



414 Nicollet Mall  
Minneapolis, Minnesota 55401

January 30, 2017

—Via Electronic Filing—

Daniel P. Wolf  
Executive Secretary  
Minnesota Public Utilities Commission  
121 7th Place East, Suite 350  
St. Paul, MN 55101

RE: PETITION  
EXTENSION OF GAS MONTHLY DEMAND TRUE-UP VARIANCE  
DOCKET NO. G002/M-17-\_\_\_\_

Dear Mr. Wolf:

Northern States Power Company, a Minnesota corporation, doing business as Xcel Energy submits to the Minnesota Public Utilities Commission a Petition for approval of a variance extension to the Purchased Gas Adjustment (PGA) Rules, Minn. R. 7825.2700, subp. 5, related to the recovery of demand costs. The Commission last approved the variance for three years in its Order dated July 28, 2014, in Docket. No. G002/M-14-171. The variance allows the Company to collect or return under- and over-recoveries of demand costs on a monthly basis instead of solely on an annual basis.

We have electronically filed this document with the Commission. A Summary of the filing has been served on all parties on the attached service list. Please contact me at [lisa.r.peterson@xcelenergy.com](mailto:lisa.r.peterson@xcelenergy.com) or 612-330-7681 if you have any questions regarding this filing.

Sincerely,

/s/

LISA PETERSON  
MANAGER, REGULATORY ANALYSIS

Enclosures  
c: Service List

STATE OF MINNESOTA  
BEFORE THE  
MINNESOTA PUBLIC UTILITIES COMMISSION

Nancy Lange	Chair
Dan Lipschultz	Commissioner
Matthew Schuerger	Commissioner
Katie Sieben	Commissioner
John Tuma	Commissioner

IN THE MATTER OF THE PETITION OF  
NORTHERN STATES POWER COMPANY  
FOR APPROVAL OF AN EXTENSION OF A  
RULE VARIANCE TO USE A MONTHLY  
DEMAND COST TRUE-UP MECHANISM

DOCKET NO. G002/M-17-\_\_\_\_

**PETITION**

**INTRODUCTION**

Northern States Power Company, a Minnesota corporation, doing business as Xcel Energy, submits to the Minnesota Public Utilities Commission, a request to extend an existing variance to the Purchased Gas Adjustment (PGA) Rules, Minn. R. 7825.2700, subp. 5, related to the recovery of demand costs.

The variance allows the Company to collect or return under- and over-recoveries of demand costs on a monthly basis instead of an annual basis. This approach (herein referred to as the “Monthly Demand True-up”) minimizes the over- or under-recovery of demand costs during a gas year due to weather conditions varying from normal, without having too large an adjustment in any one month.

The Commission last approved the same variance we seek in this filing, in its July 28, 2014 Order in Docket. No. G002/M-14-171. The variance approved by the Commission in the July 2014 Order will expire September 30, 2017. We respectfully request an extension of the variance to the PGA rules for an additional three years, through September 30, 2020.

**I. SUMMARY OF FILING**

A one-paragraph summary of the filing accompanies this petition pursuant to Minn. R. 7829.1300, subp. 1.

## **II. SERVICE ON OTHER PARTIES**

Pursuant to Minn. Stat. § 216.17 subd. 3 and Minn. R. 7829.1300, subp. 2, Xcel Energy has electronically filed this petition. A summary of the filing has been served on all parties on Xcel Energy's miscellaneous gas service list (attached).

## **III. GENERAL FILING INFORMATION**

Pursuant to Minnesota Rules 7825.3200, 7825.3500, and 7829.1300, subp. 3, Xcel Energy provides the following required information:

### **A. Name, Address, and Telephone Number of Utility**

Northern States Power Company, doing business as:  
Xcel Energy  
414 Nicollet Mall  
Minneapolis, MN 55401  
(612) 330-5500

### **B. Name, Address, and Telephone Number of Utility Attorney**

Mara K. Ascherman  
Senior Attorney  
Xcel Energy  
414 Nicollet Mall, 401 – 8th Floor  
Minneapolis, MN 55401  
(612) 215-4605

### **C. Date of Filing and Date Modified Rates Take Effect**

Xcel Energy submits this petition for approval on January 30, 2017. The proposed effective date for this variance is October 1, 2017.

### **D. Statute Controlling Schedule for Processing the Filing**

The applicable statute is Minn. Stat. § 216B.16, subd. 1, which allows a tariff change to be placed into effect on 60-days notice to the Commission, unless the proposed tariff is suspended by Commission order. The proposed tariff change discussed in this Petition falls within the definition of a “miscellaneous filing,” under Minn. R. 7829.0100, subp. 11, because no determination of Xcel Energy's general revenue requirement is necessary. Minn. R. 7829.1400, subps. 1 and 4, permits comments in response to a miscellaneous filing within 30 days of filing, with reply comments 10 days thereafter.

**E. Utility Employee Responsible for Filing**

Lisa Peterson  
Manager, Regulatory Analysis  
Xcel Energy  
414 Nicollet Mall, 401 – 7th Floor  
Minneapolis, MN 55401  
(612) 330-7681

**IV. MISCELLANEOUS INFORMATION**

Pursuant to Minn. R. 7829.0700, Xcel Energy requests that the following persons be placed on the Commission's official service list for this matter:

Mara K. Ascherman  
Senior Attorney  
Xcel Energy  
414 Nicollet Mall, 401 – 8<sup>th</sup> Floor  
Minneapolis, MN 55401  
[mara.k.ascherman@xcelenergy.com](mailto:mara.k.ascherman@xcelenergy.com)

Carl Cronin  
Regulatory Administrator  
Xcel Energy  
414 Nicollet Mall, 401 – 7<sup>th</sup> Floor  
Minneapolis, MN 55401  
[regulatory.records@xcelenergy.com](mailto:regulatory.records@xcelenergy.com)

Any information requests in this proceeding should be submitted to the Regulatory Records email address above.

**V. DESCRIPTION AND PURPOSE OF FILING**

**A. Background**

The Company requests the extension of a variance to Minn. R. 7825.2700, subp. 5 in order to continue using the Monthly Demand Cost True-up mechanism. This variance was originally approved in June 2004 in Docket No. G002/M-03-843.<sup>1</sup> Since that time, the variance has been regularly extended by subsequent Commission order. The Company received a two-year extension of the variance in Docket No. G002/M-06-681.<sup>2</sup> In its September 2, 2008 Order,<sup>3</sup> the Commission granted a three-year variance through September 30, 2011, and again in its June 24, 2011 Order,<sup>4</sup> the Commission granted a three-year variance through September 30, 2014. Most recently

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<sup>1</sup> Docket No. G002/M-03-843, Order Approving a Monthly Demand Cost True-Up Mechanism with Requirements and Granting a Variance Until September 30, 2006.

<sup>2</sup> Docket No. G002/M-06-681, Order Granting a Two-Year Extension of the Variance of Minn. Rule 7825.2700, subp. 5 and retaining the existing reporting requirements.

<sup>3</sup> Docket No. G002/M-08-456.

<sup>4</sup> Docket No. G002/M-11-203.

the Commission granted a three-year variance through September 30, 2017 in its July 28, 2014 Order.<sup>5</sup>

Using the Monthly Demand Cost True-up mechanism, the Company employs the current demand rate recovery calculation methodology as defined by Minn. R. 7825.2700, subp. 5, but determines the recovery on a monthly basis. The Company proposes to continue applying the existing annual true-up calculation to demand costs in order to ensure a final annual true-up of any remaining costs not accounted for through the Monthly Demand True-up.

We note that CenterPoint Energy (CPE) has previously filed for similar variances. Most recently, on March 16, 2016, CPE filed a Petition for a three-year rule variance in Docket No. G008/M-16-228. In the May 17, 2016 Order in that docket, CPE was granted a three-year variance.

## **B. Purpose of the Filing**

The purpose of this filing is to request extension of the Company's variance to the PGA rules, which will otherwise expire on September 30, 2017.

### *1. Extension of Variance*

The Company respectfully requests the extension of a variance to Minn. R. 7825.2700, subp. 5 for an additional three years, i.e., through September 30, 2020, in order to continue using the Monthly Demand True-up. A three-year variance is consistent with the Commission's September 30 Order, as well as CPE's most recently-granted variances. Granting an extension of the variance will allow for the Company's continued use of the Monthly Demand True-up that provides a timelier matching of costs and cost recovery for both customers and the Company.

### *2. Purpose of the Monthly Demand Cost True-up Mechanism*

Gas costs are classified as either commodity-related or demand-related within the PGA. Demand costs are, for the most part, fixed costs paid to interstate pipelines. For non-demand billed customers, demand costs are recovered from customers volumetrically through the PGA in billing rates. The demand-cost recovery rate is calculated based on weather-normalized sales, consistent with Commission Rules. However, the demand costs are recovered based on actual sales. Therefore, the over- or under-recovery of demand costs is due, primarily, to factors impacting the

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<sup>5</sup> Docket No. G002/M-14-171.

difference between actual and weather-normalized sales during the true-up year. In a warmer than normal year, demand costs will be under-recovered, and the opposite will occur in a colder than normal year.

The purpose of the Monthly Demand True-up is to minimize the over- or under-recovery of demand costs during a gas year due to weather conditions varying from normal, without having too large of an adjustment in any one month. While this methodology does not exactly align demand-cost expense and demand-cost recovery, it is expected to help minimize the potential end-of-the-year true-up. This Monthly Demand True-up is expected to lower billing rates during times of colder-than-normal weather, when usage, and therefore customer bills, are high; conversely, the monthly true-up is expected to increase rates during warmer-than-normal weather, when usage is low and customer bills are low. Under both scenarios, a timelier match of demand-cost expense with demand-cost recovery will occur.

The inaccuracy of demand-cost recovery results from factors that are essentially out of the Company's control, including abnormal weather (*i.e.*, actual ambient air temperatures that deviate from the 20-year average for the month), timing of upstream pipeline rate changes approved by the Federal Energy Regulatory Commission, and other factors. While the Commission's rules provide for an annual true-up, which assures there is ultimately no over- or under-recovery, the year-to-year over- or under-recovery of demand costs may lead to cost shifts between customers from one year to the next, as well as time-value financial impacts for both the Company and its customers.

As will be discussed further below, our experience with the Monthly Demand True-up mechanism demonstrates the value of this matching in reducing the impact of subsequent adjustments on both customers and the Company.

### **C. Description of the Monthly Demand Cost True-up Mechanism**

We are proposing to continue to use the same Monthly Demand True-up originally approved in Docket No. G002/M-03-843, with the addition of a capacity release adjustment as approved in Docket No. G002/M-08-456. The Monthly Demand True-up is only applied to the Company's non-demand billed firm customers, with separate calculations for the Residential and Commercial classes. The Monthly Demand True-up factor is calculated and included in the PGA from October through May.

To determine the factors, the Company first calculates the over or under demand-cost recovery for each calendar month. We make this calculation by comparing the weather-normalized forecasted sales to the actual calendar month sales for the month.

We then multiply the sales difference by the Demand Cost Recovery rate in the PGA for that calendar month.

On a lagged basis, the monthly over- or under-recovery is added to the over- or under-recovery collected using the Monthly Demand True-up rate itself. On a lagged basis, we also calculate the amount of capacity release dollars not included in the PGA in a month. The demand over- or under-recovery is added to the capacity release over- or under-recovery to create the total lagged over- or under-recovery. This lagged over- or under-recovery is divided by the weather-normalized forecasted sales to determine the month's Monthly Demand True-up rate, subject to a cap (described below).

The resulting Monthly Demand True-up rate component is then added to the subsequent month's PGA base demand rate, which will continue to be calculated consistent with the Commission's Rules. Because the monthly PGA filing occurs prior to availability of actual month-end data for the current month, to enable the use of actual revenue and cost information, the Company must use a one-month lag in the application of this Monthly Demand True-up. The PGA schedule calculating the Monthly Demand True-up for true-up year 2015-2016 is provided as Attachment A.<sup>6</sup>

Extremely abnormal weather could cause the Monthly Demand True-up factor to be large. Therefore, we propose to continue to cap the monthly adjustment. In the months of October, April, and May, our proposed cap is 25 percent of the demand-cost recovery rate. To accommodate for the Company's seasonal rates, in the months of November through March (the Company's "winter" months), the proposed cap is 125 percent of the levelized demand rate, minus the actual demand-cost recovery rate.

Levelized demand is the total twelve-month demand-cost for non-demand billed firm customers divided by the annual firm sales. We propose to continue to use all calendar month volumes and rates in our calculation of the Monthly Demand True-up factors. This methodology is consistent with the Monthly Demand True-up previously approved by the Commission.

## **D. Analysis of the Monthly Demand Revenue True-up Mechanism**

### *1. Cost Recovery*

The Monthly Demand True-up continues to benefit customers by minimizing the annual demand-cost under- and over-recoveries due to the weather. Table 1 below

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<sup>6</sup> Filed as Schedule I in G002/AA-13-783.

shows the over- and under-recoveries, with and without the Monthly Demand True-up. We provide further details in Attachment B.<sup>7</sup>

**Table 1: Over(Under) Recovery of Demand Costs**

<u>True-up Year</u>	<u>With Monthly Demand True-up (Actual)</u>		<u>Without Monthly Demand True-up</u>	
2004-2005	(\$652,620)	-0.76%	(\$3,719,363)	-5.46%
2005-2006	(\$3,049,081)	-5.38%	(\$6,185,302)	-11.11%
2006-2007	\$4,350,806	8.38%	\$703,577	1.64%
2007-2008	\$2,628,293	6.25%	\$3,496,825	8.20%
2008-2009	\$2,433,476	5.70%	\$3,595,452	8.38%
2009-2010	(\$364,022)	-0.74%	(\$868,664)	-1.82%
2010-2011	\$1,747,270	3.71%	\$2,501,934	5.27%
2011-2012	(\$4,997,545)	-9.96%	(\$7,563,341)	-15.11%
2012-2013	\$2,353,998	4.74%	\$2,047,095	4.12%
2013-2014	\$7,372,733	15.11%	\$10,967,375	22.45%
2014-2015	\$2,525,679	5.56%	\$4,505,962	9.85%
2015-2016	(\$2,638,930)	-5.43%	(\$5,530,911)	-11.47%

The goal of the mechanism is for actual over- or under-recovery to be closer to zero than it would have been without the Monthly Demand True-up. As shown above, this has happened in ten of the twelve years. The two other years situations happened for which the mechanism was not designed to compensate, as further explained below.

As discussed in our 2008 variance filing,<sup>8</sup> in 2006-2007 there was a large capacity release transaction. The capacity release was properly treated in the annual true-up filing, but the PGA process at that time was not set up to capture capacity release transactions. As part of the 2008 variance filing, a process was set up to handle capacity release transactions in the PGA and adjust for them in the Monthly Demand True-up.

As discussed in our 2014 variance filing,<sup>9</sup> in the 2012-2013 true-up year, the abnormally cold 2013 spring and associated increased sales led to an over-recovery late in the true-up year which could not be resolved due to the amount of time left in the true-up year and the caps on the size of the adjustments. We continue to believe

<sup>7</sup> Data comes from Schedule I of the Company's Annual True-up Filings, Docket Nos. G002/AA-05-1425, G002/AA-06-1268, G002/AA-07-1159, G002/AA-08-1054, G002/AA-09-1044, G002/AA-10-962, G002/AA-11-895, G002/AA-12-945, G002/AA-13-783, G002/AA-14-736, G002/AA-15-809 and G002/AA-16-725.

<sup>8</sup> Docket No. G002/M-08-456

<sup>9</sup> Docket No. G002/M-14-171



that caps are appropriate in the mechanism and that overall the mechanism successfully performs as designed.

As shown in Table 1 above, for each of the last three years the actual over- or under-recovery was closer to zero than it would have been without the Monthly Demand True-up. As part of their analyses in AAA Docket Nos. G999/AA-14-580 and G999/AA-15-612, the Department noted that, except for the years 2006-2007 and 2012-2013, the program continues to match costs better within the true-up year than would have been the case without the program.

## 2. *Customer Billing Impacts*

As shown in Attachment C, the bill impacts from the Monthly Demand True-up have been moderate. Table 2 below shows the largest Monthly Demand True-up charge and largest Monthly Demand True-up credit to a typical Residential customer in each of the True-up years.

**Table 2: Extreme Monthly Demand True-up Dollar Amounts  
for Typical Residential Customer**

<u>True-up Year</u>	<u>Largest Charge</u>			<u>Largest Credit</u>		
	<u>Amt of Adj.</u>	<u>% of bill</u>	<u>Month</u>	<u>Amt of Adj.</u>	<u>% of bill</u>	<u>Month</u>
2004-2005	\$2.66	1.44%	January	(\$0.21)	0.42%	October
2005-2006	\$1.58	0.90%	February	(\$0.30)	0.64%	April
2006-2007	\$1.97	1.13%	February	(\$0.46)	0.35%	December
2007-2008	\$0.76	0.42%	January	(\$0.71)	0.46%	March
2008-2009	\$0.16	0.09%	December	(\$0.77)	0.62%	February
2009-2010	\$1.45	0.92%	January	(\$0.72)	0.98%	March
2010-2011	\$0.26	0.19%	December	(\$0.94)	0.89%	March
2011-2012	\$1.24	1.12%	January	(\$0.00)	0.00%	October
2012-2013	\$1.23	1.20%	February	(\$0.57)	0.90%	April
2013-2014	\$0.02	0.02%	November	(\$1.52)	0.99%	February
2014-2015	\$0.32	1.29%	May	(\$1.48)	1.14%	January
2015-2016	\$1.37	1.24%	January	none	none	N/A

## E. **Reporting and Evaluation Requirements**

Consistent with past Commission-approved reporting requirements, we propose to:

- Provide a detailed calculation of the adjustment factor in pages 4-5 of Schedule A of the Company's monthly PGA filing (the last full true-up year is included as Attachment A in this filing);
- Identify the adjustment and the resulting total non-demand billed Demand-Cost Recovery Rate for the month as separate line items on page 3 of Schedule A of its monthly PGA filing; and
- Separately identify (by customer class) the Monthly Demand True-up revenues and summarize the following for each firm, non-demand billed customer class in the Company's annual true-up filing:
  - a. The annual demand-cost recovery absent the adjustments;
  - b. The total annual adjustment recovery; and
  - c. The remaining current year demand cost recovery true-up balance.

## **F. Application of Variance Standards**

Minn. Rules 7825.2390 through 7825.2920 govern the automatic adjustment of charges for both gas and electric utilities. Minn. R. 7825.2700 specifically outlines the calculation for determining the automatic adjustment for natural gas utilities. Under this rule, any over- or under-recovery is charged to, or returned to, customers over the next 12 months beginning September 1 each year.

We request a three-year variance from Minn. R. 7825.2700, subp. 5. While Minnesota Rules provide a month-to-month adjustment for the demand and commodity cost components of the PGA, the Monthly Demand True-up requested in this Petition will allow a timelier match between costs and cost recovery; monthly adjustments mitigate over- and under-recovery deviations and associated adverse financial impacts on customers and the Company.

Minn. R. 7829.3200 establishes three required standards for granting a variance:

1. enforcement of the rule would impose an excessive burden upon the applicant or others affected by the rule;
2. granting the variance would not adversely affect the public interest; and
3. granting the variance would not conflict with standards imposed by law.

We address each of these standards below:

### *1. Excessive Burden Standard*

Enforcement of the rule imposes a burden on our customers because, with a yearly PGA true-up, the under- or over-recovery of demand costs incurred in one year is shifted to the ratepayers that take gas from the Company in the following year. This

shift may impose a financial burden on customers, as new customers could be responsible for charges that were incurred by others, and customers who move away cannot recoup any overpayment. As there are no carrying charges applied to the over- or under-recovery, potentially large annual true-up balances can financially harm both customers and the Company. The potential for this harm is supported by the information provided with this Petition as Attachment B.

2. *Public Interest is Not Adversely Affected*

The public interest will not be adversely affected by granting the variance. Indeed, because the variance will more accurately match cost causation with cost recovery, it is consistent with the public interest. The variance will allow the Company to price service to more accurately reflect the demand costs being incurred by the Company, and mitigate the potential that future customers will experience an extreme demand cost shift.

3. *Does Not Conflict With Standards Imposed By Law*

Xcel Energy is not aware of any laws that would be violated by granting this variance.

We believe these conditions support our request for a variance, and are consistent with the conditions that supported the Commission's Orders in prior dockets on this matter.

## **VI. EFFECT OF CHANGE UPON XCEL ENERGY**

Xcel Energy's total revenue recovery is unaffected by this Petition. The Monthly Demand True-up causes a cost recovery timing change that provides a better match between demand cost incurrence and recovery on an annual basis.

### **CONCLUSION**

We respectfully request that the Commission grant this variance extension, which will allow for continued use of the Monthly Demand True-up, which provides a timelier matching of costs and cost recovery for both customers and the Company.

Dated: January 30, 2017

Northern States Power Company

STATE OF MINNESOTA  
BEFORE THE  
MINNESOTA PUBLIC UTILITIES COMMISSION

Nancy Lange  
Dan Lipschultz  
Matthew Schuerger  
Katie Sieben  
John Tuma

Chair  
Commissioner  
Commissioner  
Commissioner  
Commissioner

IN THE MATTER OF THE PETITION OF  
NORTHERN STATES POWER COMPANY  
FOR APPROVAL OF AN EXTENSION OF A  
RULE VARIANCE TO USE A MONTHLY  
DEMAND COST TRUE-UP MECHANISM

DOCKET NO. G002/M-17-\_\_\_\_

**PETITION**

**SUMMARY OF FILING**

Please take notice that on January 30, 2017, Northern States Power Company, doing business as Xcel Energy, filed with the Minnesota Public Utilities Commission its Petition for approval of an extension of the variance to Minn. R. 7825.2700, subp. 5, of the Purchased Gas Adjustment (PGA) rules related to the calculation of the demand adjustment. This variance is needed so that the Company can continue to use the Monthly Demand Cost True-up mechanism previously approved by the Commission in Docket Nos. G002/M-03-843, G002/M-06-681, G002/M-08-456, G002/M-11-203 and G002/M-14-171. The Monthly Demand Cost True-up mechanism enables a timelier matching of costs and cost recovery in the PGA mechanism.

**DERIVATION OF MONTHLY DEMAND TRUE-UP - p. 1 of 2**

<b>Residential Demand</b>	<b>( a )</b>	<b>( b )</b>	<b>( c )</b>	<b>( d )</b>	<b>( e )</b>	<b>( f )</b>	<b>( g )</b>	<b>( h )</b>	<b>( h^ )</b>	<b>( i )</b>	<b>( j )</b>	<b>( k )</b>
	Calendar Month											
	Calculated	Actual	Sales	Calendar	Demand Cost	Capacity	Lagged	Calculated	Actual	Actual	Rate Adder	Net
2015 - 2016	PGA Sales	Sales	Difference	Demand	Over/(Under)	Release	Over/(Under)	Demand Rate	Demand Rate	Demand Rate	Over/(Under)	Over/(Under)
	Page 2, col. ( d )		( b - a )		( c * d )	Page 2, col. ( u )	( e[-2] + f[-2] + j[-2] )	min(g/a, cap)		( b * h^ )	( g + i )	( e + f + i )
Jul	6,664,478	6,433,130	(231,348)	\$0.05034	(\$11,646)	\$0						(\$11,646)
Aug	6,752,347	6,498,540	(253,807)	\$0.05034	(\$12,777)	\$0						(\$12,777)
Sep	8,835,268	7,842,330	(992,938)	\$0.04775	(\$47,413)	\$0						(\$47,413)
Oct	20,196,357	16,081,870	(4,114,487)	\$0.04775	(\$196,467)	\$0	(\$24,423)		\$0.00121	\$19,459	(\$4,964)	(\$177,008)
Nov	40,464,801	31,513,400	(8,951,401)	\$0.09409	(\$842,237)	\$19,728	(\$47,413)		\$0.00117	\$36,871	(\$10,542)	(\$785,638)
Dec	59,521,927	48,227,590	(11,294,337)	\$0.09526	(\$1,075,899)	\$19,941	(\$201,430)		\$0.00338	\$163,009	(\$38,421)	(\$892,949)
Jan	69,410,736	66,331,120	(3,079,616)	\$0.09526	(\$293,364)	\$20,361	(\$833,051)		\$0.00858	\$569,121	(\$263,930)	\$296,118
Feb	56,276,387	54,112,860	(2,163,527)	\$0.09525	(\$206,076)	\$20,202	(\$1,094,379)		\$0.00857	\$463,747	(\$630,632)	\$277,874
Mar	47,452,786	36,801,580	(10,651,206)	\$0.09525	(\$1,014,527)	\$20,374	(\$536,933)		\$0.00857	\$315,390	(\$221,544)	(\$678,764)
Apr	25,048,434	24,874,540	(173,894)	\$0.04768	(\$8,291)	\$0	(\$816,505)		\$0.01192	\$296,505	(\$520,001)	\$288,213
May	15,234,487	9,948,161	(5,286,326)	\$0.04768	(\$252,052)	\$0	(\$1,215,698)		\$0.01192	\$118,582	(\$1,097,116)	(\$133,470)
<u>Jun</u>	<u>9,224,250</u>	<u>7,324,458</u>	<u>(1,899,792)</u>	<u>\$0.04769</u>	<u>(\$90,601)</u>	<u>\$13,777</u>	<u>(\$528,292)</u>					<u>(\$76,824)</u>
Tot	365,082,258	315,989,579	(49,092,679)		(\$4,051,350)					\$1,982,683		(\$1,954,284)

<b>Commercial Non-Demand</b>	<b>( a )</b>	<b>( b )</b>	<b>( c )</b>	<b>( d )</b>	<b>( e )</b>	<b>( f )</b>	<b>( g )</b>	<b>( h )</b>	<b>( h^ )</b>	<b>( i )</b>	<b>( j )</b>	<b>( k )</b>
	Calendar Month											
	Calculated	Actual	Sales	Calendar	Demand Cost	Capacity	Lagged	Calculated	Actual	Demand Rate	Demand Rate Adder	Net
2015 - 2016	PGA Sales	Sales	Difference	Demand	Over/(Under)	Release	Over/(Under)	Demand Rate	Demand Rate	Demand Rate	Over/(Under)	Over/(Under)
	Page 2, col. ( f )		( b - a )		( c * d )	Page 2, col. ( u )	( e[-2] + f[-2] + j[-2] )	min(g/a, cap)		( b * h^ )	( g + i )	( e + f + i )
Jul	4,187,152	4,086,410	(100,742)	\$0.05034	(\$5,071)	\$0						(\$5,071)
Aug	4,496,986	4,253,680	(243,306)	\$0.05034	(\$12,248)	\$0						(\$12,248)
Sep	5,197,991	5,149,570	(48,421)	\$0.04775	(\$2,312)	\$0						(\$2,312)
Oct	10,654,087	10,279,060	(375,027)	\$0.04775	(\$17,908)	\$0	(\$17,319)		\$0.00163	\$16,755	(\$565)	(\$1,153)
Nov	21,349,717	18,493,870	(2,855,847)	\$0.09409	(\$268,707)	\$11,578	(\$2,312)		\$0.00011	\$2,034	(\$278)	(\$255,095)
Dec	32,574,887	27,487,470	(5,087,417)	\$0.09526	(\$484,627)	\$11,365	(\$18,472)		\$0.00057	\$15,668	(\$2,804)	(\$457,594)
Jan	37,401,115	35,656,810	(1,744,305)	\$0.09526	(\$166,162)	\$10,945	(\$257,407)		\$0.00719	\$256,372	(\$1,034)	\$101,155
Feb	31,900,205	29,741,740	(2,158,465)	\$0.09525	(\$205,594)	\$11,104	(\$476,066)		\$0.00857	\$254,887	(\$221,180)	\$60,397
Mar	26,406,474	19,747,850	(6,658,624)	\$0.09525	(\$634,234)	\$10,933	(\$156,252)		\$0.00633	\$125,004	(\$31,248)	(\$498,298)
Apr	14,608,308	12,924,530	(1,683,778)	\$0.04768	(\$80,283)	\$0	(\$415,670)		\$0.01192	\$154,060	(\$261,609)	\$73,778
May	9,252,698	7,090,298	(2,162,400)	\$0.04768	(\$103,103)	\$0	(\$654,549)		\$0.01192	\$84,516	(\$570,033)	(\$18,587)
<u>Jun</u>	<u>5,036,270</u>	<u>3,703,302</u>	<u>(1,332,968)</u>	<u>\$0.04769</u>	<u>(\$63,569)</u>	<u>\$6,966</u>	<u>(\$341,892)</u>					<u>(\$56,604)</u>
Tot	203,065,890	178,614,589	(24,451,301)		(\$2,043,818)					\$909,297		(\$1,071,631)

**Total Firm Demand Cost Recovery Revenue (Net)**

**(\$6,095,168)**

**\$2,891,980**

**(\$3,025,915)**

Note that Col (g) for Oct reflects the total of Jul and Aug, not just Aug.

Note that Col (h) is adjusted to have the opposite sign of Col (g).

\* The "cap" is determined by:

Summer -- 0.25 \* Dmd Unit Cost/Thm, Annual (from PGA Sch A, p. 3, Line 17)

Winter -- 1.25 \* Levelized Demand - Dmd Unit Cost/Thm, Total (from PGA Sch. A, p. 3, Line 17);

Levelized Demand = (Non-Demand Billed Allocation, Annual + Non-Demand Billed Allocation, Winter)/MN Firm Therm Sales, Annual (from PGA Sch. A, p. 3, Lines 14 & 16)

**DERIVATION OF MONTHLY DEMAND TRUE-UP - p. 2 of 2**

**PGA CALCULATED SALES CALCULATION**

	(a)	(b)	(c)	(d)	(e) Non-Demand	(f)
	Monthly % of Annual Budgeted Sales	Annual PGA Forecasted Sales Per MN Rule (a * Annual Sales)	Residential PGA Sales % (d / b)	<b>Residential Calculated PGA Sales (thm)</b>	Billed Commercial PGA Sales % (f / b)	<b>Commercial Calculated PGA Sales (thm)</b>
2015 - 2016						
July	1.91%	10,851,630	61.4%	<b>6,664,478</b>	38.6%	<b>4,187,152</b>
August	1.98%	11,249,333	60.0%	<b>6,752,347</b>	40.0%	<b>4,496,986</b>
September	2.47%	14,033,259	63.0%	<b>8,835,268</b>	37.0%	<b>5,197,991</b>
October	5.43%	30,850,444	65.5%	<b>20,196,357</b>	34.5%	<b>10,654,087</b>
November	10.88%	61,814,518	65.5%	<b>40,464,801</b>	34.5%	<b>21,349,717</b>
December	16.21%	92,096,814	64.6%	<b>59,521,927</b>	35.4%	<b>32,574,887</b>
January	18.80%	106,811,851	65.0%	<b>69,410,736</b>	35.0%	<b>37,401,115</b>
February	15.52%	88,176,592	63.8%	<b>56,276,387</b>	36.2%	<b>31,900,205</b>
March	13.00%	73,859,259	64.2%	<b>47,452,786</b>	35.8%	<b>26,406,474</b>
April	6.98%	39,656,741	63.2%	<b>25,048,434</b>	36.8%	<b>14,608,308</b>
May	4.31%	24,487,185	62.2%	<b>15,234,487</b>	37.8%	<b>9,252,698</b>
June	<u>2.51%</u>	<u>14,260,520</u>	<u>64.7%</u>	<u><b>9,224,250</b></u>	<u>35.3%</u>	<u><b>5,036,270</b></u>
Annual	100.00%	568,148,146		<b>365,082,258</b>		<b>203,065,890</b>

**CAPACITY RELEASE ADJUSTMENT CALCULATION**

	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)	(s)	(t)	(u)	(v)
	NSPM* Actual Capacity Release**	NSPM* Capacity Release in PGA	NSPM* Capacity Release not in PGA j - k	MN-State Allocator	MN-state Capacity Release Not in PGA l * m	MN-State Firm Demand Allocator	MN-State Firm Capacity Release Not in PGA n * o	MN-State Residential Calendar Month Actual Sales Page 1, col. (b)	MN-State Commercial Calendar Month Actual Sales Page 1, col. (b)	MN-State Residential % of Firm Non-Demand Billed Sales q / (q + r)	MN-State Commercial % of Firm Non-Demand Billed Sales r / (q + r)	MN-State Residential Capacity Release Not in PGA p * s	MN-State Commercial Capacity Release Not in PGA p * t
2015 - 2016													
July	\$0	\$0	\$0	88.42%	\$0	96.95%	\$0	6,433,130	4,086,410	61.15%	38.85%	<b>\$0</b>	<b>\$0</b>
August	\$0	\$0	\$0	88.42%	\$0	96.95%	\$0	6,498,540	4,253,680	60.44%	39.56%	<b>\$0</b>	<b>\$0</b>
September	\$0	\$0	\$0	88.42%	\$0	96.95%	\$0	7,842,330	5,149,570	60.36%	39.64%	<b>\$0</b>	<b>\$0</b>
October	\$0	\$0	\$0	88.42%	\$0	96.95%	\$0	16,081,870	10,279,060	61.01%	38.99%	<b>\$0</b>	<b>\$0</b>
November	(\$36,720)	\$0	(\$36,720)	87.99%	(\$32,310)	96.89%	(\$31,306)	31,513,400	18,493,870	63.02%	36.98%	<b>(\$19,728)</b>	<b>(\$11,578)</b>
December	(\$36,720)	\$0	(\$36,720)	87.99%	(\$32,310)	96.89%	(\$31,306)	48,227,590	27,487,470	63.70%	36.30%	<b>(\$19,941)</b>	<b>(\$11,365)</b>
January	(\$36,720)	\$0	(\$36,720)	87.99%	(\$32,310)	96.89%	(\$31,306)	66,331,120	35,656,810	65.04%	34.96%	<b>(\$20,361)</b>	<b>(\$10,945)</b>
February	(\$36,720)	\$0	(\$36,720)	87.99%	(\$32,310)	96.89%	(\$31,306)	54,112,860	29,741,740	64.53%	35.47%	<b>(\$20,202)</b>	<b>(\$11,104)</b>
March	(\$36,720)	\$0	(\$36,720)	87.99%	(\$32,310)	96.89%	(\$31,306)	36,801,580	19,747,850	65.08%	34.92%	<b>(\$20,374)</b>	<b>(\$10,933)</b>
April	\$0	\$0	\$0	87.99%	\$0	96.89%	\$0	24,874,540	12,924,530	65.81%	34.19%	<b>\$0</b>	<b>\$0</b>
May	\$0	\$0	\$0	87.99%	\$0	96.89%	\$0	9,948,161	7,090,298	58.39%	41.61%	<b>\$0</b>	<b>\$0</b>
June	<u>(\$24,330)</u>	<u>\$0</u>	<u>(\$24,330)</u>	87.99%	<u>(\$21,408)</u>	96.89%	<u>(\$20,743)</u>	<u>7,324,458</u>	<u>3,703,302</u>	<u>66.42%</u>	<u>33.58%</u>	<u><b>(\$13,777)</b></u>	<u><b>(\$6,966)</b></u>
Annual	(\$207,931)	\$0	(\$207,931)		(\$182,958)		(\$177,273)	315,989,579	178,614,589			<b>(\$114,383)</b>	<b>(\$62,890)</b>

\* NSPM includes service to Minnesota and North Dakota

\*\* Actual Capacity Release data is lagged by two months.

**True-up Year 2004 - 2005**

<u>Class</u>	<u>Actual Demand Recovery</u>	<u>Monthly Demand Recovery</u>	<u>Demand Recovery Absent Monthly True-up</u>
Residential	\$41,129,545	\$2,245,875	\$38,883,670
<u>Commercial</u>	<u>\$20,065,334</u>	<u>\$820,868</u>	<u>\$19,244,466</u>
Total	\$61,194,879	\$3,066,743	\$58,128,136

<u>Class</u>	<u>Actual Demand Over(Under)</u>	<u>Monthly Demand Recovery</u>	<u>Demand Over(Under) Absent Monthly True-up</u>
Residential	(\$46,924)	\$2,245,875	(\$2,292,799)
<u>Commercial</u>	<u>(\$605,697)</u>	<u>\$820,868</u>	<u>(\$1,426,564)</u>
Total	(\$652,620)	\$3,066,743	(\$3,719,363)

**True-up Year 2005 - 2006**

<u>Class</u>	<u>Actual Demand Recovery</u>	<u>Monthly Demand Recovery</u>	<u>Demand Recovery Absent Monthly True-up</u>
Residential	\$32,687,287	\$1,894,498	\$30,792,789
<u>Commercial</u>	<u>\$17,345,586</u>	<u>\$1,241,722</u>	<u>\$16,103,864</u>
Total	\$50,032,873	\$3,136,220	\$46,896,653

<u>Class</u>	<u>Actual Demand Over(Under)</u>	<u>Monthly Demand Recovery</u>	<u>Demand Over(Under) Absent Monthly True-up</u>
Residential	(\$2,178,710)	\$1,894,498	(\$4,073,208)
<u>Commercial</u>	<u>(\$870,372)</u>	<u>\$1,241,722</u>	<u>(\$2,112,094)</u>
Total	(\$3,049,081)	\$3,136,220	(\$6,185,302)

The goal of the Monthly Demand True-up Mechanism is for the "Actual Demand Over(Under)" to be closer to zero than the "Demand Over(Under) Absent Monthly True-up."

**True-up Year 2006 - 2007**

<u>Class</u>	<u>Actual Demand Recovery</u>	<u>Monthly Demand Recovery</u>	<u>Demand Recovery Absent Monthly True-up</u>
Residential	\$37,580,455	\$2,499,618	\$35,080,837
<u>Commercial</u>	<u>\$19,342,886</u>	<u>\$1,147,611</u>	<u>\$18,195,275</u>
Total	\$56,923,341	\$3,647,229	\$53,276,112

<u>Class</u>	<u>Actual Demand Over(Under)</u>	<u>Monthly Demand Recovery</u>	<u>Demand Over(Under) Absent Monthly True-up</u>
Residential	\$2,979,472	\$2,499,618	\$479,854
<u>Commercial</u>	<u>\$1,371,334</u>	<u>\$1,147,611</u>	<u>\$223,723</u>
Total	\$4,350,806	\$3,647,229	\$703,577

**True-up Year 2007 - 2008**

<u>Class</u>	<u>Actual Demand Recovery</u>	<u>Monthly Demand Recovery</u>	<u>Demand Recovery Absent Monthly True-up</u>
Residential	\$30,305,484	(\$679,741)	\$30,985,225
<u>Commercial</u>	<u>\$15,585,642</u>	<u>(\$188,791)</u>	<u>\$15,774,433</u>
Total	\$45,891,126	(\$868,532)	\$46,759,658

<u>Class</u>	<u>Actual Demand Over(Under)</u>	<u>Monthly Demand Recovery</u>	<u>Demand Over(Under) Absent Monthly True-up</u>
Residential	\$1,695,007	(\$679,741)	\$2,374,748
<u>Commercial</u>	<u>\$933,287</u>	<u>(\$188,791)</u>	<u>\$1,122,078</u>
Total	\$2,628,293	(\$868,532)	\$3,496,825

The goal of the Monthly Demand True-up Mechanism is for the "Actual Demand Over(Under)" to be closer to zero than the "Demand Over(Under) Absent Monthly True-up."



**True-up Year 2008 - 2009**

<u>Class</u>	<u>Actual Demand Recovery</u>	<u>Monthly Demand Recovery</u>	<u>Demand Recovery Absent Monthly True-up</u>
Residential	\$29,249,553	(\$825,991)	\$30,075,544
<u>Commercial</u>	<u>\$15,168,652</u>	<u>(\$335,985)</u>	<u>\$15,504,637</u>
Total	\$44,418,205	(\$1,161,976)	\$45,580,181

<u>Class</u>	<u>Actual Demand Over(Under)</u>	<u>Monthly Demand Recovery</u>	<u>Demand Over(Under) Absent Monthly True-up</u>
Residential	\$1,612,385	(\$825,991)	\$2,438,376
<u>Commercial</u>	<u>\$821,091</u>	<u>(\$335,985)</u>	<u>\$1,157,076</u>
Total	\$2,433,476	(\$1,161,976)	\$3,595,452

**True-up Year 2009 - 2010**

<u>Class</u>	<u>Actual Demand Recovery</u>	<u>Monthly Demand Recovery</u>	<u>Demand Recovery Absent Monthly True-up</u>
Residential	\$29,462,232	\$387,555	\$29,074,677
<u>Commercial</u>	<u>\$15,193,714</u>	<u>\$117,087</u>	<u>\$15,076,627</u>
Total	\$44,655,946	\$504,642	\$44,151,304

<u>Class</u>	<u>Actual Demand Over(Under)</u>	<u>Monthly Demand Recovery</u>	<u>Demand Over(Under) Absent Monthly True-up</u>
Residential	(\$142,642)	\$387,555	(\$530,197)
<u>Commercial</u>	<u>(\$221,380)</u>	<u>\$117,087</u>	<u>(\$338,467)</u>
Total	(\$364,022)	\$504,642	(\$868,664)

The goal of the Monthly Demand True-up Mechanism is for the "Actual Demand Over(Under)" to be closer to zero than the "Demand Over(Under) Absent Monthly True-up."

**True-up Year 2010 - 2011**

<u>Class</u>	<u>Actual Demand Recovery</u>	<u>Monthly Demand Recovery</u>	<u>Demand Recovery Absent Monthly True-up</u>
Residential	\$31,900,539	(\$513,963)	\$32,414,502
<u>Commercial</u>	<u>\$16,582,262</u>	<u>(\$240,700)</u>	<u>\$16,822,962</u>
Total	\$48,482,801	(\$754,664)	\$49,237,465

<u>Class</u>	<u>Actual Demand Over(Under)</u>	<u>Monthly Demand Recovery</u>	<u>Demand Over(Under) Absent Monthly True-up</u>
Residential	\$1,243,740	(\$513,963)	\$1,757,703
<u>Commercial</u>	<u>\$503,531</u>	<u>(\$240,700)</u>	<u>\$744,231</u>
Total	\$1,747,270	(\$754,664)	\$2,501,934

**True-up Year 2011 - 2012**

<u>Class</u>	<u>Actual Demand Recovery</u>	<u>Monthly Demand Recovery</u>	<u>Demand Recovery Absent Monthly True-up</u>
Residential	\$28,374,616	\$1,723,494	\$30,098,110
<u>Commercial</u>	<u>\$15,005,944</u>	<u>\$842,302</u>	<u>\$15,848,246</u>
Total	\$43,380,560	\$2,565,796	\$40,814,764

<u>Class</u>	<u>Actual Demand Over(Under)</u>	<u>Monthly Demand Recovery</u>	<u>Demand Over(Under) Absent Monthly True-up</u>
Residential	(\$3,164,360)	\$1,723,494	(\$4,887,854)
<u>Commercial</u>	<u>(\$1,833,185)</u>	<u>\$842,302</u>	<u>(\$2,675,487)</u>
Total	(\$4,997,545)	\$2,565,796	(\$7,563,341)

The goal of the Monthly Demand True-up Mechanism is for the "Actual Demand Over(Under)" to be closer to zero than the "Demand Over(Under) Absent Monthly True-up."

**True-up Year 2012 - 2013**

<u>Class</u>	<u>Actual Demand Recovery</u>	<u>Monthly Demand Recovery</u>	<u>Demand Recovery Absent Monthly True-up</u>
Residential	\$33,502,197	\$301,661	\$33,803,858
<u>Commercial</u>	<u>\$17,603,132</u>	<u>\$5,242</u>	<u>\$17,608,374</u>
Total	\$51,105,329	\$306,903	\$50,798,426

<u>Class</u>	<u>Actual Demand Over(Under)</u>	<u>Monthly Demand Recovery</u>	<u>Demand Over(Under) Absent Monthly True-up</u>
Residential	\$1,735,764	\$301,661	\$1,434,103
<u>Commercial</u>	<u>\$618,234</u>	<u>\$5,242</u>	<u>\$612,992</u>
Total	\$2,353,998	\$306,903	\$2,047,095

**True-up Year 2013 - 2014**

<u>Class</u>	<u>Actual Demand Recovery</u>	<u>Monthly Demand Recovery</u>	<u>Demand Recovery Absent Monthly True-up</u>
Residential	\$35,748,577	(\$2,237,067)	\$33,511,510
<u>Commercial</u>	<u>\$19,098,544</u>	<u>(\$1,357,576)</u>	<u>\$17,740,968</u>
Total	\$54,847,121	(\$3,594,643)	\$58,441,764

<u>Class</u>	<u>Actual Demand Over(Under)</u>	<u>Monthly Demand Recovery</u>	<u>Demand Over(Under) Absent Monthly True-up</u>
Residential	\$4,987,531	(\$2,237,067)	\$7,224,598
<u>Commercial</u>	<u>\$2,385,201</u>	<u>(\$1,357,576)</u>	<u>\$3,742,777</u>
Total	\$7,372,733	(\$3,594,643)	\$10,967,375

The goal of the Monthly Demand True-up Mechanism is for the "Actual Demand Over(Under)" to be closer to zero than the "Demand Over(Under) Absent Monthly True-up."

**True-up Year 2014 - 2015**

<u>Class</u>	<u>Actual Demand Recovery</u>	<u>Monthly Demand Recovery</u>	<u>Demand Recovery Absent Monthly True-up</u>
Residential	\$30,628,662	(\$1,071,468)	\$31,700,130
<u>Commercial</u>	<u>\$16,481,371</u>	<u>(\$908,815)</u>	<u>\$17,390,186</u>
Total	\$47,110,033	(\$1,980,283)	\$49,090,316

<u>Class</u>	<u>Actual Demand Over(Under)</u>	<u>Monthly Demand Recovery</u>	<u>Demand Over(Under) Absent Monthly True-up</u>
Residential	\$1,905,031	(\$1,071,468)	\$2,976,499
<u>Commercial</u>	<u>\$620,648</u>	<u>(\$908,815)</u>	<u>\$1,529,463</u>
Total	\$2,525,679	(\$1,980,283)	\$4,505,962

**True-up Year 2015 - 2016**

<u>Class</u>	<u>Actual Demand Recovery</u>	<u>Monthly Demand Recovery</u>	<u>Demand Recovery Absent Monthly True-up</u>
Residential	\$28,198,338	\$1,982,683	\$26,215,655
<u>Commercial</u>	<u>\$15,565,823</u>	<u>\$909,297</u>	<u>\$14,656,526</u>
Total	\$43,764,161	\$2,891,981	\$40,872,180

<u>Class</u>	<u>Actual Demand Over(Under)</u>	<u>Monthly Demand Recovery</u>	<u>Demand Over(Under) Absent Monthly True-up</u>
Residential	(\$1,479,052)	\$1,982,683	(\$3,461,735)
<u>Commercial</u>	<u>(\$1,159,878)</u>	<u>\$909,297</u>	<u>(\$2,069,175)</u>
Total	(\$2,638,930)	\$2,891,981	(\$5,530,911)

The goal of the Monthly Demand True-up Mechanism is for the "Actual Demand Over(Under)" to be closer to zero than the "Demand Over(Under) Absent Monthly True-up."

	( a )	( b )*	( c )	( d )	( e )	
	<u>Usage for a</u>	<u>Total</u>		<u>Monthly Demand</u>	<u>Rate Adder</u>	
	<u>Typical</u>	<u>Distribution</u>		<u>True-up Rate</u>	<u>Effect on a</u>	<u>True-up %</u>
	<u>Customer</u>	<u>Rate Charged</u>	<u>Total Typical</u>	<u>Adder (\$/therm)</u>	<u>Typical Bill</u>	<u>of Bill</u>
	<u>(therms)</u>	<u>(\$/therm)</u>	<u>Bill</u>			
			\$6.50 + (a * b)		a * d	abs(e / c)
July-04	18	\$0.794250	\$20.55			
August-04	21	\$0.785850	\$23.27			
September-04	24	\$0.750100	\$24.63			
October-04	57	\$0.761050	\$49.53	(\$0.00366)	(\$0.21)	0.42%
November-04	95	\$1.052420	\$106.79	\$0.00199	\$0.19	0.18%
December-04	159	\$1.028790	\$170.23	\$0.00182	\$0.29	0.17%
January-05	189	\$0.945770	\$184.98	\$0.01407	\$2.66	1.44%
February-05	130	\$0.949410	\$130.10	\$0.01512	\$1.97	1.51%
March-05	125	\$0.935790	\$123.31	\$0.00173	\$0.22	0.18%
April-05	53	\$0.946540	\$57.00	\$0.01789	\$0.95	1.67%
May-05	39	\$0.930920	\$42.48	(\$0.00367)	(\$0.14)	0.33%
June-05	18	\$0.845770	\$21.68			
Annual - July-04 to June-05			\$954.55		\$5.92	0.62%

\*includes base distribution rate, riders (CIP, SEP, Affordability), base cost of gas, Monthly Demand True-up, and PGA

	( a )	( b )*	( c )	( d )	( e )	
	<u>Usage for a</u>	<u>Total</u>		<u>Monthly Demand</u>	<u>Rate Adder</u>	
	<u>Typical</u>	<u>Distribution</u>	<u>Total Typical</u>	<u>True-up Rate</u>	<u>Effect on a</u>	<u>True-up %</u>
	<u>Customer</u>	<u>Rate Charged</u>	<u>Bill</u>	<u>Adder (\$/therm)</u>	<u>Typical Bill</u>	<u>of Bill</u>
	<u>(therms)</u>	<u>(\$/therm)</u>				
		Jul.-Nov.	\$6.50 + (a * b)		a * d	abs(e / c)
		Dec.-Jun.	\$8.00 + (a * b)			
July-05	20	\$0.910390	\$24.70			
August-05	19	\$0.933830	\$24.03			
September-05	24	\$1.144620	\$33.57			
October-05	49	\$1.333800	\$71.84	(\$0.00325)	(\$0.16)	0.22%
November-05	97	\$1.417080	\$144.12	\$0.00056	\$0.05	0.04%
December-05	168	\$1.284600	\$223.73	\$0.00289	\$0.49	0.22%
January-06	127	\$1.281290	\$170.56	\$0.01205	\$1.53	0.90%
February-06	144	\$1.167380	\$176.16	\$0.01096	\$1.58	0.90%
March-06	108	\$1.114720	\$128.78	\$0.01187	\$1.29	1.00%
April-06	45	\$0.858470	\$46.97	(\$0.00666)	(\$0.30)	0.64%
May-06	29	\$0.907250	\$34.63	\$0.01569	\$0.46	1.33%
June-06	20	\$0.796570	\$23.77			
Annual - July-05 to June-06			\$1,102.86		\$4.93	0.45%

\*includes base distribution rate, riders (CIP, SEP, Affordability), base cost of gas, Monthly Demand True-up, and PGA

	( a )	( b )*	( c )	( d )	( e )	
	<u>Usage for a</u>	<u>Total</u>		<u>Monthly Demand</u>	<u>Rate Adder</u>	
	<u>Typical</u>	<u>Distribution</u>		<u>True-up Rate</u>	<u>Effect on a</u>	<u>True-up %</u>
	<u>Customer</u>	<u>Rate Charged</u>	<u>Total Typical</u>	<u>Adder (\$/therm)</u>	<u>Typical Bill</u>	<u>of Bill</u>
	<u>(therms)</u>	<u>(\$/therm)</u>	<u>Bill</u>		<u>a * d</u>	<u>abs(e / c)</u>
			\$8.00 + (a * b)			
July-06	19	\$0.810200	\$23.48			
August-06	17	\$0.891290	\$23.28			
September-06	27	\$0.941710	\$33.37			
October-06	65	\$0.638630	\$49.35	\$0.00382	\$0.25	0.50%
November-06	94	\$1.013440	\$103.45	\$0.00024	\$0.02	0.02%
December-06	116	\$1.079210	\$132.74	(\$0.00401)	(\$0.46)	0.35%
January-07	165	\$0.974460	\$168.50	\$0.01174	\$1.93	1.15%
February-07	164	\$1.014590	\$174.51	\$0.01200	\$1.97	1.13%
March-07	101	\$1.050870	\$114.10	\$0.01200	\$1.21	1.06%
April-07	70	\$0.911960	\$71.69	\$0.01632	\$1.14	1.59%
May-07	21	\$0.989190	\$28.73	\$0.01632	\$0.34	1.19%
June-07	19	\$0.990460	\$26.63			
Annual - July-06 to June-07			\$949.84		\$6.40	0.67%

\*includes base distribution rate, riders (CIP, SEP, Affordability), base cost of gas, Monthly Demand True-up, and PGA

	( a )	( b )*	( c )	( d )	( e )	
	<u>Usage for a</u>	<u>Total</u>		<u>Monthly Demand</u>	<u>Rate Adder</u>	
	<u>Typical</u>	<u>Distribution</u>		<u>True-up Rate</u>	<u>Effect on a</u>	<u>True-up %</u>
	<u>Customer</u>	<u>Rate Charged</u>	<u>Total Typical</u>	<u>Adder (\$/therm)</u>	<u>Typical Bill</u>	<u>of Bill</u>
	<u>(therms)</u>	<u>(\$/therm)</u>	<u>Bill</u>		<u>a * d</u>	<u>abs(e / c)</u>
			\$8.00 + (a * b)			
July-07	19	\$0.895460	\$24.71			
August-07	18	\$0.803860	\$22.33			
September-07	15	\$0.722000	\$19.03			
October-07	43	\$0.777670	\$41.18	(\$0.01310)	(\$0.56)	1.36%
November-07	96	\$0.934490	\$97.32	(\$0.00031)	(\$0.03)	0.03%
December-07	166	\$0.994200	\$172.62	\$0.00260	\$0.43	0.25%
January-08	178	\$0.974290	\$181.11	\$0.00425	\$0.76	0.42%
February-08	162	\$1.031510	\$174.71	(\$0.00411)	(\$0.66)	0.38%
March-08	127	\$1.142070	\$153.11	(\$0.00555)	(\$0.71)	0.46%
April-08	69	\$1.091800	\$83.84	(\$0.00901)	(\$0.63)	0.75%
May-08	37	\$1.265870	\$55.34	(\$0.00893)	(\$0.33)	0.60%
June-08	23	\$1.271190	\$37.06			
Annual - July-07 to June-08			\$1,062.35		(\$1.73)	0.16%

\*includes base distribution rate, riders (CIP, SEP, Affordability), base cost of gas, Monthly Demand True-up, and PGA



	( a )	( b )*	( c )	( d )	( e )	
	<u>Usage for a</u>	<u>Total</u>		<u>Monthly Demand</u>	<u>Rate Adder</u>	
	<u>Typical</u>	<u>Distribution</u>		<u>True-up Rate</u>	<u>Effect on a</u>	<u>True-up %</u>
	<u>Customer</u>	<u>Rate Charged</u>	<u>Total Typical</u>	<u>Adder (\$/therm)</u>	<u>Typical Bill</u>	<u>of Bill</u>
	<u>(therms)</u>	<u>(\$/therm)</u>	<u>Bill</u>		<u>a * d</u>	<u>abs(e / c)</u>
			\$8.00 + (a * b)			
July-08	18	\$1.393780	\$33.03			
August-08	16	\$1.011110	\$24.60			
September-08	21	\$0.951970	\$28.33			
October-08	46	\$0.760390	\$43.09	\$0.00007	\$0.00	0.01%
November-08	100	\$0.917020	\$99.55	(\$0.00025)	(\$0.02)	0.03%
December-08	178	\$1.001941	\$186.00	\$0.00090	\$0.16	0.09%
January-09	196	\$1.008441	\$206.15	(\$0.00038)	(\$0.07)	0.04%
February-09	138	\$0.844551	\$124.77	(\$0.00556)	(\$0.77)	0.62%
March-09	106	\$0.777081	\$90.42	(\$0.00556)	(\$0.59)	0.65%
April-09	64	\$0.655741	\$49.94	(\$0.00897)	(\$0.57)	1.15%
May-09	24	\$0.611481	\$22.46	(\$0.00897)	(\$0.21)	0.94%
June-09	23	\$0.538671	\$20.18			
Annual - July-08 to June-09			\$928.52		(\$2.08)	0.22%

\*includes base distribution rate, riders (CIP, SEP, Affordability), base cost of gas, Monthly Demand True-up, and PGA

	( a )	( b )*	( c )	( d )	( e )	
	<u>Usage for a</u>	<u>Total</u>		<u>Monthly Demand</u>	<u>Rate Adder</u>	
	<u>Typical</u>	<u>Distribution</u>		<u>True-up Rate</u>	<u>Effect on a</u>	<u>True-up %</u>
	<u>Customer</u>	<u>Rate Charged</u>	<u>Total Typical</u>	<u>Adder (\$/therm)</u>	<u>Typical Bill</u>	<u>of Bill</u>
	<u>(therms)</u>	<u>(\$/therm)</u>	<u>Bill</u>		<u>a * d</u>	<u>abs(e / c)</u>
			\$8.00 + (a * b)			
July-09	18	\$0.576321	\$18.14			
August-09	18	\$0.570611	\$18.42			
September-09	20	\$0.489691	\$17.67			
October-09	63	\$0.620868	\$47.30	(\$0.00241)	(\$0.15)	0.32%
November-09	84	\$0.782578	\$74.09	\$0.00102	\$0.09	0.12%
December-09	148	\$0.755838	\$120.20	(\$0.00373)	(\$0.55)	0.46%
January-10	182	\$0.827038	\$158.21	\$0.00799	\$1.45	0.92%
February-10	136	\$0.804638	\$117.10	\$0.00249	\$0.34	0.29%
March-10	90	\$0.722258	\$72.92	(\$0.00799)	(\$0.72)	0.98%
April-10	33	\$0.658348	\$29.40	\$0.00614	\$0.20	0.68%
May-10	29	\$0.673453	\$27.74	\$0.01097	\$0.32	1.16%
June-10	18	\$0.651943	\$19.51			
Annual - July-09 to June-10			\$720.69		\$0.97	0.13%

\*includes base distribution rate, riders (CIP, SEP, Affordability), base cost of gas, Monthly Demand True-up, and PGA

	( a )	( b )*	( c )	( d )	( e )	
	<u>Usage for a</u>	<u>Total</u>		<u>Monthly Demand</u>	<u>Rate Adder</u>	
	<u>Typical</u>	<u>Distribution</u>	<u>Total Typical</u>	<u>True-up Rate</u>	<u>Effect on a</u>	<u>True-up %</u>
	<u>Customer</u>	<u>Rate Charged</u>	<u>Bill</u>	<u>Adder (\$/therm)</u>	<u>Typical Bill</u>	<u>of Bill</u>
	<u>(therms)</u>	<u>(\$/therm)</u>				
		Jul.-Apr.	\$8.00 + (a * b)		a * d	abs(e / c)
		May-Jun.	\$9.00 + (a * b)			
July-10	17	\$0.708363	\$20.28			
August-10	17	\$0.694963	\$19.61			
September-10	23	\$0.601693	\$21.80			
October-10	39	\$0.626126	\$32.65	(\$0.00232)	(\$0.09)	0.28%
November-10	95	\$0.717686	\$76.27	\$0.00010	\$0.01	0.01%
December-10	157	\$0.796304	\$133.00	\$0.00164	\$0.26	0.19%
January-11	177	\$0.778754	\$146.13	\$0.00113	\$0.20	0.14%
February-11	137	\$0.784654	\$115.81	(\$0.00321)	(\$0.44)	0.38%
March-11	127	\$0.768144	\$105.22	(\$0.00742)	(\$0.94)	0.89%
April-11	60	\$0.706324	\$50.03	\$0.00314	\$0.19	0.37%
May-11	39	\$0.694017	\$36.36	(\$0.01171)	(\$0.46)	1.27%
June-11	22	\$0.705717	\$24.54			
Annual - July-10 to June-11			\$781.70		(\$1.28)	0.16%

\*includes base distribution rate, riders (CIP, SEP, Affordability), base cost of gas, Monthly Demand True-up, and PGA

	( a )	( b )*	( c )	( d )	( e )	
	<u>Usage for a</u>	<u>Total</u>		<u>Monthly Demand</u>	<u>Rate Adder</u>	
	<u>Typical</u>	<u>Distribution</u>		<u>True-up Rate</u>	<u>Effect on a</u>	<u>True-up %</u>
	<u>Customer</u>	<u>Rate Charged</u>	<u>Total Typical</u>	<u>Adder (\$/therm)</u>	<u>Typical Bill</u>	<u>of Bill</u>
	<u>(therms)</u>	<u>(\$/therm)</u>	<u>Bill</u>		<u>a * d</u>	<u>abs(e / c)</u>
			\$9.00 + (a * b)			
July-11	16	\$0.706837	\$20.38			
August-11	15	\$0.713437	\$19.67			
September-11	22	\$0.666957	\$23.96			
October-11	40	\$0.661267	\$35.55	(\$0.00001)	\$0.00	0.00%
November-11	86	\$0.742977	\$73.02	\$0.00022	\$0.02	0.03%
December-11	120	\$0.747625	\$98.47	\$0.00231	\$0.28	0.28%
January-12	142	\$0.716627	\$110.42	\$0.00875	\$1.24	1.12%
February-12	124	\$0.699057	\$95.37	\$0.00970	\$1.20	1.26%
March-12	62	\$0.698127	\$52.32	\$0.00970	\$0.60	1.15%
April-12	52	\$0.543377	\$37.44	\$0.01234	\$0.65	1.73%
May-12	24	\$0.471617	\$20.21	\$0.01233	\$0.29	1.45%
June-12	15	\$0.513527	\$16.83			
Annual - July-11 to June-12			\$603.63		\$4.27	0.71%

\*includes base distribution rate, riders (CIP, SEP, Affordability), base cost of gas, Monthly Demand True-up, and PGA

	( a )	( b )*	( c )	( d )	( e )	
	<u>Usage for a</u>	<u>Total</u>		<u>Monthly Demand</u>	<u>Rate Adder</u>	
	<u>Typical</u>	<u>Distribution</u>		<u>True-up Rate</u>	<u>Effect on a</u>	<u>True-up %</u>
	<u>Customer</u>	<u>Rate Charged</u>	<u>Total Typical</u>	<u>Adder (\$/therm)</u>	<u>Typical Bill</u>	<u>of Bill</u>
	<u>(therms)</u>	<u>(\$/therm)</u>	<u>Bill</u>		<u>a * d</u>	<u>abs(e / c)</u>
			\$9.00 + (a * b)			
July-12	15	\$0.528467	\$16.98			
August-12	16	\$0.567204	\$17.91			
September-12	21	\$0.542824	\$20.45			
October-12	50	\$0.578734	\$38.17	\$0.00039	\$0.02	0.05%
November-12	90	\$0.699164	\$71.62	\$0.00185	\$0.17	0.23%
December-12	134	\$0.702684	\$102.86	(\$0.00134)	(\$0.18)	0.17%
January-13	164	\$0.663814	\$117.54	\$0.00118	\$0.19	0.16%
February-13	139	\$0.669754	\$102.08	\$0.00883	\$1.23	1.20%
March-13	128	\$0.671264	\$95.18	\$0.00323	\$0.41	0.44%
April-13	82	\$0.664814	\$63.20	(\$0.00699)	(\$0.57)	0.90%
May-13	43	\$0.681314	\$38.23	(\$0.01228)	(\$0.53)	1.38%
June-13	27	\$0.686824	\$27.57			
Annual - July-12 to June-13			\$711.79		\$0.74	0.10%

\*includes base distribution rate, riders (CIP, SEP, Affordability), base cost of gas, Monthly Demand True-up, and PGA

	( a )	( b )*	( c )	( d )	( e )	
	<u>Usage for a</u>	<u>Total</u>		<u>Monthly Demand</u>	<u>Rate Adder</u>	
	<u>Typical</u>	<u>Distribution</u>		<u>True-up Rate</u>	<u>Effect on a</u>	<u>True-up %</u>
	<u>Customer</u>	<u>Rate Charged</u>	<u>Total Typical</u>	<u>Adder (\$/therm)</u>	<u>Typical Bill</u>	<u>of Bill</u>
	<u>(therms)</u>	<u>(\$/therm)</u>	<u>Bill</u>		<u>a * d</u>	<u>abs(e / c)</u>
			\$9.00 + (a * b)			
July-13	15	\$0.654635	\$18.90			
August-13	16	\$0.645655	\$19.50			
September-13	19	\$0.619095	\$20.48			
October-13	50	\$0.616845	\$39.69	(\$0.00409)	(\$0.20)	0.51%
November-13	101	\$0.698398	\$79.49	\$0.00016	\$0.02	0.02%
December-13	172	\$0.702508	\$129.64	(\$0.00122)	(\$0.21)	0.16%
January-14	191	\$0.754268	\$153.25	(\$0.00477)	(\$0.91)	0.60%
February-14	172	\$0.842048	\$153.59	(\$0.00885)	(\$1.52)	0.99%
March-14	136	\$1.030368	\$149.02	(\$0.00885)	(\$1.20)	0.81%
April-14	78	\$0.725708	\$65.25	(\$0.01172)	(\$0.91)	1.39%
May-14	45	\$0.726268	\$41.98	(\$0.01177)	(\$0.53)	1.27%
June-14	24	\$0.714578	\$26.42			
Annual - July-13 to June-14			\$897.21		(\$5.47)	0.61%

\*includes base distribution rate, riders (CIP, SEP, Affordability), base cost of gas, Monthly Demand True-up, and PGA

	( a )	( b )*	( c )	( d )	( e )	
	<u>Usage for a</u>	<u>Total</u>		<u>Monthly Demand</u>	<u>Rate Adder</u>	
	<u>Typical</u>	<u>Distribution</u>		<u>True-up Rate</u>	<u>Effect on a</u>	<u>True-up %</u>
	<u>Customer</u>	<u>Rate Charged</u>	<u>Total Typical</u>	<u>Adder (\$/therm)</u>	<u>Typical Bill</u>	<u>of Bill</u>
	<u>(therms)</u>	<u>(\$/therm)</u>	<u>Bill</u>		<u>a * d</u>	<u>abs(e / c)</u>
			\$9.00 + (a * b)			
July-14	16	\$0.726150	\$20.74			
August-14	16	\$0.648620	\$19.60			
September-14	21	\$0.730920	\$24.02			
October-14	49	\$0.729870	\$44.74	(\$0.00315)	(\$0.15)	0.34%
November-14	122	\$0.796070	\$106.52	\$0.00004	\$0.00	0.00%
December-14	136	\$0.873360	\$127.35	(\$0.00056)	(\$0.08)	0.06%
January-15	158	\$0.762793	\$129.54	(\$0.00936)	(\$1.48)	1.14%
February-15	173	\$0.777374	\$143.12	\$0.00155	\$0.27	0.19%
March-15	103	\$0.775654	\$88.90	(\$0.00766)	(\$0.79)	0.89%
April-15	55	\$0.620944	\$43.22	(\$0.01259)	(\$0.69)	1.61%
May-15	26	\$0.624624	\$24.97	\$0.01259	\$0.32	1.29%
June-15	16	\$0.648394	\$19.20			
Annual - July-14 to June-15			\$791.94		(\$2.60)	0.33%

\*includes base distribution rate, riders (CIP, SEP, Affordability, GUIC - effective since Feb 2015), base cost of gas, True-up, and PGA

	( a )	( b )*	( c )	( d )	( e )	
	<u>Usage for a</u>	<u>Total</u>		<u>Monthly Demand</u>	<u>Rate Adder</u>	
	<u>Typical</u>	<u>Distribution</u>		<u>True-up Rate</u>	<u>Effect on a</u>	<u>True-up %</u>
	<u>Customer</u>	<u>Rate Charged</u>	<u>Total Typical</u>	<u>Adder (\$/therm)</u>	<u>Typical Bill</u>	<u>of Bill</u>
	<u>(therms)</u>	<u>(\$/therm)</u>	<u>Bill</u>		<u>a * d</u>	<u>abs(e / c)</u>
			\$9.00 + (a * b)			
July-15	16	\$0.643314	\$19.04			
August-15	16	\$0.653734	\$19.31			
September-15	19	\$0.573314	\$19.90			
October-15	39	\$0.581811	\$31.60	\$0.00121	\$0.05	0.15%
November-15	76	\$0.613171	\$55.61	\$0.00117	\$0.09	0.16%
December-15	116	\$0.620127	\$81.05	\$0.00338	\$0.39	0.48%
January-16	160	\$0.633637	\$110.13	\$0.00858	\$1.37	1.24%
February-16	130	\$0.628757	\$90.77	\$0.00857	\$1.11	1.23%
March-16	88	\$0.583907	\$60.62	\$0.00857	\$0.76	1.25%
April-16	60	\$0.503667	\$39.09	\$0.01192	\$0.71	1.82%
May-16	24	\$0.514497	\$21.29	\$0.01192	\$0.28	1.34%
June-16	18	\$0.500687	\$17.81			
Annual - July-15 to June-16			\$566.21		\$4.77	0.84%

\*includes base distribution rate, riders (CIP, SEP, Affordability, GUIC), base cost of gas, Monthly Demand True-up, and PGA



## **CERTIFICATE OF SERVICE**

I, Lynnette Sweet, hereby certify that I have this day served copies or summaries of the foregoing document on the attached list of persons.

xx by depositing a true and correct copy thereof, properly enveloped  
with postage paid in the United States Mail at Minneapolis,  
Minnesota

xx electronic filing

### **Xcel Energy's Miscellaneous Gas Service List**

Dated this 30<sup>th</sup> day of January 2017

/s/

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Lynnette Sweet  
Regulatory Administrator

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	No	GEN_SL_Northern States Power Company dba Xcel Energy-Gas_Xcel Misc Gas
Carl	Cronin	Regulatory.records@xcelenergy.com	Xcel Energy	414 Nicollet Mall FL 7  Minneapolis, MN 554011993	Electronic Service	No	GEN_SL_Northern States Power Company dba Xcel Energy-Gas_Xcel Misc Gas
Jeffrey A.	Daugherty	jeffrey.daugherty@centerpointenergy.com	CenterPoint Energy	800 LaSalle Ave  Minneapolis, MN 55402	Electronic Service	No	GEN_SL_Northern States Power Company dba Xcel Energy-Gas_Xcel Misc Gas
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	GEN_SL_Northern States Power Company dba Xcel Energy-Gas_Xcel Misc Gas
Sharon	Ferguson	sharon.ferguson@state.mn.us	Department of Commerce	85 7th Place E Ste 500  Saint Paul, MN 551012198	Electronic Service	No	GEN_SL_Northern States Power Company dba Xcel Energy-Gas_Xcel Misc Gas
Todd J.	Guerrero	todd.guerrero@kutakrock.com	Kutak Rock LLP	Suite 1750 220 South Sixth Street Minneapolis, MN 554021425	Electronic Service	No	GEN_SL_Northern States Power Company dba Xcel Energy-Gas_Xcel Misc Gas
Sandra	Hofstetter	sHofstetter@mnychamber.com	MN Chamber of Commerce	7261 County Road H  Fremont, WI 54940-9317	Electronic Service	No	GEN_SL_Northern States Power Company dba Xcel Energy-Gas_Xcel Misc Gas
Michael	Hoppe	il23@mtn.org	Local Union 23, I.B.E.W.	932 Payne Avenue  St. Paul, MN 55130	Electronic Service	No	GEN_SL_Northern States Power Company dba Xcel Energy-Gas_Xcel Misc Gas
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