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November 1, 2019

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

Re: Docket No. G004/M-19-430  
Informational Update Filing on Great Plains' 2019 Demand Entitlement Filing

Dear Mr. Wolf:

Great Plains Natural Gas Co. (Great Plains), a Division of Montana-Dakota Utilities Co., submitted its Demand Entitlement Filing on June 28, 2019 (June 28 DEQ) in the above referenced docket.

**TF12 Reallocation:**

As stated in the June 28 DEQ filing, Great Plains agreed to update the Commission on the allocation of Northern Natural Gas (NNG) TF12 Base and TF12 Variable in place for the 2019-2020 season. Great Plains was informed that NNG is increasing the TF12 Base by 102 dk to 3,921 dk per day, while decreasing the TF12 Variable by 102 dk to 3,614 dk per day. This new allocation will be effective November 1, 2019.

Table 1  
TF12 Changes to Initial Filing

	Initial Filing (Dk)	Change (Dk)	Update (Dk)
TF12 Base	3,819	102	3,921
TF12 Variable	3,716	(102)	3,614

**Updated Demand Costs:**

At the time the June 28 DEQ filing was prepared, Great Plains proposed to lower the amount of FT-A capacity released on Viking Gas Transmission (VGT) by 400 Dk from 2,600 Dk to 2,200 Dk at an estimated rate of \$2.1300 per dk. Great Plains' Gas Supply Department was able to secure a contract for the 2,200 Dk/day capacity release to a prearranged bidder for the period of November 2019 through March 2020 at a rate of \$4.7507 per Dk per month.

Great Plains also proposed in its June 28 DEQ filing to release 1,000 Dk/day of currently contracted Northern Natural Gas (NNG) capacity. This capacity release has not been secured with a purchaser at this time; however, Great Plains is in ongoing discussions with purchasers and will provide an update if this capacity release on NNG is finalized. Should this 1,000 Dk/day of capacity release be executed, it will place Great Plains' demand entitlement quantity at the original level represented in the June 28 filing.

In the June 28 DEQ filing, Great Plains indicated a contracted seasonal release on VGT of 5,000 Dk/day would be posted and a release was assumed in determining the rate impacts. This capacity release did not effect the demand entitlement for the heating season. Currently, Great Plains anticipates that this release will be continued in the 2020 summer season but no pre-arranged agreements have been entered into at this time. As such, this 5,000 Dk/day capacity release on VGT has not been reflected as a credit to the demand entitlement profile for the 2019-2020 heating season. If Great Plains reaches an agreement with a purchaser for this capacity release, Great Plains will provide an update to its demand costs through the purchased gas adjustment (PGA).

After incorporating the changes mentioned above, the 2019-20120 heating season capacity reserve is 8.5%, which is an increase of 3.0%, from the June 28 DEQ filing.

The demand costs to be effective November 1, 2019 are reflected in Table 2, below:

Table 2  
Updated Demand Costs

Interstate Pipelines	Volumes Dk/day	Rates \$	Months	Demand Costs \$
<u>VGT</u>				
FT-A - Zone 1-1 (Cat. 3)	8,000	\$4.3706	12	\$419,578
FT-A - Zone 1-1 (Cat. 3)	5,000	4.3706	12	262,236
FT-A Seasonal (Cat. 3)	2,000	4.3706	5	43,706
FT-A - Zone 1-1 (Cat. 3)	5,000	4.3706	12	262,236
FT-A - Capacity Release	(2,200)	4.7507	5	(52,258)
<u>NNG</u>				
TFX - Summer	13,000	5.6830	7	517,153
TFX - Winter	13,000	15.1530	5	984,945
TFX Seasonal (November - March)	2,000	15.1530	5	151,530
TF12 Base - Summer	3,921	5.6830	7	155,981
TF12 Base - Winter	3,921	10.2300	5	200,559
TF12 Variable - Summer	3,614	5.6830	7	143,769
TF12 Variable - Winter	3,614	13.8660	5	250,559
TF5	3,410	15.1530	5	258,359
TFX - Winter	5,200	15.1530	5	393,978
TFX - Annual (Summer Rate)	2,000	5.6830	7	79,562
TFX - Annual (Winter Rate)	2,000	15.1530	5	151,530
TFX Negotiated Contract - Winter	1,000	26.8918	5	134,459
FDD-1 Reservation	4,640	1.7140	12	95,436
Interruptible Demand Credit				(579,799)
Total Demand Charges				<u>\$3,873,519</u>

The annual updated demand effect is an increase of \$0.00890 per dk as shown on Exhibit C. Please see Table 3 below for the annual demand rate impacts, as effective October 1, 2019 and reflecting the changes noted above.

Table 3  
Annual Demand Rate Impacts

Effective date	Residential Customer (77.9 Dk)	Total Change Res (%)	Firm General Service (434.4 Dk)	Total Change FGS (%)
October 1, 2019	\$ 98.03		\$ 546.65	
Change due to update	\$ 0.69	0.7	\$ 3.87	0.7
November 1, 2019	\$ 98.72		\$ 550.52	

Great Plains' analysis indicates that the portfolio in place for the 2019-2020 heating season will allow the Company to adequately serve customers.

In support of updating Docket No. G004/M-19-430, Great Plains has updated the following exhibits to show the impact of the changes listed above.

- Exhibit A – Design Day Capacity
- Exhibit B – Demand Profile
- Exhibit C – Rate Impacts
- Exhibit D – Demand Entitlement Analysis

Per the Department's request in its Response Comments to Docket No. G004/M-15-645, dated August 31, 2016, Great Plains has included a red-line version of the Exhibits. Please see Exhibit E.

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

**GREAT PLAINS NATURAL GAS CO.  
DEMAND ENTITLEMENT FILING 2019 - 2020 HEATING SEASON  
DESIGN DAY - NOVEMBER 2019  
-UPDATE-**

Pipeline	Customer Factors 1/			Design HDD 2/	No. of Customers 3/	Projected Customers 4/	Peak/ Customer	Projected Peak Day (dk) 5/	L&UA 6/	Projected Design	Proposed Capacity	Reserve
	Dk/day	Dk/DD	RSqr									
<b>VGT</b>												
Crookston	0.04733	0.01383	0.99645	96	2,579	2,601	1.37501	3,578	25	3,603		
North 4	0.05036	0.01397	0.99767	91	7,222	7,278	1.32163	9,622	67	9,689		
Wahpeton	0.07255	0.01412	0.99744	91	2,268	2,303	1.35747	3,619	25	3,644		
<b>Total VGT</b>					<u>12,069</u>	<u>12,182</u>		<u>16,819</u>	<u>117</u>	<u>16,936</u>		
<b>NNG</b>	0.05244	0.01626	0.99721	83	<u>12,050</u>	<u>12,134</u>	1.40202	<u>17,011</u>	<u>119</u>	<u>17,130</u>		
<b>Total</b>					<u><u>24,119</u></u>	<u><u>24,316</u></u>		<u><u>33,830</u></u>	<u><u>236</u></u>	<u><u>34,066</u></u>	<u><u>36,945</u></u>	<u><u>8.5%</u></u>

1/ Use per customer factors based on regression analysis for the 36 months ending March 2019.

2/ Design Heating Degree Days Base 60 degrees F.

3/ Reflects monthly average for December 2018 - February 2019.

4/ Customer growth is based on regression analysis for the 36 months ending March 2019 with composite growth rates of: Crookston = 0.85%, North = 0.78%, Wahpeton = 1.54%, South = 0.70%.

5/ Includes 500 dk of incremental capacity related to the addition of a new firm customer.

6/ Lost and Unaccounted for Gas percentage of 0.7%.

**GREAT PLAINS NATURAL GAS CO.  
DEMAND ENTITLEMENT FILING 2019 - 2020 HEATING SEASON  
DEMAND PROFILE EFFECTIVE NOVEMBER 1, 2019  
-UPDATE-**

<u>Type of Capacity or Entitlement</u>	<u>Authorized Amount</u>	<u>Proposed Change</u>	<u>Proposed Amount</u>	<u>Contract Length</u>	<u>Expiration Date</u>
<b><u>Demand Profile (dk) 1/</u></b>					
<b><u>VGT</u></b>					
FT-A - Zone 1-1 (Cat. 3)	8,000	0	8,000	5 years	10/31/22
FT-A - Zone 1-1 (Cat. 3)	5,000	0	5,000	5 years	10/31/22
FT-A Seasonal - Zone 1-1 (Cat. 3)	2,000	0	2,000	5 years	10/31/22
FT-A - Zone 1-1 (Cat. 3)	5,000	0	5,000	5 years	10/31/23
FT-A - Capacity Release	(2,600)	400	(2,200)	5 months	3/31/20
<b><u>NNG</u></b>					
TF12 Base (Summer & Winter)	3,819	102	3,921	5 years	10/31/24
TF12 Variable (Summer & Winter)	3,716	(102)	3,614	5 years	10/31/24
TF5 (November - March)	3,410	0	3,410	5 years	10/31/24
TFX Negotiated (November - March)	1,000	0	1,000	10.5 years	3/31/25
TFX Seasonal (November - March)	5,200	0	5,200	5 years	10/31/24
TFX (Annual) 2/	1,000	1,000	2,000	10 years	10/31/25
Subtotal	35,545	1,400	36,945		
<b><u>Supplemental Capacity</u></b>					
TFX Seasonal (November - March)	2,000	0	2,000	5 years	10/31/24
TFX (Annual)	13,000	0	13,000	11.5 years	3/31/24
TFX (Annual) 2/	1,000	(1,000)	0	10 years	10/31/25
<b><u>Storage</u></b>					
FDD-1 Reservation	4,640	0	4,640	5 years	5/31/24
Heating Season Total Capacity:	35,545	1,400	36,945		
Non-Heating Season Total Capacity:	27,535	0	27,535		
Forecasted Heating Season Design Day:	33,674	392	34,066		
Estimated Non-Heating Season Design Day:	18,507	(47)	18,460		
Heating Season Capacity: Surplus/(Shortage)	1,871	1,008	2,879		
Non-Heating Season Capacity: Surplus/(Shortage)	9,028	47	9,075		

1/ Minnesota communities plus Wahpeton, ND.

2/ Northern Natural capacity of 2,000 Dk, of which 1,000 Dk was formerly used as supplemental capacity to deliver gas to Viking at Chisago for 'back-haul' transport to Vergas, MN.

**GREAT PLAINS NATURAL GAS CO.  
DEMAND PROFILE  
-UPDATE-**

2017-2018 Heating Season G004/M-17-521		2018-2019 Heating Season G004/M-18-454		2019-2020 Heating Season G004/M-19-430		Difference
	Quantity (dk)		Quantity (dk)		Quantity (dk)	
FT-A (Cat. 3) (12 months)	8,000	FT-A (Cat. 3) (12 months)	8,000	FT-A (Cat. 3) (12 months)	8,000	0
FT-A (Cat. 3) (12 months)	5,000	FT-A (Cat. 3) (12 months)	10,000	FT-A (Cat. 3) (12 months)	10,000	0
FT-A (Cat. 3) (November - March)	2,000	FT-A (Cat. 3) (November - March)	2,000	FT-A (Cat. 3) (November - March)	2,000	0
FT-A (November - March)	-	FT-A (November - March)	-	FT-A (November - March)	-	0
BP Contract (Firm Demand)	1,600	FT-A - Capacity Release	(2,600)	FT-A - Capacity Release	(2,200)	400
TFX (12 months) 1/	13,000	TFX (12 months) 1/	13,000	TFX (12 months) 1/	13,000	0
TFX (November - March) 1/	2,000	TFX (November - March) 1/	2,000	TFX (November - March) 1/	2,000	0
TF-12 Base	4,854	TF-12 Base	3,819	TF-12 Base	3,921	102
TF-12 Variable	2,681	TF-12 Variable	3,716	TF-12 Variable	3,614	(102)
TF-5 (November- March)	3,410	TF-5 (November- March)	3,410	TF-5 (November- March)	3,410	0
TFX (November - March)	5,200	TFX (November - March)	5,200	TFX (November - March)	5,200	0
TFX - Negotiated (November - March)	1,000	TFX - Negotiated (November - March)	1,000	TFX - Negotiated (November - March)	1,000	0
TFX (Annual) 2/	2,000	TFX (Annual) 4/	2,000	TFX (Annual)	2,000	0
TFX - Capacity Release	-	TFX - Capacity Release	-	TFX - Capacity Release	-	0
FDD-1 Reservation 1/	4,640	FDD-1 Reservation 1/	4,640	FDD-1 Reservation 1/	4,640	0
Heating Season Total Capacity 3/	34,445	Heating Season Total Capacity 5/	35,545	Heating Season Total Capacity	36,945	1,400
Non-Heating Season Total Capacity	22,535	Non-Heating Season Total Capacity	27,535	Non-Heating Season Total Capacity	27,535	0
Total Entitlement 3/	34,445	Total Entitlement 5/	35,545	Total Entitlement	36,945	1,400
Total Annual Transportation 3/	22,535	Total Annual Transportation 5/	26,535	Total Annual Transportation	27,535	1,000
Total Season Transportation	13,210	Total Season Transportation	9,010	Total Season Transportation	9,410	400
Percent TF-5	31.16%	Percent TF-5	31.16%	Percent TF-5	31.16%	0.00%
Total Percent Seasonal	38.35%	Total Percent Seasonal	25.35%	Total Percent Seasonal	25.47%	0.12%

1/ Does not impact demand profile.

2/ Demand profile includes 700 dk: Remaining 1,300 dk used to deliver gas to Viking interconnect at Chisago for 1,300 dk FT-A (12 Months) 'back-haul' contract to Vergas, MN.

3/ Includes 700 dk of total 2,000 dk from TFX (Annual) contract for capacity and demand profile calculation.

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

5/ Includes 1,000 dk of total 2,000 dk from TFX (Annual) contract for capacity and demand profile calculation.

**GREAT PLAINS NATURAL GAS CO.**  
**RATE EFFECT OF PROPOSED DEMAND - NOVEMBER 1, 2019**  
**NORTH DISTRICT**  
**-UPDATE-**

	Last Rate Case 1/	Last Demand Change 2/	October 2019 Rates 3/	November 2019 Proposed 4/	% Change from			Change from October 2019 Rates
					Last Rate Case	Last Demand Change	October 2019 Rates	
<b>Residential</b>								
Commodity Cost of Gas	\$2.53010	\$3.88920	\$1.95580	\$2.43770	-3.7%	-37.3%	24.6%	\$0.48190
GCR 5/	0.07620	0.48590	(0.23440)	(0.23440)	-407.6%	-148.2%	0.0%	0.00000
Demand Cost of Gas	1.18900	1.33860	1.25840	1.26730	6.6%	-5.3%	0.7%	0.00890
Commodity Margin 6/	1.65450	1.91540	1.65450	1.65450	0.0%	-13.6%	0.0%	0.00000
CCRA 7/	0.21250	0.01300	(0.03370)	(0.03370)	-115.9%	-359.2%	0.0%	0.00000
GAP 8/		0.01393	0.01393	0.01393	N/A	0.0%	0.0%	0.00000
GUIC 9/		0.14850	0.24940	0.24940	N/A	67.9%	0.0%	0.00000
RDM 10/		0.28420	(0.38160)	(0.38160)	N/A	-234.3%	0.0%	0.00000
Total Rate	\$5.66230	\$8.08873	\$4.48233	\$4.97313	-12.2%	-38.5%	10.9%	\$0.49080
Average Annual Usage (dk)	77.9	77.9	77.9	77.9				
Average Annual Cost of Gas	\$441.09	\$630.11	\$349.17	\$387.40	-12.2%	-38.5%	10.9%	\$38.23
<b>Firm General Service</b>								
Commodity Cost of Gas	\$2.53010	\$3.88920	\$1.95580	\$2.43770	-3.7%	-37.3%	24.6%	\$0.48190
GCR 5/	0.07620	0.48590	(0.23440)	(0.23440)	-407.6%	-148.2%	0.0%	0.00000
Demand Cost of Gas	1.18900	1.33860	1.25840	1.26730	6.6%	-5.3%	0.7%	0.00890
Commodity Margin 6/	1.31930	1.52380	1.31930	1.31930	0.0%	-13.4%	0.0%	0.00000
CCRA 7/	0.21250	0.01300	(0.03370)	(0.03370)	-115.9%	-359.2%	0.0%	0.00000
GAP 8/		0.01393	0.01393	0.01393	N/A	0.0%	0.0%	0.00000
GUIC 9/		0.11170	0.17920	0.17920	N/A	60.4%	0.0%	0.00000
RDM 10/		0.24540	(0.23120)	(0.23120)	N/A	-194.2%	0.0%	0.00000
Total Rate	\$5.32710	\$7.62153	\$4.22733	\$4.71813	-11.4%	-38.1%	11.6%	\$0.49080
Average Annual Usage (dk)	434.4	434.4	434.4	434.4				
Average Annual Cost of Gas	\$2,314.09	\$3,310.79	\$1,836.35	\$2,049.56	-11.4%	-38.1%	11.6%	\$213.21
<b>Customer Class</b>	<u>Commodity Change</u>		<u>Demand Change</u>		<u>Total Change</u>		<u>Avg. Annual</u>	
	<u>(\$/dk)</u>	<u>(Percent)</u>	<u>(\$/dk)</u>	<u>(Percent)</u>	<u>(\$/dk)</u>	<u>(Percent)</u>	<u>Bill Change</u>	
Residential	\$0.4819	24.6%	\$0.0089	0.7%	\$0.4908	10.9%	\$38.23	
Firm General Service	0.4819	24.6%	0.0089	0.7%	0.4908	11.6%	\$213.21	

- 1/ Consolidated Base Cost of Gas effective July 1, 2017 in update to Docket No. G004/MR-16-834. Commodity margin effective May 1, 2019 in Docket No. E,G-999/CI-17-895.
- 2/ Demand in Docket No. G004/AA-18-454, effective November 1, 2018:
- 3/ Most recently filed PGA: October 2019.
- 4/ Includes seasonal capacity release of 2,200 Dk.
- 5/ GCR rate of \$0.1748 (effective September 1, 2017 - Docket No. G005/AA-17-493); GCR rate of \$0.4859 (effective September 1, 2018 - Docket No. G004/AA-18-374); GCR rate of (\$0.2344) (effective September 1, 2019 - Docket No. G004/AA-19-401).
- 6/ Includes CCRC of \$0.0556 (effective January 1, 2017 - Docket No. G004/M-16-384).
- 7/ CCRA of \$0.2125 (effective January 1, 2017 - Docket No. G004/M-16-384); CCRA of \$0.0130 (effective October 1, 2018 - Docket No. G004/M-18-118); CCRA rate of (\$0.0130) (effective August 1, 2019 - Docket No. G004/M-19-287).
- 8/ Effective with service rendered on and after June 1, 2017 - Docket No. G004/M-16-495.
- 9/ Effective with service rendered on and after November 1, 2017 - Docket No. G004/M-16-1066 and March 1, 2019 - Docket No. G004-M-18-282.



**GREAT PLAINS NATURAL GAS CO.**  
**RATE EFFECT OF PROPOSED DEMAND - NOVEMBER 1, 2019**  
**SOUTH DISTRICT**  
**-UPDATE-**

	Last Rate Case 1/	Last Demand Change 2/	October 2019 Rates 3/	November 2019 Proposed 4/	% Change from			Change from October 2019 Rates
					Last Rate Case	Last Demand Change	October 2019 Rates	
<b>Residential</b>								
Commodity Cost of Gas	\$2.53010	\$3.88920	\$1.95580	\$2.43770	-3.7%	-37.3%	24.6%	\$0.48190
GCR 5/	0.16270	0.48590	(0.23440)	(0.23440)	-244.1%	-148.2%	0.0%	0.00000
Demand Cost of Gas	1.18900	1.33860	1.25840	1.26730	6.6%	-5.3%	0.7%	0.00890
Commodity Margin 6/	1.65450	1.66470	1.65450	1.65450	0.0%	-0.6%	0.0%	0.00000
CCRA 7/	0.21250	0.01300	(0.03370)	(0.03370)	-115.9%	-359.2%	0.0%	0.00000
GAP 8/		0.01393	0.01393	0.01393	N/A	0.0%	0.0%	0.00000
GUIC 9/		0.14850	0.24940	0.24940	N/A	67.9%	0.0%	0.00000
RDM 10/		0.20030	(0.30500)	(0.30500)	N/A	-252.3%	0.0%	0.00000
<b>Total Rate</b>	<b>\$5.74880</b>	<b>\$7.75413</b>	<b>\$4.55893</b>	<b>\$5.04973</b>	<b>-12.2%</b>	<b>-34.9%</b>	<b>10.8%</b>	<b>\$0.49080</b>
Average Annual Usage (dk)	77.9	77.9	77.9	77.9				
Average Annual Cost of Gas	\$447.83	\$604.05	\$355.14	\$393.37	-12.2%	-34.9%	10.8%	\$38.23
<b>Firm General Service</b>								
Commodity Cost of Gas	\$2.53010	\$3.88920	\$1.95580	\$2.43770	-3.7%	-37.3%	24.6%	\$0.48190
GCR 5/	0.16270	0.48590	(0.23440)	(0.23440)	-244.1%	-148.2%	0.0%	0.00000
Demand Cost of Gas	1.18900	1.33860	1.25840	1.26730	6.6%	-5.3%	0.7%	0.00890
Commodity Margin 6/	1.31930	1.33480	1.31930	1.31930	0.0%	-1.2%	0.0%	0.00000
CCRA 7/	0.21250	0.01300	(0.03370)	(0.03370)	-115.9%	-359.2%	0.0%	0.00000
GAP 8/		0.01393	0.01393	0.01393	N/A	0.0%	0.0%	0.00000
GUIC 9/		0.11170	0.17920	0.17920	N/A	60.4%	0.0%	0.00000
RDM 10/		0.20080	(0.07420)	(0.07420)	N/A	-137.0%	0.0%	0.00000
<b>Total Rate</b>	<b>\$5.41360</b>	<b>\$7.38793</b>	<b>\$4.38433</b>	<b>\$4.87513</b>	<b>-9.9%</b>	<b>-34.0%</b>	<b>11.2%</b>	<b>\$0.49080</b>
Average Annual Usage (dk)	434.4	434.4	434.4	434.4				
Average Annual Cost of Gas	\$2,351.67	\$3,209.32	\$1,904.55	\$2,117.76	-9.9%	-34.0%	11.2%	\$213.21
<b>Customer Class</b>								
	Commodity Change		Demand Change		Total Change		Avg. Annual	
	(\$/dk)	(Percent)	(\$/dk)	(Percent)	(\$/dk)	(Percent)	Bill Change	
Residential	\$0.4819	24.6%	\$0.0089	0.7%	\$0.4908	10.8%	\$38.23	
Firm General Service	0.4819	24.6%	0.0089	0.7%	0.4908	11.2%	\$213.21	

- 1/ Consolidated Base Cost of Gas effective July 1, 2017 in update to Docket No. G004/MR-16-834. Commodity margin effective May 1, 2019 in Docket No. E,G-999/CI-17-895.
- 2/ Demand in Docket No. G004/AA-18-454, effective November 1, 2018:
- 3/ Most recently filed PGA: October 2019.
- 4/ Includes seasonal capacity release of 2,200 Dk.
- 5/ GCR rate of \$0.1748 (effective September 1, 2017 - Docket No. G005/AA-17-493); GCR rate of \$0.4859 (effective September 1, 2018 - Docket No. G004/AA-18-374); GCR rate of (\$0.2344) (effective September 1, 2019 - Docket No. G004/AA-19-401).
- 6/ Includes CCRC of \$0.0556 (effective January 1, 2017 - Docket No. G004/M-16-384).
- 7/ CCRA of \$0.2125 (effective January 1, 2017 - Docket No. G004/M-16-384); CCRA of \$0.0130 (effective October 1, 2018 - Docket No. G004/M-18-118); CCRA rate of (\$0.0130) (effective August 1, 2019 - Docket No. G004/M-19-287).
- 8/ Effective with service rendered on and after June 1, 2017 - Docket No. G004/M-16-495.
- 9/ Effective with service rendered on and after November 1, 2017 - Docket No. G004/M-16-1066 and March 1, 2019 - Docket No. G004/M-18-282.
- 10/ Effective with service rendered on and after January 1, 2018 and April 1, 2019 - Docket No. G004/M-15-879.

**GREAT PLAINS NATURAL GAS CO.  
DEMAND ENTITLEMENT ANALYSIS  
-UPDATE-**

Heating Season	Number of Firm Customers			Design Day Requirement			Total Entitlement + Storage + Peak Shaving			
	(1) Number of Customers	(2) Change From Previous Year	(3) % Change From Previous Year	(4) Design Day (dk)	(5) Change From Previous Year	(6) % Change From Previous Year	(7) Total Entitlement (dk)	(8) Change From Previous Year	(9) % Change From Previous Year	(10) % of Reserve Margin [(7)-(4)]/(4)
2019-2020	24,316	76	0.31%	34,066	392	1.16%	36,945	1,400	3.94%	8.45%
2018-2019	24,240	243	1.01%	33,674	941	2.87%	35,545	1,100	3.19%	5.56%
2017-2018	23,997	184	0.77%	32,733	335	1.03%	34,445	200	0.58%	5.23%
Annual Average			0.70%			1.69%			2.57%	6.41%

Heating Season	Firm Peak Day Sendout			(14) Excess Per Customer [(7)-(4)]/(1)	(15) Design Day per Customer (4)/(1)	(16) Entitlement per Customer (7)/(1)	(17) Peak Day Sendout per Customer (11)/(1)
	(11) Firm Peak Day Sendout (dk)	(12) Change From Previous Year	(13) % Change From Previous Year				
2019-2020				0.1184	1.4010	1.5194	
2018-2019	30,320	1,679	5.86%	0.0772	1.3892	1.4664	1.2508
2017-2018	28,641	112	0.39%	0.0713	1.3640	1.4354	1.1935
Annual Average			3.13%	0.0890	1.3847	1.4737	1.2222

**GREAT PLAINS NATURAL GAS CO.  
DEMAND ENTITLEMENT FILING 2019 - 2020 HEATING SEASON  
DESIGN DAY - NOVEMBER 2019  
-UPDATE-**

Pipeline	Customer Factors 1/			Design HDD 2/	No. of Customers 3/	Projected Customers 4/	Peak/ Customer	Projected Peak Day (dk) 5/	L&UA 6/	Projected Design	Proposed Capacity	Reserve		
	Dk/day	Dk/DD	RSqr											
<b>VGT</b>														
Crookston	0.04733	0.01383	0.99645	96	2,579	2,601	1.37501	3,578	25	3,603				
North 4	0.05036	0.01397	0.99767	91	7,222	7,278	1.32163	9,622	67	9,689				
Wahpeton	0.07255	0.01412	0.99744	91	2,268	2,303	1.35747	3,619	25	3,644				
<b>Total VGT</b>					<u>12,069</u>	<u>12,182</u>		<u>16,819</u>	<u>117</u>	<u>16,936</u>				
<b>NNG</b>	0.05244	0.01626	0.99721	83	<u>12,050</u>	<u>12,134</u>	1.40202	<u>17,011</u>	<u>119</u>	<u>17,130</u>				
<b>Total</b>					<u><u>24,119</u></u>	<u><u>24,316</u></u>		<u><u>33,830</u></u>	<u><u>236</u></u>	<u><u>34,066</u></u>	<u><u>35,945</u></u>	<u><u>36,945</u></u>	<u><u>5.5%</u></u>	<u><u>8.5%</u></u>

1/ Use per customer factors based on regression analysis for the 36 months ending March 2019.

2/ Design Heating Degree Days Base 60 degrees F.

3/ Reflects monthly average for December 2018 - February 2019.

4/ Customer growth is based on regression analysis for the 36 months ending March 2019 with composite growth rates of: Crookston = 0.85%, North = 0.78%, Wahpeton = 1.54%, South = 0.70%.

5/ Includes 500 dk of incremental capacity related to the addition of a new firm customer.

6/ Lost and Unaccounted for Gas percentage of 0.7%.

**GREAT PLAINS NATURAL GAS CO.  
DEMAND ENTITLEMENT FILING 2019 - 2020 HEATING SEASON  
DEMAND PROFILE EFFECTIVE NOVEMBER 1, 2019  
-UPDATE-**

<u>Type of Capacity or Entitlement</u>	<u>Authorized Amount</u>	<u>Proposed Change</u>	<u>Proposed Amount</u>	<u>Contract Length</u>	<u>Expiration Date</u>
<b><u>Demand Profile (dk) 1/</u></b>					
<b><u>VGT</u></b>					
FT-A - Zone 1-1 (Cat. 3)	8,000	0	8,000	5 years	10/31/22
FT-A - Zone 1-1 (Cat. 3)	5,000	0	5,000	5 years	10/31/22
FT-A Seasonal - Zone 1-1 (Cat. 3)	2,000	0	2,000	5 years	10/31/22
FT-A - Zone 1-1 (Cat. 3)	5,000	0	5,000	5 years	10/31/23
FT-A - Capacity Release	(2,600)	400	(2,200)	5 months	3/31/20
<b><u>NNG</u></b>					
TF12 Base (Summer & Winter)	3,819	0 102	<del>3,819</del> 3,921	5 years	10/31/24
TF12 Variable (Summer & Winter)	3,716	0-(102)	<del>3,716</del> 3,614	5 years	10/31/24
TF5 (November - March)	3,410	0	3,410	5 years	10/31/24
TFX Negotiated (November - March)	1,000	0	1,000	10.5 years	3/31/25
TFX Seasonal (November - March)	5,200	0	5,200	5 years	10/31/24
TFX (Annual) 2/	1,000	1,000	2,000	10 years	10/31/25
TFX - Capacity Release	0	(1,000)	(1,000)	5 months	3/31/20
Subtotal	<u>35,545</u>	<u>400 1,400</u>	<u><del>35,945</del> 36,945</u>		
<b><u>Supplemental Capacity</u></b>					
TFX Seasonal (November - March)	2,000	0	2,000	5 years	10/31/24
TFX (Annual)	13,000	0	13,000	11.5 years	3/31/24
TFX (Annual) 2/	1,000	(1,000)	0	10 years	10/31/25
<b><u>Storage</u></b>					
FDD-1 Reservation	4,640	0	4,640	5 years	5/31/24
Heating Season Total Capacity:	35,545	400 1,400	<del>35,945</del> 36,945		
Non-Heating Season Total Capacity:	27,535	0 1,000	<del>26,535</del> 27,535		
Forecasted Heating Season Design Day:	33,674	392	34,066		
Estimated Non-Heating Season Design Day:	18,507	(47)	18,460		
Heating Season Capacity: Surplus/(Shortage)	1,871	8-1,008	<del>1,879</del> 2,879		
Non-Heating Season Capacity: Surplus/(Shortage)	9,028	(953) 47	<del>8,075</del> 9,075		

1/ Minnesota communities plus Wahpeton, ND.

2/ Northern Natural capacity of 2,000 Dk, of which 1,000 Dk was formerly used as supplemental capacity to deliver gas to Viking at Chisago for 'back-haul' transport to Vergas, MN.

**GREAT PLAINS NATURAL GAS CO.  
DEMAND PROFILE  
-UPDATE-**

2017-2018 Heating Season G004/M-17-521		2018-2019 Heating Season G004/M-18-454		2019-2020 Heating Season G004/M-19-430		Difference
	Quantity (dk)		Quantity (dk)		Quantity (dk)	
FT-A (Cat. 3) (12 months)	8,000	FT-A (Cat. 3) (12 months)	8,000	FT-A (Cat. 3) (12 months)	8,000	0
FT-A (Cat. 3) (12 months)	5,000	FT-A (Cat. 3) (12 months)	10,000	FT-A (Cat. 3) (12 months)	10,000	0
FT-A (Cat. 3) (November - March)	2,000	FT-A (Cat. 3) (November - March)	2,000	FT-A (Cat. 3) (November - March)	2,000	0
FT-A (November - March)	-	FT-A (November - March)	-	FT-A (November - March)	-	0
BP Contract (Firm Demand)	1,600	FT-A - Capacity Release	(2,600)	FT-A - Capacity Release	(2,200)	400
TFX (12 months) 1/	13,000	TFX (12 months) 1/	13,000	TFX (12 months) 1/	13,000	0
TFX (November - March) 1/	2,000	TFX (November - March) 1/	2,000	TFX (November - March) 1/	2,000	0
TF-12 Base	4,854	TF-12 Base	3,819	TF-12 Base	3,819	0 102
TF-12 Variable	2,681	TF-12 Variable	3,716	TF-12 Variable	3,716	0 (102)
TF-5 (November- March)	3,410	TF-5 (November- March)	3,410	TF-5 (November- March)	3,410	0
TFX (November - March)	5,200	TFX (November - March)	5,200	TFX (November - March)	5,200	0
TFX - Negotiated (November - March)	1,000	TFX - Negotiated (November - March)	1,000	TFX - Negotiated (November - March)	1,000	0
TFX (Annual) 2/	2,000	TFX (Annual) 4/	2,000	TFX (Annual)	2,000	0
TFX - Capacity Release	-	TFX - Capacity Release	-	TFX - Capacity Release	(1,000)	(1,000)
FDD-1 Reservation 1/	4,640	FDD-1 Reservation 1/	4,640	FDD-1 Reservation 1/	4,640	0
Heating Season Total Capacity 3/	34,445	Heating Season Total Capacity 5/	35,545	Heating Season Total Capacity	35,945	400 1,400
Non-Heating Season Total Capacity	22,535	Non-Heating Season Total Capacity	27,535	Non-Heating Season Total Capacity	26,535	(1,000) 0
Total Entitlement 3/	34,445	Total Entitlement 5/	35,545	Total Entitlement	35,945	400 1,400
Total Annual Transportation 3/	22,535	Total Annual Transportation 5/	26,535	Total Annual Transportation	27,535	1,000
Total Season Transportation	13,210	Total Season Transportation	9,010	Total Season Transportation	9,410	400
Percent TF-5	31.16%	Percent TF-5	31.16%	Percent TF-5	31.16%	0.00%
Total Percent Seasonal	38.35%	Total Percent Seasonal	25.35%	Total Percent Seasonal	26.18%	0.83%
					25.47%	-0.12%

1/ Does not impact demand profile.

2/ Demand profile includes 700 dk: Remaining 1,300 dk used to deliver gas to Viking interconnect at Chisago for 1,300 dk FT-A (12 Months) 'back-haul' contract to Vergas, MN.

3/ Includes 700 dk of total 2,000 dk from TFX (Annual) contract for capacity and demand profile calculation.

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

5/ Includes 1,000 dk of total 2,000 dk from TFX (Annual) contract for capacity and demand profile calculation.

**GREAT PLAINS NATURAL GAS CO.**  
**RATE EFFECT OF PROPOSED DEMAND - NOVEMBER 1, 2019**  
**NORTH DISTRICT**  
**-UPDATE-**

	Last Rate Case 1/	Last Demand Change 2/	July 2019 Rates 3/	November 2019 Proposed 4/	% Change from		July 2019 Rates	Change from July 2019 Rates		
					Last Rate Case	Last Demand Change				
<b>Residential</b>										
Commodity Cost of Gas	\$2.53010	\$3.88920	\$2.14980	\$2.14980 2.43770	-15.0%	-3.7%	-44.7%	-37.3%	0.0%	\$0.00000
GCR 5/	0.07620	0.48590	0.48590	0.48590 (0.23440)	537.7%	-407.6%	0.0%	-148.2%	0.0%	0.00000
Demand Cost of Gas	1.18900	1.33860	1.32820	1.32490 1.26730	11.4%	6.6%	-1%	-5.3%	-0.2%	(0.00330)
Commodity Margin 6/	1.65450	1.91540	1.65450	1.65450	0.0%		-13.60%		0.0%	0.00000
CCRA 7/	0.21250	0.01300	0.01300	0.01300 (0.03370)	-93.9%	-115.9%	0.0%	-359.2%	0.0%	0.00000
GAP 8/		0.01393	0.01393	0.01393	N/A		0.00%		0.0%	0.00000
GUIC 9/		0.14850	0.24940	0.24940	N/A		67.90%		0.0%	0.00000
RDM 10/		0.28420	(0.38160)	(0.38160)	N/A		-234.30%		0.0%	0.00000
Total Rate	\$5.66230	\$8.08873	\$5.51313	\$5.50983 4.97313	-2.7%	-12.2%	-31.9%	-38.5%	-0.1%	(\$0.00330)
Average Annual Usage (dk)	77.9	77.9	77.9	77.9						
Average Annual Cost of Gas	\$441.09	\$630.11	\$429.47	\$429.24 \$387.40	-2.7%	-12.2%	-31.9%	-38.5%	-0.1%	(\$0.26)
<b>Firm General Service</b>										
Commodity Cost of Gas	\$2.53010	\$3.88920	\$2.14980	\$2.14980 2.43770	-15.0%	-3.7%	-44.7%	-37.3%	0.0%	\$0.00000
GCR 5/	0.07620	0.48590	0.48590	0.48590 (0.23440)	537.7%	-407.6%	0.0%	-148.2%	0.0%	0.00000
Demand Cost of Gas	1.18900	1.33860	1.32820	1.32490 1.26730	11.4%	6.6%	-1%	-5.3%	-0.2%	(0.00330)
Commodity Margin 6/	1.31930	1.52380	1.31930	1.31930	0.0%		-13.4%		0.0%	0.00000
CCRA 7/	0.21250	0.01300	0.01300	0.01300 (0.03370)	-93.9%	-115.9%	0.0%	-359.2%	0.0%	0.00000
GAP 8/		0.01393	0.01393	0.01393	N/A		0.0%		0.0%	0.00000
GUIC 9/		0.11170	0.17920	0.17920	N/A		60.4%		0.0%	0.00000
RDM 10/		0.24540	(0.23120)	(0.23120)	N/A		-194.2%		0.0%	0.00000
Total Rate	\$5.32710	\$7.62153	\$5.25813	\$5.25843 4.71813	-4.4%	-11.4%	-31.1%	-38.1%	-0.1%	(\$0.00330)
Average Annual Usage (dk)	434.4	434.4	434.4	434.4						
Average Annual Cost of Gas	\$2,314.09	\$3,310.79	\$2,284.13	\$2,282.70 \$2,049.56	-1.4%	-11.4%	-31.1%	-38.1%	-0.1%	(\$1.43)
<b>Customer Class</b>										
	Commodity Change		Demand Change		Total Change		Avg. Annual Bill Change			
	(\$/dk)	(Percent)	(\$/dk)	(Percent)	(\$/dk)	(Percent)				
Residential	\$0.0000	0.0%	(\$0.0033)	-0.2%	(\$0.0033)	-0.1%	(\$0.26)			
Firm General Service	0.0000	0.0%	(0.0033)	-0.2%	(0.0033)	-0.1%	(\$1.43)			

- 1/ Consolidated Base Cost of Gas effective July 1, 2017 in update to Docket No. G004/MR-16-834. Commodity margin effective May 1, 2019 in Docket No. E,G-999/CI-17-895.
- 2/ Demand in Docket No. G004/AA-18-454, effective November 1, 2018:
- 3/ Most recently filed PGA: October 2019.
- 4/ Includes seasonal capacity release of 2,200 Dk.
- 5/ GCR rate of \$0.1748 (effective September 1, 2017 - Docket No. G005/AA-17-493); GCR rate of \$0.4859 (effective September 1, 2018 - Docket No. G004/AA-18-374); GCR rate of (\$0.2344) (effective September 1, 2019 - Docket No. G004/AA-19-401).
- 6/ Includes CCRC of \$0.0556 (effective January 1, 2017 - Docket No. G004/M-16-384).
- 7/ CCRA of \$0.2125 (effective January 1, 2017 - Docket No. G004/M-16-384); CCRA of \$0.0130 (effective October 1, 2018 - Docket No. G004/M-18-118); CCRA rate of (\$0.0130) (effective August 1, 2019 - Docket No. G004/M-19-287).
- 8/ Effective with service rendered on and after June 1, 2017 - Docket No. G004/M-16-495.
- 9/ Effective with service rendered on and after November 1, 2017 - Docket No. G004/M-16-1066 and March 1, 2019 - Docket No. G004-M-18-282.
- 10/ Effective with service rendered on and after January 1, 2018 and April 1, 2019 - Docket No. G004/M-15-879.

**GREAT PLAINS NATURAL GAS CO.**  
**RATE EFFECT OF PROPOSED DEMAND - NOVEMBER 1, 2019**  
**SOUTH DISTRICT**  
**-UPDATE-**

	Last Rate Case 1/	Last Demand Change 2/	July 2019 Rates 3/	November 2019 Proposed 4/	% Change from			Change from July 2019 Rates
					Last Rate Case	Last Demand Change	July 2019 Rates	
<b>Residential</b>								
Commodity Cost of Gas	\$2.53010	\$3.88920	\$1.95580	\$2.14980 2.43770	-15.0% -3.7%	-44.7% -37.3%	0.0%	\$0.00000
GCR 5/	0.16270	0.48590	0.48590	0.48590 (0.23440)	198.6% -244.1%	0.0% -148.2%	0.0%	0.00000
Demand Cost of Gas	1.18900	1.33860	1.32820	1.32490 1.26730	11.4% 6.6%	-1% -5.3%	-0.2%	(0.00330)
Commodity Margin 6/	1.65450	1.66470	1.65450	1.65450	0.0%	-0.6%	0.0%	0.00000
CCRA 7/	0.21250	0.01300	0.01300	0.01300 (0.03370)	-93.0% -115.9%	0.0% -359.2%	0.0%	0.00000
GAP 8/		0.01393	0.01393	0.01393	N/A	0.0%	0.0%	0.00000
GUIC 9/		0.14850	0.24940	0.24940	N/A	67.90%	0.0%	0.00000
RDM 10/		0.20030	(0.30500)	(0.30500)	N/A	-252.30%	0.0%	0.00000
Total Rate	\$5.74880	\$7.75413	\$5.39573	\$5.58643 5.04973	-2.8% -12.2%	-28.0% -34.9%	-0.1%	(\$0.00330)
Average Annual Usage (dk)	77.9	77.9	77.9	77.9				
Average Annual Cost of Gas	\$447.83	\$604.05	\$420.33	\$435.18 393.37	-2.8% -12.2%	-28.0% -34.9%	-0.1%	(\$0.26)
<b>Firm General Service</b>								
Commodity Cost of Gas	\$2.53010	\$3.88920	\$1.95580	\$2.14980 2.43770	-15.0% -3.7%	-44.7% -37.3%	0.0%	\$0.00000
GCR 5/	0.16270	0.48590	0.48590	0.48590 (0.23440)	198.6% -244.1%	0.0% -148.2%	0.0%	0.00000
Demand Cost of Gas	1.18900	1.33860	1.32820	1.32490 1.26730	11.4% 6.6%	-1% -5.3%	-0.2%	(0.00330)
Commodity Margin 6/	1.31930	1.33480	1.31930	1.31930	0.0%	-1.2%	0.0%	0.00000
CCRA 7/	0.21250	0.01300	0.01300	0.01300 (0.03370)	-93.0% -115.9%	0.0% -359.2%	0.0%	0.00000
GAP 8/		0.01393	0.01393	0.01393	N/A	0.0%	0.0%	0.00000
GUIC 9/		0.11170	0.17920	0.17920	N/A	60.4%	0.0%	0.00000
RDM 10/		0.20080	(0.07420)	(0.07420)	N/A	-137.0%	0.0%	0.00000
Total Rate	\$5.41360	\$7.38793	\$5.22113	\$5.41183 4.87513	0.0% -9.9%	-26.7% -34.0%	-0.1%	(\$0.00330)
Average Annual Usage (dk)	434.4	434.4	434.4	434.4				
Average Annual Cost of Gas	\$2,351.67	\$3,209.32	\$2,268.06	\$2,350.90 2,117.76	0.0% -9.9%	-26.7% -34.0%	-0.1%	(\$1.43)
<b>Customer Class</b>								
	Commodity Change		Demand Change		Total Change		Avg. Annual	
	(\$/dk)	(Percent)	(\$/dk)	(Percent)	(\$/dk)	(Percent)	Bill Change	
Residential	\$0.0000	0.0%	(\$0.0033)	-0.2%	(\$0.0033)	-0.1%	(\$0.26)	
Firm General Service	0.0000	0.0%	(0.0033)	-0.2%	(0.0033)	-0.1%	(\$1.43)	

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**GREAT PLAINS NATURAL GAS CO.  
DEMAND ENTITLEMENT ANALYSIS  
-UPDATE-**

Heating Season	Number of Firm Customers			Design Day Requirement			Total Entitlement + Storage + Peak Shaving			
	(1) Number of Customers	(2) Change From Previous Year	(3) % Change From Previous Year	(4) Design Day (dk)	(5) Change From Previous Year	(6) % Change From Previous Year	(7) Total Entitlement (dk)	(8) Change From Previous Year	(9) % Change From Previous Year	(10) % of Reserve Margin [(7)-(4)]/(4)
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Annual Average			0.70%			1.69%			1.89%	5.40%

Heating Season	Firm Peak Day Sendout			(14) Excess Per Customer [(7)-(4)]/(1)	(15) Design Day per Customer (4)/(1)	(16) Entitlement per Customer (7)/(1)	(17) Peak Day Sendout per Customer (11)/(1)
	(11) Firm Peak Day Sendout (dk)	(12) Change From Previous Year	(13) % Change From Previous Year				
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