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July 31, 2014

VIA ELECTRONIC FILING

Dr. Burl W. Haar
Executive Secretary
Minnesota Public Utilities Commission
121 7th Place East, Suite 350
St. Paul, Minnesota 55101-2147

RE: Petition for Change in Contract Demand Entitlement
Docket No. _____

Dear Dr. Haar:

Attached hereto, please find Greater Minnesota Gas, Inc.'s Petition for Change in Contract Demand Entitlement for 2014-2015 Heating Season for filing in a new docket.

All individuals identified on the attached service list have been electronically served with the same.

Thank you for your assistance. Please do not hesitate to contact me should you have any questions or concerns or if you require additional information. My direct dial number is (507) 665-8657 and my email address is kanderson@greatermngas.com.

Sincerely,

GREATER MINNESOTA GAS, INC.

/s/
Kristine A. Anderson
Corporate Attorney

Enclosure

cc: Service List

CERTIFICATE OF SERVICE

I, Kristine Anderson, hereby certify that I have this day served a true and correct copy of the following document to all persons at the addresses indicated on the attached list by electronic filing, electronic mail, or by depositing the same enveloped with postage paid in the United States Mail at Le Sueur, Minnesota:

Greater Minnesota Gas, Inc.'s Petition for Change in Contract Demand Entitlement for 2014-2015 Heating Season
Docket No. _____

filed this 31st day of July, 2014.

/s/ Kristine A. Anderson
Kristine A. Anderson, Esq.
Corporate Attorney
Greater Minnesota Transmission, LLC

First Name	Last Name	Email	Company Name	Address	Delivery Method	View Trade Secret	Service List Name
Kristine	Anderson	kanderson@greatermngas.com	Greater Minnesota Gas, Inc.	202 S. Main Street Le Sueur, MN 56058	Electronic Service	No	GEN_SL_Greater Minnesota Gas, Inc._Official Service List
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_Greater Minnesota Gas, Inc._Official Service List
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_Greater Minnesota Gas, Inc._Official Service List
Burl W.	Haar	burl.haar@state.mn.us	Public Utilities Commission	Suite 350 121 7th Place East St. Paul, MN 551012147	Electronic Service	No	GEN_SL_Greater Minnesota Gas, Inc._Official Service List
Nicolle	Kupser	nkupser@greatermngas.com	Greater Minnesota Gas, Inc.	202 South Main Street P.O. Box 68 Le Sueur, MN 56058	Electronic Service	No	GEN_SL_Greater Minnesota Gas, Inc._Official Service List
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	No	GEN_SL_Greater Minnesota Gas, Inc._Official Service List
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STATE OF MINNESOTA

BEFORE THE MINNESOTA PUBLIC UTILITIES COMMISSION

Beverly Jones Heydinger	Chair
David C. Boyd	Commissioner
Nancy Lange	Commissioner
Dan Lipschultz	Commissioner
Betsy Wergin	Commissioner

MPUC Docket No. _____

PETITION FOR CHANGE IN CONTRACT DEMAND ENTITLEMENT FOR 2014-2015 HEATING SEASON

OVERVIEW

Greater Minnesota Gas, Inc. ("GMG") submits this filing to the Minnesota Public Utilities Commission ("Commission") to notify the Commission of a minor change in contract demand entitlement effective November 1, 2014. GMG will provisionally include the rate impact of these changes in GMG's Purchased Gas Adjustments effective November 1, 2014, pending Commission approval.

GMG's analysis demonstrates that with the proposed changes, GMG will have sufficient capacity to serve its firm customers during the 2014-2015 heating season without subjecting its ratepayers to paying unduly high amounts for maintaining its reserve. However, as it did prior to the last heating season, GMG anticipates informally reviewing its projections, demand entitlement, and reserve margin immediately prior to the heating season to ensure that adequate capacity will be available to meet projected peak day demand and design day conditions. In the event that an adjustment of its contract demand request is necessary at that time, GMG will undertake appropriate action to address that scenario.

Minnesota Rule 7825.2910 Subp. 2 requires GMG to identify four things when filing for a change in demand, namely: discussion of the factors contributing to the need for changing demand; GMG's design day demand analysis; a summary of GMG's customers' winter and summer usage for all customer classes; and, a description of GMG's design day gas supply from all sources under it proposed level. This Petition addresses each of the requisite four areas based on GMG's analysis of its current customer usage and patterns, the impact GMG's current and anticipated growth on the upcoming heating season, and forecasting the size and expected load of new and recently acquired customers.

DISCUSSION

GMG's demand entitlement filings in recent years have reflected substantial change as a direct result of the Company's tremendous growth. In order to address both a narrow reserve margin and the uncertainty of predictive modeling for conversion customers, GMG's reserve margin was dramatically increased for the 2013-2014 heating season. Nonetheless, because of its increased customer base, GMG's ratepayers did not sustain any adverse rate impact as a result of GMG purchasing increased reserve capability. Despite experiencing a winter with historical low temperatures and a natural gas availability crisis, GMG's reserve margin was sufficient to ensure that its customers' needs were satisfied. Although GMG has continued to experience growth, that growth will not result in a substantial increase in reserve margin needs. Therefore, GMG continued to employ similar modeling theories in developing its contract demand entitlement proposal for the 2014-2015 heating season as those used in recent previous seasons. GMG again utilized a combination of analytical tools to balance the competing components of maintaining a sufficient reserve and maintaining reasonable customer rates. By combining statistical regression analysis based on its existing customer data, projected growth information, and budget year analysis, GMG's proposed demand entitlement is again soundly supported by its supporting data, attached hereto and incorporated by reference.

GMG seeks an increase in total demand entitlement as follows:

Previous Entitlement (Dth)	Proposed Entitlement (Dth)	Entitlement Changes (Dth)	% Change From Previous Year
9,559	9,659	100	1.05%

1. GMG Requires a Small Increase in Demand to Account for Increased Growth and the Corresponding Change in its Design Day Calculations to Assure Its Ability to Maintain an Adequate Reserve Margin.

A small increase in demand entitlement is requested by GMG to insure that it has sufficient reserve to meet its customers' needs. GMG's prior reserve margin level satisfactorily balanced the necessity of a sufficient reserve margin against protection for its ratepayers from an unreasonable reserve cost. The Department has previously noted that the OES generally uses a gauge of five percent to determine the appropriateness of firm's reserve margin. However, for the 2013-2014 heating season, the Department and Commission approved a reserve margin of 7.2%. GMG also prefers to utilize a conservative approach when allocating a reserve margin. GMG recognizes the Department's previously noted concern that, "[t]he reserve margin is necessary since it provides an extra cushion which ensures firm reliability on a peak day; however, carrying too great a reserve margin results in customers paying higher demand costs than are necessary to provide reasonable service." (Docket No. G022/M-10-1165, Comments of the Minnesota Office of Energy Security, January 3, 2011, p. 5.) Nonetheless, GMG believes that maintaining its reserve margin at a conservative level continues to be prudent and, importantly, that is can be maintained without undue cost burdens to its ratepayers. Therefore, GMG proposes a reserve margin of 7.7% for the upcoming heating season.

GMG's predictive modeling calculations reflect a need for a small change to its design day entitlement. The table below summarizes GMG's design day and reserve calculations:

Existing Customer Base		
Design Day Requirement (Attachment A, Page 2 of 3, line 11)	8,969	Dth
Reserve at 7.7%	690	Dth
Design Day Requirement With 7.7% Reserve Margin	9,659	Dth

The ultimate objective of a design day analysis is to forecast anticipated firm customer demand at design temperatures to predict the necessary level of firm resources to sufficiently serve customer in the unlikely event that design day weather occurs. In order to meet that objective, an small increase in GMG's contract demand entitlement is warranted.

2. GMG's Design Day Analysis Ensure Viable Forecasting Given Available Customer Data and Predictive Information.

GMG has historically relied on a single econometric model to forecast its supply needs for each upcoming heating season. However, the changes in GMG's growth and customer mix warranted employing a combination of quantitative and qualitative indicators for the last heating season analysis in order to enable GMG to make prudent distribution system and peak capacity planning decisions.[1] Therefore, last year, GMG made use of qualitative data for its anticipated new customers and combined that information with historical quantitative data for its existing customers. GMG's system growth is not as remarkable as it was prior to the two most recent heating seasons. Therefore, GMG is able to return to relying more heavily on quantitative data for its current season analysis.

As it has done in the past, GMG employed an ordinary least square regression analysis methodology to predict peak day demand. GMG's regression analysis is predicated on a 90 heating degree day as its basis, based on an average design day temperature of -25°F. GMG's design day forecast for its existing customers for the 2014-2015 heating season is based on 8,969 Dth, which is an increase of 52 Dth over the 2013-2014 design day requirements. The derivation of the design day forecast can be seen in Attachment A, Page 2 of 3.[2]

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[1]. GMG acknowledges that its design day forecast was likely higher than necessary for the last heating season, when examined retrospectively. As the Commission may recall, GMG began serving two new areas with large commercial loads during 2013 and, since quantitative data for customer usage was not available, GMG incorporated qualitative data into its analysis. The current analysis is based on quantitative data alone.

[2]. GMG notes that its regression analysis is based on combined customer classes. Given the recent acquisition of the bulk of GMG's commercial customers, there is not a sufficient amount of historical data to separate residential and commercial classes for regression purposes. As time passes and historical data builds, GMG intends to separate its customer classes for future regression analysis purposes.

GMG notes that the Department expressed concern about GMG's use of negative baseload (non-heat sensitive load) in its regression analysis. (Docket No. G022/M-13-730, Comments of the Minnesota Department of Commerce, Division of Energy Resources, September 16, 2013, p. 5.) As such, the Department recommended that GMG should estimate baseload consumption by examining actual consumption data from the summer months rather than using a negative term for a constant in its regression analysis. GMG concurs that the Department is correct in its assertion that a negative constant should not generally be used in a regression analysis. GMG agrees that when there is sufficient data available, utilizing actual consumption data in the regression analysis will provide more precise predictive information. However, GMG's expanded system just began serving its large commercial customers (and, indeed, a large percentage of its customers in general) in late 2013. As a result, GMG does not have sufficient historical data on which to base a summer usage estimate. Hence, GMG respectfully requests that it continue to utilize its current methodology until it has three solid years of data upon which to calculate viable baseload consumption estimates. GMG recognizes that such a practice likely results in a more conservative reserve amount; but, since ratepayers are not being harmed in the process, GMG believes that it is most appropriate at this time in order to ensure a sufficient reserve.

Attachment A details the regression analysis calculations upon which GMG's contract demand entitlement petition is based, insofar as it relates to its existing customers and quantitative historical data. In conducting its least square regression analysis, GMG employed the following methodology:

> The analysis was completed by using historical firm sales volume data and actual temperature data for the heating season periods from November 2011 through March 2014. The firm sales volume data was correlated to geographic weather data by assigning town border station locations geographically to weather sites as follows:

Weather Site	TBS Location
Mankato	Rapidan
Mankato	Madison Links
Faribault	Heidelberg
Faribault	Forest
Faribault	Faribault 5
Shakopee	Marystown
Randall	Alexandria

> Employing widely-accepted statistical analysis, a linear equation was derived from the linear regression model that was used to calculate the design day usage per customer. The forecasted number of firm customers for the 2014-2015 heating season was then multiplied by the design day usage per customer to derive the design day requirements.

The linear regression models the linear relationship between heating degree day data and firm customer natural gas usage by fitting a linear equation to observed data. The linear regression line has an equation of the form:

$$\boldsymbol{Y = a + b\,X}$$

Where X (Heating Degree Days) is the explanatory variable and Y (Firm Sales Volume) is the dependent variable. The slope of the line is b, and a is the intercept (Firm Non-Temp Sensitive Volume).

The strength of the linear association is quantified by the correlation coefficient. The correlation coefficient takes a positive value between 0 and 1, with 1 indicating perfect correlation (all points would lay along a straight line in this case). A correlation value close to 0 indicates no association between the variables. The formula for computing the correlation coefficient is given by:

$$r = \frac{1}{n-1} \Sigma \left(\frac{x - \overline{x}}{s_x} \right) \left(\frac{y - \overline{y}}{s_y} \right)$$

The reliance on accepted statistical modeling methodology to obtain quantitative data for forecasting purposes is intended to mitigate discrepancies between actual resource utilization and planned supply needs. Hence, GMG has attempted to secure all available information to gauge likely customer sendout during a design day weather occurrence.

3. The Summary of Winter Versus Summer Usage for All GMG Customer Classes Supports a Change in Demand Entitlement.

A summary of GMG's customer usage for both the winter and summer seasons is provided below, broken down by customer class. The summary is based on usage for the twelve month period ending June 30, 2014.

Balance of page intentionally left blank due to size of the following table.

Seasonal Customer Usage By Class (Dth)			
	Winter	**Summer**	**Total**
Residential - Firm	398,959	121,722	520,732
Commercial - Firm	12,325	4,262	16,586
Industrial - Firm	247,323	87,279	334,602
Flexible Rate - Firm	22,258	5,534	27,792
Total Firm	*680,865*	*218,846*	*899,711*
Agricultural - Interruptible	*57,800*	*13,611*	*71,411*
Industrial - Interruptible	18,718	7,056	25,774
Flexible Rate - Interruptible	3,528	29,645	33,173
Total Interruptible (Non-Ag)	*22,246*	*36,701*	*58,947*
Total	**760,911**	**269,158**	**1,030,069**

For the upcoming heating season, GMG has taken permanent assignment of 1400 Dth of release capacity gas on the Viking Emerson line over a twelve month period, rather than the 1300 Dth of release capacity over a four month period. GMG is confident that the capacity over the entire year will ensure that it is able to meet needs throughout the summer and shoulder months as well as during the heating season.

GMG's proposed increase in its contract demand entitlement will assure sufficient supply and reliability for its customers throughout the heating season. GMG's contract arrangements secure supply for both the summer months and the winter months to sufficiently serve its firm customer base throughout the year. GMG's proposal strikes the ideal balance for both cost and efficiency protections for its customers.

4. The Anticipated Design Day Gas Supply is in the Best Interest of Ratepayers Because it Provides for an Adequate Reserve Margin While Minimizing the Rate Impact.

GMG recognizes that the primary concerns of the Commission and the Department with regard to natural gas suppliers are sufficient assurance of reliability and reasonable rates for customers. It is critical that GMG is fully prepared to provide enough firm load to meet its customers' needs. In order to assure that it can meet all of its customers' needs throughout the year, GMG's proposal provides a balanced portfolio based on an integrated system. To that end, GMG has

secured a variety of gas supply sources. A summary of GMG's demand profile shows the changes in GMG's supply sources, as compared to the supply sources for the two previous heating seasons, as seen in Attachment B. GMG is primarily served by the Northern Natural Gas pipeline system. Attachment C identifies the contracts GMG holds with Northern Natural Gas; and, it also specifically notes proposed changes to its Viking Emerson contracts for the 2014-2015 heating season and the corresponding change in contract demand costs.

While GMG's early submission of its Petition herein allows for substantial time to consider its request prior to the heating season, it also necessarily requires GMG to engage in prediction regarding anticipated customer growth for the remainder of the current year. As such, GMG again proposes that it essentially true-up its anticipated needs closer to the beginning of the heating season and that it make any necessary demand adjustments at that time. In that regard, GMG is currently exploring the option of purchasing 300 to 500 Dth of capacity release at minimal cost to its customers should the need arise. GMG will provide updated information with regard to any impact on its contract demand entitlement analysis to the extent that an adjustment is necessary prior to November 1, 2014.

GMG's supply contract scheme is designed so that gas can be delivered to alternate points and can be used elsewhere in GMG's integrated system if necessary at any given time. Thus, GMG has the ability to move supply throughout its service area on a day to day basis as market demand and supply options dictate.

Attachment D provides a summary of the rate impact to firm customers with the contract changes. It demonstrates that GMG's customers will not be subject to increased rates because of the increased reserve. As shown, the rate impact is actually anticipated to be a slight reduction in customer rates. Therefore, there is no adverse impact to customer rates as a result of the increased demand entitlement, which further supports its approval.

REQUEST FOR COMMISSION ACTION

GMG posits that its proposed change in contract demand entitlement serves the best interest of its customers. As the supporting information demonstrates, GMG coordinated its gas-supply planning for the 2014-1015 heating season alongside consideration of previous Department and Commission concerns and recommendations and its broader corporate planning. GMG's proposal again strikes the appropriate balance between assuring physical reliability with sufficient supply to serve all customers in the event that design day weather occurs with minimizing the rate impact of maintaining a sufficient reserve on GMG customers. Therefore, GMG respectfully requests that the Commission approve its Petition for Change in Contract Demand Entitlement for 2014-2015 Heating Season.

Dated: July 31, 2014

Respectfully submitted,

/s/
Kristine A. Anderson
Corporate Attorney
Greater Minnesota Gas, Inc.
202 S. Main Street
Le Sueur, MN 56068
Phone: 888-931-3411

ATTACHMENT A
Design Day Regression Analysis Background Information

Greater Minnesota Gas, Inc.
Contract Demand Entitlement Filing 2014 - 2015 Heating Season
Design Day Information

	Number of Sales Firm Customers			Design Day Requirement			Total Entitlement + Storage + Peak Shaving			Reserve Margin
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Heating Season	Number of Customers	Change from Pervious Year	% Change from Previous Year	Design Day (Dth)	Change from Pervious Year	% Change from Previous Year	Total Entitlement (Dth) 1/	Change from Pervious Year	% Change from Previous Year	% of Reserve Margin [(7)-(4)]/(4)]
2014-2015 Est (1/31)	5,900	595	11.22%	8,969	904	11.21%	9,659	300	3.21%	7.69%
2013-2014 (1/6)	5,305	531	11.12%	8,065	3,101	62.47%	9,359	4,150	79.67%	16.04%
2012-2013 (1/31)	4,774	558	13.24%	4,964	273	5.83%	5,209	165	3.27%	4.94%
2011-2012 (1/19)	4,216	319	8.19%	4,691	241	5.41%	5,044	-	0.00%	7.54%
2010-2011 (1/11)	3,897	175	4.70%	4,450 2/	239	5.66%	5,044	500	11.00%	13.35%
2009-2010 (1/10)	3,722	162	4.55%	4,211	(71)	-1.65%	4,544	300	7.07%	7.90%
2008-2009 (1/09)	3,560	182	5.39%	4,282	566	15.23%	4,244 3/	244	6.10%	-0.89%
2007-2008 (1/08)	3,378	170	5.30%	3,716	166	4.68%	4,000	350	9.59%	7.64%
2006-2007 (2/07)	3,208	237	7.98%	3,550	583	19.65%	3,650	350	10.61%	2.82%
2005-2006 (2/06)	2,971	290	10.82%	2,967	271	10.05%	3,300	300	10.00%	11.22%
2004-2005	2,681	336	14.33%	2,696	696	34.80%	3,000	600	25.00%	11.28%
2003-2004	2,345	181	8.36%	2,000	(200)	-9.09%	2,400	(200)	-7.69%	20.00%
2002-2003	2,164	300	16.09%	2,200	400	22.22%	2,600	400	18.18%	18.18%
2001-2002	1,864	301	19.26%	1,800	400	28.57%	2,200	500	29.41%	22.22%
2000-2001	1,563	393	33.59%	1,400	300	27.27%	1,700	300	21.43%	21.43%
1999-2000	1,170	279	31.31%	1,100	250	29.41%	1,400	150	12.00%	27.27%
1998-1999	891	289	48.01%	850	350	70.00%	1,250	750	150.00%	47.06%
1997-1998	602	339	128.90%	500	200	66.67%	500	200	66.67%	0.00%
1996-1997	263	263		300	300		300	300		
Average per Year:	2,406	264	23.12%	2,545	293	21.93%	2,824	315	24.62%	14.47%

	Firm Peak Day Send out						
	(11)	(12)	(13)	(14)	(15)	(16)	(17)
Heating Season	Firm Peak Day Send out (Dth)	Change from Pervious Year	% Change from Previous Year	Excess per Customer [(7)-(4)]/(1)	Design Day per Customer (4)/(1)	Entitlement per Customer (7)/(1)	Peak Day Send out per Customer (11)/(1)
2014-2015	Unknown			0.117	1.5202	1.6371	Unknown
2013-2014	7,880	2,855	56.82%	0.244	1.5203	1.7642	1.4854
2012-2013	5,025	1,368	37.41%	0.051	1.0398	1.0911	1.0526
2011-2012	3,657	(248)	-6.35%	0.084	1.1126	1.1964	0.8674
2010-2011	3,905	251	6.87%	0.152	1.1419	1.2943	1.0021
2009-2010	3,654	(374)	-9.29%	0.089	1.1315	1.2208	0.9817
2008-2009	4,028	(72)	-1.75%	(0.011)	1.2028	1.1921	1.1315
2007-2008	4,100	550	15.49%	0.084	1.1001	1.1841	1.2137 4/
2006-2007	3,550	738	26.24%	0.031	1.1066	1.1378	1.1066
2005-2006	2,812	285	11.28%	0.112	0.9987	1.1107	0.9465
2004-2005	2,527	185	7.90%	0.113	1.0056	1.1190	0.9426
2003-2004	2,342	587	33.45%	0.171	0.8529	1.0235	0.9987
2002-2003	1,755	747	74.11%	0.185	1.0166	1.2015	0.8110
2001-2002	1,008	(180)	-15.15%	0.215	0.9657	1.1803	0.5408
2000-2001	1,188	291	32.44%	0.192	0.8957	1.0877	0.7601
1999-2000	897	95	11.85%	0.256	0.9402	1.1966	0.7667
1998-1999	802	397	98.02%	0.449	0.9540	1.4029	0.9001
1997-1998	405	233	135.47%	-	0.8306	0.8306	0.6728
1996-1997	172	172		-	1.1407	1.1407	0.6540
Average per Year:	2,210	260	30.50%	0.133	1.0248	1.1574	0.8953

Notes:
1/ Total Entitlement = Total Contract Entitlement - Non-Recallable Capacity Release
2/ Reflects design day forecast method change to linear regression model.
3/ Adjusted to reflect 300 Dth not contracted as originally planned in Docket No. G022/M-08-1327.
4/ Reflects extraordinary send out due to temporary construction heat load.

Greater Minnesota Gas, Inc.
Design Day: Heating Season 2014 - 2015
Derivation of Design Day Use Per Customer

Linear Regression Analysis Period: November thru March 2011-2014

Line No.	Town Border Station(s)	Weather Area	Non- Heat Sensitive (Y Intercept)	Use Per HDD (Slope)	Design HDD	Estimated Design Dths	Regression Coefficient	Equation
1	Rapidan and Madison Links	Mankato	11.88	17.77	90	1,612	0.8646	Y Inter + Slope x Design HDD = Estimated Design Dth
2	Forest, Heidelberg, and Faribault 5	Faribault	-222.52	46.25	90	3,940	0.8136	
3	Marystown	Shakopee	-4.20	7.17	90	641	0.9321	
4	Randall	Alexandria	394.75	16.86	90	1,912	0.8491	
			179.92	88.05				
5				**Total Design Dths**		**8,105**		
6				**Estimated Interruptible Load**		**40**		
7				**Net Design Dths**		**8,065**		Line 4 - Line 5
8				**Customer Count 12/2013**		**5,305**		
9				**Design Dths/Customer**		**1.5202**		Line 6 / Line 7
10				**Estimated Firm Customers for 2014/2015**		**5,900**	*	
11				**Design Dths 2014/2015**		**8,969**		Line 8 x Line 9

* Excludes individual identified commercial customer loads

Greater Minnesota Gas, Inc.
Peak Day Analysis

Line No.	Description	Design Day Calculation	Peak Day 2013 -14	Peak Day 2012 -13	Peak Day 2011 -12
1	Date of Peak Day		6-Jan-14	31-Jan-13	19-Jan-12
2	Day of the Week		Monday	Thursday	Thursday
3	Total Throughput (Dth)	9009	7895	5038	3710
4	Interruptible Customer Usage (Dth)	40	15	13	53
5	Firm Transportation Usage (Dth)	0	150	150	132
6	Firm Sales Throughput (Dth)	8969	7730	4875	3525
7	Average Actual Gas Day Temperature (Deg. F)	-25	-17	-1	-3
8	Heating Degree Days (HDD) 65 degree base	90	82	66	68
9	Non-HDD Sensitive Base (Dth)	180	180	-92	301
10	Total HDD Sensitive Firm Throughput (Dth)	8789	7550	4967	3224
11	Actual Firm Peak Day Dth/HDD (Dth)	98	93	75	47
12	Base + (Actual Dth/HDD * HDDs) (Dth)	8969	7730	4875	3525
13	Peak Month Firm Customers	5900	5305	4774	4216
14	Peak Day Use per Firm Customer	1.520	1.457	1.021	0.836
			Sales Jan '14	% of Total	
15	Firm Sales				
16	Residential		97,020	54.7%	
17	Commercial		14,289	8.1%	
18	Industrial		60,331	34.0%	
19	Flexible Rate Industrial		5,568	3.1%	
20	Total Firm Sales		177,208	100.0%	
21	Allocated Peak Day based on Dth Sales				
22	Residential	4,911	4,232	54.7%	
23	Commercial	723	623	8.1%	
24	Industrial	3,054	2,632	34.0%	
25	Flexible Rate Industrial	282	243	3.1%	
26	Total Firm Sales	8,969	7,730	100%	

ATTACHMENT B
Demand Profile and Supply Comparison

Greater Minnesota Gas, Inc.
Contract Demand Entitlement Filing
Demand Profile

2012 - 2013 Heating Season	Quantity (Dth)		2013 - 2014 Heating Season (revised)	Quantity (Dth)		2014 - 2015 Heating Season	Quantity (Dth)	Change in Quantity (Dth)
TF-7 (Summer - Apr. - Oct.)	**300**		**TF-7 (Summer - Apr. - Oct.)**	**-**		**TF-7 (Summer - Apr. - Oct.)**	**-**	**-**
TF 12 (Nov. - Oct.)	**210**		**TF 12 (Nov. - Oct.)**	**210**		**TF 12 (Nov. - Oct.)**	**210**	**-**
TFX-7 (Oct. - Apr.))	**665**		**TFX-7 (Oct. - Apr.))**	**665**		**TFX-7 (Oct. - Apr.))**	**665**	**-**
TFX-5 (Nov. - Mar.)	**4,244**		**TFX-5 (Nov. - Mar.)**	**6,344**		**TFX-5 (Nov. - Mar.)**	**6,344**	**-**
Viking Zone 1			**Viking Zone 1**	**2,000**	**(2)**	**Viking Zone 1**	**2,000**	**-**
TFX-5 (Nov. - Mar.)	**90**		**TFX-5 (Nov. - Mar.)**	**90**		**TFX-5 (Nov. - Mar.)**	**90**	**-**
			Viking Forward Haul/Emerson	**1,300**		**Viking Forward Haul/Emerson**	**1,400**	**100**
Delivery Contract			**Delivery Contract**	**950**	**(3)**	**Delivery Contract**	**950**	**-**
Capacity Release - Non-recallable	**-**		**Capacity Release - Non-recallable**	**-**		**Capacity Release - Non-recallable**	**-**	**-**
SMS	1,300		SMS	1,300		SMS	2,000	**700**
Heating Season Total Capacity	5,209		Heating Season Total Capacity	9,559		Heating Season Total Capacity	9,659	100
Non-Heating Season Total Capacity	510		Non-Heating Season Total Capacity	210		Non-Heating Season Total Capacity	210	-
Total Entitlement @ Peak	5,209		Total Entitlement @ Peak	9,559		Total Entitlement @ Peak	9,659	100
Total Annual Transportation	-		Total Annual Transportation	-		Total Annual Transportation	-	-
Total Season Transportation	5,209		Total Season Transportation	9,559		Total Season Transportation	9,659	100
Total Percent Summer Vs. Winter	9.8%		Total Percent Summer Vs. Winter	2.2%		Total Percent Summer Vs. Winter	2.2%	
Total Percent Seasonal	100.0%		Total Percent Seasonal	100.0%		Total Percent Seasonal	100.0%	

Notes:

1/ Only items in bold affect capacity entitlement level.

2/ Transport only. Does not increase peak day entitlement.

3/ Company has contract for supply delivered to TBS. No demand charges are applicable, but the 950 dekatherms is available on peak day.

ATTACHMENT C
Contract Entitlement Changes

Greater Minnesota Gas, Inc.
Northern Natural Gas Contract Summary
Contract Entitlement Changes as of November 1, 2014

Contract Entitlements 2013-14

Contract No.	Service Type	Rate Schedule	Months	Entitlement (Dth)	Expiration Date
102985	Firm Throughput	TFX - 5	Nov-Mar	3,000	3/31/2017
102985	Firm Throughput	TFX - 5	Nov-Mar	500	3/31/2018
102985	Firm Throughput	TFX - 5	Nov-Mar	500	3/31/2014
102985	Firm Throughput	TFX - 5	Nov-Mar	2,100	3/31/2014
102985	Firm Throughput	TF - 12	Nov-Mar	244	3/31/2015
121534	Firm Throughput	TFX - 7	Oct-Apr	665	10/31/2015
120579	Firm Throughput	TF - 12	Oct-Sep	181	9/30/2017
120579	Firm Throughput	TF - 12	Oct-Sep	29	9/30/2017
120579	Firm Throughput	TF - 5	Nov-Mar	90	9/30/2017
BP Contract	Contracted Delivery		Nov-Sep	950	4/30/2015
Viking Emerson	Forward Haul	TF-5	Dec-Mar	1,300	3/31/2014
		2013-14 Heating Season Total Capacity		9,559	
		2013-14 Design Day Demand		8,065	
		Reserve Margin		1,494	18.5%

Proposed Contract Entitlement Changes for 2014-15

Start Date	Contract No.	Service Type	Rate Schedule	Months	Entitlement (Dth)	Expiration Date
	Viking Emerson	Forward Haul	TF-5	Dec-Mar	(1,300)	3/31/2014
	Viking Emerson	Forward Haul	TF-5	Nov-Oct	1,400	10/31/2018
		2014-15 Heating Season Total Capacity			9,659	
		2014-15 Design Day Demand			8,969	
		Reserve Margin			690	7.7%

Proposed Change in Contract Demand Costs

Contract No.	Rate Schedule	Volume Dth / Day	No. of Months	Monthly Demand Rates	Total Annual Cost
Viking Emerson	TF-5	(1,300)	4	$ 3.7671	$ (19,588.92)
Viking Emerson	TF-5	1,400	12	$ 3.3978	$ 57,083.04
					$ 37,494.12

/1 This contract was not renewed
/2 This amount to be added to the contracts.
/3 Contracted amount through supply.
/4 Increase to previously approved entitlements.

** Contract has Right of First Refusal on Extension*

ATTACHMENT D
Rate Impact of Proposed Contract Demand Entitlement

Greater Minnesota Gas, Inc.
Contract Demand Entitlement Filing
Rate Impact - November 2014

	Annualized Impact									
Residential	Last Rate Case 1/	Last Demand Change 2/	Current PGA w/o Demand Ent. Change (Nov. 1, 2013)	Proposed Demand Entitlement Change	Change from Last Rate Case	% Change from Last Rate Case	Change from Last Demand Change	% Change from Last Demand Change	Change from Most Recent PGA	% Change from Most Recent PGA
Commodity Cost of Gas (WACOG)	$ 5.8801	$ 4.1212	$ 4.1212	$ 4.1212	$ (1.7589)	-29.91%	$ -	0.00%	$ -	0.00%
Demand Cost of Gas	$ 0.8293	$ 0.8303	$ 0.8303	$ 0.7546	$ (0.0747)	-9.00%	$ (0.0757)	-9.12%	$ (0.0757)	-9.12%
Total Cost of Gas	$ 6.7094	$ 4.9515	$ 4.9515	$ 4.8758	$ (1.8336)	-27.33%	$ (0.0757)	-1.53%	$ (0.0757)	-1.53%
Average Annual Usage (Dth)	101.1	101.1	101.1	101.1						
Average Annual Total Cost of Gas	$ 678.54	$ 500.76	$ 500.76	$ 493.10	$ (185.44)	-27.33%	$ (7.66)	-1.53%	$ (7.66)	-1.53%

	Annualized Impact									
Commercial & Industrial Firm	Last Rate Case 1/	Last Demand Change 2/	Current PGA w/o Demand Ent. Change (Nov. 1, 2013)	Proposed Demand Entitlement Change	Change from Last Rate Case	% Change from Last Rate Case	Change from Last Demand Change	% Change from Last Demand Change	Change from Most Recent PGA	% Change from Most Recent PGA
Commodity Cost of Gas (WACOG)	$ 5.8801	$ 4.1212	$ 4.1212	$ 4.1212	$ (1.76)	-29.91%	$ -	0.00%	$ -	0.00%
Demand Cost of Gas	$ 0.8293	$ 0.8303	$ 0.8303	$ 0.7546	$ (0.07)	-9.00%	$ (0.0757)	-9.12%	$ (0.0757)	-9.12%
Total Cost of Gas	$ 6.7094	$ 4.9515	$ 4.9515	$ 4.8758	$ (1.83)	-27.33%	$ (0.0757)	-1.53%	$ (0.0757)	-1.53%
Average Annual Usage (Dth)	3,031.8	3,031.8	3,031.8	3,031.8						
Average Annual Total Cost of Gas	$ 20,341.87	$ 15,012.20	$ 15,012.20	$ 14,782.69	$ (5,559.18)	-27.33%	$ (229.51)	-1.53%	$ (229.51)	-1.53%

Notes:
1/ Docket Nos. G022/GR-09-962 & G022/MR-10-949
2/ Docket No. G022/M-10-1165 & G022/AA-10-1186

Greater Minnesota Gas, Inc.
Purchased Gas Adjustment (PGA) Calculation

Effective date of implementation:	Natural gas usage on and after	**November 1, 2013**						
Reason for change:	Change in cost of gas due to an estimated Increase in the market price of natural gas from October 2013.							
This PGA is based on the following Northern Natural Gas Tariffs:		This PGA is based on the following Viking Gas Transmission Co. Tariffs:						
5th Revised Sheet No. 50		v.12.0.0 superseding v.11.0.0						
Issued: 8/1/13		Issued: 02/28/2013						
Effective: 10/1/13		Effective: 4/1/13						
5th Revised Sheet No. 51								
Issued: 8/1/13								
Effective: 10/1/13								
Original Sheet No. 55								
Issued: 9/24/10								
Effective: 9/24/10								
I. Greater Minnesota Gas, Inc. - Base Cost of Gas				**November 1, 2010**				
Approved in Docket No. G022/MR-10-949								
						Rate/CCF		
All Customer Sales Rate Classes - Demand		MCF	x Months	x Tariff Rate	Equals	Firm	Interruptible	
	TFX - 7	300	7	$5.6830	11,934	$0.002773		
	TFX-5	4,244	5	$15.1530	321,547	$0.074711		
	SMS Demand	50	7	$2.1800	763	$0.000177		
		1,300	8	$2.1800	22,672	$0.005268		
	Total Capacity Cost				$356,916			
	Rate Case 2009 Firm Sales Service Volume - CCF			4,303,890				
	Demand Base Cost of Gas / CCF					**$0.082929**	**$0.000000**	
All Customer Sales Rate Classes - Commodity								
	All Classes Commodity				$ 2,808,142			
	Rate Case Total Sales Service Volume - CCF			4,775,650				
	Commodity Base Cost of Gas/CCF					**$0.588013**	**$0.588013**	
	Total Base Cost of Gas/CCF				$3,165,058	**$0.670942**	**$0.588013**	
Annual Sales Volume - 2009 Rate Case Sales Service Volume - CCF				**4,775,650**				
Sales Service Volume - CCF			4,303,890					
Interruptible Service Volume - CCF			471,760					
II. Greater Minnesota Gas, Inc. Rates - Current Cost of Gas Effective				**November 1, 2013**				
	Commodity Cost of Gas				$0.412120	WACOG		
III. Annual Sales Volume - 2013-2014 Budget (September - August)				**9,064,590**				
Sales Service Volume - CCF			**8,197,780**					
Interruptible Service Volume - CCF			**866,810**					
IV. Greater Minnesota Gas, Inc.'s -- Current Cost of Gas Effective				**November 1, 2013**				
						Rate/CCF		
All Customer Sales Rate Classes		MCF	x Months	x Tariff Rate	Equals	Firm	Ag Interr	Gen Interr
	Viking Zone 1	2,000	12	$3.4671	83,210	$0.010150		
	Viking Zone 1	1,300	4	$3.4671	18,029	$0.002199		
	TFX - 5	6,344	5	$15.1530	480,653	$0.058632		
	TF - 12	210	5	$10.2300	10,742	$0.001310		
	TF - 12	210	7	$5.6830	8,354	$0.001019		
	TF - 5	90	5	$15.1530	6,819	$0.000832		
	TFX - 7	665	5	$15.1530	50,384	$0.006146		
	TFX - 7	665	2	$5.6830	7,558	$0.000922		
	SMS Demand	50	7	$2.1800	763	$0.000093		
		1,300	5	$2.1800	14,170	$0.001729		
	Current Demand Cost of Gas				$680,682	**$0.083032**	**$0.000000**	**$0.000000**
	Current Commodity Cost of Gas/CCF			% of Total 85%	**$3,735,699**	**$0.412120**	**$0.412120**	**$0.412120**
	Total Cost of Gas/CCF				**$4,416,381**	**$0.495152**	**$0.412120**	**$0.412120**

Summary of Cost
All Customer Sales Rate Classes (/CCF)

	Firm Sales				Agricultural Interruptible				General Interruptible			
	Total Demand	Total Commodity	True-up	**Total**	Total Demand	Total Commodity	True-up	**Total**	Total Demand	Total Commodity	True-up	**Total**
1) Base Rate	$0.082929	$0.588013	$0.000000	**$0.670942**	$0.000000	$0.588013	$0.000000	**$0.588013**	$0.000000	$0.588013	$0.000000	**$0.588013**
2) Prior PGA	$0.017508	($0.206513)	($0.004520)	**($0.193525)**	$0.000000	($0.206513)	$0.065020	**($0.141493)**	$0.000000	($0.206513)	($0.019530)	**($0.226043)**
3) Current Adj	($0.017405)	$0.030620	$0.000000	**$0.013215**	$0.000000	$0.030620	$0.000000	**$0.030620**	$0.000000	$0.030620	$0.000000	**$0.030620**
4) PGA Billed (2+3)	$0.000103	($0.175893)	($0.004520)	**($0.180310)**	$0.000000	($0.175893)	$0.065020	**($0.110873)**	$0.000000	($0.175893)	($0.019530)	**($0.195423)**
5) Average Cost of Gas	$0.083032	$0.412120	($0.004520)	**$0.490632**	$0.000000	$0.412120	$0.065020	**$0.477140**	$0.000000	$0.412120	($0.019530)	**$0.392590**

	Prior Cumulative Adjustments	Demand & Commodity Change Filed Herein	True-up Adjustment Factor Change Eff. September 1, 2013 (G022/AA-13-___)	Current PGA Adjustment
All Firm Sales Rate Classes (/CCF)	($0.189005)	$0.013215	($0.004520)	**($0.180310)**
Ag Inter. Sales Rate Classes (/CCF)	($0.206513)	$0.030620	$0.065020	**($0.110873)**
Gen. Inter. Sales Rate Classes (/CCF)	($0.206513)	$0.030620	($0.019530)	**($0.195423)**

		1	2	3	4	5	7
November 1, 2013	Tariff Rate Designation	Non-gas Commodity Margin ($/CCF)	Commodity Cost ($/CCF)	Demand Other PGA Expenses ($/CCF)	Total Cost of Gas ($/CCF)	True-up Factor ($/CCF)	Total Billing Rate ($/CCF)
Rate Class					(2)+(3)+(4)		
Residential	RS1	$0.444330	$0.412120	$0.083032	$0.495152	($0.004520)	$0.934962
Small Commercial CS1	SCS1	$0.426330	$0.412120	$0.083032	$0.495152	($0.004520)	$0.916962
Commercial CS1	CS1	$0.396330	$0.412120	$0.083032	$0.495152	($0.004520)	$0.886962
Commercial/Industrial MS1	MS1	$0.376330	$0.412120	$0.083032	$0.495152	($0.004520)	$0.866962
Commercial/Industrial LS1	LS1	$0.361330	$0.412120	$0.083032	$0.495152	($0.004520)	$0.851962
Agricultural - Interruptible	AG1	$0.231310	$0.412120	$0.000000	$0.412120	$0.065020	$0.708450
General Interruptible	IND1	$0.251310	$0.412120	$0.000000	$0.412120	($0.019530)	$0.643900
General Interruptible - Flex	IND1 - FL	$0.030000	$0.412120	$0.000000	$0.412120	($0.019530)	$0.422590

Estimated Gas Volumes - November, 2013 859,580 Ccf

FOR ILLUSTRATIVE PURPOSES ONLY

Greater Minnesota Gas, Inc.
Purchased Gas Adjustment (PGA) Calculation

Effective date of implementation:	Natural gas usage on and after	**November 1, 2014**						
Reason for change:	Change in cost of gas due to an estimated Decrease in the market price of natural gas from June 2014.							
This PGA is based on the following Northern Natural Gas Tariffs:		This PGA is based on the following Viking Gas Transmission Co. Tariffs:						
7th Revised Sheet No. 50		v.17.0.0 superseding v.16.0.0						
Issued: 1/31/14		Issued: 2/27/14						
Effective: 4/1/14		Effective: 4/1/14						
7th Revised Sheet No. 51								
Issued: 1/31/14								
Effective: 4/1/14								
Original Sheet No. 55								
Issued: 9/24/10								
Effective: 9/24/10								
I. Greater Minnesota Gas, Inc. - Base Cost of Gas				**November 1, 2010**				
Approved in Docket No. G022/MR-10-949								
						Rate/CCF		
All Customer Sales Rate Classes - Demand		MCF	x Months	x Tariff Rate	Equals	Firm	Interruptible	
	TFX - 7	300	7	$5.6830	11,934	$0.002773		
	TFX-5	4,244	5	$15.1530	321,547	$0.074711		
	SMS Demand	50	7	$2.1800	763	$0.000177		
		1,300	8	$2.1800	22,672	$0.005268		
	Total Capacity Cost				$356,916			
	Rate Case 2009 Firm Sales Service Volume - CCF			4,303,890				
	Demand Base Cost of Gas / CCF					**$0.082929**	**$0.000000**	
All Customer Sales Rate Classes - Commodity								
	All Classes Commodity				$ 2,808,142			
	Rate Case Total Sales Service Volume - CCF			4,775,650				
	Commodity Base Cost of Gas/CCF					**$0.588013**	**$0.588013**	
	Total Base Cost of Gas/CCF				$3,165,058	**$0.670942**	**$0.588013**	
Annual Sales Volume - 2009 Rate Case Sales Service Volume - CCF				**4,775,650**				
Sales Service Volume - CCF			4,303,890					
Interruptible Service Volume - CCF			471,760					
II. Greater Minnesota Gas, Inc. Rates - Current Cost of Gas Effective				**November 1, 2014**				
	Commodity Cost of Gas				$0.479740	WACOG		
III. Annual Sales Volume - 2014-2015 Budget (September - August)				**10,924,800**				
Sales Service Volume - CCF			**9,317,860**					
Interruptible Service Volume - CCF			**1,606,940**					
IV. Greater Minnesota Gas, Inc.'s -- Current Cost of Gas Effective				**November 1, 2014**				
							Rate/CCF	
All Customer Sales Rate Classes		MCF	x Months	x Tariff Rate	Equals	Firm	Ag Interr	Gen Interr
	Viking Zone 1	2,000	12	$3.3978	81,547	$0.008752		
	Viking Zone 1	1,400	12	$3.3978	57,083	$0.006126		
	TFX - 5	6,344	5	$15.1530	480,653	$0.051584		
	TF - 12	210	5	$10.2300	10,742	$0.001153		
	TF - 12	210	7	$5.6830	8,354	$0.000897		
	TF - 5	90	5	$15.1530	6,819	$0.000732		
	TFX - 7	665	5	$15.1530	50,384	$0.005407		
	TFX - 7	665	2	$5.6830	7,558	$0.000811		
					0	$0.000000		
					0	$0.000000		
	Current Demand Cost of Gas				$703,140	**$0.075462**	**$0.000000**	**$0.000000**
	Current Commodity Cost of Gas/CCF			% of Total 88%	**$5,241,064**	**$0.479740**	**$0.479740**	**$0.479740**
	Total Cost of Gas/CCF				**$5,944,203**	**$0.555202**	**$0.479740**	**$0.479740**

FOR ILLUSTRATIVE PURPOSES ONLY

Summary of Cost
All Customer Sales Rate Classes (/CCF)

	Firm Sales				Agricultural Interruptible				General Interruptible			
	Total Demand	Total Commodity	True-up	**Total**	Total Demand	Total Commodity	True-up	**Total**	Total Demand	Total Commodity	True-up	**Total**
1) Base Rate	$0.082929	$0.588013	$0.000000	**$0.670942**	$0.000000	$0.588013	$0.000000	**$0.588013**	$0.000000	$0.588013	$0.000000	**$0.588013**
2) Prior PGA	($0.001731)	($0.009853)	($0.004520)	**($0.016104)**	$0.000000	($0.009853)	$0.065020	**$0.055167**	$0.000000	($0.009853)	($0.019530)	**($0.029383)**
3) Current Adj	($0.005736)	($0.098420)	$0.000000	**($0.104156)**	$0.000000	($0.098420)	$0.000000	**($0.098420)**	$0.000000	($0.098420)	$0.000000	**($0.098420)**
4) PGA Billed (2+3)	($0.007467)	($0.108273)	($0.004520)	**($0.120260)**	$0.000000	($0.108273)	$0.065020	**($0.043253)**	$0.000000	($0.108273)	($0.019530)	**($0.127803)**
5) Average Cost of Gas	$0.075462	$0.479740	($0.004520)	**$0.550682**	$0.000000	$0.479740	$0.065020	**$0.544760**	$0.000000	$0.479740	($0.019530)	**$0.460210**

	Prior Cumulative Adjustments	Demand & Commodity Change Filed Herein	True-up Adjustment Factor Change Eff. September 1, 2013 (G022/AA-13-___)	Current PGA Adjustment
All Firm Sales Rate Classes (/CCF)	($0.011584)	($0.104156)	($0.004520)	**($0.120260)**
Ag Inter. Sales Rate Classes (/CCF)	($0.009853)	($0.098420)	$0.065020	**($0.043253)**
Gen. Inter. Sales Rate Classes (/CCF)	($0.009853)	($0.098420)	($0.019530)	**($0.127803)**

		1	2	3	4	5	7
November 1, 2014	Tariff Rate Designation	Non-gas Commodity Margin ($/CCF)	Commodity Cost ($/CCF)	Demand Other PGA Expenses ($/CCF)	Total Cost of Gas ($/CCF) (2)+(3)+(4)	True-up Factor ($/CCF)	Total Billing Rate ($/CCF)
Rate Class							
Residential	RS1	$0.444330	$0.479740	$0.075462	$0.555202	($0.004520)	$0.995012
Small Commercial CS1	SCS1	$0.426330	$0.479740	$0.075462	$0.555202	($0.004520)	$0.977012
Commercial CS1	CS1	$0.396330	$0.479740	$0.075462	$0.555202	($0.004520)	$0.947012
Commercial/Industrial MS1	MS1	$0.376330	$0.479740	$0.075462	$0.555202	($0.004520)	$0.927012
Commercial/Industrial LS1	LS1	$0.361330	$0.479740	$0.075462	$0.555202	($0.004520)	$0.912012
Agricultural - Interruptible	AG1	$0.231310	$0.479740	$0.000000	$0.479740	$0.065020	$0.776070
General Interruptible	IND1	$0.251310	$0.479740	$0.000000	$0.479740	($0.019530)	$0.711520
General Interruptible - Flex	IND1 - FL	$0.030000	$0.479740	$0.000000	$0.479740	($0.019530)	$0.490210

Estimated Gas Volumes July, 2014 246,920 Ccf