5.9235	9	\$ 131,671,959	22,871,938	\$ 5.7569	9	\$ 0.1665	2.89%
MERC-AL***	\$ 294,114	72,559	\$ 4.0534	1	\$ 399,181	72,559	\$ 5.5015	8	\$ (1.4480)	-26.32%
CenterPoint Energy*****	\$ 530,038,101	107,287,679	\$ 4.9403	4	\$ 523,929,508	107,287,679	\$ 4.8834	2	\$ 0.0569	1.17%
Xcel Gas****	\$ 288,455,166	59,811,508	\$ 4.8227	3	\$ 293,435,914	59,811,508	\$ 4.9060	3	\$ (0.0833)	-1.70%
<b>Mn Weighted Average</b>	<b>\$ 1,004,475,806</b>	<b>199,818,407</b>	<b>\$ 5.0269</b>		<b>\$ 1,000,252,780</b>	<b>199,818,407</b>	<b>\$ 5.0058</b>		<b>\$ 0.0211</b>	<b>0.42%</b>
<b>Mn Non-Weighted Average</b>			<b>\$ 5.0159</b>				<b>\$ 5.1640</b>		<b>\$ (0.1481)</b>	<b>-2.87%</b>

\*\*\*NOTE: MERC's four PGA systems (NMU, PNG, GL, VIK) were consolidated into two PGA systems (MERC-CON and MERC-NNG) effective July 1, 2013.

\*\*\*\*NOTE: Xcel Gas considers the LGS/Demand Billed customers Firm customers.

\*\*\*\*\*NOTE: CenterPoint Energy's Northern area merged with the Viking area in July 2005.

\*\*\*\*\*NOTE: Subtracted Interstate's company use & interdepartmental from firm volumes.

1 The numbers reported in this table are from the true up filings and utility AAA reports.

2 MERC's Interruptible numbers include the Joint customers since Joint customers are not considered firm on the peak day.

This Table was prepared as requested by Commission Staff (See Commission staff briefing papers of November 8, 2001 in Docket No. E,G999/AA-00-1027, page 31). Please keep in mind that the comparisons between the regulated utilities will not be an "apples-to-apples" comparison as each utility has different rate structures and tariffs.

**Attachment G18**  
**Current-Year Total Costs<sup>1</sup>**  
**Rate Class: INTERRUPTIBLE**

PGA System	PGA Recovered	Actual Total Gas Sales (MMBtu)	PGA Recovered (\$/MMBtu)	Rankings	Actual Incurred Total Gas Cost	Actual Total Gas Sales (MMBtu)	Current-Period Actual Incurred Gas Cost (\$/MMBtu)	Rankings	Actual Over(Under) (\$/MMBtu)	Percent Over(Under) Recovery
	(1)	(2)	(3) = (1)/(2)		(4)	(5)	(6) = (4)/(5)		(7) = (3) - (6)	(8) = (7)/(6)
Greater Minnesota	\$ 628,633	149,615	\$ 4.2017	6	\$ 631,034	149,615	\$ 4.2177	5	\$ (0.0160)	-0.38%
Great Plains North***	\$ 2,249,953	589,311	\$ 3.8179	2	\$ 2,215,266	589,311	\$ 3.7591	1	\$ 0.0589	1.57%
Great Plains South	\$ 3,588,904	928,650	\$ 3.8646	3	\$ 3,782,400	928,650	\$ 4.0730	3	\$ (0.2084)	-5.12%
Interstate Gas	\$ 1,286,292	310,795	\$ 4.1387	5	\$ 1,403,709	310,795	\$ 4.5165	7	\$ (0.3778)	-8.36%
MERC-Consolidated *	\$ 4,331,854	998,113	\$ 4.3400	8	\$ 4,843,616	998,113	\$ 4.8528	9	\$ (0.5127)	-10.57%
MERC-NNG *	\$ 11,316,956	2,562,965	\$ 4.4156	9	\$ 12,382,542	2,562,965	\$ 4.8313	8	\$ (0.4158)	-8.61%
MERC-AL *	\$ 65,399	23,145	\$ 2.8256	1	\$ 93,512	23,145	\$ 4.0403	2	\$ (1.2146)	-30.06%
CenterPoint Energy*****	\$ 70,359,373	16,351,511	\$ 4.3029	7	\$ 69,409,239	16,351,511	\$ 4.2448	6	\$ 0.0581	1.37%
Xcel Gas****	\$ 43,298,022	10,924,000	\$ 3.9636	4	\$ 45,915,152	10,924,000	\$ 4.2031	4	\$ (0.2396)	-5.70%
<b>Mn Weighted Average</b>	<b>\$ 137,125,386</b>	<b>32,838,104</b>	<b>\$ 4.1758</b>		<b>\$ 140,676,470</b>	<b>32,838,104</b>	<b>\$ 4.2839</b>		<b>\$ (0.1081)</b>	<b>-2.52%</b>
<b>Mn Non-Weighted Average</b>			<b>\$ 3.9856</b>				<b>\$ 4.3043</b>		<b>\$ (0.3187)</b>	<b>-7.40%</b>

\*NOTE: MERC's Interruptible numbers include the joint customers since Joint customers are not considered firm on the peak day.  
\*\*\*NOTE: Great Plains' Crookston district merged with the North-4 district in February 2004 and became the North district.  
\*\*\*\*NOTE: Xcel Gas considers the LGS/Demand Billed customers Firm customers.  
\*\*\*\*\*NOTE: CenterPoint Energy's Northern area merged with the Viking area in July 2005 and became NNG and Vik. area combined.  
1 The numbers reported in this table are from the true up filings and utility AAA reports.

This Table was prepared as requested by Commission Staff (See Commission staff briefing papers of November 8, 2001 in Docket No. E, G999/AA-00-1027, page 31).

Attachment G19  
Lost-and-Unaccounted-for Gas  
Supporting Table G19

SOURCE: IR 10

Utility Name	Purchased Gas (Mcf)	Purchased Gas Adjustments (Mcf)	Total Gas Purchased (Mcf)	Customer Use Gas (Mcf)	Company Use Gas (Mcf)	Consumed Gas Adjustments (Mcf)	Total Consumed Gas (Mcf)	Lost and Unaccounted Gas (Mcf)	Percent Unaccounted for Gas lost (found)
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
			(3)=(1)+(2)				(7)=(4)+(5)+(6)	(8)=(3)-(7)	(9)=[(8)/(3)]
Greater Minnesota	1,139,450	0	1,139,450	1,119,685	10,627	0	1,130,312	9,138	0.80%
Great Plains total co. #	4,168,378	(64,364)	4,104,014	4,082,668	0	(61,903)	4,020,765	83,249	2.03%
Great Plains North								44,931	1.09%
Great Plains South								38,318	0.93%
IPL/MERC-AL***	1,698,506	(20,924)	1,677,582	1,674,429	902	0	1,675,331	2,251	0.13%
MERC-Consolidated **	6,473,502	(144,291)	6,329,211	5,975,062	0	14,392	5,989,454	339,757	5.37%
MERC-NNG **	25,396,714	(165,873)	25,230,841	25,434,903	0	(6,477)	25,428,426	(197,585)	-0.78%
CenterPoint Energy	125,418,874	(228,689)	125,190,185	123,639,196	111,918	0	123,751,114	1,439,071	1.15%
Xcel Gas Mn jurisdiction *	72,284,036	232,205	72,516,241	70,726,566	8,942	0	70,735,508	1,780,733	2.46%
Statewide Totals	236,579,460	(391,936)	236,187,524	232,652,509	132,389	(53,988)	232,730,910	3,539,863	1.50%

# Great Plains states that its Company use gas volumes are included in the Customer Use Gas column. GP's IR 16 states volumes represent estimated calendar month sales and the true-up volumes represent billed sales volumes.

\* Xcel's LNG & propane purchases reported in Purchased Gas Adjustments, column (2).

\*\* MERC's company use gas volumes (19,238 Dth for MERC-CON & 11,603 Dth for MERC-NNG) are subtracted from the Purchased Gas, column (1).

MERC-CON's Purchased Gas adjusted for GLGT's metering error for the period February through July 2014 per response to revised IR 10.

MERC-NNG's Consumer Use Gas adjusted for Deer River customers' billing errors for the period July 2013 to October 2014 per response to revised IR 10.

\*\*\* Reflects 10 months IPL and 2 months MERC-AL.

Source:	Firm Design Day Demand (Mcf) (1)	Firm Design Day Deliverability w/ Peak-Shaving (Mcf) (2)	Actual Peak Day Date (Mcf) (3)	Design-Day Customer Numbers (4)	Actual Firm Peak Day Usage (Mcf) (5)	Annual Firm Throughput (Mcf) (6)	Design-Day Use Per Customer (7)	Peak-Day Use Per Design-Day Customer (8)	Annual Firm Load Factor (9)	Reserve Margin (10)	Annual Firm Requirement % (11)
	IR#2	IR#2	IR#3	IR#2	IR#3	IR#2	(7)=(1)/(4)	(8)=(1)/(5)	(9)=((6)/365)/(5)	(10)=((2)-(1))/(1)	(11)=(5)/(2)
Greater Minnesota	8,969	10,859	02/18/15	5,900	8,396	970,070	1.5202	1.0682	31.65%	21.07%	77.3%
Great Plains North District #	14,812	15,500	02/18/15	11,682	13,868	1,424,916	1.2679	1.0681	28.15%	4.64%	89.5%
Great Plains South District	16,312	17,145	01/04/15	11,842	15,231	1,412,020	1.3775	1.0710	25.40%	5.11%	88.8%
IPL/MERC-AL	12,915	14,219	01/07/15	10,690	10,279	1,267,931	1.2081	1.2564	33.79%	10.10%	72.3%
CenterPoint Energy	1,290,000	1,344,418	02/18/15	830,002	959,660	107,321,500	1.5542	1.3442	30.64%	4.22%	71.4%
MERC-CON	48,706	51,459	01/04/15	34,397	45,751	4,807,824	1.4160	1.0646	28.79%	5.65%	88.9%
Xcel Gas (Mn JURISDICTION)	715,945	761,354	01/12/15	446,409	530,339	66,702,506	1.6038	1.3500	34.46%	6.34%	69.7%
MERC-NNG	261,002	266,385	01/04/15	178,388	193,753	21,803,847	1.4631	1.3471	30.83%	2.06%	72.7%
<b>Totals</b>	<b>2,368,661</b>	<b>2,481,339</b>		<b>1,529,310</b>	<b>1,777,277</b>	<b>205,710,614</b>	<b>1.5488</b>	<b>1.3327</b>	<b>31.71%</b>	<b>4.76%</b>	<b>71.6%</b>
<b>TOTAL prior year</b>		<u>2,430,901</u>									
change from prior year		50,438									

# The North District includes Wahpeton, North Dakota.  
NOTE: Xcel's reports Mn Jurisdiction in IR 2 and 3 and MN + ND in IR 4.

## CERTIFICATE OF SERVICE

I, Sharon Ferguson, hereby certify that I have this day, served copies of the following document on the attached list of persons by electronic filing, certified mail, e-mail, or by depositing a true and correct copy thereof properly enveloped with postage paid in the United States Mail at St. Paul, Minnesota.

**Minnesota Department of Commerce  
Review Of 2014-2015 Annual Automatic Adjustment Reports – PGA and True-Up**

**Docket No. G999/AA-15-612; G004/AA-15-794; G001/AA-15-796; G022/AA-15-797; G008/AA-15-800; G011/AA-15-801; G011/AA-15-802; G011/AA-15-803; and G002/AA-15-809**

Dated this **1<sup>st</sup>** day of **July 2016**

**/s/Sharon Ferguson**

First Name	Last Name	Email	Company Name	Address	Delivery Method	View Trade Secret	Service List Name
Tamie A.	Aberle	tamie.aberle@mdu.com	Great Plains Natural Gas Co.	400 North Fourth Street  Bismarck, ND 585014092	Electronic Service	No	OFF_SL_15-612_AA-15-612
Julia	Anderson	Julia.Anderson@ag.state.mn.us	Office of the Attorney General-DOC	1800 BRM Tower 445 Minnesota St St. Paul, MN 551012134	Electronic Service	Yes	OFF_SL_15-612_AA-15-612
Kristine	Anderson	kanderson@greatermngas.com	Greater Minnesota Gas, Inc.	202 S. Main Street  Le Sueur, MN 56058	Electronic Service	No	OFF_SL_15-612_AA-15-612
Marie	Doyle	marie.doyle@centerpointenergy.com	CenterPoint Energy	800 LaSalle Avenue P O Box 59038 Minneapolis, MN 554590038	Electronic Service	No	OFF_SL_15-612_AA-15-612
Sharon	Ferguson	sharon.ferguson@state.mn.us	Department of Commerce	85 7th Place E Ste 500  Saint Paul, MN 551012198	Electronic Service	No	OFF_SL_15-612_AA-15-612
Nicolle	Kupser	nkupser@greatermngas.com	Greater Minnesota Gas, Inc.	202 South Main Street P.O. Box 68 Le Sueur, MN 56058	Electronic Service	No	OFF_SL_15-612_AA-15-612
Amber	Lee	ASLee@minnesotaenergyresources.com	Minnesota Energy Resources Corporation	2665 145th St W  Rosemount, MN 55068	Electronic Service	No	OFF_SL_15-612_AA-15-612
Paul J.	Lehman	paul.lehman@xcelenergy.com	Xcel Energy	414 Nicollet Mall  Minneapolis, MN 554011993	Electronic Service	No	OFF_SL_15-612_AA-15-612
John	Lindell	agorud.ecf@ag.state.mn.us	Office of the Attorney General-RUD	1400 BRM Tower 445 Minnesota St St. Paul, MN 551012130	Electronic Service	Yes	OFF_SL_15-612_AA-15-612
Samantha	Norris	samanthanorris@alliantenergy.com	Interstate Power and Light Company	200 1st Street SE PO Box 351  Cedar Rapids, IA 524060351	Electronic Service	No	OFF_SL_15-612_AA-15-612



First Name	Last Name	Email	Company Name	Address	Delivery Method	View Trade Secret	Service List Name
SaGonna	Thompson	Regulatory.records@xcelenergy.com	Xcel Energy	414 Nicollet Mall FL 7 Minneapolis, MN 554011993	Electronic Service	No	OFF_SL_15-612_AA-15-612
Daniel P	Wolf	dan.wolf@state.mn.us	Public Utilities Commission	121 7th Place East Suite 350 St. Paul, MN 551012147	Electronic Service	Yes	OFF_SL_15-612_AA-15-612

First Name	Last Name	Email	Company Name	Address	Delivery Method	View Trade Secret	Service List Name
Tamie A.	Aberle	tamie.aberle@mdu.com	Great Plains Natural Gas Co.	400 North Fourth Street Bismarck, ND 585014092	Electronic Service	No	OFF_SL_15-794_AA-15-794
Julia	Anderson	Julia.Anderson@ag.state.mn.us	Office of the Attorney General-DOC	1800 BRM Tower 445 Minnesota St St. Paul, MN 551012134	Electronic Service	Yes	OFF_SL_15-794_AA-15-794
Sharon	Ferguson	sharon.ferguson@state.mn.us	Department of Commerce	85 7th Place E Ste 500  Saint Paul, MN 551012198	Electronic Service	No	OFF_SL_15-794_AA-15-794
John	Lindell	agorud.ecf@ag.state.mn.us	Office of the Attorney General-RUD	1400 BRM Tower 445 Minnesota St St. Paul, MN 551012130	Electronic Service	Yes	OFF_SL_15-794_AA-15-794
Brian	Meloy	brian.meloy@stinson.com	Stinson, Leonard, Street LLP	150 S 5th St Ste 2300  Minneapolis, MN 55402	Electronic Service	No	OFF_SL_15-794_AA-15-794
Daniel P	Wolf	dan.wolf@state.mn.us	Public Utilities Commission	121 7th Place East Suite 350 St. Paul, MN 551012147	Electronic Service	Yes	OFF_SL_15-794_AA-15-794

First Name	Last Name	Email	Company Name	Address	Delivery Method	View Trade Secret	Service List Name
Christopher	Anderson	canderson@allete.com	Minnesota Power	30 W Superior St  Duluth, MN 558022191	Electronic Service	No	OFF_SL_15-796_AA-15-796
Julia	Anderson	Julia.Anderson@ag.state.mn.us	Office of the Attorney General-DOC	1800 BRM Tower 445 Minnesota St St. Paul, MN 551012134	Electronic Service	Yes	OFF_SL_15-796_AA-15-796
William A.	Blazar	bblazar@mnchamber.com	Minnesota Chamber Of Commerce	Suite 1500 400 Robert Street North St. Paul, MN 55101	Electronic Service	No	OFF_SL_15-796_AA-15-796
City	Clerk	sschulte@ci.albertlea.mn.us	City of Albert Lea	221 E Clark St  Albert Lea, MN 56007	Electronic Service	No	OFF_SL_15-796_AA-15-796
Daniel R	Culhane	DanielCulhane@alliantenergy.com	Alliant Energy Corporate Services, Inc.	4902 North Biltmore Ln  Madison, WI 53718-2148	Electronic Service	No	OFF_SL_15-796_AA-15-796
Ian	Dobson	ian.dobson@ag.state.mn.us	Office of the Attorney General-RUD	Antitrust and Utilities Division 445 Minnesota Street, BRM Tower St. Paul, MN 55101	Electronic Service 1400	No	OFF_SL_15-796_AA-15-796
Sharon	Ferguson	sharon.ferguson@state.mn.us	Department of Commerce	85 7th Place E Ste 500  Saint Paul, MN 551012198	Electronic Service	No	OFF_SL_15-796_AA-15-796
David	Grover	dgrover@itctransco.com	ITC Midwest	901 Marquette Avenue Suite 1950 Minneapolis, MN 55402	Electronic Service	No	OFF_SL_15-796_AA-15-796
Annete	Henkel	mui@mnuilityinvestors.org	Minnesota Utility Investors	413 Wacouta Street #230 St. Paul, MN 55101	Electronic Service	No	OFF_SL_15-796_AA-15-796
Linda	Jensen	linda.s.jensen@ag.state.mn.us	Office of the Attorney General-DOC	1800 BRM Tower 445 Minnesota Street  St. Paul, MN 551012134	Electronic Service	No	OFF_SL_15-796_AA-15-796

First Name	Last Name	Email	Company Name	Address	Delivery Method	View Trade Secret	Service List Name
Richard	Johnson	Rick.Johnson@lawmoss.com	Moss & Barnett	150 S. 5th Street Suite 1200 Minneapolis, MN 55402	Electronic Service	No	OFF_SL_15-796_AA-15-796
Jim	Krueger	jkrueger@fmcs.coop	Freeborn-Mower Cooperative Services	Box 611  Albert Lea, MN 56007	Electronic Service	No	OFF_SL_15-796_AA-15-796
John	Lindell	agorud.ecf@ag.state.mn.us	Office of the Attorney General-RUD	1400 BRM Tower 445 Minnesota St St. Paul, MN 551012130	Electronic Service	Yes	OFF_SL_15-796_AA-15-796
Kavita	Maini	kmairi@wi.rr.com	KM Energy Consulting LLC	961 N Lost Woods Rd  Oconomowoc, WI 53066	Electronic Service	No	OFF_SL_15-796_AA-15-796
Pam	Marshall	pam@energycents.org	Energy CENTS Coalition	823 7th St E  St. Paul, MN 55106	Electronic Service	No	OFF_SL_15-796_AA-15-796
David	Moeller	dmoeller@allete.com	Minnesota Power	30 W Superior St  Duluth, MN 558022093	Electronic Service	No	OFF_SL_15-796_AA-15-796
Carl	Nelson	cnelson@mncee.org	Center for Energy and Environment	212 3rd Ave N Ste 560  Minneapolis, MN 55401	Electronic Service	No	OFF_SL_15-796_AA-15-796
Samantha	Norris	samanthanorris@alliantenergy.com	Interstate Power and Light Company	200 1st Street SE PO Box 351  Cedar Rapids, IA 524060351	Electronic Service	No	OFF_SL_15-796_AA-15-796
Steven	Nyhus	swnyhus@flaherty-hood.com	Flaherty & Hood PA	525 Park St Ste 470  Saint Paul, MN 55103	Electronic Service	No	OFF_SL_15-796_AA-15-796
Richard	Savelkoul	rsavelkoul@martinsquires.com	Martin & Squires, P.A.	332 Minnesota Street Ste W2750  St. Paul, MN 55101	Electronic Service	No	OFF_SL_15-796_AA-15-796

First Name	Last Name	Email	Company Name	Address	Delivery Method	View Trade Secret	Service List Name
Larry L.	Schedin	Larry@LLSResources.com	LLS Resources, LLC	332 Minnesota St, Ste W1390  St. Paul, MN 55101	Electronic Service	No	OFF_SL_15-796_AA-15-796
Ron	Spangler, Jr.	rlspangler@otpc.com	Otter Tail Power Company	215 So. Cascade St. PO Box 496 Fergus Falls, MN 565380496	Electronic Service	No	OFF_SL_15-796_AA-15-796
Robyn	Woeste	robynwoeste@alliantenergy.com	Interstate Power and Light Company	200 First St SE  Cedar Rapids, IA 52401	Electronic Service	No	OFF_SL_15-796_AA-15-796
Daniel P	Wolf	dan.wolf@state.mn.us	Public Utilities Commission	121 7th Place East Suite 350 St. Paul, MN 551012147	Electronic Service	Yes	OFF_SL_15-796_AA-15-796

First Name	Last Name	Email	Company Name	Address	Delivery Method	View Trade Secret	Service List Name
Julia	Anderson	Julia.Anderson@ag.state.mn.us	Office of the Attorney General-DOC	1800 BRM Tower 445 Minnesota St St. Paul, MN 551012134	Electronic Service	Yes	OFF_SL_15-797_AA-15-797
Kristine	Anderson	kanderson@greatermngas.com	Greater Minnesota Gas, Inc.	202 S. Main Street  Le Sueur, MN 56058	Electronic Service	No	OFF_SL_15-797_AA-15-797
Sharon	Ferguson	sharon.ferguson@state.mn.us	Department of Commerce	85 7th Place E Ste 500  Saint Paul, MN 551012198	Electronic Service	No	OFF_SL_15-797_AA-15-797
Brian	Gardow	bgardow@greatermngas.com	Greater Minnesota Gas, Inc.	PO Box 68  Le Sueur, MN 56058	Electronic Service	No	OFF_SL_15-797_AA-15-797
Nicolle	Kupser	nkupser@greatermngas.com	Greater Minnesota Gas, Inc.	202 South Main Street P.O. Box 68 Le Sueur, MN 56058	Electronic Service	No	OFF_SL_15-797_AA-15-797
John	Lindell	agorud.ecf@ag.state.mn.us	Office of the Attorney General-RUD	1400 BRM Tower 445 Minnesota St St. Paul, MN 551012130	Electronic Service	Yes	OFF_SL_15-797_AA-15-797
Greg	Palmer	gpalmer@greatermngas.com	Greater Minnesota Gas, Inc.	PO Box 68 202 South Main Street Le Sueur, MN 56058	Electronic Service	No	OFF_SL_15-797_AA-15-797
Eric	Swanson	eswanson@winthrop.com	Winthrop Weinstine	225 S 6th St Ste 3500 Capella Tower Minneapolis, MN 554024629	Electronic Service	No	OFF_SL_15-797_AA-15-797
Daniel P	Wolf	dan.wolf@state.mn.us	Public Utilities Commission	121 7th Place East Suite 350 St. Paul, MN 551012147	Electronic Service	Yes	OFF_SL_15-797_AA-15-797

First Name	Last Name	Email	Company Name	Address	Delivery Method	View Trade Secret	Service List Name
Julia	Anderson	Julia.Anderson@ag.state.mn.us	Office of the Attorney General-DOC	1800 BRM Tower 445 Minnesota St St. Paul, MN 551012134	Electronic Service	Yes	OFF_SL_15-800_AA-15-800
Brenda A.	Bjorklund	brenda.bjorklund@centerpointenergy.com	CenterPoint Energy	800 LaSalle Ave FL 14  Minneapolis, MN 55402	Electronic Service	No	OFF_SL_15-800_AA-15-800
Marie	Doyle	marie.doyle@centerpointenergy.com	CenterPoint Energy	800 LaSalle Avenue P O Box 59038 Minneapolis, MN 554590038	Electronic Service	No	OFF_SL_15-800_AA-15-800
Sharon	Ferguson	sharon.ferguson@state.mn.us	Department of Commerce	85 7th Place E Ste 500  Saint Paul, MN 551012198	Electronic Service	No	OFF_SL_15-800_AA-15-800
John	Lindell	agorud.ecf@ag.state.mn.us	Office of the Attorney General-RUD	1400 BRM Tower 445 Minnesota St St. Paul, MN 551012130	Electronic Service	Yes	OFF_SL_15-800_AA-15-800
Daniel P	Wolf	dan.wolf@state.mn.us	Public Utilities Commission	121 7th Place East Suite 350 St. Paul, MN 551012147	Electronic Service	Yes	OFF_SL_15-800_AA-15-800

First Name	Last Name	Email	Company Name	Address	Delivery Method	View Trade Secret	Service List Name
Michael	Ahern	ahern.michael@dorsey.com	Dorsey & Whitney, LLP	50 S 6th St Ste 1500  Minneapolis, MN 554021498	Electronic Service	No	OFF_SL_15-801_AA-15-801
Julia	Anderson	Julia.Anderson@ag.state.mn.us	Office of the Attorney General-DOC	1800 BRM Tower 445 Minnesota St St. Paul, MN 551012134	Electronic Service	Yes	OFF_SL_15-801_AA-15-801
Michael	Auger	mauger@usenergyservices.com	U S Energy Services, Inc.	Suite 1200 605 Highway 169 N Minneapolis, MN 554416531	Electronic Service	No	OFF_SL_15-801_AA-15-801
Sundra	Bender	sundra.bender@state.mn.us	Public Utilities Commission	121 7th Place East Suite 350 Saint Paul, MN 55101-2147	Electronic Service	No	OFF_SL_15-801_AA-15-801
Leigh	Currie	lcurrie@mncenter.org	Minnesota Center for Environmental Advocacy	26 E. Exchange St., Suite 206  St. Paul, Minnesota 55101	Electronic Service	No	OFF_SL_15-801_AA-15-801
Seth	DeMerritt	ssdemerritt@integrysgroup.com	MERC (Holding)	700 North Adams P.O. Box 19001 Green Bay, WI 543079001	Electronic Service	No	OFF_SL_15-801_AA-15-801
Ian	Dobson	ian.dobson@ag.state.mn.us	Office of the Attorney General-RUD	Antitrust and Utilities Division 445 Minnesota Street, 1400 BRM Tower St. Paul, MN 55101	Electronic Service	No	OFF_SL_15-801_AA-15-801
Darcy	Fabrizius	Darcy.fabrizius@constellation.com	Constellation Energy	N21 W23340 Ridgeview Pkwy  Waukesha, WI 53188	Electronic Service	No	OFF_SL_15-801_AA-15-801
Emma	Fazio	emma.fazio@stoel.com	Stoel Rives LLP	33 South Sixth Street Suite 4200 Minneapolis, MN 55402	Electronic Service	No	OFF_SL_15-801_AA-15-801
Sharon	Ferguson	sharon.ferguson@state.mn.us	Department of Commerce	85 7th Place E Ste 500  Saint Paul, MN 551012198	Electronic Service	No	OFF_SL_15-801_AA-15-801



First Name	Last Name	Email	Company Name	Address	Delivery Method	View Trade Secret	Service List Name
Daryll	Fuentes	dfuentes@usg.com	USG Corporation	550 W Adams St  Chicago, IL 60661	Electronic Service	No	OFF_SL_15-801_AA-15-801
Robert	Harding	robert.harding@state.mn.us	Public Utilities Commission	Suite 350 121 7th Place East  St. Paul, MN 55101	Electronic Service	No	OFF_SL_15-801_AA-15-801
Richard	Johnson	Rick.Johnson@lawmoss.com	Moss & Barnett	150 S. 5th Street Suite 1200 Minneapolis, MN 55402	Electronic Service	No	OFF_SL_15-801_AA-15-801
Amber	Lee	ASLee@minnesotaenergyresources.com	Minnesota Energy Resources Corporation	2665 145th St W  Rosemount, MN 55068	Electronic Service	No	OFF_SL_15-801_AA-15-801
John	Lindell	agorud.ecf@ag.state.mn.us	Office of the Attorney General-RUD	1400 BRM Tower 445 Minnesota St St. Paul, MN 551012130	Electronic Service	Yes	OFF_SL_15-801_AA-15-801
Peter	Madsen	peter.madsen@ag.state.mn.us	Office of the Attorney General-DOC	Bremer Tower, Suite 1800 445 Minnesota Street St. Paul, Minnesota 55101	Electronic Service	No	OFF_SL_15-801_AA-15-801
Brian	Meloy	brian.meloy@stinson.com	Stinson, Leonard, Street LLP	150 S 5th St Ste 2300  Minneapolis, MN 55402	Electronic Service	No	OFF_SL_15-801_AA-15-801
Andrew	Moratzka	andrew.moratzka@stoel.com	Stoel Rives LLP	33 South Sixth St Ste 4200  Minneapolis, MN 55402	Electronic Service	No	OFF_SL_15-801_AA-15-801
Richard	Savelkoul	rsavelkoul@martinsquires.com	Martin & Squires, P.A.	332 Minnesota Street Ste W2750  St. Paul, MN 55101	Electronic Service	No	OFF_SL_15-801_AA-15-801
Colleen	Sipiorski	ctsipiorski@integrysgroup.com	Minnesota Energy Resources Corporation	700 North Adams Street  Green Bay, WI 54307	Electronic Service	No	OFF_SL_15-801_AA-15-801

First Name	Last Name	Email	Company Name	Address	Delivery Method	View Trade Secret	Service List Name
Kristin	Stastny	kstastny@briggs.com	Briggs and Morgan, P.A.	2200 IDS Center 80 South 8th Street Minneapolis, MN 55402	Electronic Service	No	OFF_SL_15-801_AA-15-801
Eric	Swanson	eswanson@winthrop.com	Winthrop Weinstine	225 S 6th St Ste 3500 Capella Tower Minneapolis, MN 554024629	Electronic Service	No	OFF_SL_15-801_AA-15-801
Casey	Whelan	cwhelan@usenergyservices.com	U.S. Energy Services, Inc.	605 Highway 169 N Ste 1200  Plymouth, MN 55441	Electronic Service	No	OFF_SL_15-801_AA-15-801
Daniel P	Wolf	dan.wolf@state.mn.us	Public Utilities Commission	121 7th Place East Suite 350 St. Paul, MN 551012147	Electronic Service	Yes	OFF_SL_15-801_AA-15-801
James P.	Zakoura	Jim@smizak-law.com	Smithyman & Zakoura Chartered	750 Commerce Plaza II 7400 West 110th Street Overland Park, KS 662102362	Electronic Service	No	OFF_SL_15-801_AA-15-801

First Name	Last Name	Email	Company Name	Address	Delivery Method	View Trade Secret	Service List Name
Michael	Ahern	ahern.michael@dorsey.com	Dorsey & Whitney, LLP	50 S 6th St Ste 1500  Minneapolis, MN 554021498	Electronic Service	No	OFF_SL_15-802_AA-15-802
Julia	Anderson	Julia.Anderson@ag.state.mn.us	Office of the Attorney General-DOC	1800 BRM Tower 445 Minnesota St St. Paul, MN 551012134	Electronic Service	Yes	OFF_SL_15-802_AA-15-802
Michael	Auger	mauger@usenergyservices.com	U S Energy Services, Inc.	Suite 1200 605 Highway 169 N Minneapolis, MN 554416531	Electronic Service	No	OFF_SL_15-802_AA-15-802
Sundra	Bender	sundra.bender@state.mn.us	Public Utilities Commission	121 7th Place East Suite 350 Saint Paul, MN 55101-2147	Electronic Service	No	OFF_SL_15-802_AA-15-802
Leigh	Currie	lcurrie@mncenter.org	Minnesota Center for Environmental Advocacy	26 E. Exchange St., Suite 206  St. Paul, Minnesota 55101	Electronic Service	No	OFF_SL_15-802_AA-15-802
Seth	DeMerritt	ssdemerritt@integrysgroup.com	MERC (Holding)	700 North Adams P.O. Box 19001 Green Bay, WI 543079001	Electronic Service	No	OFF_SL_15-802_AA-15-802
Ian	Dobson	ian.dobson@ag.state.mn.us	Office of the Attorney General-RUD	Antitrust and Utilities Division 445 Minnesota Street, BRM Tower St. Paul, MN 55101	Electronic Service	No	OFF_SL_15-802_AA-15-802
Darcy	Fabrizius	Darcy.fabrizius@constellation.com	Constellation Energy	N21 W23340 Ridgeview Pkwy  Waukesha, WI 53188	Electronic Service	No	OFF_SL_15-802_AA-15-802
Emma	Fazio	emma.fazio@stoel.com	Stoel Rives LLP	33 South Sixth Street Suite 4200 Minneapolis, MN 55402	Electronic Service	No	OFF_SL_15-802_AA-15-802
Sharon	Ferguson	sharon.ferguson@state.mn.us	Department of Commerce	85 7th Place E Ste 500  Saint Paul, MN 551012198	Electronic Service	No	OFF_SL_15-802_AA-15-802

First Name	Last Name	Email	Company Name	Address	Delivery Method	View Trade Secret	Service List Name
Daryll	Fuentes	dfuentes@usg.com	USG Corporation	550 W Adams St  Chicago, IL 60661	Electronic Service	No	OFF_SL_15-802_AA-15-802
Robert	Harding	robert.harding@state.mn.us	Public Utilities Commission	Suite 350 121 7th Place East  St. Paul, MN 55101	Electronic Service	No	OFF_SL_15-802_AA-15-802
Richard	Johnson	Rick.Johnson@lawmoss.com	Moss & Barnett	150 S. 5th Street Suite 1200 Minneapolis, MN 55402	Electronic Service	No	OFF_SL_15-802_AA-15-802
Amber	Lee	ASLee@minnesotaenergyresources.com	Minnesota Energy Resources Corporation	2665 145th St W  Rosemount, MN 55068	Electronic Service	No	OFF_SL_15-802_AA-15-802
John	Lindell	agorud.ecf@ag.state.mn.us	Office of the Attorney General-RUD	1400 BRM Tower 445 Minnesota St St. Paul, MN 551012130	Electronic Service	Yes	OFF_SL_15-802_AA-15-802
Peter	Madsen	peter.madsen@ag.state.mn.us	Office of the Attorney General-DOC	Bremer Tower, Suite 1800 445 Minnesota Street St. Paul, Minnesota 55101	Electronic Service	No	OFF_SL_15-802_AA-15-802
Brian	Meloy	brian.meloy@stinson.com	Stinson, Leonard, Street LLP	150 S 5th St Ste 2300  Minneapolis, MN 55402	Electronic Service	No	OFF_SL_15-802_AA-15-802
Andrew	Moratzka	andrew.moratzka@stoel.com	Stoel Rives LLP	33 South Sixth St Ste 4200  Minneapolis, MN 55402	Electronic Service	No	OFF_SL_15-802_AA-15-802
Richard	Savelkoul	rsavelkoul@martinsquires.com	Martin & Squires, P.A.	332 Minnesota Street Ste W2750  St. Paul, MN 55101	Electronic Service	No	OFF_SL_15-802_AA-15-802
Colleen	Sipiorski	ctsipiorski@integrysgroup.com	Minnesota Energy Resources Corporation	700 North Adams Street  Green Bay, WI 54307	Electronic Service	No	OFF_SL_15-802_AA-15-802

First Name	Last Name	Email	Company Name	Address	Delivery Method	View Trade Secret	Service List Name
Kristin	Stastny	kstastny@briggs.com	Briggs and Morgan, P.A.	2200 IDS Center 80 South 8th Street Minneapolis, MN 55402	Electronic Service	No	OFF_SL_15-802_AA-15-802
Eric	Swanson	eswanson@winthrop.com	Winthrop Weinstine	225 S 6th St Ste 3500 Capella Tower Minneapolis, MN 554024629	Electronic Service	No	OFF_SL_15-802_AA-15-802
Casey	Whelan	cwhelan@usenergyservices.com	U.S. Energy Services, Inc.	605 Highway 169 N Ste 1200  Plymouth, MN 55441	Electronic Service	No	OFF_SL_15-802_AA-15-802
Daniel P	Wolf	dan.wolf@state.mn.us	Public Utilities Commission	121 7th Place East Suite 350 St. Paul, MN 551012147	Electronic Service	Yes	OFF_SL_15-802_AA-15-802
James P.	Zakoura	Jim@smizak-law.com	Smithyman & Zakoura Chartered	750 Commerce Plaza II 7400 West 110th Street Overland Park, KS 662102362	Electronic Service	No	OFF_SL_15-802_AA-15-802

First Name	Last Name	Email	Company Name	Address	Delivery Method	View Trade Secret	Service List Name
Michael	Ahern	ahern.michael@dorsey.com	Dorsey & Whitney, LLP	50 S 6th St Ste 1500  Minneapolis, MN 554021498	Electronic Service	No	OFF_SL_15-803_AA-15-803
Julia	Anderson	Julia.Anderson@ag.state.mn.us	Office of the Attorney General-DOC	1800 BRM Tower 445 Minnesota St St. Paul, MN 551012134	Electronic Service	Yes	OFF_SL_15-803_AA-15-803
Michael	Auger	mauger@usenergyservices.com	U S Energy Services, Inc.	Suite 1200 605 Highway 169 N Minneapolis, MN 554416531	Electronic Service	No	OFF_SL_15-803_AA-15-803
Sundra	Bender	sundra.bender@state.mn.us	Public Utilities Commission	121 7th Place East Suite 350 Saint Paul, MN 55101-2147	Electronic Service	No	OFF_SL_15-803_AA-15-803
Leigh	Currie	lcurrie@mncenter.org	Minnesota Center for Environmental Advocacy	26 E. Exchange St., Suite 206  St. Paul, Minnesota 55101	Electronic Service	No	OFF_SL_15-803_AA-15-803
Seth	DeMerritt	ssdemerritt@integrysgroup.com	MERC (Holding)	700 North Adams P.O. Box 19001 Green Bay, WI 543079001	Electronic Service	No	OFF_SL_15-803_AA-15-803
Ian	Dobson	ian.dobson@ag.state.mn.us	Office of the Attorney General-RUD	Antitrust and Utilities Division 445 Minnesota Street, 1400 BRM Tower St. Paul, MN 55101	Electronic Service	No	OFF_SL_15-803_AA-15-803
Darcy	Fabrizius	Darcy.fabrizius@constellation.com	Constellation Energy	N21 W23340 Ridgeview Pkwy  Waukesha, WI 53188	Electronic Service	No	OFF_SL_15-803_AA-15-803
Emma	Fazio	emma.fazio@stoel.com	Stoel Rives LLP	33 South Sixth Street Suite 4200 Minneapolis, MN 55402	Electronic Service	No	OFF_SL_15-803_AA-15-803
Sharon	Ferguson	sharon.ferguson@state.mn.us	Department of Commerce	85 7th Place E Ste 500  Saint Paul, MN 551012198	Electronic Service	No	OFF_SL_15-803_AA-15-803

First Name	Last Name	Email	Company Name	Address	Delivery Method	View Trade Secret	Service List Name
Daryll	Fuentes	dfuentes@usg.com	USG Corporation	550 W Adams St  Chicago, IL 60661	Electronic Service	No	OFF_SL_15-803_AA-15-803
Robert	Harding	robert.harding@state.mn.us	Public Utilities Commission	Suite 350 121 7th Place East  St. Paul, MN 55101	Electronic Service	No	OFF_SL_15-803_AA-15-803
Richard	Johnson	Rick.Johnson@lawmoss.com	Moss & Barnett	150 S. 5th Street Suite 1200 Minneapolis, MN 55402	Electronic Service	No	OFF_SL_15-803_AA-15-803
Amber	Lee	ASLee@minnesotaenergyresources.com	Minnesota Energy Resources Corporation	2665 145th St W  Rosemount, MN 55068	Electronic Service	No	OFF_SL_15-803_AA-15-803
John	Lindell	agorud.ecf@ag.state.mn.us	Office of the Attorney General-RUD	1400 BRM Tower 445 Minnesota St St. Paul, MN 551012130	Electronic Service	Yes	OFF_SL_15-803_AA-15-803
Peter	Madsen	peter.madsen@ag.state.mn.us	Office of the Attorney General-DOC	Bremer Tower, Suite 1800 445 Minnesota Street St. Paul, Minnesota 55101	Electronic Service	No	OFF_SL_15-803_AA-15-803
Brian	Meloy	brian.meloy@stinson.com	Stinson, Leonard, Street LLP	150 S 5th St Ste 2300  Minneapolis, MN 55402	Electronic Service	No	OFF_SL_15-803_AA-15-803
Andrew	Moratzka	andrew.moratzka@stoel.com	Stoel Rives LLP	33 South Sixth St Ste 4200  Minneapolis, MN 55402	Electronic Service	No	OFF_SL_15-803_AA-15-803
Richard	Savelkoul	rsavelkoul@martinsquires.com	Martin & Squires, P.A.	332 Minnesota Street Ste W2750  St. Paul, MN 55101	Electronic Service	No	OFF_SL_15-803_AA-15-803
Colleen	Sipiorski	ctsipiorski@integrysgroup.com	Minnesota Energy Resources Corporation	700 North Adams Street  Green Bay, WI 54307	Electronic Service	No	OFF_SL_15-803_AA-15-803

First Name	Last Name	Email	Company Name	Address	Delivery Method	View Trade Secret	Service List Name
Kristin	Stastny	kstastny@briggs.com	Briggs and Morgan, P.A.	2200 IDS Center 80 South 8th Street Minneapolis, MN 55402	Electronic Service	No	OFF_SL_15-803_AA-15-803
Eric	Swanson	eswanson@winthrop.com	Winthrop Weinstine	225 S 6th St Ste 3500 Capella Tower Minneapolis, MN 554024629	Electronic Service	No	OFF_SL_15-803_AA-15-803
Casey	Whelan	cwhelan@usenergyservices.com	U.S. Energy Services, Inc.	605 Highway 169 N Ste 1200  Plymouth, MN 55441	Electronic Service	No	OFF_SL_15-803_AA-15-803
Daniel P	Wolf	dan.wolf@state.mn.us	Public Utilities Commission	121 7th Place East Suite 350 St. Paul, MN 551012147	Electronic Service	Yes	OFF_SL_15-803_AA-15-803
James P.	Zakoura	Jim@smizak-law.com	Smithyman & Zakoura Chartered	750 Commerce Plaza II 7400 West 110th Street Overland Park, KS 662102362	Electronic Service	No	OFF_SL_15-803_AA-15-803



First Name	Last Name	Email	Company Name	Address	Delivery Method	View Trade Secret	Service List Name
Tamie A.	Aberle	tamie.aberle@mdu.com	Great Plains Natural Gas Co.	400 North Fourth Street Bismarck, ND 585014092	Electronic Service	No	OFF_SL_15-809_AA-15-809
Kristine	Anderson	kanderson@greatermngas.com	Greater Minnesota Gas, Inc.	202 S. Main Street Le Sueur, MN 56058	Electronic Service	No	OFF_SL_15-809_AA-15-809
Julia	Anderson	Julia.Anderson@ag.state.mn.us	Office of the Attorney General-DOC	1800 BRM Tower 445 Minnesota St St. Paul, MN 551012134	Electronic Service	Yes	OFF_SL_15-809_AA-15-809
Christopher	Anderson	canderson@allete.com	Minnesota Power	30 W Superior St Duluth, MN 558022191	Electronic Service	No	OFF_SL_15-809_AA-15-809
Gail	Baranko	gail.baranko@xcelenergy.com	Xcel Energy	414 Nicollet Mall7th Floor Minneapolis, MN 55401	Electronic Service	No	OFF_SL_15-809_AA-15-809
William A.	Blazar	bblazar@mnychamber.com	Minnesota Chamber Of Commerce	Suite 1500 400 Robert Street North St. Paul, MN 55101	Electronic Service	No	OFF_SL_15-809_AA-15-809
Robert S.	Carney, Jr.			4232 Colfax Ave. S. Minneapolis, MN 55409	Paper Service	No	OFF_SL_15-809_AA-15-809
George	Crocker	gwillc@nawo.org	North American Water Office	PO Box 174 Lake Elmo, MN 55042	Electronic Service	No	OFF_SL_15-809_AA-15-809
Ian	Dobson	ian.dobson@ag.state.mn.us	Office of the Attorney General-RUD	Antitrust and Utilities Division 445 Minnesota Street, BRM Tower St. Paul, MN 55101	Electronic Service	No	OFF_SL_15-809_AA-15-809
Marie	Doyle	marie.doyle@centerpointenergy.com	CenterPoint Energy	800 LaSalle Avenue P O Box 59038 Minneapolis, MN 554590038	Electronic Service	No	OFF_SL_15-809_AA-15-809

First Name	Last Name	Email	Company Name	Address	Delivery Method	View Trade Secret	Service List Name
Rebecca	Eilers	rebecca.d.eilers@xcelenergy.com	Xcel Energy	414 Nicollet Mall - 401 7th Floor  Minneapolis, MN 55401	Electronic Service	No	OFF_SL_15-809_AA-15-809
Sharon	Ferguson	sharon.ferguson@state.mn.us	Department of Commerce	85 7th Place E Ste 500  Saint Paul, MN 551012198	Electronic Service	No	OFF_SL_15-809_AA-15-809
Edward	Garvey	garveyed@aol.com	Residence	32 Lawton St  Saint Paul, MN 55102	Electronic Service	No	OFF_SL_15-809_AA-15-809
Annete	Henkel	mui@mutilityinvestors.org	Minnesota Utility Investors	413 Wacouta Street #230 St.Paul, MN 55101	Electronic Service	No	OFF_SL_15-809_AA-15-809
Michael	Hoppe	il23@mtn.org	Local Union 23, I.B.E.W.	932 Payne Avenue  St. Paul, MN 55130	Electronic Service	No	OFF_SL_15-809_AA-15-809
Richard	Johnson	Rick.Johnson@lawmoss.com	Moss & Barnett	150 S. 5th Street Suite 1200 Minneapolis, MN 55402	Electronic Service	No	OFF_SL_15-809_AA-15-809
Nicolle	Kupser	nkupser@greatermngas.com	Greater Minnesota Gas, Inc.	202 South Main Street P.O. Box 68 Le Sueur, MN 56058	Electronic Service	No	OFF_SL_15-809_AA-15-809
Amber	Lee	ASLee@minnesotaenergyresources.com	Minnesota Energy Resources Corporation	2665 145th St W  Rosemount, MN 55068	Electronic Service	No	OFF_SL_15-809_AA-15-809
Paul J.	Lehman	paul.lehman@xcelenergy.com	Xcel Energy	414 Nicollet Mall  Minneapolis, MN 554011993	Electronic Service	No	OFF_SL_15-809_AA-15-809
John	Lindell	agorud.ecf@ag.state.mn.us	Office of the Attorney General-RUD	1400 BRM Tower 445 Minnesota St St. Paul, MN 551012130	Electronic Service	Yes	OFF_SL_15-809_AA-15-809

First Name	Last Name	Email	Company Name	Address	Delivery Method	View Trade Secret	Service List Name
Eric	Lipman	eric.lipman@state.mn.us	Office of Administrative Hearings	PO Box 64620 St. Paul, MN 551640620	Paper Service	Yes	OFF_SL_15-809_AA-15-809
Matthew P	Loftus	matthew.p.loftus@xcelenergy.com	Xcel Energy	414 Nicollet Mall FL 5 Minneapolis, MN 55401	Electronic Service	No	OFF_SL_15-809_AA-15-809
Pam	Marshall	pam@energycents.org	Energy CENTS Coalition	823 7th St E St. Paul, MN 55106	Electronic Service	No	OFF_SL_15-809_AA-15-809
Mary	Martinka	mary.a.martinka@xcelenergy.com	Xcel Energy Inc	414 Nicollet Mall 7th Floor Minneapolis, MN 55401	Electronic Service	No	OFF_SL_15-809_AA-15-809
David	Moeller	dmoeller@allete.com	Minnesota Power	30 W Superior St Duluth, MN 558022093	Electronic Service	No	OFF_SL_15-809_AA-15-809
Andrew	Moratzka	andrew.moratzka@stoel.com	Stoel Rives LLP	33 South Sixth St Ste 4200 Minneapolis, MN 55402	Electronic Service	No	OFF_SL_15-809_AA-15-809
David W.	Niles	david.niles@avantenergy.com	Minnesota Municipal Power Agency	Suite 300 200 South Sixth Street Minneapolis, MN 55402	Electronic Service	No	OFF_SL_15-809_AA-15-809
Samantha	Norris	samanthanorris@alliantenergy.com	Interstate Power and Light Company	200 1st Street SE PO Box 351 Cedar Rapids, IA 524060351	Electronic Service	No	OFF_SL_15-809_AA-15-809
Greg	Palmer	gpalmer@greatermngas.com	Greater Minnesota Gas, Inc.	PO Box 68 202 South Main Street Le Sueur, MN 56058	Electronic Service	No	OFF_SL_15-809_AA-15-809
Richard	Savelkoul	rsavelkoul@martinsquires.com	Martin & Squires, P.A.	332 Minnesota Street Ste W2750 St. Paul, MN 55101	Electronic Service	No	OFF_SL_15-809_AA-15-809

First Name	Last Name	Email	Company Name	Address	Delivery Method	View Trade Secret	Service List Name
Janet	Shaddix Elling	jshaddix@janetshaddix.com	Shaddix And Associates	Ste 122 9100 W Bloomington Frwy Bloomington, MN 55431	Electronic Service	No	OFF_SL_15-809_AA-15-809
James M.	Strommen	jstrommen@kennedy-graven.com	Kennedy & Graven, Chartered	470 U.S. Bank Plaza 200 South Sixth Street Minneapolis, MN 55402	Electronic Service	No	OFF_SL_15-809_AA-15-809
SaGonna	Thompson	Regulatory.records@xcelenergy.com	Xcel Energy	414 Nicollet Mall FL 7  Minneapolis, MN 554011993	Electronic Service	No	OFF_SL_15-809_AA-15-809
Lisa	Veith	lisa.veith@ci.stpaul.mn.us	City of St. Paul	400 City Hall and Courthouse 15 West Kellogg Blvd. St. Paul, MN 55102	Electronic Service	No	OFF_SL_15-809_AA-15-809
Cam	Winton	cwinton@mnychamber.com	Minnesota Chamber of Commerce	400 Robert Street North Suite 1500 St. Paul, Minnesota 55101	Electronic Service	No	OFF_SL_15-809_AA-15-809
Daniel P	Wolf	dan.wolf@state.mn.us	Public Utilities Commission	121 7th Place East Suite 350 St. Paul, MN 551012147	Electronic Service	Yes	OFF_SL_15-809_AA-15-809