

August 1, 2019

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

RE: **Supplemental Comments of the Minnesota Department of Commerce, Division of Energy Resources**
Docket No. G004/M-18-454

Dear Mr. Wolf:

Attached are the *Supplemental Comments* of the Minnesota Department of Commerce, Division of Energy Resources (Department) in the following matter:

Petition of Great Plains Natural Gas Co., a Division of MDU Resources Group, Inc. (Great Plains or the Company) for Approval of Changes in Contract Demand Entitlements.

These *Supplemental Comments* are in response to Great Plains' *Informational Update* filed on October 31, 2018. The petitioner on behalf of Great Plains is:

Tamie A. Aberle
Director of Regulatory Affairs
Great Plains Natural Gas Company
705 West Fir Avenue
PO Box 176
Fergus Falls, Minnesota 56538-0176

To ensure that the record is complete in this docket, the Department provides the following response to Great Plains' October 31, 2018 *Informational Update*. The Department recommends that the Minnesota Public Utilities Commission (Commission) accept the Company's proposed level of demand entitlement and allow Great Plains to recover associated demand costs through the monthly Purchased Gas Adjustment effective November 1, 2018. The Department also recommends that the Commission require Great Plains to provide information as requested herein in its next demand entitlement petition.

The Department is available to respond to any questions the Commission may have on this matter.

Sincerely,

/s/ SACHIN SHAH
Rates Analyst

SS/ar
Attachments



Before the Minnesota Public Utilities Commission

Supplemental Comments of the Minnesota Department of Commerce Division of Energy Resources

Docket No. G004/M-18-454

I. INTRODUCTION

Great Plains Natural Gas Co., a Division of MDU Resources Group, Inc. (Great Plains or the Company), filed a demand entitlement petition (*Petition*) on June 29, 2018, with the Minnesota Public Utilities Commission (Commission). On August 29, 2018 the Minnesota Department of Commerce, Division of Energy Resources (Department) filed *Comments* in response to the Company's *Petition*. In its *Comments*, the Department stated that it would provide its final recommendations to the Commission after the Company filed its update on November 1, 2018.

On October 31, 2018, the Company filed its *Informational Update* which showed the final demand entitlement volumes and costs that would be charged to ratepayers. The Company noted that there were changes to the firm transport entitlement levels since the original August 29, 2018 *Petition*.

Great Plains originally planned to purchase 2,400 Dekatherms (Dth or Dk) per day of firm, winter only, capacity on Viking Gas Transmission (Viking or VGT). In its *Petition*, the Company stated the following:¹

Great Plains proposes to acquire 2,400 Dk/day of seasonal capacity from a third party on VGT, as shown on Exhibit B, Page 1. This 2,400 Dk/day of seasonal capacity is to replace the 1,600 Dk/day seasonal firm capacity purchase contract with BP Canada Energy Marketing Corp., which expired after the 2017-2018 heating season. If Great Plains is unsuccessful in its attempt to secure seasonal capacity on VGT, the option to purchase a delivered supply of natural gas at either of the VGT city gates will be available on a term or spot basis. The Company will update the Commission regarding the final seasonal capacity contract or delivered supply purchase by November 1, 2018.

¹ See Great Plains August 29, 2018 *Petition*, page 3.

In the *Informational Update*, the Company reported that it acquired 5,000 Dth per day of capacity for five years in lieu of the seasonal winter only Viking capacity that it had originally proposed. In its *Informational Update*, the Company stated the following:²

At the time the June 29 DEQ filing was prepared, Viking Gas Transmission (VGT) capacity was fully subscribed and no additional capacity was available. Therefore, Great Plains proposed to acquire 2,400 Dk/day of seasonal capacity from a third party on VGT.

After the June 29 DEQ filing, VGT posted capacity, that had been turned back to VGT from a prior customer, for bid on its electronic bulletin board. Great Plains bid for and secured a five-year FT-A, Zone 1-1 annual contract for 5,000 Dk/day. Although this amount of firm capacity exceeds current demand requirements, Great Plains determined this long-term contract is in the Company's best interest for the following reasons that are similar to those identified in Response Comments of the Minnesota Department of Commerce, Division of Energy Resources, Docket No. G004/M-16 557, dated November 10, 2016, concerning a long-term capacity contract with [Northern Natural Gas] NNG secured in 2015:

- There is no valid alternative such as a propane-air peak shaving facility;
- Great Plains' peak-day send out has been increasing over the last three heating seasons;
- Future weather cannot be forecasted accurately and with precision;
- VGT is fully subscribed and currently does not have capacity available to contract in a "just-in-time" fashion; rather, incremental capacity is usually added in larger quantities; and
- Great Plains must plan for its design day.

As discussed in the *Petition*, Great Plains proposed changes in its demand entitlement that, in total, would have resulted in total demand costs from all source systems of approximately \$3,944,082.³ In the Company's *Informational Update*, Great Plains stated that as a result of the changes in Viking capacity (as described above), and the annual Northern Natural Gas's (NNG) reallocation of TF-12B and TF-12V services, total demand costs are approximately \$4,124,919 (net of the temporary capacity release).⁴

² See Great Plains October 31, 2018 *Informational Update*, page 2.

³ See Table 1, page 4 in the *Petition*.

⁴ See Table 2, page 3 in the Company's *Informational Update*.

The Department responds to the *Informational Update* below.

II. DEPARTMENT ANALYSIS

The Department offers the following analysis of the Company's *Informational Update*, addressing:

- the revised demand entitlement costs,
- the associated Purchased Gas Adjustment (PGA) cost; and
- the reserve margin (including the events of January 29, 2019 through January 30, 2019).

A. Entitlement Changes

As noted above, Great Plains originally planned to purchase 2,400 Dekatherms (Dth) per day of firm, winter only, capacity on Viking. Due to market conditions at the time the *Petition* was filed, Viking capacity was sold out. In addition, the Company had stated "If Great Plains is unsuccessful in its attempt to secure seasonal capacity on VGT, the option to purchase a delivered supply of natural gas at either of the VGT city gates will be available on a term or spot basis."

However, the Company acquired a five-year FT-A, Zone 1-1 annual contract for 5,000 Dth per day of capacity in lieu of the seasonal winter only Viking capacity or the delivered supply agreement that it had originally proposed. The acquired capacity is not only an annual, rather than seasonal, contract but 2,600 Dth per day more than what the Company anticipated in its *Petition*.

As the Company stated in its *Petition*,⁵ it projected a design-day requirement of 33,674 Dth/day, of which 16,472 Dth/day is needed for firm customers receiving natural gas from city gates interconnecting with VGT. The Company's previously subscribed transmission capacity that directly interconnects with Great Plains' city gates included 15,000 Dth/day on VGT to serve the city gates of Crookston, MN and communities located on Great Plains' transmission lateral located between Vergas, MN and Wahpeton, ND. However, with the new five-year FT-A, Zone 1-1 annual contract acquisition, the current subscribed transmission capacity that directly interconnects with Great Plains' city gates is 20,000 Dth/day on VGT.

⁵ See page 2 in the *Petition*.

If Great Plains had not procured the new five-year contract, the reserve margin would have been negative 8.9%.⁶ In the past few heating seasons the design day has been growing on the city gates interconnecting with VGT as shown in Table 1 below.⁷

Table 1: Historical VGT interconnected city gate Reserve Margin

Heating Season	VGT Design Day (Dth)	Previous VGT Design Day Capacity (Dth)	Historical VGT Reserve Margin	Current Design Day Capacity (Dth)	VGT Reserve Margin
2018-2019	16,472	15,000	-8.94%	20,000	21.42%
2017-2018	15,821	15,000	-5.19%		
2016-2017	15,556	15,000	-3.57%		
2015-2016	15,410	15,000	-2.66%		
2014-2015	14,812	15,000	1.27%		

The above historical Design Day capacity does not reflect the seasonal winter only capacity or the seasonal delivered supply agreement⁸ that the company previously acquired, but is now expired, and only reflects the long-term capacity that the Company has with VGT. The Company has previously tried to get long-term interstate pipeline capacity on VGT.⁹

⁶ *Id.* and Exhibit A of *Petition*.

⁷ For example, See Great Plains *July 2, 2014 Filing*, Exhibit A in Docket No. G004/M-14-563; *July 1, 2015 Filing*, Exhibits A, B, and D in Docket No. G004/M-15-645 (Docket 15-645); *October 29, 2015 Informational Update*, Exhibits A and B in Docket 15-645; *June 30, 2017 Filing*, Exhibits A and B in Docket No. G004/M-17-521 (Docket 17-521); *November 1, 2017 Informational Update*, Exhibits A, B, and D in Docket 17-521; and page 2 and Exhibit A in the *Petition*.

⁸ The seasonal winter capacity refers for example, to the 2,400 Dth per day of firm, winter only, capacity from a third party (such as BP Canada Energy Marketing Corporation) on VGT and Great Plains would hold the pipeline capacity and deliver supply to its city gates. Whereas a seasonal delivered supply agreement, in general, would refer to an arrangement where a gas supplier would hold firm transportation capacity on VGT, and would commit to deliver gas to Great Plains at the city gate thereby performing the transportation themselves.

⁹ See *June 30, 2017 Filing*, page 3 and Exhibit B and *November 1, 2017 Informational Update*, page 2 in Docket No. G004/M-17-521, and pages 2-3 of the *Petition* in the instant docket.

The Department also notes that Great Plains' 15,000 Dth/day VGT capacity for firm customers receiving natural gas from city gates interconnecting with VGT is also sourced by 15,000 Dk/day of supplemental capacity on NNG's transmission system. In its *Petition*,¹⁰ the Company indicated that 2,000 Dth/day of its supplemental seasonal NNG TFX capacity will expire on October 31, 2019.

Moreover, while the Company has previously acquired, and attempted to acquire, seasonal winter only capacity or the seasonal delivered supply agreement it is not clear whether the seasonal acquisitions would have been attainable for future heating seasons (i.e., for the 2018-2019 heating season) and/or whether that would have been cost effective compared to the long-term five-year contract acquired. To an extent, the Company avoids the potential need to fund a VGT transmission expansion project if it were to occur in the near future, by locking in the current rates. In addition as mentioned by the Company above,¹¹

- There is no valid alternative such as a propane-air peak shaving facility;
- Great Plains' peak-day send out has been increasing over the last three heating seasons;
- Future weather cannot be forecasted accurately and with precision;
- VGT is fully subscribed and currently does not have capacity available to contract in a "just-in-time" fashion; rather, incremental capacity is usually added in larger quantities;
- Great Plains must plan for its design day; and
- Consolidation of the Company's PGA districts could result in changes to Great Plains' current and future capacity arrangements.

Based on all of the above, the Department concludes that Great Plains proposed entitlement changes appear reasonable.

¹⁰ See Exhibit B of the *Petition* and the *Informational Update*.

¹¹ See the Department's *November 9, 2016 Supplemental Response Comments* in Docket No. G004/M-15-645 (Docket 15-645) at pages 6 through 13 for a detailed discussion.

B. Great Plains PGA Cost Recovery proposal update

Great Plains proposed to reflect the costs associated with its proposed demand entitlements in the PGA effective November 1, 2018. The demand entitlements in Great Plains' *Informational Update* Exhibit B and Table 2 represents the demand entitlements for which the Company's firm customers will pay. Table 3 of the *Informational Update* compares the October 2018 PGA costs to the November 2018 PGA costs for two customer classes. The resulting cost changes, related strictly to changes in demand costs, have the following annual rate effects:

- an annual bill increase of \$5.33 or approximately 5.4%, for the average residential customer consuming 77.9 dth annually; and
- an annual bill increase of \$29.71 or approximately 5.4%, for the average firm general service customer consuming 434.4 dth annually.

The bill impacts described above relate solely to changes in demand cost and are based on the demand data and information provided by the Company. Based on its review, the Department concludes that the Company's proposal appears to be reasonable.

C. Reserve margin

1. No Change to The Reserve Margin

As a result of the proposed entitlement changes, there is no change in the reserve margin of 5.56% (net of the temporary capacity release). This reflects a slight increase in the reserve margin compared to the 2017-2018 heating season's reserve margin of 5.23%.¹² Without the capacity release, the Company's entitlement is 38,145 Dth/day resulting in a reserve margin of 13.3%. As discussed in detail above and based on the discussion in the Department's *Comments*, the 2018-2019 reserve margin is acceptable.

2. Update on Reserve Margin Assessment

In the Department's *Comments*, the Department stated the following:¹³

As fully discussed previously,¹⁴ the Department notes that, in contrast to the electric utility industry, natural gas reserve margins are utility-specific rather than regionally specific. However, given

¹² See *Supplemental Comments* Department Attachments 1 and 2.

¹³ See Department's August 29, 2018 *Comments* at pages 9-10.

¹⁴ See the Department's *November 29, 2017 Comments* in Docket No. G004/M-17-521.

Minnesota's efforts to expand natural gas use in under- and unserved areas, and the increasing use of natural gas for electricity generation, there is a growing need to more closely examine reserve margins and to integrate natural gas supply planning with electric resource planning. The Department will provide an update on the responses to information requests it has sent previously when it files its final recommendations and comments after Great Plains files its update on November 1, 2018, in addition to information provided in the annual service quality and annual automatic adjustment reports, to ascertain, among other things, the number and timing of interruptions (curtailments) that may be occurring, and the causes of those curtailments, as a first step in assessing whether the demand entitlements procured, including reserve margins in place at those times, were sufficient or justified, and to continue monitoring the growing interrelationship between the natural gas and electric industries.

Through discovery in various dockets,¹⁵ Great Plains provided the Department with daily throughput data (that includes all firm, transportation, and interruptible) by Town Border Station (TBS), and curtailment data over the period from November 2012 to March 2018. In its responses to Information Request (IR) No. 18 in Docket G999/AA-16-524 (Docket 16-524), the Company in part stated the following:

Great Plains does not track daily throughput by firm, interruptible, and transport load.

¹⁵ See *Supplemental Comments Attachment 3*.

The Department reviewed information provided by the Company regarding the Company's historical curtailments. Please see Table 2 below.

Table 2: Historical Curtailments

Period	Curtailment		No. of Customers	Non-Compliant Usage (Dth)	Reserve Margin
	Beginning Date	End Date			
Dec 2017 - Jan 18	12/25/2017	12/26/2017	4	0	5.23%
	12/29/2017	12/31/2017	4	0	
	1/12/2018	1/13/2018	4	0	
	1/15/2018	1/16/2018	4	0	
Jan - June 2017 ¹⁶	1/4/2017	1/6/2017	4	0	5.70%
	03/14/2017	03/15/2017	1	300	
July - Dec 2016	8/29/2016	8/30/2016	1	0	5.70%
	12/17/2016	12/18/2016	2	0	
	12/18/2016	12/19/2016	2	0	
	12/19/2016	12/20/2016	2	0	
July 2015 - June 2016	1/15/2016	1/16/2016	5	0	3.96%
	2/12/2016	2/13/2016	5	0	
July 2014 - June 2015	2/17/2015	2/19/2015	5	0	4.89%
July 2013 - June 2014	1/5/2014	1/8/2014	17	916.3	4.12%
	1/22/2014	1/23/2014	16	582.8	
	12/29/2013	12/31/2013	12	363.5	
	1/27/2014	1/28/2014	9	280.6	
	2/10/2014	2/11/2014	10	317.4	
Nov 2012 - June 2013	1/31/2013	2/1/2013	3	??	5.33%

¹⁶ See Exhibit F of Great Plains August 31, 2017 Annual Automatic Adjustment (AAA) Report in Docket No. G999/AA-17-493 (Docket 17-493).

The Department notes that, in Great Plains' response to Department IR No. 18 in various dockets,¹⁷ the Company identified additional customers that were asked to curtail on 01/04/2017 for approximately 9 days and on 01/12/2017 for a day due to weather and pressure issues on a Fergus Falls lateral line.

As can be seen in Table 2 above, the Company had some curtailment events during the various heating seasons (including the First Polar Vortex). It appears that Great Plains has taken steps to ensure that its interruptible customers are truly interruptible and able to curtail usage when an event is called.

In its Exhibit F of its initial AAA Report in Docket 17-493, Great Plains only identified one curtailment event from 01/04/2017 till 01/06/2017 as shown in Table 2 above. In its response to Department IR No. 18 in various dockets,¹⁸ the Company stated the following:

Direct: refers to situations where customers were expressly notified of curtailment.

Indirect: refers to situations where customer, who typically doesn't consume, would be denied service if a request was made. (Grain Dryers)

The Company did have one customer that was non-compliant during the 2016-2017 heating season as described in the Department's *December 4, 2018 Comments* in Docket 17-493 as follows:¹⁹

In its Exhibit F, Great Plains explained that it had five curtailment periods during the 2016-2017 heating season and all eleven customers that were requested to curtail gas usage complied with the request. One customer however, ignored instructions to not run their grain dryer on March 14-15, 2017. That customer used over 300 dekatherms of unauthorized gas, resulting in a penalty of over \$15,000 that was credited back to ratepayers. The Department concludes that Great Plains complied with the reporting requirements in Docket No. 14-580.

The Department has previously stated that it is important that interruptible customers who do not use the gas system in a responsible manner be held financially accountable:²⁰

¹⁷ See *Supplemental Comments*, Attachment 3.

¹⁸ See *Supplemental Comments* Attachment 3.

¹⁹ See Exhibit F of Great Plains *August 31, 2017 AAA Report* in Docket 17-493 and Department's *December 4, 2018 Comments* in Docket 17-493 at pages 21 and 59-60.

²⁰ See Department's *December 4, 2018 Comments* in Docket 17-493 at pages 59-60.

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

Great Plains' planning approach appears to be appropriate, and in light of the reserve margins in place at the time, the Department concludes at this time that Great Plains' planning approach and resulting reserve margins appear reasonable.

3. Information Requested to be Included in Next Demand Entitlement Petition

In Docket No. E,G999/CI-19-160 (Docket 19-160), the Commission opened an investigation to learn about each utility's operational experiences during the 2019 Polar Vortex.

In its *April 8, 2019 Comments* in Docket 19-160, Great Plains stated the following:²¹

...The weather event that took place in January and February of 2019 resulted in temperatures that were near the 30-year coldest weather temperatures Great Plains' uses to analyze its customers' requirements to ensure sufficient pipeline capacity is secured, gas supplies are available, and the distribution system is capable of delivering sufficient gas supply to its customers. Great Plains actively monitors its system in cold weather conditions to ensure that reliability and safety are maintained. There was no loss in service to any firm customers during the severe weather event. Further, Great Plains did not experience any issues with excess flow valves during the severe weather event.

²¹ See [edockets Id 20194-151762-01](#)

The Company indicated that its firm customers were not impacted during the 2019 Polar Vortex, but the Company indicated that it had “pressure” issues near Fergus Falls. As a result, the Department requests that Great Plains in its next Demand Entitlement Petition explain the Fergus Falls pressure issues experienced during the most recent Polar Vortex, and past events such as the occurrence in January 2017, including at a minimum answers to the following questions:

- What are the possible sources of the “pressure” issues in Fergus Falls?
- Have the previous “pressure” issues impacted service to the Company’s firm customers?

In addition, the Department requests that the Company explain in its next demand entitlement petition how its distribution/transmission system and city gates would be impacted if there ever were a loss of a single compressor station on NNG’s and/or Viking’s systems.

III. DEPARTMENT RECOMMENDATIONS

The Department recommends that the Commission:

- Approve Great Plains’ proposed level of demand entitlements as amended by its *Supplemental Filing*; and
- Allow Great Plains to recover associated demand costs through the monthly Purchased Gas Adjustment effective November 1, 2018.

The Department also requests that, in its next demand entitlement petition, Great Plains provide the following information.

- What are the possible sources of the “pressure” issues in Fergus Falls?
- Have the previous “pressure” issues impacted service to the Company’s firm customers?
- Explain in its next demand entitlement petition how its distribution/transmission system and city gates would be impacted if there ever were a loss of a single compressor station on:
 - NNG’s system,
 - Viking’s system,
 - Both NNG’s and Viking’s systems.

/ar

**Supplemental Comments Department Attachment 1
 Docket No. G004/M-18-454
 Great Plains Demand Entitlement Historical and Current Proposal**

Contract Type	2015-2016	2016-2017	2017-2018	Proposed As of 11/1/18			
	Quantity (Mcf)	Quantity (Mcf)	Quantity (Mcf)	2018-2019 Quantity (Mcf)	Change in Quantity (Mcf)	Change in Capacity (%)	Change in Design Day (%)
<u>VGT</u>							
FT-A (12-month)	13,000	13,000	13,000	18,000	5,000		
FT-A (5-month)	2,700	3,400	2,000	2,000	-		
BP (5-month)	-	-	1,600	-	(1,600)		
Seasonal Capacity Release				(2,600)	(2,600)		
Total VGT	15,700	16,400	16,600	17,400	800		
<u>NNG</u>							
TFX (12-month)*	2,000	2,000	700	1,000	300		
TFX (5-month)	6,200	6,200	6,200	6,200	-		
TF12B	4,604	5,421	4,854	3,819	(1,035)		
TF12V	2,931	2,114	2,681	3,716	1,035		
TF5	3,410	3,410	3,410	3,410	-		
TFX (Capacity Release)	(1,300)	(1,300)	-	-	-		
Total NNG	17,845	17,845	17,845	18,145	300		
Total Entitlement	33,545	34,245	34,445	35,545	1,100	3.19%	0.41%
Total Annual Transportation	22,535	22,535	21,235	26,535	5,300	24.96%	
Total Winter Only Transport	11,010	11,710	13,210	9,010	(4,200)	-31.79%	
Percent of Winter Only Capacity	32.82%	34.19%	38.35%	25.35%			

*Demand profile includes 1,000 dk: Remaining 1,000 dk used to deliver gas to Viking interconnect at Chisago for 1,300 dk FT-A (12 Months) "back-haul" contract to Vergas, MN.

Source: Great Plains Exhibit B

Supplemental Comments Department Attachment 2
Docket No. G004/M-18-454
Great Plains Demand Entitlement Analysis*

	Number of Firm Customers			Design-Day Requirement			Total Entitlement Plus Peak Shaving			Reserve Margin	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
Heating Season	Number of Customers	Change from Previous Year	% Change From Previous Year	Design Day (Dth)	Change from Previous Year	% Change From Previous Year	Total Design-Day Capacity (Dth)	Change from Previous Year	% Change From Previous Year	Reserve (7) - (4)	% Reserve [(7)-(4)]/(4)
2018-2019	24,240	243	1.01%	33,674	941	2.87%	35,545	1,100	3.19%	1,871	5.56%
2017-2018	23,997	184	0.77%	32,733	335	1.03%	34,445	200	0.58%	1,712	5.23%
2016-2017	23,813	(69)	-0.29%	32,398	131	0.41%	34,245	700	2.09%	1,847	5.70%
2015-2016	23,882	358	1.52%	32,267	1,143	3.67%	33,545	900	2.76%	1,278	3.96%
2014-2015	23,524	296	1.27%	31,124	1,691	5.75%	32,645	2,000	6.53%	1,521	4.89%
2013-2014	23,228	290	1.26%	29,433	339	1.17%	30,645	0	0.00%	1,212	4.12%
2012-2013	22,938	164	0.72%	29,094	158	0.55%	30,645	159	0.52%	1,551	5.33%
2011-2012	22,774	40	0.18%	28,936	(393)	-1.34%	30,486	(1,380)	-4.33%	1,550	5.36%
2010-2011	22,734	(2)	-0.01%	29,329	(515)	-1.73%	31,866	(1,170)	-3.54%	2,537	8.65%
2009-2010	22,736	85	0.38%	29,844	119	0.40%	33,036	(1,170)	-3.42%	3,192	10.70%
2008-2009	22,651	49	0.22%	29,725	(714)	-2.35%	34,206	0	0.00%	4,481	15.07%
2007-2008	22,602	1	0.00%	30,439	(406)	-1.32%	34,206	0	0.00%	3,767	12.38%
2006-2007	22,601			30,845			34,206			3,361	10.90%
Average			0.59%			0.76%			0.36%		7.53%

	Firm Peak-Day Sendout			Per Customer Metrics			
	(12)	(13)	(14)	(15)	(16)	(17)	(18)
Heating Season	Firm Peak-Day Sendout (Dth)	Change from Previous 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 per Customer (12)/(1)
2018-2019	unknown			0.0772	1.3892	1.4664	unknown
2017-2018	28,641	112	0.39%	0.0713	1.3640	1.4354	1.1935
2016-2017	28,529	1,283	4.71%	0.0776	1.3605	1.4381	1.1980
2015-2016	27,246	(1,853)	-6.37%	0.0535	1.3511	1.4046	1.1409
2014-2015	29,099	1,406	5.08%	0.0647	1.3231	1.3877	1.2370
2013-2014	27,693	3,471	14.33%	0.0522	1.2671	1.3193	1.1922
2012-2013	24,222	5,513	29.47%	0.0676	1.2684	1.3360	1.0560
2011-2012	18,709	(4,269)	-18.58%	0.0681	1.2706	1.3386	0.8215
2010-2011	22,978	1,442	6.70%	0.1116	1.2901	1.4017	1.0107
2009-2010	21,536	(1,731)	-7.44%	0.1404	1.3126	1.4530	0.9472
2008-2009	23,267	540	2.38%	0.1978	1.3123	1.5101	1.0272
2007-2008	22,727	852	3.89%	0.1667	1.3467	1.5134	1.0055
2006-2007	21,875			0.1487	1.3648	1.5135	0.9679
Average			3.14%	0.0998	1.3247	1.4245	1.0665

*The Petition is the second in which the Company's South District and North District were combined based the ruling in Docket No. G004/GR-15-879. The Department combined the districts for comparison.
 Source: Great Plains Exhibit D



705 West Fir Avenue
Mailing Address:
P.O. Box 176
Fergus Falls, MN 56538-0176
(218) 736-6935

April 10, 2017

Public Copy – Trade Secret Information Redacted

Mr. Connor Boler
Department of Commerce
Division of Energy Resources
85 7th Place East, Suite 500
St. Paul, MN 55101-2198

Re: Docket No. G999/AA-16-524

Dear Mr. Boler:

Great Plains Natural Gas Co., (Great Plains), a Division of MDU Resources Group, Inc., herewith electronically submits its response to information request number 18 from the Minnesota Department of Commerce, Division of Energy Resources dated March 10, 2017. Response No. 18 has information that has been designated as Confidential Information – Not for Public Disclosure and is furnished in accordance with Minnesota Statute 13.37 Subd. 1(b). This information would present a safety concern to Great Plains if made public.

If you have any questions regarding this filing, please contact me at (701) 222-7856, or Brian M. Meloy, at (612) 335-1451.

Sincerely,

/s/ Tamie A. Aberle

Tamie A. Aberle
Director of Regulatory Affairs

cc: Brian M. Meloy

Minnesota Department of Commerce
Division of Energy Resources
Information Request

Docket Number: G999/AA-16-524 Nonpublic Public
Requested From: All regulated gas utilities Date of Request: 3/10/2017
Response Due: 3/20/2017

Requested by: Adam Heinen/Michael Ryan/Angela Byrne/Steve Rakow
Email Address(es): adam.heinen@state.mn.us
Phone Number(s): 651-539-1825

Request Number: 18
Topic: Distribution Planning

Request:

- A. Please provide a detailed discussion of how the utility plans, constructs, and maintains its distribution system. As part of this response, include a discussion about how the utility decides to add capacity or expand in to new, or growing, service territory.
- B. Please provide daily throughput data, by each individual Town Border Station (TBS) or delivery point, on the utility's system since November 1, 2012. If available, please provide these data divided by firm, interruptible, and transport load. Please also provide these data in Microsoft Excel format with all links, and formulae intact.
- C. Please provide the number of interruption days, by TBS or delivery point, by month since November 2012. To the extent possible, please identify the number of interruption days that are non-weather related (e.g., reliability purposes). Please also provide these data in Microsoft Excel format with all links, and formulae intact.
- D. Please provide, on a daily basis since November 1, 2012 by TBS or delivery point, the maximum deliverable throughput by customer type. Please also provide these data in Microsoft Excel format with all links, and formulae intact.
- E. Please provide, by TBS or delivery point, on a daily basis since November 1, 2012 the percentage of deliverable capacity subscribed by the utility. If applicable, please identify other parties, and their percentages of subscribed capacity, at the TBS. Please also provide these data in Microsoft Excel format with all links, and formulae intact.
- F. Please provide the following forecasted data, in Microsoft Excel format with all links and formulae intact, by TBS, or delivery point, for the next three heating seasons. If the utility expects daily fluctuation, please provide these data on a daily basis:
 - a. Total utility throughput, if possible, divided by customer type (*i.e.*, firm, interruptible, transport); and
 - b. Expected firm and total throughput available at the TBS or delivery point.
- G. Please provide maps, by county, identifying the location (and name) of any, and all, TBSs or delivery points on the utility's system. If possible, please provide these maps in pdf and GIS executable formats.

To be completed by responder

Response Date: April 10, 2017
Response by: Travis Jacobson
Email Address: travis.jacobson@mdu.com
Phone Number: (701) 222-7855

Minnesota Department of Commerce
Division of Energy Resources
Information Request

Docket Number: G999/AA-16-524 Nonpublic Public
Requested From: All regulated gas utilities Date of Request: 3/10/2017
Response Due: 3/20/2017

Requested by: Adam Heinen/Michael Ryan/Angela Byrne/Steve Rakow
Email Address(es): adam.heinen@state.mn.us
Phone Number(s): 651-539-1825

- B. Please see the attached Microsoft Excel document titled “DOC IR 18 Response – Attachment A” within worksheet titled “Request 18.B”. Great Plains does not track daily throughput by firm, interruptible, and transport load.
- C. Please see Attachment B. Page 1 is the information for July through December 2016, page 2 covers the period July 2015 through June 2016 and was provided in Docket No. AA-16-524, page 3 covers the period July 2014 through June 2015 and was provided in Docket No. AA-15-612, and pages 4 and 5 cover the period July 2013 through June 2014 and was provided in Docket No. AA-14-580. For the period November 2012 through June 2013, from 9:00 a.m. on 1/31/13 through 9:00 a.m. 2/1/2013, three customers in the South District were asked to curtail. Two customers complied and one failed to comply resulting in a penalty.
- D. Great Plains Natural Gas does not allocate maximum deliverable throughput to or for any particular customer class.
- E. Great Plains Natural Gas does not track historical delivery point capacities; therefore, does not identify the percentage of subscribed capacity. Please see the current percentage of deliverable capacity in the attached Microsoft Excel document titled “DOC IR 18 Response – Attachment A” within worksheet titled “Request 18.E”
- F. a. Please refer to included Microsoft Excel document titled “DOC IR 18 Response – Attachment A” within worksheet titled “Request 18.F”
- b. Please see Response No. 18 E. The expected and total throughput available is shown in the Microsoft Excel file.
- G. Please see the maps [TRADE SECRET] which shown Great Plains’ service territory by county which are included in the attached files in pdf format.

To be completed by responder

Response Date: April 10, 2017
Response by: Travis Jacobson
Email Address: travis.jacobson@mdu.com
Phone Number: (701) 222-7855

GREAT PLAINS NATURAL GAS CO.
CURTAILMENT REQUIREMENTS AND PENALTIES
JULY 2016 – DECEMBER 2016

Great Plains' curtailment requirements and penalties information:

- a. The volume of gas consumed by the non-compliant customer during the curtailment period.

-0- dk

Four curtailment events occurred during the period beginning July 2016 through December 2016

- 1) 9:00 a.m. on 8/29/16 until 9:00 a.m. on 8/30/16
 - One customer was requested to curtail gas usage
 - The customer complied with the request
- 2) 9:00 a.m. on 12/17/16 until 9:00 a.m. on 12/18/16
 - Two customers were requested to curtail gas usage
 - Both customers complied with the request
- 3) 9:00 a.m. on 12/18/16 until 9:00 a.m. on 12/19/16
 - Two customers were requested to curtail gas usage
 - Both customers complied with the request
- 4) 9:00 a.m. on 12/19/16 until 9:00 a.m. on 12/20/16
 - Two customers were requested to curtail gas usage
 - Both customers complied with the request

- b. The specific commodity rate charged for the unauthorized gas used and how that rate is determined

N/A

- c. The financial penalty, if any, assess by the company to the customer, including calculation in determining the penalty or penalties

N/A

- d. A discussion about utility communication with each customer regarding noncompliance with interruptions (excluding invoices).

N/A

GREAT PLAINS NATURAL GAS CO.
CURTAILMENT REQUIREMENTS AND PENALTIES
JULY 2015 – JUNE 2016

Great Plains' curtailment requirements and penalties information:

- a. The volume of gas consumed by the non-compliant customer during the curtailment period.

-0- dk

Two curtailment periods during the 2015-2016 heating season:

- 1) 9:00 a.m. on 1/15/16 until 9:00 a.m. on 1/16/16
 - Five customers were requested to curtail gas usage
 - All customers complied with the request
- 2) 9:00 a.m. on 2/12/16 until 9:00 a.m. on 2/13/16
 - Five customers were requested to curtail gas usage
 - All customers complied with the request

- b. The specific commodity rate charged for the unauthorized gas used and how that rate is determined.

N/A

- c. The financial penalty, if any, assessed by the company to the customer, including calculations in determining the penalty or penalties.

N/A

- d. A discussion about utility communication with each customer regarding noncompliance with interruptions (excluding invoices).

N/A

GREAT PLAINS NATURAL GAS CO.
CURTAILMENT REQUIREMENTS AND PENALTIES
JULY 2014 – JUNE 2015

Great Plains' curtailment requirements and penalties information:

- a. The volume of gas consumed by the non-compliant customer during the curtailment period.

-0- dk

One curtailment period during the 2014-2015 heating season:

- 3:00 p.m. on 2/17/15 until 9:00 a.m. on 2/19/15
- Five customers were requested to curtail gas usage
- All customers complied with the request

- b. The specific commodity rate charged for the unauthorized gas used and how that rate is determined.

N/A

- c. The financial penalty, if any, assessed by the company to the customer, including calculations in determining the penalty or penalties.

N/A

- d. A discussion about utility communication with each customer regarding noncompliance with interruptions (excluding invoices).

N/A

Account Information				Starting Meter Read					End Meter Read			\$50/ dth Penalty					
City	Account Number	Customer Type	Rate	Curtailment Start Date	Curtailment Start Time	Curtailment End Date	Curtailment End Time	Dth Avail.	Date	Time	Read	Date	Time	Read	Consumption (Dth)	Penalty Rate (\$/Dth)	\$50 Portion of Penalty
Breckenridge	11410	Sales	N71	1/5/2014	9:00 AM	1/8/2014	12:00 PM	0	1/5/2014	10:10 AM	957545	1/8/2014	9:34 AM	957577	3.6	\$ 50.00	\$ 180.00
Crookston	21951	Sales	N71	1/5/2014	9:00 AM	1/8/2014	12:00 PM	0	1/5/2014	9:33 AM	52021	1/8/2014	8:15 AM	54403	314.2	\$ 50.00	\$ 15,710.00
Crookston	21741	Sales	N71	1/5/2014	9:00 AM	1/8/2014	12:00 PM	0	1/5/2014	9:46 AM	187899	1/8/2014	10:00 AM	188101	200.6	\$ 50.00	\$ 10,030.00
Crookston	21735	Sales	N71	1/5/2014	9:00 AM	1/8/2014	12:00 PM	0	1/5/2014	9:47 AM	76148	1/8/2014	9:20 AM	76926	86.6	\$ 50.00	\$ 4,330.00
Crookston	21749	Sales	N71	1/5/2014	9:00 AM	1/8/2014	12:00 PM	0	1/5/2014	9:48 AM	62365	1/8/2014	10:00 AM	63027	73.7	\$ 50.00	\$ 3,685.00
Crookston	21940	Sales	N71	1/5/2014	9:00 AM	1/8/2014	12:00 PM	0	1/5/2014	10:20 AM	92823	1/8/2014	9:49 AM	93056	49.9	\$ 50.00	\$ 2,495.00
Crookston	27339	Sales	N71	1/5/2014	9:00 AM	1/8/2014	12:00 PM	0	1/5/2014	9:58 AM	14735	1/8/2014	10:20 AM	14944	20.8	\$ 50.00	\$ 1,040.00
Crookston	21756	Sales	N71	1/5/2014	9:00 AM	1/8/2014	12:00 PM	0	1/5/2014	10:00 AM	91192	1/8/2014	9:58 AM	91394	20.1	\$ 50.00	\$ 1,005.00
Crookston	22037	Sales	N71	1/5/2014	9:00 AM	1/8/2014	12:00 PM	0	1/5/2014	9:22 AM	36644	1/8/2014	9:37 AM	36732	9.8	\$ 50.00	\$ 490.00
Crookston	20876	Sales	N71	1/5/2014	9:00 AM	1/8/2014	12:00 PM	0	1/5/2014	9:30 AM	24075	1/8/2014	8:05 AM	24148	7.2	\$ 50.00	\$ 360.00
Crookston	28321	Sales	N71	1/5/2014	9:00 AM	1/8/2014	12:00 PM	0	1/5/2014	10:00 AM	54168	1/8/2014	9:45 AM	54208	4.5	\$ 50.00	\$ 225.00
Crookston	20713	Sales	N71	1/5/2014	9:00 AM	1/8/2014	12:00 PM	0	1/5/2014	10:12 AM	254376	1/8/2014	8:50 AM	254411	3.7	\$ 50.00	\$ 185.00
Crookston	21951	Sales	N71	1/22/2014	9:00 AM	1/23/2014	9:00 AM	0	1/22/2014	10:21 AM	66280	1/23/2014	8:27 AM	67212	123.3	\$ 50.00	\$ 6,165.00
Crookston	21741	Sales	N71	1/22/2014	9:00 AM	1/23/2014	9:00 AM	0	1/22/2014	10:33 AM	189525	1/23/2014	8:17 AM	189561	35.9	\$ 50.00	\$ 1,795.00
Crookston	21735	Sales	N71	1/22/2014	9:00 AM	1/23/2014	9:00 AM	0	1/22/2014	9:51 AM	79605	1/23/2014	7:42 AM	79828	24.9	\$ 50.00	\$ 1,245.00
Crookston	21749	Sales	N71	1/22/2014	9:00 AM	1/23/2014	9:00 AM	0	1/22/2014	10:39 AM	66439	1/23/2014	8:17 AM	66645	23.0	\$ 50.00	\$ 1,150.00
Crookston	27339	Sales	N71	1/22/2014	9:00 AM	1/23/2014	9:00 AM	0	1/22/2014	10:59 AM	15943	1/23/2014	7:57 AM	16026	8.3	\$ 50.00	\$ 415.00
Crookston	21940	Sales	N71	1/22/2014	9:00 AM	1/23/2014	9:00 AM	0	1/22/2014	10:17 AM	94883	1/23/2014	8:10 AM	94909	5.6	\$ 50.00	\$ 280.00
Crookston	22046	Sales	N71	1/22/2014	9:00 AM	1/23/2014	9:00 AM	0	1/22/2014	10:01 AM	36756	1/23/2014	7:52 AM	36811	5.5	\$ 50.00	\$ 275.00
Crookston	22037	Sales	N71	1/22/2014	9:00 AM	1/23/2014	9:00 AM	0	1/22/2014	10:09 AM	37737	1/23/2014	8:02 AM	37765	3.1	\$ 50.00	\$ 155.00
Crookston	20876	Sales	N71	1/22/2014	9:00 AM	1/23/2014	9:00 AM	0	1/22/2014	9:22 AM	24391	1/23/2014	7:32 AM	24418	2.7	\$ 50.00	\$ 135.00
Crookston	28321	Sales	N71	1/22/2014	9:00 AM	1/23/2014	9:00 AM	0	1/22/2014	10:13 AM	55572	1/23/2014	8:07 AM	55591	2.1	\$ 50.00	\$ 105.00
Crookston	20713	Sales	N71	1/22/2014	9:00 AM	1/23/2014	9:00 AM	0	1/22/2014	9:26 AM	257997	1/23/2014	9:05 AM	258010	1.4	\$ 50.00	\$ 70.00
Crookston	21741	Sales	N71	12/29/2013	12:00 PM	12/31/2013	9:00 AM	0	12/29/2013	12:30 PM	187255	12/31/2013	9:15 AM	187338	82.4	\$ 50.00	\$ 4,120.00
Crookston	21749	Sales	N71	12/29/2013	12:00 PM	12/31/2013	9:00 AM	0	12/29/2013	12:36 PM	60748	12/31/2013	9:18 AM	61114	40.7	\$ 50.00	\$ 2,035.00
Crookston	21735	Sales	N71	12/29/2013	12:00 PM	12/31/2013	9:00 AM	0	12/29/2013	1:42 PM	74451	12/31/2013	10:40 AM	74909	51.0	\$ 50.00	\$ 2,550.00
Crookston	21951	Sales	N71	12/29/2013	12:00 PM	12/31/2013	9:00 AM	0	12/29/2013	11:50 AM	49501	12/31/2013	9:25 AM	49717	28.5	\$ 50.00	\$ 1,425.00
Crookston	22037	Sales	N71	12/29/2013	12:00 PM	12/31/2013	9:00 AM	0	12/29/2013	1:52 PM	36206	12/31/2013	9:37 AM	36272	7.3	\$ 50.00	\$ 365.00
Crookston	28321	Sales	N71	12/29/2013	12:00 PM	12/31/2013	9:00 AM	0	12/29/2013	11:56 AM	53622	12/31/2013	10:56 AM	53721	11.0	\$ 50.00	\$ 550.00
Crookston	21951	Sales	N71	1/27/2014	9:00 AM	1/28/2014	9:00 AM	0	1/27/2014	10:32 AM	70177	1/28/2014	10:35 AM	71330	151.6	\$ 50.00	\$ 7,580.00
Crookston	21741	Sales	N71	1/27/2014	9:00 AM	1/28/2014	9:00 AM	0	1/27/2014	9:05 AM	189917	1/28/2014	11:10 AM	189957	39.6	\$ 50.00	\$ 1,980.00
Crookston	27339	Sales	N71	1/27/2014	9:00 AM	1/28/2014	9:00 AM	0	1/27/2014	10:18 AM	16213	1/28/2014	11:20 AM	16586	36.9	\$ 50.00	\$ 1,845.00
Crookston	21735	Sales	N71	1/27/2014	9:00 AM	1/28/2014	9:00 AM	0	1/27/2014	9:51 AM	80624	1/28/2014	9:13 AM	80848	24.9	\$ 50.00	\$ 1,245.00
Crookston	21940	Sales	N71	1/27/2014	9:00 AM	1/28/2014	9:00 AM	0	1/27/2014	9:35 AM	95400	1/28/2014	10:30 AM	95451	10.9	\$ 50.00	\$ 545.00
Crookston	22037	Sales	N71	1/27/2014	9:00 AM	1/28/2014	9:00 AM	0	1/27/2014	10:07 AM	38029	1/28/2014	9:27 AM	38056	3.0	\$ 50.00	\$ 150.00
Crookston	20511	Sales	N71	1/27/2014	9:00 AM	1/28/2014	9:00 AM	0	1/27/2014	9:15 AM	44349	1/28/2014	8:46 AM	44366	1.9	\$ 50.00	\$ 95.00
Crookston	21951	Sales	N71	2/10/2014	9:00 AM	2/11/2014	12:00 PM	0	2/10/2014	9:40 AM	83354	2/11/2014	9:53 AM	84659	171.6	\$ 50.00	\$ 8,580.00
Crookston	21741	Sales	N71	2/10/2014	9:00 AM	2/11/2014	12:00 PM	0	2/10/2014	9:50 AM	191409	2/11/2014	10:26 AM	191448	38.6	\$ 50.00	\$ 1,930.00
Crookston	21940	Sales	N71	2/10/2014	9:00 AM	2/11/2014	12:00 PM	0	2/10/2014	9:34 AM	97267	2/11/2014	9:50 AM	97440	37.0	\$ 50.00	\$ 1,850.00
Crookston	21749	Sales	N71	2/10/2014	9:00 AM	2/11/2014	12:00 PM	0	2/10/2014	9:54 AM	71548	2/11/2014	10:31 AM	71769	24.5	\$ 50.00	\$ 1,225.00
Crookston	25145	Sales	N71				12:00 PM			8:24 AM	396948		8:39 AM	396954	5.9	\$ 50.00	\$ 295.00

Account Information									Starting Meter Read			End Meter Read			\$50/ dth Penalty		
City	Account Number	Customer Type	Rate	Curtailment Start Date	Curtailment Start Time	Curtailment End Date	Curtailment End Time	Dth Avail	Date	Time	Read	Date	Time	Read	Consumption (Dth)	Penalty Rate (\$/Dth)	\$50 Portion of Penalty
Crookston	22037	Sales	N71	2/10/2014	9:00 AM	2/11/2014	12:00 PM	0	2/10/2014	10:05 AM	39270	2/11/2014	9:45 AM	39292	2.4	\$ 50.00	\$ 120.00
Crookston	20713	Sales	N71	2/10/2014	9:00 AM	2/11/2014	12:00 PM	0	2/10/2014	8:28 AM	262394	2/11/2014	8:43 AM	262409	1.6	\$ 50.00	\$ 80.00
Dawson	24169	Sales	S85	1/22/2014	9:00 AM	1/23/2014	9:00 AM	0							319.7	\$ 50.00	\$ 15,985.00
Fergus Falls	6320	Sales	N71	1/5/2014	9:00 AM	1/8/2014	12:00 PM	0	1/5/2014	11:16 AM	89087	1/8/2014	8:27 AM	89581	55.0	\$ 50.00	\$ 2,750.00
Fergus Falls	7861	Sales	N71	1/5/2014	9:00 AM	1/8/2014	12:00 PM	0	1/5/2014	12:00 AM	40910	1/8/2014	9:23 AM	41028	13.1	\$ 50.00	\$ 655.00
Fergus Falls	28650	Sales	N71	1/5/2014	9:00 AM	1/8/2014	12:00 PM	0	1/5/2014	10:19 AM	49618	1/8/2014	9:42 AM	49694	8.5	\$ 50.00	\$ 425.00
Fergus Falls	7861	Sales	N71	1/22/2014	9:00 AM	1/23/2014	9:00 AM	0	1/22/2014	10:44 AM	41932	1/23/2014	9:05 AM	42022	10.0	\$ 50.00	\$ 500.00
Fergus Falls	8230	Sales	N71	1/22/2014	9:00 AM	1/23/2014	9:00 AM	0	1/22/2014	9:20 AM	45267	1/23/2014	8:58 AM	45342	8.3	\$ 50.00	\$ 415.00
Fergus Falls	8456	Sales	N71	12/29/2013	12:00 PM	12/31/2013	9:00 AM	0	12/29/2013	11:20 AM	49104	12/31/2013	9:57 AM	49299	21.7	\$ 50.00	\$ 1,085.00
Fergus Falls	7861	Sales	N71	12/29/2013	12:00 PM	12/31/2013	9:00 AM	0	12/29/2013	10:57 AM	40578	12/31/2013	10:44 AM	40645	7.5	\$ 50.00	\$ 375.00
Fergus Falls	8670	Sales	N71	12/29/2013	12:00 PM	12/31/2013	9:00 AM	0	12/29/2013	12:59 PM	6897	12/31/2013	10:04 AM	7064	25.5	\$ 50.00	\$ 1,275.00
Fergus Falls	7861	Sales	N71	1/27/2014	9:00 AM	1/28/2014	9:00 AM	0	1/27/2014	8:37 AM	42298	1/28/2014	9:33 AM	42322	2.6	\$ 50.00	\$ 130.00
Fergus Falls	6320	Sales	N71	2/10/2014	9:00 AM	2/11/2014	9:00 AM	0	2/10/2014	9:52 AM	93561	2/11/2014	9:05 AM	93709	16.3	\$ 50.00	\$ 815.00
Fergus Falls	7861	Sales	N71	2/10/2014	9:00 AM	2/11/2014	9:00 AM	0	2/10/2014	9:57 AM	43267	2/11/2014	9:23 AM	43287	2.2	\$ 50.00	\$ 110.00
Montevideo	24169	Sales	S85	12/29/2013	12:00 PM			0	1/5/2014			1/8/2014			35.2	\$ 50.00	\$ 1,760.00
Montevideo	15156	Sales	S85	1/5/2014	9:00 AM	1/8/2014	12:00 PM	0	1/5/2014	9:27 AM	181139	1/8/2014	10:00 AM	181442	30.8	\$ 50.00	\$ 1,540.00
Montevideo	15156	Sales	S85	1/22/2014	9:00 AM	1/23/2014	9:00 AM	0	1/22/2014	9:04 AM	183799	1/23/2014	1:45 PM	183837	3.9	\$ 50.00	\$ 195.00
Pelican Rapids	10077	Sales	N71	1/3/2014	12:00 PM	12/31/2013	9:00 AM	0	12/29/2013	2:16 PM	26630	12/31/2013	10:09 AM	26791	16.0	\$ 50.00	\$ 800.00
Pelican Rapids	10304	Sales	N85	1/5/2014	12:00 PM	12/31/2013	9:00 AM	0	12/29/2013	12:00 PM	305527	1/1/2014	9:00 AM	305564	36.7	\$ 50.00	\$ 1,835.00
Redwood Falls	24175	Sales	S85	1/6/2014	9:00 AM			0	1/5/2014	9:00 AM	885168	1/8/2014	9:00 AM	885182	14.2	\$ 50.00	\$ 710.00
Redwood Falls	24175	Sales	S85	1/22/2014	9:00 AM	1/23/2014	9:00 AM	0	1/22/2014	9:00 AM	903775	1/23/2014	9:00 AM	903780	5.1	\$ 50.00	\$ 255.00
Redwood Falls	24175	Sales	S85	1/27/2014	9:00 AM	1/28/2014	9:00 AM	0	1/27/2014	9:00 AM	908175	1/28/2014	9:00 AM	908184	9.2	\$ 50.00	\$ 460.00
Redwood Falls	24175	Sales	S85	2/10/2014	9:00 AM	2/11/2014	9:00 AM	0	2/10/2014	9:11 AM	919942	2/11/2014	9:03 AM	919959	17.3	\$ 50.00	\$ 865.00



November 8

u
8 h v 8
" v o
" v)

E -
U V U 7
U UV

U)
h
Oo
U UV

o O
U - k #
k u) V†
k UV

M
8 U 8
o U o
h\
O o UV

k) \ # Mu V \ 8
V° uyk- \ 7) \ # Mu 8

k

u o

-) #
h
h) 7 U U
u U
h

h
@ u o

@
@

k

k @ #

Minnesota Department of Commerce
Division of Energy Resources
Information Request

Docket Number: G999/AA-16-524 Nonpublic Public
Requested From: All Regulated Natural Gas Utilities Date of Request: 11/8/2017
Type of Inquiry: General Response Due: 11/20/2017

Requested by: Adam Heinen/Michael Ryan/Angela Byrne/Steve Rakow
Email Address(es): adam.heinen@state.mn.us; michael.ryan@state.mn.us;
angela.byrne@state.mn.us; stephen.rakow@state.mn.us
Phone Number(s): 651-539-1825

Request Number: 22
Topic: Distribution Planning
Reference(s): Department Information Request No. 18

Request:

Please provide the above reference, including any and all subparts, updated to the most recent date available.

If this information has already been provided in the application or in response to an earlier Department-
DER information request, please identify the specific cite(s) or Department-
DER information request number(s).

To be completed by responder

Response Date:
Response by:
Email Address:
Phone Number:

Response:

- (A) Please see Attachment A for curtailment revenue recorded in Miscellaneous Revenue.
- (B) No, the customers are not required to have a backup system. As the tariff states, interruptible customers must be able to curtail usage by switching to standby fuel source or suffer a plant shutdown. The tariff further states that the company may shut off the customer's supply of gas in the event the customer fails to curtail gas usage.
- (C) The company does not require the customer to periodically 'test' their backup system. It is the customer's responsibility to ensure their backup system is working properly.
- (D) Yes, Great Plains did have occurrences where customers did not comply with an interruption during the 2013-2014 heating season.
 - (1) The duration of unauthorized consumption after a curtailment was called is unknown. A start of curtailment reading is made and an end of curtailment reading is made. The difference in readings drives a calculation of unauthorized gas. No hourly telemetry is available in the GPNG service territory for interruptible sales accounts so there is no record of how many hours a customer continued to use. It is simply known that gas was consumed during the curtailment period.
 - (2) See Attachment B.
 - (3) The commodity rate was determined following the rate identified in the tariff.
 - (4) The financial penalty, as described in the tariff, was calculated by applying a \$50 per dekatherm charge for all unauthorized gas consumed during a curtailment period. The number of unauthorized dekatherms was calculated by converting the read increment to dekatherm based on the meter setup and applicable heat factor.
 - (5) At this time the company believes the penalty for failure to curtail is adequate to encourage compliance.

Response by: Travis Jacobson List sources of information: _____
Title: Manager, Regulatory Affairs _____
Department: Regulatory Affairs _____
Telephone: (701) 222-7855 _____

Account Information									Starting Meter Read			End Meter Read			\$50/ dth Penalty		
City	Account Number	Customer Type	Rate	Curtailment Start Date	Curtailment Start Time	Curtailment End Date	Curtailment End Time	Dth Avail.	Date	Time	Read	Date	Time	Read	Consumption (Dth)	Penalty Rate (\$/Dth)	\$50 Portion of Penalty
Breckenridge	11410	Sales	N71	1/5/2014	9:00 AM	1/8/2014	12:00 PM	0	1/5/2014	10:10 AM	957545	1/8/2014	9:34 AM	957577	3.6	\$ 50.00	\$ 180.00
Crookston	21951	Sales	N71	1/5/2014	9:00 AM	1/8/2014	12:00 PM	0	1/5/2014	9:33 AM	52021	1/8/2014	8:15 AM	54403	314.2	\$ 50.00	\$ 15,710.00
Crookston	21741	Sales	N71	1/5/2014	9:00 AM	1/8/2014	12:00 PM	0	1/5/2014	9:46 AM	187899	1/8/2014	10:00 AM	188101	200.6	\$ 50.00	\$ 10,030.00
Crookston	21735	Sales	N71	1/5/2014	9:00 AM	1/8/2014	12:00 PM	0	1/5/2014	9:47 AM	76148	1/8/2014	9:20 AM	76926	86.6	\$ 50.00	\$ 4,330.00
Crookston	21749	Sales	N71	1/5/2014	9:00 AM	1/8/2014	12:00 PM	0	1/5/2014	9:48 AM	62365	1/8/2014	10:00 AM	63027	73.7	\$ 50.00	\$ 3,685.00
Crookston	21940	Sales	N71	1/5/2014	9:00 AM	1/8/2014	12:00 PM	0	1/5/2014	10:20 AM	92823	1/8/2014	9:49 AM	93056	49.9	\$ 50.00	\$ 2,495.00
Crookston	27339	Sales	N71	1/5/2014	9:00 AM	1/8/2014	12:00 PM	0	1/5/2014	9:58 AM	14735	1/8/2014	10:20 AM	14944	20.8	\$ 50.00	\$ 1,040.00
Crookston	21756	Sales	N71	1/5/2014	9:00 AM	1/8/2014	12:00 PM	0	1/5/2014	10:00 AM	91192	1/8/2014	9:58 AM	91394	20.1	\$ 50.00	\$ 1,005.00
Crookston	22037	Sales	N71	1/5/2014	9:00 AM	1/8/2014	12:00 PM	0	1/5/2014	9:22 AM	36644	1/8/2014	9:37 AM	36732	9.8	\$ 50.00	\$ 490.00
Crookston	20876	Sales	N71	1/5/2014	9:00 AM	1/8/2014	12:00 PM	0	1/5/2014	9:30 AM	24075	1/8/2014	8:05 AM	24148	7.2	\$ 50.00	\$ 360.00
Crookston	28321	Sales	N71	1/5/2014	9:00 AM	1/8/2014	12:00 PM	0	1/5/2014	10:00 AM	54168	1/8/2014	9:45 AM	54208	4.5	\$ 50.00	\$ 225.00
Crookston	20713	Sales	N71	1/5/2014	9:00 AM	1/8/2014	12:00 PM	0	1/5/2014	10:12 AM	254376	1/8/2014	8:50 AM	254411	3.7	\$ 50.00	\$ 185.00
Crookston	21951	Sales	N71	1/22/2014	9:00 AM	1/23/2014	9:00 AM	0	1/22/2014	10:21 AM	66280	1/23/2014	8:27 AM	67212	123.3	\$ 50.00	\$ 6,165.00
Crookston	21741	Sales	N71	1/22/2014	9:00 AM	1/23/2014	9:00 AM	0	1/22/2014	10:33 AM	189525	1/23/2014	8:17 AM	189561	35.9	\$ 50.00	\$ 1,795.00
Crookston	21735	Sales	N71	1/22/2014	9:00 AM	1/23/2014	9:00 AM	0	1/22/2014	9:51 AM	79605	1/23/2014	7:42 AM	79828	24.9	\$ 50.00	\$ 1,245.00
Crookston	21749	Sales	N71	1/22/2014	9:00 AM	1/23/2014	9:00 AM	0	1/22/2014	10:39 AM	66439	1/23/2014	8:17 AM	66645	23.0	\$ 50.00	\$ 1,150.00
Crookston	27339	Sales	N71	1/22/2014	9:00 AM	1/23/2014	9:00 AM	0	1/22/2014	10:59 AM	15943	1/23/2014	7:57 AM	16026	8.3	\$ 50.00	\$ 415.00
Crookston	21940	Sales	N71	1/22/2014	9:00 AM	1/23/2014	9:00 AM	0	1/22/2014	10:17 AM	94883	1/23/2014	8:10 AM	94909	5.6	\$ 50.00	\$ 280.00
Crookston	22046	Sales	N71	1/22/2014	9:00 AM	1/23/2014	9:00 AM	0	1/22/2014	10:01 AM	36756	1/23/2014	7:52 AM	36811	5.5	\$ 50.00	\$ 275.00
Crookston	22037	Sales	N71	1/22/2014	9:00 AM	1/23/2014	9:00 AM	0	1/22/2014	10:09 AM	37737	1/23/2014	8:02 AM	37765	3.1	\$ 50.00	\$ 155.00
Crookston	20876	Sales	N71	1/22/2014	9:00 AM	1/23/2014	9:00 AM	0	1/22/2014	9:22 AM	24391	1/23/2014	7:32 AM	24418	2.7	\$ 50.00	\$ 135.00
Crookston	28321	Sales	N71	1/22/2014	9:00 AM	1/23/2014	9:00 AM	0	1/22/2014	10:13 AM	55572	1/23/2014	8:07 AM	55591	2.1	\$ 50.00	\$ 105.00
Crookston	20713	Sales	N71	1/22/2014	9:00 AM	1/23/2014	9:00 AM	0	1/22/2014	9:26 AM	257997	1/23/2014	9:05 AM	258010	1.4	\$ 50.00	\$ 70.00
Crookston	21741	Sales	N71	12/29/2013	12:00 PM	12/31/2013	9:00 AM	0	12/29/2013	12:30 PM	187255	12/31/2013	9:15 AM	187338	82.4	\$ 50.00	\$ 4,120.00
Crookston	21749	Sales	N71	12/29/2013	12:00 PM	12/31/2013	9:00 AM	0	12/29/2013	12:36 PM	60748	12/31/2013	9:18 AM	61114	40.7	\$ 50.00	\$ 2,035.00
Crookston	21735	Sales	N71	12/29/2013	12:00 PM	12/31/2013	9:00 AM	0	12/29/2013	1:42 PM	74451	12/31/2013	10:40 AM	74909	51.0	\$ 50.00	\$ 2,550.00
Crookston	21951	Sales	N71	12/29/2013	12:00 PM	12/31/2013	9:00 AM	0	12/29/2013	11:50 AM	49501	12/31/2013	9:25 AM	49717	28.5	\$ 50.00	\$ 1,425.00
Crookston	22037	Sales	N71	12/29/2013	12:00 PM	12/31/2013	9:00 AM	0	12/29/2013	1:52 PM	36206	12/31/2013	9:37 AM	36272	7.3	\$ 50.00	\$ 365.00
Crookston	28321	Sales	N71	12/29/2013	12:00 PM	12/31/2013	9:00 AM	0	12/29/2013	11:56 AM	53622	12/31/2013	10:56 AM	53721	11.0	\$ 50.00	\$ 550.00
Crookston	21951	Sales	N71	1/27/2014	9:00 AM	1/28/2014	9:00 AM	0	1/27/2014	10:32 AM	70177	1/28/2014	10:35 AM	71330	151.6	\$ 50.00	\$ 7,580.00
Crookston	21741	Sales	N71	1/27/2014	9:00 AM	1/28/2014	9:00 AM	0	1/27/2014	9:05 AM	189917	1/28/2014	11:10 AM	189957	39.6	\$ 50.00	\$ 1,980.00
Crookston	27339	Sales	N71	1/27/2014	9:00 AM	1/28/2014	9:00 AM	0	1/27/2014	10:18 AM	16213	1/28/2014	11:20 AM	16586	36.9	\$ 50.00	\$ 1,845.00
Crookston	21735	Sales	N71	1/27/2014	9:00 AM	1/28/2014	9:00 AM	0	1/27/2014	9:51 AM	80624	1/28/2014	9:13 AM	80848	24.9	\$ 50.00	\$ 1,245.00
Crookston	21940	Sales	N71	1/27/2014	9:00 AM	1/28/2014	9:00 AM	0	1/27/2014	9:35 AM	95400	1/28/2014	10:30 AM	95451	10.9	\$ 50.00	\$ 545.00
Crookston	22037	Sales	N71	1/27/2014	9:00 AM	1/28/2014	9:00 AM	0	1/27/2014	10:07 AM	38029	1/28/2014	9:27 AM	38056	3.0	\$ 50.00	\$ 150.00
Crookston	20511	Sales	N71	1/27/2014	9:00 AM	1/28/2014	9:00 AM	0	1/27/2014	9:15 AM	44349	1/28/2014	8:46 AM	44366	1.9	\$ 50.00	\$ 95.00
Crookston	21951	Sales	N71	2/10/2014	9:00 AM	2/11/2014	12:00 PM	0	2/10/2014	9:40 AM	83354	2/11/2014	9:53 AM	84659	171.6	\$ 50.00	\$ 8,580.00
Crookston	21741	Sales	N71	2/10/2014	9:00 AM	2/11/2014	12:00 PM	0	2/10/2014	9:50 AM	191409	2/11/2014	10:26 AM	191448	38.6	\$ 50.00	\$ 1,930.00
Crookston	21940	Sales	N71	2/10/2014	9:00 AM	2/11/2014	12:00 PM	0	2/10/2014	9:34 AM	97267	2/11/2014	9:50 AM	97440	37.0	\$ 50.00	\$ 1,850.00
Crookston	21749	Sales	N71	2/10/2014	9:00 AM	2/11/2014	12:00 PM	0	2/10/2014	9:54 AM	71548	2/11/2014	10:31 AM	71769	24.5	\$ 50.00	\$ 1,225.00
Crookston	25145	Sales	N71				12:00 PM			8:24 AM	396948		8:39 AM	396954	5.9	\$ 50.00	\$ 295.00

Account Information									Starting Meter Read			End Meter Read			\$50/ dth Penalty		
City	Account Number	Customer Type	Rate	Curtailment Start Date	Curtailment Start Time	Curtailment End Date	Curtailment End Time	Dth Avail.	Date	Time	Read	Date	Time	Read	Consumption (Dth)	Penalty Rate (\$/Dth)	\$50 Portion of Penalty
Crookston	22037	Sales	N71	2/10/2014	9:00 AM	2/11/2014	12:00 PM	0	2/10/2014	10:05 AM	39270	2/11/2014	9:45 AM	39292	2.4	\$ 50.00	\$ 120.00
Crookston	20713	Sales	N71	2/10/2014	9:00 AM	2/11/2014	12:00 PM	0	2/10/2014	8:28 AM	262394	2/11/2014	8:43 AM	262409	1.6	\$ 50.00	\$ 80.00
Dawson	24169	Sales	S85	1/22/2014	9:00 AM	1/23/2014	9:00 AM	0							319.7	\$ 50.00	\$ 15,985.00
Fergus Falls	6320	Sales	N71	1/5/2014	9:00 AM	1/8/2014	12:00 PM	0	1/5/2014	11:16 AM	89087	1/8/2014	8:27 AM	89581	55.0	\$ 50.00	\$ 2,750.00
Fergus Falls	7861	Sales	N71	1/5/2014	9:00 AM	1/8/2014	12:00 PM	0	1/5/2014	12:00 AM	40910	1/8/2014	9:23 AM	41028	13.1	\$ 50.00	\$ 655.00
Fergus Falls	28650	Sales	N71	1/5/2014	9:00 AM	1/8/2014	12:00 PM	0	1/5/2014	10:19 AM	49618	1/8/2014	9:42 AM	49694	8.5	\$ 50.00	\$ 425.00
Fergus Falls	7861	Sales	N71	1/22/2014	9:00 AM	1/23/2014	9:00 AM	0	1/22/2014	10:44 AM	41932	1/23/2014	9:05 AM	42022	10.0	\$ 50.00	\$ 500.00
Fergus Falls	8230	Sales	N71	1/22/2014	9:00 AM	1/23/2014	9:00 AM	0	1/22/2014	9:20 AM	45267	1/23/2014	8:58 AM	45342	8.3	\$ 50.00	\$ 415.00
Fergus Falls	8456	Sales	N71	12/29/2013	12:00 PM	12/31/2013	9:00 AM	0	12/29/2013	11:20 AM	49104	12/31/2013	9:57 AM	49299	21.7	\$ 50.00	\$ 1,085.00
Fergus Falls	7861	Sales	N71	12/29/2013	12:00 PM	12/31/2013	9:00 AM	0	12/29/2013	10:57 AM	40578	12/31/2013	10:44 AM	40645	7.5	\$ 50.00	\$ 375.00
Fergus Falls	8670	Sales	N71	12/29/2013	12:00 PM	12/31/2013	9:00 AM	0	12/29/2013	12:59 PM	6897	12/31/2013	10:04 AM	7064	25.5	\$ 50.00	\$ 1,275.00
Fergus Falls	7861	Sales	N71	1/27/2014	9:00 AM	1/28/2014	9:00 AM	0	1/27/2014	8:37 AM	42298	1/28/2014	9:33 AM	42322	2.6	\$ 50.00	\$ 130.00
Fergus Falls	6320	Sales	N71	2/10/2014	9:00 AM	2/11/2014	9:00 AM	0	2/10/2014	9:52 AM	93561	2/11/2014	9:05 AM	93709	16.3	\$ 50.00	\$ 815.00
Fergus Falls	7861	Sales	N71	2/10/2014	9:00 AM	2/11/2014	9:00 AM	0	2/10/2014	9:57 AM	43267	2/11/2014	9:23 AM	43287	2.2	\$ 50.00	\$ 110.00
Montevideo	24169	Sales	S85	12/29/2013	12:00 PM			0	1/5/2014			1/8/2014			35.2	\$ 50.00	\$ 1,760.00
Montevideo	15156	Sales	S85	1/5/2014	9:00 AM	1/8/2014	12:00 PM	0	1/5/2014	9:27 AM	181139	1/8/2014	10:00 AM	181442	30.8	\$ 50.00	\$ 1,540.00
Montevideo	15156	Sales	S85	1/22/2014	9:00 AM	1/23/2014	9:00 AM	0	1/22/2014	9:04 AM	183799	1/23/2014	1:45 PM	183837	3.9	\$ 50.00	\$ 195.00
Pelican Rapids	10077	Sales	N71	1/3/2014	12:00 PM	12/31/2013	9:00 AM	0	12/29/2013	2:16 PM	26630	12/31/2013	10:09 AM	26791	16.0	\$ 50.00	\$ 800.00
Pelican Rapids	10304	Sales	N85	1/5/2014	12:00 PM	12/31/2013	9:00 AM	0	12/29/2013	12:00 PM	305527	1/1/2014	9:00 AM	305564	36.7	\$ 50.00	\$ 1,835.00
Redwood Falls	24175	Sales	S85	1/6/2014	9:00 AM			0	1/5/2014	9:00 AM	885168	1/8/2014	9:00 AM	885182	14.2	\$ 50.00	\$ 710.00
Redwood Falls	24175	Sales	S85	1/22/2014	9:00 AM	1/23/2014	9:00 AM	0	1/22/2014	9:00 AM	903775	1/23/2014	9:00 AM	903780	5.1	\$ 50.00	\$ 255.00
Redwood Falls	24175	Sales	S85	1/27/2014	9:00 AM	1/28/2014	9:00 AM	0	1/27/2014	9:00 AM	908175	1/28/2014	9:00 AM	908184	9.2	\$ 50.00	\$ 460.00
Redwood Falls	24175	Sales	S85	2/10/2014	9:00 AM	2/11/2014	9:00 AM	0	2/10/2014	9:11 AM	919942	2/11/2014	9:03 AM	919959	17.3	\$ 50.00	\$ 865.00



705 West Fir Avenue
Mailing Address:
P.O. Box 176
Fergus Falls, MN 56538-0176
(218) 736-6935

August 31, 2017

Daniel P. Wolf
Executive Secretary
Minnesota Public Utilities Commission
121 Seventh Place East, Suite 350
St. Paul, MN 55101-2147

Re: Annual Report; Automatic Adjustment
Docket No. E, G999/AA-17-___

Dear Mr. Wolf:

Great Plains Natural Gas Co. (Great Plains), a Division of MDU Resources Group, Inc., herewith electronically submits its Annual Report of Automatic Adjustment of Gas Charges (AAA), pursuant to Minnesota Rule 7825.2800 – 7825.2830.

In support of the filing Great Plains has attached the following:

Exhibit A – North District:

Summary of Gas Costs Recovered
Degree Day and Volume Information

Exhibit B – South District:

Summary of Gas Costs Recovered
Degree Day and Volume Information

Exhibit C – Independent Auditor's Report reviewing the accounting procedures of Great Plains' purchased gas adjustment

Exhibit D – Schedule of Contractor Main Strikes

Exhibit E – Meter Testing Updates

Exhibit F – Curtailment Requirements and Penalties

If you have any questions regarding this filing, please contact me at (701) 222-7856, or Brian M. Meloy, at (612) 335-1451.

Sincerely,

/s/ Tamie A. Aberle

Tamie A. Aberle
Director of Regulatory Affairs

cc: Brian M. Meloy

natural gas from increasing significantly. The potential shift of electric generation from coal to gas and new generation fueled by natural gas may result in higher natural gas prices in the longer term.

Contractor Main Strikes

Pursuant to the Order in Docket No. G-999/AA-10-885, the total cost of lost gas due to main strikes of \$1,674 was credited to the cost of gas prior to the determination of the cost of gas charged to the customer classes. Therefore, there is not an amount allocated to firm and interruptible customers in this GCR. See Exhibit D for Great Plains' Contractor Main Strike information.

Meter Testing Updates

Great Plains' meter testing plan is set forth in Section 7 of its Gas Distribution Standards as originally submitted on June 4, 2012 in Docket No. E, G999/AA-10-885. Several minor modifications were made to the Gas Meter Testing Section of the Gas Distribution Standards in 2013, which were reported in an update to Docket No. G999/AA-14-580. Section 7 was again revised in 2015, however, the revisions did not affect the meter testing plan.

Section 7 of the Gas Distribution Standards was updated in 2016 to remove the reference to mechanical correcting indexes on Page 15, along with a clarifying change in the title of this section to "Indexes and Electronic Correctors."

There have been no updates regarding meter testing to Section 7 of the Gas Distribution Standards within the annual period covered by this AAA filing.

Great Plains continues to test meters based on random sampling of new and installed meters along with testing the large capacity meters on a periodic basis. See Exhibit E for Section 7 of the Gas Distribution Standards related to testing gas meters.

Curtailment Requirements and Penalties

Pursuant to the Order in Docket No. G999/AA-14-580, regulated natural gas utilities shall provide information on unauthorized gas use for each customer that did not comply with a called interruption(s) during the heating season. See Exhibit F for Great Plains' curtailment activities.

**GREAT PLAINS NATURAL GAS CO.
 CURTAILMENT REQUIREMENTS AND PENALTIES
 JULY 2016 – JUNE 2017**

Great Plains' curtailment requirements and penalties information:

- a. Five Curtailment events occurred during the period beginning July 2016 through June 2017:
- 1) 9:00 a.m. on 8/29/16 until 9:00 a.m. on 8/30/16
 - One customer was requested to curtail gas usage
 - The customer complied with the request
 - 2) 9:00 a.m. on 12/17/16 until 9:00 a.m. on 12/18/16
 - Two customers were requested to curtail gas usage
 - Both customers complied with the request
 - 3) 9:00 a.m. on 12/18/16 until 9:00 a.m. on 12/19/16
 - Two customers were requested to curtail gas usage
 - Both customers complied with the request
 - 4) 9:00 a.m. on 12/19/16 until 9:00 a.m. on 12/20/16
 - Two customers were requested to curtail gas usage
 - Both customers complied with the request
 - 5) 9:00 a.m. on 1/4/17 until 9:00 a.m. on 1/6/17
 - Four customers were requested to curtail gas usage
 - All customers complied with the request

In addition, grain drying customers were not allowed to run during the following gas days due to transmission pipeline System Overrun Limit (SOL) constraints:

Start Date	End Date	Non-Compliant Customers
12/17/16	12/19/16	
1/3/17	1/6/17	
1/11/17	1/14/17	
1/15/17	1/17/17	
2/1/17	2/2/17	
2/7/17	2/8/17	
3/10/17	3/10/17	
3/14/17	3/15/17	One Customer was non-compliant

Exhibit F
 Page 2 of 3

- b. The volume of gas consumed by the non-compliant customer during the curtailment period.

<u>Date</u>	<u>MCF</u>	<u>BTU</u>	<u>Dk</u>
3/14/2017	244.3188	1.019	248.9609
3/15/2017	51.0024	1.019	<u>51.9714</u>
			<u>300.9323</u>

	<u>Dk</u>	<u>Rate</u>	<u>Penalty</u>
Unauthorized Gas Charge	300.9323	\$ 50.00 1/	\$ 15,046.62
Penalty 1/	300.9323	1.5999 2/	<u>481.46</u>
Total Charge			<u>\$ 15,528.08</u>

1/ Penalty rate of \$50.00 per dk per North District Large Interruptible Gas Sales Service Tariff.

2/ Rate is difference between Firm rate of \$5.7795 and IT rate of \$4.1796.

- c. The specific commodity rate charged for the unauthorized gas used and how that rate is determined.

Please see Response b. above.

- d. The financial penalty, if any, assessed by the company to the customer, including calculations in determining the penalty or penalties.

Please see Response b. above.

Exhibit F
Page 3 of 3

- e. A discussion about utility communication with each customer regarding noncompliance with interruptions (excluding invoices).

Northern Natural Gas (NNG) issued a System Overrun Limit (SOL) for March 14 & 15, 2017. During an SOL, NNG allocates storage so Great Plains cannot make same day or real-time storage adjustments to account for a grain dryer's additional usage. Also, if purchases have already been made for the gas day, Great Plains does not have the ability to purchase more supply to cover a dryer's additional demand. In these situations, Great Plains does not allow grain dryers to run.

On March 14, 2017, a grain-drying customer called requesting to run their grain dryers on March 14 and 15. They were informed that due to the colder system-wide temps, the pipeline that Great Plains uses to get natural gas to the customer is in constraints for both days. Customer was informed that when the pipeline is in constraints, Great Plains cannot allow any grain dryers to run.

Customer disregarded instructions to not run, and used approximately 301 dk of gas over the curtailment period.

Minnesota Department of Commerce
Division of Energy Resources
Information Request

Docket Number: G999/AA-18-374 Nonpublic Public
Requested From: All Regulated Minnesota Gas Utilities Date of Request: 10/9/2018
Type of Inquiry: General Response Due: 11/8/2018

Requested by: Angela Byrne
Email Address(es): angela.byrne@state.mn.us
Phone Number(s): 651-539-1820

Request Number: 18
Topic: Distribution Planning
Reference(s): Department Information Request No. 22, Docket No. G999/AA-16-524

Request:

Please provide the above reference, updated to the most recent data available. Data should begin where the utility's previous data ended in its most recent, updated response (March 2017 for Great Plains, November 2017 for all other utilities). For reference, the request has been duplicated below.

If this information has already been provided in the application or in response to an earlier Department-DER information request, please identify the specific cite(s) or Department-DER information request number(s).

- A. Please provide a detailed discussion of how the utility plans, constructs, and maintains its distribution system. As part of this response, include a discussion about how the utility decides to add capacity or expand in to new, or growing, service territory.
- B. Please provide daily throughput data, by each individual Town Border Station (TBS) or delivery point, on the utility's system since November 1, 2012. If available, please provide these data divided by firm, interruptible, and transport load. Please also provide these data in Microsoft Excel format with all links, and formulae intact.
- C. Please provide the number of interruption days, by TBS or delivery point, by month since November 2012. To the extent possible, please identify the number of interruption days that are non-weather related (*e.g.*, reliability purposes). Please also provide these data in Microsoft Excel format with all links, and formulae intact.
- D. Please provide, on a daily basis since November 1, 2012 by TBS or delivery point, the maximum deliverable throughput by customer type. Please also provide these data in Microsoft Excel format with all links, and formulae intact.

To be completed by responder

Response Date: November 8, 2018
Response by: Travis Jacobson, Manager, Regulatory Affairs
Email Address: travis.jacobson@mdu.com
Phone Number: (701) 222-7855

Minnesota Department of Commerce
Division of Energy Resources
Information Request

Docket Number: G999/AA-18-374 Nonpublic Public
Requested From: All Regulated Minnesota Gas Utilities Date of Request: 10/9/2018
Type of Inquiry: General Response Due: 11/8/2018

Requested by: Angela Byrne
Email Address(es): angela.byrne@state.mn.us
Phone Number(s): 651-539-1820

- E. Please provide, by TBS or delivery point, on a daily basis since November 1, 2012 the percentage of deliverable capacity subscribed by the utility. If applicable, please identify other parties, and their percentages of subscribed capacity, at the TBS. Please also provide these data in Microsoft Excel format with all links, and formulae intact.
- F. Please provide the following forecasted data, in Microsoft Excel format with all links and formulae intact, by TBS, or delivery point, for the next three heating seasons. If the utility expects daily fluctuation, please provide these data on a daily basis:
- a. Total utility throughput, if possible, divided by customer type (*i.e.*, firm, interruptible, transport); and
 - b. Expected firm and total throughput available at the TBS or delivery point.
- G. Please provide maps, by county, identifying the location (and name) of any, and all, TBSs or delivery points on the utility's system. If possible, please provide these maps in pdf and GIS executable formats.
- a. Please identify, by county, on the maps in Part F, the location of any, and all, transmission assets on the utility's system.
 - b. If the utility has an affiliate transmission or intrastate pipeline utility, please also identify these assets on the maps provided in Part F, by county.

Response:

- A. No change.
- B. Please see the attached Microsoft Excel document titled "DOC IR-18 Distribution Planning 18" within worksheet titled "IR No. 18.B". Great Plains does not track daily throughput by firm, interruptible, and transport load.
- C. Please see the attached Microsoft Excel document titled "DOC IR-18 Distribution Planning 18" within worksheet titled "IR No. 18.C".

To be completed by responder

Response Date: November 8, 2018
Response by: Travis Jacobson, Manager, Regulatory Affairs
Email Address: travis.jacobson@mdu.com
Phone Number: (701) 222-7855

Minnesota Department of Commerce
Division of Energy Resources
Information Request

Docket Number: G999/AA-18-374 Nonpublic Public
Requested From: All Regulated Minnesota Gas Utilities Date of Request: 10/9/2018
Type of Inquiry: General Response Due: 11/8/2018

Requested by: Angela Byrne
Email Address(es): angela.byrne@state.mn.us
Phone Number(s): 651-539-1820

D. No change.

E. Great Plains Natural Gas does not track historical delivery point capacities; therefore, does not identify the percentage of subscribed capacity. Please see the current percentage of deliverable capacity in the attached Microsoft Excel document titled "DOC IR-18 Distribution Planning 18" within worksheet titled "IR No. 18.E".

F. a. Please see the attached Microsoft Excel document titled "DOC IR-18 Distribution Planning 18" within worksheet titled "IR No. 18.F.a".

b. Please see the current percentage of deliverable capacity in the attached Microsoft Excel document titled "DOC IR-18 Distribution Planning 18" within worksheet titled "IR No. 18.E".

G. No Change.

To be completed by responder

Response Date: November 8, 2018
Response by: Travis Jacobson, Manager, Regulatory Affairs
Email Address: travis.jacobson@mdu.com
Phone Number: (701) 222-7855

Great Plains Natural Gas Co.
 Docket No. G999/AA-18-374
 IR No. 18-B

Gas Date	Renville MN #1	Dawson MN #1	Redwood Falls MN #1	Marshall MN #1	Belview MN #1	Boyd MN #1	Clarkfield MN #1	Danube MN #1	Echo MN #1	Granite Falls MN #1	Montevideo MN #1	Sacred Heart MN #1	Wood Lake MN #1	Renville MN #2	Crookston	Fergus Falls (N4 + W)
4/1/2018	338	2,430	1,286	2,876	78	39	186	127	63	835	1,614	131	91	5,543	2,281	13,722
4/2/2018	375	2,901	2,742	3,345	90	40	198	283	74	905	1,846	139	107	5,997	4,674	13,681
4/3/2018	440	3,015	3,321	4,198	106	52	260	159	86	1,141	2,356	189	130	5,263	4,443	15,668
4/4/2018	375	2,411	3,120	3,481	88	42	206	146	71	948	1,924	154	108	5,889	4,572	14,218
4/5/2018	344	2,502	3,262	3,126	82	42	203	124	66	882	1,835	134	106	5,702	3,705	14,775
4/6/2018	441	2,736	3,773	3,769	109	54	258	160	87	1,109	2,304	160	106	5,760	4,501	16,720
4/7/2018	334	2,460	2,313	2,667	84	41	196	127	69	849	1,745	122	86	2,355	4,224	16,762
4/8/2018	372	2,452	1,376	3,035	90	42	207	133	71	915	1,850	143	99	79	4,108	17,575
4/9/2018	299	2,421	2,533	2,862	68	32	173	103	58	767	1,491	120	85	75	4,414	17,159
4/10/2018	248	2,235	2,608	2,498	62	27	746	230	52	675	1,298	102	71	129	4,242	15,975
4/11/2018	240	2,233	2,983	2,646	64	29	670	228	54	633	1,277	91	74	2,838	3,748	16,204
4/12/2018	228	2,066	2,672	2,530	51	27	869	86	45	606	1,261	81	64	3,947	4,198	16,138
4/13/2018	354	2,459	3,252	3,245	92	44	558	131	70	851	1,818	120	97	5,824	4,122	17,401
4/14/2018	389	2,491	2,020	3,245	101	44	214	149	75	960	1,967	136	101	5,494	3,820	17,233
4/15/2018	338	2,470	1,328	3,201	86	38	194	120	65	859	1,745	133	94	5,940	3,997	17,025
4/16/2018	290	2,396	2,122	3,069	75	33	324	105	61	772	1,557	125	91	4,539	3,231	16,641
4/17/2018	243	2,345	2,724	2,657	65	29	139	87	52	658	1,290	98	73	4,079	3,709	15,663
4/18/2018	281	2,319	2,931	2,880	71	29	148	104	55	732	1,400	111	84	4,074	3,713	15,144
4/19/2018	211	1,776	2,749	2,355	56	26	129	80	46	594	1,199	78	60	4,302	3,514	14,472
4/20/2018	194	2,166	2,926	2,091	44	26	129	73	49	519	1,116	67	55	4,186	3,214	14,607
4/21/2018	162	2,183	1,785	1,968	37	21	102	63	39	390	892	53	45	4,768	2,452	13,570
4/22/2018	136	2,211	548	1,796	30	17	80	38	33	355	760	42	38	3,183	3,177	12,100
4/23/2018	105	2,365	1,570	1,607	19	10	568	26	28	288	591	31	26	3,511	2,896	11,393
4/24/2018	172	2,725	2,617	2,223	39	22	219	66	37	478	973	69	54	4,083	3,625	11,192
4/25/2018	143	2,420	2,411	1,863	29	15	75	43	32	375	792	50	40	5,220	3,548	10,864
4/26/2018	141	2,245	2,112	1,971	29	16	204	57	34	373	732	49	40	5,105	3,361	12,448
4/27/2018	142	2,111	2,595	1,793	28	17	224	36	29	357	812	42	37	4,357	3,042	13,789
4/28/2018	132	2,038	1,197	1,516	28	16	74	38	25	317	727	41	30	2,685	3,140	13,191
4/29/2018	87	1,925	315	1,291	16	9	53	26	18	197	477	24	18	4,865	2,979	12,096
4/30/2018	60	1,467	1,573	1,391	9	5	171	31	13	170	427	16	11	4,898	3,343	12,827
5/1/2018	90	2,096	2,190	1,704	16	11	156	39	19	263	711	26	23	4,975	3,576	14,198
5/2/2018	75	1,869	2,164	1,607	14	7	191	22	15	206	460	25	15	6,401	3,258	12,168
5/3/2018	62	1,866	1,876	1,431	12	6	212	12	31	182	457	19	11	5,687	2,953	11,901
5/4/2018	50	1,845	2,179	1,131	9	4	30	9	61	143	372	11	6	5,520	2,890	11,635
5/5/2018	49	1,822	1,104	978	7	4	21	7	9	116	305	10	4	5,763	2,632	10,927
5/6/2018	47	1,817	179	1,059	8	3	21	9	20	119	321	11	5	5,052	2,724	11,019
5/7/2018	40	1,767	1,126	1,175	7	3	17	6	54	109	327	11	3	5,748	2,961	10,212
5/8/2018	45	1,826	2,099	1,212	8	3	18	12	10	130	350	18	8	5,985	3,235	9,467
5/9/2018	58	1,888	1,850	1,301	11	5	26	13	14	179	381	15	8	6,100	3,598	11,981
5/10/2018	83	1,834	2,098	1,482	17	9	51	24	19	250	583	25	20	6,062	3,473	12,455
5/11/2018	105	1,932	2,443	1,657	25	12	63	34	25	268	637	34	25	5,929	3,031	11,719
5/12/2018	97	2,024	1,002	1,215	21	11	56	32	21	230	592	30	19	4,326	2,739	11,162
5/13/2018	49	1,926	213	998	9	4	25	12	9	130	344	14	7	359	2,788	10,684
5/14/2018	53	1,883	1,702	1,237	9	4	26	12	12	155	387	14	9	33	3,080	11,086
5/15/2018	47	1,549	1,781	1,149	8	3	19	10	10	124	379	14	4	1,851	2,913	10,955
5/16/2018	42	1,764	1,861	1,074	7	3	17	7	8	110	354	14	2	2,085	2,759	10,500
5/17/2018	39	1,898	1,742	1,071	7	3	17	6	7	113	337	14	2	6,064	2,555	11,101
5/18/2018	42	1,861	1,991	1,115	8	3	18	8	9	124	373	11	2	6,057	915	11,663
5/19/2018	54	1,957	1,292	1,039	12	6	3	15	12	152	422	17	8	2,768	570	11,706
5/20/2018	50	1,822	222	1,043	9	4	23	12	11	119	324	14	8	31	608	11,088
5/21/2018	54	1,705	1,629	1,257	9	4	30	16	11	162	424	17	13	295	743	11,149
5/22/2018	45	1,993	2,156	1,094	7	3	6	9	9	125	371	14	4	217	766	11,434
5/23/2018	52	1,982	1,120	1,835	6	3	-	7	8	113	352	14	3	426	620	11,550
5/24/2018	52	1,843	1,924	1,110	7	3	36	8	8	104	321	11	1	191	631	11,463
5/25/2018	35	1,745	2,073	1,031	5	3	124	7	8	92	330	8	1	205	415	11,420
5/26/2018	36	1,766	1,217	725	5	3	11	5	7	82	282	9	1	161	275	9,897
5/27/2018	32	1,736	126	662	5	2	10	4	7	85	239	9	1	225	287	9,799
5/28/2018	37	1,772	149	812	5	2	14	5	6	87	189	8	1	424	537	10,171
5/29/2018	44	1,809	1,504	970	5	3	212	7	8	108	336	8	1	559	704	10,370
5/30/2018	44	1,921	1,954	1,073	5	3	208	75	8	111	370	14	2	459	611	11,468
5/31/2018	96	1,813	2,042	1,088	5	3	196	523	7	95	312	10	1	394	736	10,785
6/1/2018	64	1,884	2,094	1,065	5	3	114	220	8	99	311	7	1	566	500	11,056
6/2/2018	41	1,904	1,673	835	5	3	16	46	8	111	327	10	2	586	475	11,153

Great Plains Natural Gas Co.
 Docket No. G999/AA-18-374
 IR No. 18.B

Gas Date	Renville MN #1	Dawson MN #1	Redwood Falls MN #1	Marshall MN #1	Behview MN #1	Boyd MN #1	Clarkfield MN #1	Danube MN #1	Echo MN #1	Granite Falls MN #1	Montevideo MN #1	Sacred Heart MN #1	Wood Lake MN #1	Renville MN #2	Crookston	Fergus Falls (N4 + W)
6/3/2018	42	1,817	762	901	5	3	19	8	8	116	334	10	2	421	572	11,362
6/4/2018	39	1,733	1,680	1,079	4	3	16	6	8	107	311	10	1	614	638	11,174
6/5/2018	41	1,834	1,633	1,105	5	2	76	190	8	99	312	13	1	284	779	11,249
6/6/2018	39	1,896	2,022	1,126	5	3	218	268	8	112	362	13	-	327	825	10,937
6/7/2018	36	1,937	2,057	1,121	5	3	169	694	8	110	347	10	1	205	602	11,196
6/8/2018	41	1,839	1,864	923	9	3	116	217	7	101	339	8	-	117	439	10,541
6/9/2018	38	1,950	1,736	843	5	3	24	5	8	96	304	10	1	74	407	10,068
6/10/2018	37	1,907	601	920	6	3	25	21	8	97	281	9	1	203	477	10,676
6/11/2018	47	1,866	1,600	1,118	5	3	27	281	10	120	345	11	3	604	734	11,245
6/12/2018	49	2,006	1,895	1,221	6	3	53	226	8	118	343	15	5	572	803	11,099
6/13/2018	74	1,953	1,977	1,391	6	3	150	47	8	118	323	12	1	658	688	9,611
6/14/2018	39	1,874	2,155	1,538	5	3	51	278	8	103	312	8	1	4,420	678	10,704
6/15/2018	31	1,780	2,067	1,106	5	3	17	2	8	88	320	7	1	4,203	586	10,772
6/16/2018	35	1,872	969	670	5	2	11	2	7	79	238	8	-	3,600	409	10,176
6/17/2018	37	1,905	145	818	6	2	17	3	7	83	274	8	-	632	463	9,249
6/18/2018	43	1,402	1,277	1,045	5	3	23	5	8	105	342	9	3	643	753	9,914
6/19/2018	44	330	2,265	1,130	6	2	35	7	8	117	357	10	3	803	834	9,719
6/20/2018	43	128	2,022	1,152	6	3	118	6	8	110	321	12	4	951	722	10,763
6/21/2018	44	32	2,026	1,163	6	3	24	75	8	109	354	10	3	567	594	11,005
6/22/2018	37	14	1,979	938	10	2	27	4	7	109	320	8	1	652	494	10,262
6/23/2018	40	-	1,252	797	5	2	24	4	8	88	291	8	-	626	427	9,917
6/24/2018	42	22	162	898	5	2	19	5	7	95	304	9	-	655	540	10,651
6/25/2018	43	111	1,387	1,103	5	3	200	5	8	106	319	9	1	658	707	11,136
6/26/2018	47	409	1,868	1,171	6	3	102	6	8	104	341	14	2	635	708	11,611
6/27/2018	42	568	1,974	1,022	5	3	61	6	8	98	325	13	3	647	737	11,093
6/28/2018	37	1,559	2,046	1,013	5	3	170	154	8	98	277	9	-	646	559	10,696
6/29/2018	36	1,767	1,624	840	5	2	14	169	7	81	297	7	-	625	407	8,521
6/30/2018	35	1,831	1,710	716	5	2	14	-	8	81	265	7	-	650	479	10,255
7/1/2018	33	1,913	565	812	5	2	14	2	7	87	260	8	-	612	574	10,447
7/2/2018	40	1,905	1,101	1,100	5	2	31	8	8	93	311	8	1	287	682	10,691
7/3/2018	35	1,894	1,744	955	5	2	149	65	8	92	309	7	2	346	565	10,871
7/4/2018	38	1,947	1,575	848	5	2	15	4	7	84	171	8	-	435	421	10,046
7/5/2018	32	1,953	930	5	2	15	31	8	94	296	8	-	-	236	553	10,104
7/6/2018	35	1,871	1,757	829	4	2	13	4	8	90	289	8	-	188	469	9,295
7/7/2018	37	1,753	1,346	662	4	2	13	2	7	72	245	8	-	185	369	9,858
7/8/2018	37	1,773	323	867	5	2	15	2	8	75	234	8	-	228	506	10,102
7/9/2018	41	2,010	1,171	1,050	5	2	15	4	8	92	297	8	-	431	688	11,008
7/10/2018	39	1,854	2,000	1,116	5	2	17	5	8	99	305	13	-	189	614	10,113
7/11/2018	39	1,772	1,850	1,033	5	2	43	3	7	84	306	12	-	450	597	10,449
7/12/2018	40	1,797	1,675	1,087	5	2	159	3	8	97	306	8	1	140	654	10,667
7/13/2018	32	1,928	1,815	943	4	2	143	4	7	85	284	7	2	319	480	10,770
7/14/2018	30	1,917	1,620	742	4	3	14	3	8	69	233	7	-	208	292	10,635
7/15/2018	32	2,007	922	882	5	2	14	4	7	84	267	8	-	239	539	10,435
7/16/2018	38	1,786	1,065	1,065	5	2	16	4	8	94	309	7	-	128	869	10,521
7/17/2018	36	1,918	1,580	1,098	8	2	14	154	8	96	315	13	-	37	830	10,964
7/18/2018	36	1,906	1,812	1,072	5	2	39	32	7	90	294	10	1	130	708	10,908
7/19/2018	36	1,915	1,742	1,130	29	3	138	6	8	103	322	8	3	78	629	10,945
7/20/2018	31	1,959	2,024	976	44	3	14	220	8	94	304	9	-	63	530	10,814
7/21/2018	31	1,939	1,787	773	5	2	20	3	9	77	272	7	-	175	394	10,295
7/22/2018	26	1,879	968	812	5	2	13	4	7	85	243	8	-	510	551	8,197
7/23/2018	31	1,968	1,082	1,204	8	2	15	279	8	102	278	8	2	25	644	2,544
7/24/2018	31	1,978	1,857	1,264	5	2	15	272	8	95	296	9	2	24	722	3,261
7/25/2018	27	1,969	1,845	1,114	5	3	14	321	8	111	297	13	2	26	1,032	3,322
7/26/2018	30	1,951	2,172	1,149	5	3	17	239	8	126	320	11	4	28	674	3,537
7/27/2018	28	1,957	2,002	889	5	2	14	6	8	100	324	7	-	25	514	8,593
7/28/2018	25	1,853	1,717	694	5	2	14	4	8	89	262	7	-	22	452	10,180
7/29/2018	26	1,911	898	813	6	3	15	4	8	90	281	8	1	56	499	10,385
7/30/2018	38	1,849	1,278	933	5	2	16	20	8	107	279	8	2	114	715	10,631
7/31/2018	38	1,852	2,062	924	5	2	13	124	8	93	308	12	-	116	881	10,427
8/1/2018	36	2,036	1,896	1,032	5	2	17	6	8	116	337	11	1	116	813	11,647
8/2/2018	33	1,995	2,067	1,091	5	2	39	6	8	106	302	9	-	95	614	11,104
8/3/2018	29	1,928	1,831	864	5	2	137	60	8	89	293	7	-	100	558	10,692
8/4/2018	31	1,878	1,839	701	5	3	21	4	8	80	252	7	-	92	346	10,474

Great Plains Natural Gas Co.
 Docket No. G999/AA-18-374
 IR No. 18.B

Gas Date	Renville MN #1	Dawson MN #1	Redwood Falls MN #1	Marshall MN #1	Belview MN #1	Boyd MN #1	Clarkfield MN #1	Danube MN #1	Echo MN #1	Granite Falls MN #1	Montevideo MN #1	Sacred Heart MN #1	Wood Lake MN #1	Renville MN #2	Crookston	Fergus Falls (N4 + W)
8/5/2018	29	1,914	149	742	5	2	21	334	8	92	272	8	-	101	572	10,341
8/6/2018	37	2,013	1,190	987	5	2	17	154	8	119	282	8	2	100	822	10,625
8/7/2018	39	1,882	1,847	1,170	5	2	15	117	8	117	302	14	4	110	550	11,240
8/8/2018	36	1,693	1,881	1,401	5	2	17	109	8	88	275	12	2	109	703	10,808
8/9/2018	32	1,789	1,903	1,282	5	2	17	134	8	93	313	9	1	68	518	8,919
8/10/2018	30	1,752	2,035	1,041	5	2	17	211	8	84	266	7	-	72	378	10,577
8/11/2018	32	1,834	1,699	561	4	2	14	2	8	79	246	6	-	95	345	10,513
8/12/2018	29	1,744	146	816	5	2	14	3	8	83	263	8	-	95	562	10,325
8/13/2018	36	1,768	900	1,253	5	2	16	3	8	94	288	12	-	99	835	10,757
8/14/2018	34	1,904	1,972	1,333	5	2	111	5	8	101	309	13	-	103	825	10,759
8/15/2018	36	1,805	1,699	1,049	5	2	16	5	8	100	297	12	3	106	714	10,855
8/16/2018	34	1,830	1,704	1,206	7	3	17	3	8	92	286	11	2	92	739	10,824
8/17/2018	33	1,888	1,974	1,020	5	2	15	4	9	99	288	7	-	83	2,628	10,917
8/18/2018	33	1,758	1,571	772	5	3	15	3	8	81	243	7	-	99	2,543	10,320
8/19/2018	36	1,921	360	895	5	2	17	3	8	92	280	9	1	100	2,960	9,565
8/20/2018	38	1,886	1,403	1,210	5	2	16	6	9	109	305	9	3	106	2,620	10,855
8/21/2018	36	1,789	2,306	1,188	5	3	19	7	9	123	303	13	7	100	2,516	10,934
8/22/2018	34	1,836	1,927	1,127	5	2	16	6	9	115	295	12	4	97	2,809	11,229
8/23/2018	34	1,958	1,757	1,371	5	3	15	5	8	102	291	11	2	107	3,044	10,712
8/24/2018	32	1,936	1,830	1,044	5	3	14	5	8	99	271	7	-	158	2,282	10,730
8/25/2018	33	1,832	1,576	777	5	2	13	4	8	84	262	7	-	202	2,743	10,661
8/26/2018	32	1,841	131	913	5	2	14	3	8	81	239	8	-	371	2,408	10,293
8/27/2018	35	1,968	1,183	1,119	5	2	15	5	9	100	307	9	1	583	3,193	11,177
8/28/2018	42	1,943	2,050	1,147	7	3	16	8	10	145	346	16	11	140	3,337	11,318
8/29/2018	40	1,998	1,963	1,147	6	3	9	7	9	128	312	13	8	147	3,124	11,258
8/30/2018	33	1,755	2,020	1,232	6	2	6	7	9	119	280	9	4	656	3,218	11,239
8/31/2018	33	1,792	1,975	818	7	2	6	3	8	95	270	6	2	669	3,072	10,718
9/1/2018	29	1,888	1,744	732	6	2	8	3	8	77	266	7	-	1,822	2,536	10,211
9/2/2018	24	1,912	527	726	6	2	7	2	8	82	238	8	-	1,895	2,779	9,738
9/3/2018	35	1,932	136	858	6	2	6	3	8	95	178	9	1	1,951	1,862	10,167
9/4/2018	43	1,981	964	1,065	6	3	17	6	9	116	305	13	5	2,866	2,304	10,338
9/5/2018	41	1,937	1,503	1,403	7	3	20	6	9	142	325	14	6	2,377	2,711	10,575
9/6/2018	37	1,972	1,710	1,166	6	3	18	24	10	134	334	12	7	650	3,420	10,618
9/7/2018	29	1,875	1,916	973	6	2	17	116	9	122	317	7	1	134	3,155	11,323
9/8/2018	36	1,962	1,483	761	6	3	17	5	9	109	290	9	1	55	3,093	11,007
9/9/2018	36	1,851	937	961	6	3	18	15	8	111	288	9	3	27	3,184	10,747
9/10/2018	38	1,850	1,476	1,286	6	2	16	110	9	121	325	11	4	141	3,292	11,217
9/11/2018	37	1,940	1,990	1,179	7	2	15	3	8	122	304	13	3	1,124	3,588	6,765
9/12/2018	33	1,991	1,981	1,135	6	2	14	16	9	105	314	12	5	1,077	3,473	5,465
9/13/2018	35	1,855	2,068	1,116	6	2	39	66	8	99	306	9	3	1,725	3,489	5,206
9/14/2018	33	1,859	2,039	883	6	3	154	30	8	95	299	6	2	1,961	2,557	8,748
9/15/2018	30	1,945	1,752	725	6	2	14	3	8	82	275	7	-	700	3,069	9,406
9/16/2018	32	2,034	588	705	6	2	16	9	8	87	246	8	3	124	3,194	9,242
9/17/2018	36	2,109	1,464	1,082	6	2	17	33	9	130	308	10	7	1,421	3,432	10,089
9/18/2018	35	2,118	2,056	1,060	6	2	16	100	9	126	302	14	7	973	1,777	10,433
9/19/2018	41	2,152	2,094	1,170	7	4	21	131	10	146	335	15	11	1,464	3,454	10,582
9/20/2018	52	2,114	2,226	1,209	8	4	26	22	10	157	396	13	11	1,374	3,648	10,339
9/21/2018	66	2,236	2,246	1,507	12	6	41	175	16	208	461	18	13	1,287	3,692	11,145
9/22/2018	57	2,154	1,895	874	9	5	27	10	13	132	368	15	4	1,515	3,431	11,047
9/23/2018	49	2,039	199	921	7	3	19	7	10	104	303	10	3	1,739	3,515	6,561
9/24/2018	62	2,102	1,465	1,368	8	5	27	105	13	190	410	13	9	1,178	3,956	6,215
9/25/2018	83	2,144	2,366	1,416	12	8	43	244	18	237	553	26	23	2,852	4,010	7,703
9/26/2018	71	2,137	2,159	1,557	10	6	180	69	15	188	438	21	63	3,500	3,108	8,334
9/27/2018	89	2,306	2,356	1,412	14	8	48	213	18	246	498	26	24	3,358	4,111	8,727
9/28/2018	116	2,336	2,498	1,395	20	11	61	122	22	284	743	38	27	3,280	4,426	9,438
9/29/2018	138	2,365	1,705	1,386	24	16	168	40	86	301	795	45	27	3,111	4,044	8,357
9/30/2018	112	2,370	851	1,340	17	11	112	28	94	257	691	35	24	2,764	4,079	8,810

Great Plains Natural Gas Co.
 Docket No. G999/AA-18-374
 IR No. 18.C

Sum of Days Row Labels	Column Labels				Indirect Crookston	Fergus Falls	Zone E-F	Indirect Total	Grand Total
	Direct Crookston	Direct Total		Fergus Falls					
2017	4	31	35	30	150	34	214	249	
Jan	1	22	23	6	27	8	41	64	
Feb				2	23	2	27	27	
Mar				1	26	1	28	28	
Apr					7		7	7	
Sep					0		0	0	
Oct					3		3	3	
Nov					43	1	44	44	
Dec	3	9	12	21	21	22	64	76	
2018	2	6	8	3	43	32	78	86	
Jan	2	6	8	3	26	11	40	48	
Feb					17	16	33	33	
Apr						5	5	5	
Grand Total	6	37	43	33	193	66	292	335	

Direct: refers to situations where customers were expressly notified of curtailment.

Indirect: refers to situations where customer, who typically doesn't consume, would be denied service if a request was made. (Grain Dryers)

Issuer	DATE START	DATE END	Days	Dpoint	Direct/Indirect
G Supply	1/4/2017	1/5/2017	1	Fergus Falls	Direct
G Supply	1/4/2017	1/5/2017	1	Fergus Falls	Direct
G Supply	1/4/2017	1/5/2017	1	Fergus Falls	Direct
G Supply	1/4/2017	1/5/2017	1	Crookston	Direct
Field	1/4/2017	1/13/2017	9	Fergus Falls	Direct
Field	1/4/2017	1/13/2017	9	Fergus Falls	Direct
Field	1/12/2017	1/13/2017	1	Fergus Falls	Direct
G Supply	12/25/2017	12/26/2017	1	Fergus Falls	Direct
G Supply	12/25/2017	12/26/2017	1	Fergus Falls	Direct
G Supply	12/25/2017	12/26/2017	1	Fergus Falls	Direct
G Supply	12/25/2017	12/26/2017	1	Crookston	Direct
G Supply	12/29/2017	12/31/2017	2	Fergus Falls	Direct
G Supply	12/29/2017	12/31/2017	2	Fergus Falls	Direct
G Supply	12/29/2017	12/31/2017	2	Fergus Falls	Direct
G Supply	12/29/2017	12/31/2017	2	Crookston	Direct
G Supply	1/12/2018	1/13/2018	1	Fergus Falls	Direct
G Supply	1/12/2018	1/13/2018	1	Fergus Falls	Direct
G Supply	1/12/2018	1/13/2018	1	Fergus Falls	Direct
G Supply	1/12/2018	1/13/2018	1	Crookston	Direct
G Supply	1/15/2018	1/16/2018	1	Fergus Falls	Direct
G Supply	1/15/2018	1/16/2018	1	Fergus Falls	Direct
G Supply	1/15/2018	1/16/2018	1	Fergus Falls	Direct
G Supply	1/15/2018	1/16/2018	1	Crookston	Direct

Great Plains Natural Gas Co.
Docket No. G999/AA-18-374
IR No. 18.E

<u>Delivery Point</u>	<u>Currently Subscribed Capacity</u>	<u>Design Capacity</u>	<u>% Subscribed</u>
Zone E-F	19,145	36,278	53%
Crookston	2,000	8,209	24%
Fergus Falls	13,000	25,054	52%

Great Plains Natural Gas Co.
 Docket No. G999/AA-18-374
 IR No. 18.F.a

Pipeline	VGT	VGT	VGT	VGT	VGT	VGT	NNG	NNG	NNG	
Delivery Point	Crookston	Crookston	Crookston	Fergus Falls	Fergus Falls	Fergus Falls	Zone E-F	Zone E-F	Zone E-F	
Service Type	Firm Sales	Interruptible Sales	Transportation	Firm Sales	Interruptible Sales	Transportation	Firm Sales	Interruptible Sales	Transportation	
2018	Nov	38,521	15,720	76,268	132,672	116,280	256,752	179,959	33,570	154,549
2018	Dec	56,337	16,771	74,486	193,709	130,913	266,835	267,023	34,782	192,220
2019	Jan	62,934	18,450	69,236	214,911	143,057	258,831	289,106	37,789	213,239
2019	Feb	53,161	17,780	64,756	179,024	127,008	245,172	242,471	34,076	193,382
2019	Mar	42,335	15,934	63,829	142,726	119,102	249,670	194,535	31,124	194,850
2019	Nov	39,081	15,720	76,268	134,430	116,280	256,752	182,058	33,570	154,549
2019	Dec	57,156	16,771	74,486	196,260	130,913	266,835	270,103	34,782	192,220
2020	Jan	63,849	18,450	69,236	217,737	142,844	258,831	292,438	37,789	213,239
2020	Feb	55,456	18,415	64,756	186,416	131,544	245,172	252,074	34,076	193,382
2020	Mar	42,950	15,934	63,829	144,617	119,102	249,670	196,807	31,124	194,850
2020	Nov	39,649	15,720	76,268	136,215	116,280	256,752	184,191	33,570	154,549
2020	Dec	57,986	16,771	74,486	198,848	130,913	266,835	273,233	34,782	192,220
2021	Jan	64,665	18,450	69,236	220,605	142,740	258,831	295,825	37,789	213,239
2021	Feb	54,717	17,780	64,756	183,774	127,008	245,172	248,119	34,076	193,382
2021	Mar	43,575	15,934	63,829	146,536	119,102	249,670	199,116	31,124	194,850



705 West Fir Avenue
Mailing Address:
P.O. Box 176
Fergus Falls, MN 56538-0176
(218) 736-6935

May 29, 2018

Mr. Connor Boler
Minnesota Department of Commerce
Division of Energy Resources
85 7th Place East, Suite 280
St. Paul, MN 55101-2198

Re: Docket No. G999/AA-17-493

Dear Mr. Boler:

Great Plains Natural Gas Co., (Great Plains), a Division of MDU Resources Group, Inc., herewith electronically submits its response to information request number 18 from the Minnesota Department of Commerce, Division of Energy Resources, dated May 17, 2018.

If you have any questions regarding this filing, please contact me at (701) 222-7856, or Brian M. Meloy, at (612) 335-1451.

Sincerely,

/s/ Tamie A. Aberle

Tamie A. Aberle
Director of Regulatory Affairs

cc: Brian M. Meloy

Minnesota Department of Commerce
Division of Energy Resources
Information Request

Docket Number: G999/AA-17-493 Nonpublic Public
Requested From: All regulated gas utilities Date of Request: 5/17/2018
Response Due: 5/28/2018

Requested by: Sachin Shah/Angela Byrne/Adam Heinen/Steve Rakow
Email Address(es): sachin.shah@state.mn.us
Phone Number(s): 651-539-1834

Request Number: 18
Topic: Distribution Planning

Request:

Please provide an update to the following questions for the period January 2017 through April 2018. If there has been no change since the company's initial response to DOC Information Request 18 in Docket No. G999/AA-16-524 from March 2017, please indicate "No change."

- A. Please provide a detailed discussion of how the utility plans, constructs, and maintains its distribution system. As part of this response, include a discussion about how the utility decides to add capacity or expand in to new, or growing, service territory.
- B. Please provide daily throughput data, by each individual Town Border Station (TBS) or delivery point, on the utility's system since January 1, 2017. If available, please provide these data divided by firm, interruptible, and transport load. Please also provide these data in Microsoft Excel format with all links, and formulae intact.
- C. Please provide the number of interruption days, by TBS or delivery point, by month since January 2017. To the extent possible, please identify the number of interruption days that are non-weather related (e.g., reliability purposes). Please also provide these data in Microsoft Excel format with all links, and formulae intact.
- D. Please provide, on a daily basis since January 1, 2017 by TBS or delivery point, the maximum deliverable throughput by customer type. Please also provide these data in Microsoft Excel format with all links, and formulae intact.
- E. Please provide, by TBS or delivery point, on a daily basis since January 1, 2017 the percentage of deliverable capacity subscribed by the utility. If applicable, please identify other parties, and their percentages of subscribed capacity, at the TBS. Please also provide these data in Microsoft Excel format with all links, and formulae intact.
- F. Please provide the following forecasted data, in Microsoft Excel format with all links and formulae intact, by TBS, or delivery point, for the next three heating seasons. If the utility expects daily fluctuation, please provide these data on a daily basis:
 - a. Total utility throughput, if possible, divided by customer type (i.e., firm, interruptible, transport); and
 - b. Expected firm and total throughput available at the TBS or delivery point.

To be completed by responder

Response Date: May 29, 2018
Response by: Travis Jacobson
Email Address: travis.jacobson@mdu.com
Phone Number: (701) 222-7855

Minnesota Department of Commerce
Division of Energy Resources
Information Request

Docket Number: G999/AA-17-493 Nonpublic Public
Requested From: All regulated gas utilities Date of Request: 5/17/2018
Response Due: 5/28/2018

Requested by: Sachin Shah/Angela Byrne/Adam Heinen/Steve Rakow
Email Address(es): sachin.shah@state.mn.us
Phone Number(s): 651-539-1834

- G. Please provide maps, by county, identifying the location (and name) of any, and all, TBSs or delivery points on the utility's system. If possible, please provide these maps in pdf and GIS executable formats.
- a. Please identify, by county, on the maps in Part F, the location of any, and all, transmission assets on the utility's system.
 - b. If the utility has an affiliate transmission or intrastate pipeline utility, please also identify these assets on the maps provided in Part F, by county.

If this information has already been provided in written comments or in response to an earlier DOC information request, please identify the specific comment cite(s) or DOC information request number(s).

Response:

- A. No change.
- B. Please see the attached Microsoft Excel document titled "AA-17-493 GP Response IR 18" within worksheet titled "IR No. 18.B". Great Plains does not track daily throughput by firm, interruptible, and transport load.
- C. Please see the attached Microsoft Excel document titled "AA-17-493 GP Response IR 18" within worksheet titled "IR No. 18.C".
- D. No change.
- E. Great Plains Natural Gas does not track historical delivery point capacities; therefore, does not identify the percentage of subscribed capacity. Please see the current percentage of deliverable capacity in the attached Microsoft Excel document titled "AA-17-493 GP Response IR 18" within worksheet titled "IR No. 18.E".
- F. a. Please see the attached Microsoft Excel document titled "AA-17-493 GP Response IR 18" within worksheet titled "IR No. 18.F.a".

To be completed by responder

Response Date: May 29, 2018
Response by: Travis Jacobson
Email Address: travis.jacobson@mdu.com
Phone Number: (701) 222-7855

Minnesota Department of Commerce
Division of Energy Resources
Information Request

Docket Number: G999/AA-17-493 Nonpublic Public
Requested From: All regulated gas utilities Date of Request: 5/17/2018
Response Due: 5/28/2018

Requested by: Sachin Shah/Angela Byrne/Adam Heinen/Steve Rakow
Email Address(es): sachin.shah@state.mn.us
Phone Number(s): 651-539-1834

b. Please see the attached Microsoft Excel document titled "AA-17-493 GP Response IR 18"
within worksheet titled "IR No. 18.E".

G. No Change.

To be completed by responder

Response Date: May 29, 2018
Response by: Travis Jacobson
Email Address: travis.jacobson@mdu.com
Phone Number: (701) 222-7855



705 West Fir Avenue
Mailing Address:
P.O. Box 176
Fergus Falls, MN 56538-0176
(218) 736-6935

November 29, 2018

Mr. Connor Boler
Department of Commerce
Division of Energy Resources
85 7th Place East, Suite 500
St. Paul, MN 55101-2198

Re: Docket No. G999/AA-18-374

Dear Mr. Boler:

Great Plains Natural Gas Co., (Great Plains), a Division of MDU Resources Group, Inc., herewith electronically submits its response to information request number 20 from the Minnesota Department of Commerce, Division of Energy Resources dated November 19, 2018.

If you have any questions regarding this filing, please contact me at (701) 222-7856, or Brian M. Meloy, at (612) 335-1451.

Sincerely,

/s/ Tamie A. Aberle

Tamie A. Aberle
Director of Regulatory Affairs

cc: Brian M. Meloy
Angela Byrne
Sachin Shah
Adam Heinen

Minnesota Department of Commerce
Division of Energy Resources
Information Request

Docket Number: G999/AA-18-374 Nonpublic Public
Requested From: MDU Resources Group Inc., Date of Request: 11/19/2018
d/b/a Great Plains Natural Gas Co
Type of Inquiry: General Response Due: 11/29/2018
Requested by: Sachin Shah, Angela Byrne, Adam Heinen
Email Address(es): sachin.shah@state.mn.us; angela.byrne@state.mn.us; adam.heinen@state.mn.us
Phone Number(s): 651-539-1834; 651-539-1820; 651-539-1825

Request Number: 20
Topic:
Reference(s): MDU Resources Group Inc., d/b/a Great Plains Natural Gas Company (Great Plains) response to Department Information Request (IR) Nos. 18 in Docket No. G999/AA-16-524.

Request:

- (a) Please explain and separately provide the above reference, including all subparts, to the most recent date available.
- (b) As part of your response to part (a) above, please supplement your response(s) to include weather data beginning from November 1, 2012.

Where applicable, please provide all the data used in your response in Microsoft Excel format with all links and formulae intact.

If this information has already been provided in the Petition or in response to an earlier Department information request (IR), please identify the specific cite(s) or Department IR numbers(s).

To be completed by responder

Response Date: November 29, 2018
Response by: Travis Jacobson, Manager, Regulatory Affairs
Email Address: travis.jacobson@mdu.com
Phone Number: (701) 222-7855

Minnesota Department of Commerce
Division of Energy Resources
Information Request

Docket Number: G999/AA-18-374 Nonpublic Public
Requested From: MDU Resources Group Inc., Date of Request: 11/19/2018
d/b/a Great Plains Natural Gas Co
Type of Inquiry: General Response Due: 11/29/2018
Requested by: Sachin Shah, Angela Byrne, Adam Heinen
Email Address(es): sachin.shah@state.mn.us; angela.byrne@state.mn.us; adam.heinen@state.mn.us
Phone Number(s): 651-539-1834; 651-539-1820; 651-539-1825

Response:

- (a) Please see attached Microsoft Excel document titled "DOC IR-18 Distribution Planning 18 – Update" for an updated response to IR No. 18.B. Responses to all other IR No.18 subparts remain unchanged from those filed for IR No. 18 on 11/19/2018.
- (b) Please see attached Microsoft Excel document titled "DOC IR-20 Weather Data 18."

To be completed by responder

Response Date: November 29, 2018
Response by: Travis Jacobson, Manager, Regulatory Affairs
Email Address: travis.jacobson@mdu.com
Phone Number: (701) 222-7855