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October 31, 2016

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-16-557

Informational Update Filing on Great Plains' 2016 Demand Entitlement Filing

Dear Mr. Wolf:

Great Plains Natural Gas Co. (Great Plains), a Division of MDU Resources Group, Inc., submitted its Demand Entitlement Filing on June 30, 2016 (June 30 DEQ) in the above referenced docket.

NORTH DISTRICT:

In the June 30 DEQ filing, Great Plains proposed to increase the North District capacity by 650 dk per day. Great Plains proposed to replace the capacity and delivered gas provided under the 2015-2016 contracts (700 dk per day of seasonal capacity from Viking along with the contract for 730 dk of firm gas delivered to Vikings' Chisago receipt point from a current gas supplier) with 1,350 dk per day of incremental capacity on Viking. Great Plains now reports 1,400 dk per day of seasonal capacity was procured from Viking which increases the North District capacity by 700 dk per day over the 2015-2016 heating season capacity and results in a reserve percentage of 5.4% as shown on Exhibit B.

Table 1
North District Change to Initial Filing

North District	Initial Filing	Change	Update
	(Dk)	(Dk)	(Dk)
Viking FT-A Seasonal	1,350	50	1,400

Table 2 North District Updated Demand Costs

Interstate Pipelines	Volumes	Rates	Months	Demand Costs
	(1)	(2)	(3)	(4)
	Dk/day	\$	A 5	\$
Viking		MI TO THE REAL PROPERTY OF THE PARTY OF THE		
FT-A - Zone 1-1 (Cat. 3)	8,000	\$4.3706	12	419,578
FT-A - Zone 1-1 (Cat. 1)	5,000	4.7507	5	118,767
FT-A Seasonal	2,000	4.7507	5	47,507
FT-A Seasonal	1,400	4.7507	5	33,255
NNG				
TFX Seasonal	2,000	15.1530	5	151,530
TFX - Winter	13,000	15.1530	5	984,945
TFX - Summer	13,000	5.6830	7	517,153
Total Demand Charges				\$2,272,735

The total customer impact of the updated demand profile compared to rates effective June 1, 2016 is a decrease of \$0.0143 per dk as shown on Exhibit C. Please see Table 3 below for the annual rate impacts for the North District, as originally filed and reflecting the changes noted above.

Table 3
North District Annual Demand Rate Impacts

Filing	Residential Customer (103.8 Dk)	Total Change Res (%)	Firm General Service (375.7 Dk)	Total Change FGS (%)
June 30, 2016	(\$1.56)	-0.9	(\$5.68)	-0.9
November 1, 2016	(\$1.48)	-0.9	(\$5.38)	-0.9

SOUTH DISTRICT:

As discussed in the June 30 DEQ filing and in Great Plains' Reply Comments in this Docket, which were filed on September 23, 2016, Great Plains entered a 10-year agreement for 2,000 dk per day annual capacity on Northern Natural's system which exceeded its current requirements for firm deliverability. Therefore, Great Plains released 1,300 dk per day at \$0.22 per dk of excess capacity for the 2015-2016 heating season to a third-party marketer. This capacity release expired and Great Plains proposed to again release 1,300 dk per day of excess capacity at \$0.22 per dk for the 2016-2017 heating season.

Great Plains now reports it has released 1,000 dk per day at \$0.17 per dk of excess capacity for the upcoming heating season. Net of this released capacity, the South District reserve margin for the 2016-2017 heating season is 7.7 percent, as shown on Exhibit B.

Great Plains contacted several marketers and received a bid for \$0.17 per dk. Great Plains then posted a pre-arranged, biddable capacity release on the shipper's website. There were no higher bids received; therefore, Great Plains entered into a contract to release 1,000 dk per day at the bid price of \$0.17 per dk from November 1, 2016 through March 31, 2017.

Great Plains is working to release another 300 dk per day from December 1, 2016 - March 31, 2017. The effect of this additional capacity release would lower the South District reserve margin to the 6.0% originally proposed in the June DEQ filing. Great Plains will update the Department when this capacity release is finalized.

As stated in the June 30 DEQ filing, Great Plains agreed to update the Commission on the allocation of Northern's TF12 Base and TF12 Variable in place for the 2016-2017 season. Great Plains was informed that Northern is increasing the TF12 Base by 817 dk to 5,421 dk per day, while decreasing the TF12 Variable by 817 dk to 2,114 dk per day. This new allocation will be effective November 1, 2016.

Table 4
South District Changes to Initial Filing

South District	Initial Filing (Dk)	Change (Dk)	Update (Dk)
TF12 Base	4,604	817	5,421
TF12 Variable	2,931	(817)	2,114
Capacity Release	1,300	(300)	1,000

Table 5 South District Updated Demand Costs

nterstate Pipelines	Volumes	Rates	Months	Demand Costs
	(1)	(2)	(3)	(4)
	Dk/day	\$		\$
Viking		9		
FT-A - Zone 1-1 (Cat. 1)	5,000	4.7507	7	166,275
NNG				
TF12 Base - Summer	5,421	\$5.6830	7	215,653
TF12 Base - Winter	5,421	10.2300	5	277,284
TF12 Variable - Summer	2,114	5.6830	7	84,097
TF12 Variable - Winter	2,114	13.8660	5	146,564
TF5	3,410	15.1530	5	258,359
TFX - Summer	2,000	5.6830	7	79,562
TFX - Winter	7,200	15.1530	5	545,508
TFX Negotiated Contract	1,000	26.8918	5	134,459
TFX - Capacity Release	(1,000)	1/	5	(25,670)
FDD-1 Reservation	4,640	1.7140	12	95,436
Total Demand Charges				\$1,977,527

March 31, 2017.

The customer impact of the updated demand profile compared to rates effective May 1, 2016 is a decrease of \$0.0017 per dk as shown on Exhibit C. Please see Table 6 below for the annual rate impacts for the South District, as originally filed and reflecting the changes noted above.

Table 6 South District Annual Demand Rate Impacts

Filing	Residential Customer (88.2 Dk)	Total Change Res (%)	Firm General Service (340.9 Dk)	Total Change FGS (%)
June 30, 2016	\$0.00	0.0	\$0.00	0.0
November 1, 2016	\$0.15	0.1	\$0.58	0.1

Great Plains filed an Application for Authority to Increase Natural Gas Rates in Minnesota, Docket No. G004/GR-15-879, in which the Company proposed to combine the two districts into one. As such, the updated reserve margin on a combined basis, for the 2016-2017 heating season is 6.6% as shown on Exhibit B.

Great Plains' analysis indicates that the portfolio in place for the 2016-2017 heating season will allow the Company to adequately serve customers.

In support of updating Docket No. G004/M-16-557, Great Plains has updated the following exhibits to show the impact of the changes listed above.

Exhibit A - Demand Profile

Exhibit B – Design Day Capacity

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 2016 - 2017 HEATING SEASON DEMAND PROFILE EFFECTIVE NOVEMBER 1, 2016 -UPDATE-

Type of Capacity or Entitlement	Current Amount	Proposed Change	Proposed Amount	Contract Length	Expiration Date
Demand Profile for North District (dk) 1/					
FT-A	8,000	0	8,000	5 years	10/31/17
FT-A - Zone 1-1 (November - March)	5,000	0	5,000	1 year	10/31/17
FT-A Seasonal (November - March) FT-A (November - March)	2,000	0 1,400	2,000 1,400	1 year 5 months	10/31/17 3/31/17
FT-A (November - March) FT-A Seasonal (November - March)	700	(700)	0	5 months	3/31/16
Subtotal	15,700	700	16,400	0 111011113	0/01/10
TFX Seasonal (November - March)	2,000	0	2,000	5 years	10/31/19
TFX (Annual)	13,000	0	13,000	11.5 years	3/31/24
BP Seasonal Contract	730	(730)	0	5 months	3/31/16
Heating Season Total Capacity:	15,700	700	16,400		
Non-Heating Season Total Capacity:	8,000	0	8,000		
Forecasted Heating Season Design Day:	15,409	147	15,556		
Estimated Non-Heating Season Design Day:	8,741	60	8,801		
Heating Season Capacity: Surplus/(Shortage)	291	553	844		
Non-Heating Season Capacity: Surplus/(Shortage)	(741)	(60)	(801)		
Demand Profile for South District (dk):					
TF12 Base (Summer & Winter)	4,604	817	5,421	5 years	10/31/19
TF12 Variable (Summer & Winter)	2,931	(817)	2,114	5 years	10/31/19
TF5 (November - March)	3,410	0	3,410	5 years	10/31/19
TFX Negotiated (November - March)	1,000	0	1,000	10.5 years 5 years	3/31/25 10/31/19
TFX Seasonal (November - March) TFX (Annual)	5,200 2,000	0	5,200 2,000	10 years	10/31/19
Proposed: TFX Seasonal - Capacity Release	2,000	(1,000)	(1,000)	5 months	3/31/17
TFX Seasonal - Capacity Release	(1,300)	1,300	(1,000)	5 months	3/31/16
Subtotal	17,845	300	18,145		
FT-A - Zone 1-1 (April - October)	5,000	0	5,000	1 year	10/31/17
FDD-1 Reservation	4,640	0	4,640	5 years	5/31/20
Heating Season Total Capacity:	17,845	300	18,145		
Non-Heating Season Total Capacity:	14,535	0	14,535		
		580			
Forecasted Heating Season Design Day:	16,858	(16)	16,842		
Estimated Non-Heating Season Design Day:	9,036	(6)	9,030		
Heating Season Capacity: Surplus/(Shortage)	987	316	1,303		
Non-Heating Season Capacity: Surplus/(Shortage)	5,499	6	5,505		

^{1/} Minnesota North District communities plus Wahpeton, ND.

GREAT PLAINS NATURAL GAS CO. DEMAND PROFILE NORTH DISTRICT -UPDATE-

2014-2015 Heating Season	
G004/M-14-563	Quantity (dk)
FT-A (12 months)	8,000
FT-A (November through March)	5,000
BP Seasonal (Firm Gas to TBS)	500
TFX (November through March)	2,000
TFX (12 months)	13,000
FT-A (November through March)	2,000
Heating Season Total Capacity	15,500
Non-Heating Season Total Capacity	8,000
Total Entitlement (Including Peak Shaving)	15,500
Total Annual Transportation	8,000
Total Season Transportation	7,000
Total Percent Seasonal	45.16%

2015-2016 Heating Season	
G004/M-15-645	Quantity (dk)
FT-A (12 months)	8,000
FT-A (November through March)	5,700
BP Seasonal (Firm Gas to TBS)	-
TFX (November through March)	2,000
TFX (12 months)	13,000
FT-A (November through March)	2,000
BP Seasonal (Firm Gas to Chisago) 1/	730
Heating Season Total Capacity	15,700
Non-Heating Season Total Capacity	8,000
Total Entitlement	15,700
Total Annual Transportation	8,000
Total Season Transportation	7,700
Total Percent Seasonal	49.04%

2016-2017 Heating Season		
G004/M-16-557	Quantity (dk)	Difference
FT-A (12 months)	8,000	0
FT-A (November through March)	5,000	(700)
BP Seasonal (Firm Gas to TBS)	-	0
TFX (November through March)	2,000	0
TFX (12 months)	13,000	0
FT-A (November through March)	2,000	0
BP Seasonal (Firm Gas to Chisago) 1/	-	0
FT-A (November - March)	1,400	1,400
Heating Season Total Capacity	16,400	700
Non-Heating Season Total Capacity	8,000	0
Total Entitlement	16,400	700
Total Annual Transportation	8,000	0
Total Season Transportation	8,400	700
Total Percent Seasonal	51.22%	2.18%

^{1/} Does not impact demand profile.

GREAT PLAINS NATURAL GAS CO. DEMAND PROFILE SOUTH DISTRICT -UPDATE-

2014-2015 Heating Season	
G004/M-14-563	Quantity (dk)
TF-12 Base	5,100
TF-12 Variable	2,435
FT-A (April through October)	5,000
TF-5 (November through March)	3,410
TFX (November through March)	6,200
FDD-1 Reservation	4,640
Heating Season Total Capacity	17,145
Non-Heating Season Total Capacity	12,535
Total Entitlement (Including Peak Shaving)	17,145
Total Annual Transportation	7,535
Total Season Transportation	9,610
Percent TF-5	31.16%
Total Percent Seasonal	56.05%

2015-2016 Heating Season	
G004/M-15-645	Quantity (dk)
TF-12 Base	4,604
TF-12 Variable	2,931
FT-A (April through October)	5,000
TF-5 (November through March)	3,410
TFX (November through March)	6,200
TFX (Annual)	2,000
TFX - Capacity Release	(1,300)
FDD-1 Reservation	4,640
Heating Season Total Capacity	17,845
Non-Heating Season Total Capacity	14,535
Total Entitlement	17,845
Total Annual Transportation	9,535
Total Season Transportation	10,310
Percent TF-5	31.16%
Total Percent Seasonal	57.78%

2016-2017 Heating Season		
G004/M-16-557	Quantity (dk)	Difference
TF-12 Base	5,421	817
TF-12 Variable	2,114	(817)
FT-A (April through October)	5,000	0
TF-5 (November through March)	3,410	0
TFX (November through March)	6,200	0
TFX (Annual)	2,000	0
TFX - Capacity Release	(1,000)	300
FDD-1 Reservation	4,640	0
Heating Season Total Capacity	18,145	300
Non-Heating Season Total Capacity	14,535	0
Total Entitlement	18,145	300
Total Annual Transportation	9,535	0
Total Season Transportation	10,610	300
Percent TF-5	31.16%	0.00%
Total Percent Seasonal	58.47%	0.69%

GREAT PLAINS NATURAL GAS CO. DEMAND ENTITLEMENT FILING 2016 - 2017 HEATING SEASON DESIGN DAY - NOVEMBER 2016 -UPDATE-

Arno		omer Factor		Design	No. of	Projected	Peak/	Projected Peak	L&UA 5/	Projected	Canacity	Posonio
<u>Area</u>	Dk/day_	Dk/DD	RSqr	HDD 2/	Customers 3/	Customers 4/	Customer	Day (dk)	Laur 3/	Design	Capacity	Reserve
Crookston	0.03961	0.01374	0.97169	96	2,501	2,530	1.35865	3,438	24	3,462		
North 4	0.05577	0.01330	0.96137	91	7,075	7,127	1.26607	9,020	63	9,083		
Wahpeton	0.07470	0.01413	0.98257	91	2,170	2,197	1.36053	2,990	21	3,011		
Total North District					11,746	11,854		15,448	108	15,556	16,400	5.4%
South 13	0.05233	0.01622	0.97828	83	11,884	11,959	1.39859	16,725	117	16,842	18,145	7.7%
Total					23,630	23,813		32,173	225	32,398	34,545	6.6%

^{1/} Use per customer factors based on regression analysis for the 36 months ending March 2016.

^{2/} Design Heating Degree Days Base 60 degrees F.

^{3/} Reflects monthly average for December 2015 - February 2016.

^{4/} Customer growth is based on regression analysis for the 36 months ending March 2016 with composite growth rates of: Crookston = 1.30%, North = 0.85%, Wahpeton = 1.21%, South = 0.70%.

^{5/} Lost and Unaccounted for Gas percentage of 0.7%.

GREAT PLAINS NATURAL GAS CO. RATE EFFECT OF PROPOSED DEMAND - NOVEMBER 1, 2016 **NORTH DISTRICT** -UPDATE-

	% Change from					Change from		
	Last Rate	Last Demand	June	November	Last Rate	Last Demand	June 2016	June 2016
	Case 1/	Change 2/	2016 PGA	2016 PGA	Case	Change	Rates	Rates
Residential			,	,	V			
Commodity Cost of Gas	\$3.1328	\$2.4418	\$1.9588	\$2.8714	-8.3%	17.6%	46.6%	\$0.9126
Demand Cost of Gas	1.5215	1.6118	1.6503	1.6360	7.5%	1.5%	-0.9%	(0.0143)
Commodity Margin 3/	1.7207	1.7207	1.7207	1.7207	0.0%	0.0%	0.0%	0.0000
Total Rate	6.3750	5.7743	5.3298	6.2281	-2.3%	7.9%	16.9%	0.8983
Average Annual Usage (dk)	103.8	103.8	103.8	103.8				
Average Annual Cost of Gas	\$661.73	\$599.37	\$553.23	\$646.48	-2.3%	7.9%	16.9%	\$93.25
Firm General Service								
Commodity Cost of Gas	\$3.1328	\$2.4418	\$1.9588	\$2.8714	-8.3%	17.6%	46.6%	\$0.9126
Demand Cost of Gas	1.5215	1.6118	1.6503	1.6360	7.5%	1.5%	-0.9%	(0.0143)
Commodity Margin 3/	1.4071	1.4071	1.4071	1.4071	0.0%	0.0%	0.0%	0.0000
Total Rate	6.0614	5.4607	5.0162	5.9145	-2.4%	8.3%	17.9%	0.8983
Average Annual Usage (dk)	375.7	375.7	375.7	375.7				
Average Annual Cost of Gas	\$2,277.27	\$2,051.58	\$1,884.59	\$2,222.08	-2.4%	8.3%	17.9%	\$337.49

	Commod	ity Change	Demand	Change	Total	Change	Average Annual
Customer Class	(\$/dk)	(Percent)	(\$/dk)	(Percent)	(\$/dk)	(Percent)	Bill Change
Residential	\$0.9126	46.6%	(\$0.0143)	-0.9%	\$0.8983	16.9%	\$93.25
Firm General Service	0.9126	46.6%	(0.0143)	-0.9%	0.8983	17.9%	\$337.49

^{1/} Base Cost of Gas Effective January 1, 2016 in Docket No. G004/MR-15-878 or Docket No. G004/MR-16-834.

^{2/} Demand in Docket No. G004/AA-15-951, effective November 1, 2015.

^{3/} Includes CCRA and GAP. CCRC change of \$0.304 and CCRA change of (\$.0304) effective January 1, 2016 - Docket No. G004/GR-15-879.

GREAT PLAINS NATURAL GAS CO. RATE EFFECT OF PROPOSED DEMAND - NOVEMBER 1, 2016 SOUTH DISTRICT -UPDATE-

			OI DITTE					
						% Change from		Change from
	Last Rate	Last Demand	May 2016	November	Last Rate	Last Demand	May 2016	May 2016
	Case 1/	Change 2/	PGA 4/	2016 PGA	Case	Change	Rates	Rates
Residential					-			
Commodity Cost of Gas	\$3.2123	\$2.5794	\$2.0658	\$2.8854	-10.2%	11.9%	39.7%	\$0.8196
Demand Cost of Gas	1.2379	1.3854	1.2324	1.2341	-0.3%	-10.9%	0.1%	0.0017
Commodity Margin 3/	1.3367	1.3367	1.3367	1.3367	0.0%	0.0%	0.0%	0.0000
Total Rate	5.7869	5.3015	4.6349	5.4562	-5.7%	2.9%	17.7%	0.8213
Average Annual Usage (dk)	88.2	88.2	88.2	88.2				
Average Annual Cost of Gas	\$510.40	\$467.59	\$408.80	\$481.24	-5.7%	2.9%	17.7%	\$72.44
Firm General Service								
Commodity Cost of Gas	\$3.2123	\$2.5794	\$2.0658	\$2.8854	-10.2%	11.9%	39.7%	\$0.8196
Demand Cost of Gas	1.2379	1.3854	1.2324	1.2341	-0.3%	-10.9%	0.1%	0.0017
Commodity Margin 3/	1.0889	1.0889	1.0889	1.0889	0.0%	0.0%	0.0%	0.0000
Total Rate	5.5391	5.0537	4.3871	5.2084	-6.0%	3.1%	18.7%	0.8213
Average Annual Usage (dk)	340.9	340.9	340.9	340.9				
Average Annual Cost of Gas	\$1,888.28	\$1,722.81	\$1,495.56	\$1,775.54	-6.0%	3.1%	18.7%	\$279.98

	Commod	ity Change	Demand	d Change	Total	Change	Annual
Customer Class	(\$/dk)	(Percent)	(\$/dk)	(Percent)	(\$/dk)	(Percent)	Bill Change
Residential	\$0.8196	39.7%	\$0.0017	0.1%	\$0.8213	17.7%	\$72.44
Firm General Service	0.8196	39.7%	0.0017	0.1%	0.8213	18.7%	\$279.98

^{1/} Base Cost of Gas Effective January 1, 2016 in Docket No. G004/MR-15-878 or Docket No. G004/MR-16-834.

^{2/} Demand in Docket No. G004/AA-15-1011, effective December 1, 2015.

^{3/} Includes CCRA and GAP. CCRC change of \$0.304 and CCRA change of (\$.0304) effective January 1, 2016 - Docket No. G004/GR-15-879.

^{4/} Great Plains did not file a South District PGA for June 2016.

GREAT PLAINS NATURAL GAS CO. DEMAND ENTITLEMENT ANALYSIS NORTH DISTRICT -UPDATE-

	Number of Firm Customers			De	sign Day Requirer	ment	Total Entitlement + Storage + Peak Shaving			
Heating Season	(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)
2016-2017	11,854	11	0.09%	15,556	147	0.95%	16,400	700	4.46%	5.43%
2015-2016	11,843	161	1.38%	15,409	597	4.03%	15,700	200	1.29%	1.89%
2014-2015	11,682	103	0.89%	14,812	672	4.75%	15,500	500	3.33%	4.64%
2013-2014	11,579	172	1.51%	14,140	(104)	-0.73%	15,000	0	0.00%	6.08%
2012-2013	11,407	177	1.58%	14,244	176	1.25%	15,000	159	1.07%	5.31%
2011-2012	11,230	48	0.43%	14,068	(96)	-0.68%	14,841	(1,000)	-6.31%	5.49%
2010-2011	11,182	(12)	-0.11%	14,164	(248)	-1.72%	15,841	0	0.00%	11.84%
2009-2010	11,194	8	0.07%	14,412	(37)	-0.26%	15,841	(1,000)	-5.94%	9.92%
2008-2009	11,186	41	0.37%	14,449	(413)	-2.78%	16,841	0	0.00%	16.55%
2007-2008	11,145	28	0.25%	14,862	(289)	-1.91%	16,841	0	0.00%	13.32%
2006-2007	11,117	(64)	-0.57%	15,151	(673)	-4.25%	16,841	0	0.00%	11.15%
2005-2006	11,181	81	0.73%	15,824	(49)	-0.31%	16,841	0	0.00%	6.43%
2004-2005	11,100	25	0.23%	15,873	(121)	-0.76%	16,841	0	0.00%	6.10%
2003-2004 1/	11,075	2,375	27.30%	15,994	2,559	19.05%	16,841	4,154	32.74%	5.30%
2002-2003	8,700	180	2.11%	13,435	(1,231)	-8.39%	12,687	(2,780)	-17.97%	-5.57%
2001-2002	8,520	19	0.22%	14,666	212	1.47%	15,467	0	0.00%	5.46%
2000-2001	8,501	304	3.71%	14,454	0	0.00%	15,467	0	0.00%	7.01%
1999-2000	8,197	82	1.01%	14,454	618	4.47%	15,467	0	0.00%	7.01%
1998-1999	8,115	227	2.88%	13,836	244	1.80%	15,467	0	0.00%	11.79%
1997-1998	7,888	215	2.80%	13,592	2,415	21.61%	15,467	3,950	34.30%	13.79%
1996-1997	7,673	267	3.61%	11,177	379	3.51%	11,517	1,459	14.51%	3.04%
1995-1996	7,406			10,798			10,058			-6.85%
Annual Avera	ge		2.40%			1.96%			2.93%	6.60%

	F	irm Peak Day Se	endout				
Heating Season	(11) Firm Peak Day Sendout (dk)	(12) Change From Previous Year	(13) % Change From Previous Year	(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)
2016-2017				0.0712	1.3123	1.3835	
2015-2016	11,664	(2,204)	-15.89%	0.0246	1.3011	1.3257	0.9849
2014-2015	13,868	632	4.77%	0.0589	1.2679	1.3268	1.1871
2013-2014	13,236	1,530	13.07%	0.0743	1.2212	1.2954	1.1431
2012-2013	11,706	3,265	38.68%	0.0663	1.2487	1.3150	1.0262
2011-2012	8,441	(2,617)	-23.67%	0.0688	1.2527	1.3215	0.7516
2010-2011	11,058	2,134	23.91%	0.1500	1.2667	1.4167	0.9889
2009-2010	8,924	(769)	-7.93%	0.1277	1.2875	1.4151	0.7972
2008-2009	9,693	(348)	-3.47%	0.2138	1.2917	1.5055	0.8665
2007-2008	10,041	451	4.70%	0.1776	1.3335	1.5111	0.9009
2006-2007	9,590	43	0.45%	0.1520	1.3629	1.5149	0.8626
2005-2006	9,547	(923)	-8.82%	0.0910	1.4153	1.5062	0.8539
2004-2005	10,470	(942)	-8.25%	0.0872	1.4300	1.5172	0.9432
2003-2004	11,412	1,606	16.38%	0.0765	1.4442	1.5206	1.0304
2002-2003	9,806	(3,572)	-26.70%	(0.0860)	1.5443	1.4583	1.1271
2001-2002	13,378	1,699	14.55%	0.0940	1.7214	1.8154	1.5702
2000-2001	11,679	(1,699)	-12.70%	0.1192	1.7003	1.8194	1.3738
1999-2000	13,378	2,196	19.64%	0.1236	1.7633	1.8869	1.6321
1998-1999	11,182	(748)	-6.27%	0.2010	1.7050	1.9060	1.3779
1997-1998	11,930	267	2.29%	0.2377	1.7231	1.9608	1.5124
1996-1997	11,663	551	4.96%	0.0443	1.4567	1.5010	1.5200
1995-1996	11,112			(0.0999)	1.4580	1.3581	1.5004
Annual Aver	age		1.49%	0.0943	1.4322	1.5264	1.1405

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

	Nu	mber of Firm Cus	stomers	Desi	ign Day Requiren		Tot	al Entitlement + 5	Storage + Peak Sh	aving
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Heating	Number of	Change From	% Change From	Design Day	Change From		Total Entitlement			% of Reserve
Season	Customers	Previous Year	Previous Year	(dk)	Previous Year	Previous Year	(dk)	Previous Year	Previous Year	Margin [(7)-(4)]/(4)
2016-2017	11,959	(80)	-0.66%	16,842	(16)	-0.09%	18,145	300	1.68%	7.74%
2015-2016	12,039	197	1.66%	16,858	546	3.35%	17,845	700	4.08%	5.85%
2014-2015	11,842	193	1.66%	16,312	1,019	6.66%	17,145	1,500	9.59%	5.11%
2013-2014	11,649	118	1.02%	15,293	443	2.98%	15,645	0	0.00%	2.30%
2012-2013	11,531	(13)	-0.11%	14,850	(18)	-0.12%	15,645	0	0.00%	5.35%
2011-2012	11,544	(8)	-0.07%	14,868	(297)	-1.96%	15,645	(380)	-2.37%	5.23%
2010-2011	11,552	10	0.09%	15,165	(267)	-1.73%	16,025	(1,170)	-6.80%	5.67%
2009-2010	11,542	77	0.67%	15,432	156	1.02%	17,195	(170)	-0.98%	11.42%
2008-2009	11,465	8	0.07%	15,276	(301)	-1.93%	17,365	0	0.00%	13.68%
2007-2008	11,457	(27)	-0.24%	15,577	(117)	-0.75%	17,365	0	0.00%	11.48%
2006-2007	11,484	(224)	-1.91%	15,694	(699)	-4.26%	17,365	0	0.00%	10.65%
2005-2006	11,708	(92)	-0.78%	16,393	(336)	-2.01%	17,365	0	0.00%	5.93%
2004-2005	11,800	60	0.51%	16,729	92	0.55%	17,365	0	0.00%	3.80%
2003-2004	11,740	40	0.34%	16,637	(413)	-2.42%	17,365	0	0.00%	4.38%
2002-2003	11,700	76	0.65%	17,050	(2,058)	-10.77%	17,365	(2,600)	-13.02%	1.85%
2001-2002	11,624	189	1.65%	19,108	7	0.04%	19,965	0	0.00%	4.49%
2000-2001	11,435	(41)	-0.36%	19,101	0	0.00%	19,965	0	0.00%	4.52%
1999-2000	11,476	280	2.50%	19,101	340	1.81%	19,965	0	0.00%	4.52%
1998-1999	11,196	(25)	-0.22%	18,761	374	2.03%	19,965	0	0.00%	6.42%
1997-1998	11,221	306	2.80%	18,387	431	2.40%	19,965	2,000	11.13%	8.58%
1996-1997	10,915	235	2.20%	17,956	353	2.01%	17,965	1,008	5.94%	0.05%
1995-1996	10,680			17,603			16,957	300		-3.67%
Annual Ave	erage		0.55%			-0.15%			0.44%	5.70%
	F	irm Peak Day Se	endout	(14)	(15)	(16)	(17)			
	(11)	(12)	(13)	Excess Per	Design Day	Entitlement	Peak Day			
Heating		Change From	% Change From	Customer	per Customer	per Customer	Sendout per			
Season	Sendout (dk)	Previous Year	Previous Year	[(7)-(4)]/(1)	(4)/(1)	(7)/(1)	Customer (11)/(1)			
2016-2017		540000	27272	0.1090	1.4083	1.5173	17: 62678124			
2015-2016		351	2.30%	0.0820	1.4003	1.4823	1.2943			
2014-2015		774	5.35%	0.0703	1.3775	1.4478	1.2862			
2013-2014	14,457	1,941	15.51%	0.0302	1.3128	1.3430	1.2411			
2012-2013		2,248	21.89%	0.0689	1.2878	1.3568	1.0854			
2011-2012		(1,652)	-13.86%	0.0673	1.2879	1.3552	0.8895			
2010-2011	11,920	(692)	-5.49%	0.0744	1.3128	1.3872	1.0319			
2009-2010	140/1/2011	(962)	-7.09%	0.1527	1.3370	1.4898	1.0927			
2008-2009		888	7.00%	0.1822	1.3324	1.5146	1.1840			
2007-2008		401	3.26%	0.1561	1.3596	1.5157	1.1073			
2006-2007		(789)	-6.03%	0.1455	1.3666	1.5121	1.0697			
2005-2006		(996)	-7.08%	0.0830	1.4002	1.4832	1.1167			
2004-2005		(626)	-4.26%	0.0539	1.4177	1.4716	1.1924			
2003-2004		425	2.98%	0.0620	1.4171	1.4791	1.2518			
2002-2003		2,151	17.75%	0.0269	1.4573	1.4842	1.2197			
2001-2002		(2,724)	-18.35%	0.0737	1.6438	1.7176	1.0427			
2000-2001	14,844	(1,921)	-11.46%	0.0756	1.6704	1.7460	1.2981			
1999-2000		828	5.20%	0.0753	1.6644	1.7397	1.4609			
1998-1999		(133)	-0.83%	0.1075	1.6757	1.7832	1.4235			
1997-1998		115	0.72%	0.1406	1.6386	1.7793	1.4321			
1996-1997	15,955	(418)	-2.55%	0.0008	1.6451	1.6459	1.4617			

(0.0605)

0.0808

0.25%

1.6482

1.4573

1.5877

1.5382

1995-1996

Annual Average

16,373

1.5331

1.2245

GREAT PLAINS NATURAL GAS CO. DEMAND ENTITLEMENT FILING 2016 - 2017 HEATING SEASON DEMAND PROFILE EFFECTIVE NOVEMBER 1, 2016 -UPDATE-

Type of Capacity or Entitlement	Current Amount	Proposed Change	Proposed Amount	Contract Length	Expiration Date
Demand Profile for North District (dk) 1/ FT-A	8,000	0	8,000	5 years	10/31/17
FT-A - Zone 1-1 (November - March)	5,000	0	5,000	1 years	10/31/17
FT-A Seasonal (November - March)	2,000	0	2,000	1 year	10/31/17
FT-A (November - March)	0	1,350 1,400	1,350 1,400	5 months	3/31/17
FT-A Seasonal (November - March)	700	(700)	0	5 months	3/31/16
Subtotal	15,700	650 700	16,350 16,400		
TFX Seasonal (November - March)	2,000	0	2,000	5 years	10/31/19
TFX (Annual)	13,000	0	13,000	11.5 years	3/31/24
BP Seasonal Contract	730	(730)	0	5 months	3/31/16
Heating Season Total Capacity:	15,700	650 700	16,350 16,400		
Non-Heating Season Total Capacity:	8,000	0	8,000		
,	(6)				
Forecasted Heating Season Design Day:	15,409	147	15,556		
Estimated Non-Heating Season Design Day:	8,741	60	8,801		
Heating Season Capacity: Surplus/(Shortage)	291	503 553	794 844		
Non-Heating Season Capacity: Surplus/(Shortage)	(741)	(60)	(801)		
Demand Profile for South District (dk):				_	
TF12 Base (Summer & Winter)	4,604	0 817	4,604 5,421	5 years	10/31/19
TF12 Variable (Summer & Winter)	2,931	0 (817)	2,931 2,114	5 years	10/31/19
TF5 (November - March)	3,410	0	3,410	5 years	10/31/19 3/31/25
TFX Negotiated (November - March) TFX Seasonal (November - March)	1,000 5,200	0	1,000 5,200	10.5 years 5 years	10/31/19
TFX (Annual)	2,000	0	2,000	10 years	10/31/15
Proposed: TFX Seasonal - Capacity Release	0	(1,300) 1,000	(1,300) 1,000	5 months	3/31/17
TFX Seasonal - Capacity Release	(1,300)	1,300	0	5 months	3/31/16
Subtotal	17,845	0 300	17,845 18,145		
FT A Zono 1.1 (April October)	E 000	0	E 000	1	10/21/17
FT-A - Zone 1-1 (April - October) FDD-1 Reservation	5,000 4,640	0	5,000 4,640	1 year 5 years	10/31/17 5/31/20
FDD-1 Reservation	4,040	U	4,040	5 years	3/3/1/20
Heating Season Total Capacity:	17,845	0 300	17,845 18,145		
Non-Heating Season Total Capacity:	14,535	0	14,535		
Forecasted Heating Season Design Day:	16,858	(16)	16,842		
Estimated Non-Heating Season Design Day:	9,036	(6)	9,030		
3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3		(-)	01022		
Heating Season Capacity: Surplus/(Shortage)	987	16 316	1,003 1,303		
Non-Heating Season Capacity: Surplus/(Shortage)	5,499	6	5,505		

^{1/} Minnesota North District communities plus Wahpeton, ND.

GREAT PLAINS NATURAL GAS CO. DEMAND PROFILE NORTH DISTRICT -UPDATE-

2014-2015 Heating Season	
G004/M-14-563	Quantity (dk)
FT-A (12 months)	8,000
FT-A (November through March)	5,000
BP Seasonal (Firm Gas to TBS)	500
TFX (November through March)	2,000
TFX (12 months)	13,000
FT-A (November through March)	2,000
Heating Season Total Capacity	15,500
Non-Heating Season Total Capacity	8,000
Total Entitlement (Including Peak Shaving)	15,500
Total Annual Transportation	8,000
Total Season Transportation	7,000
Total Percent Seasonal	45.16%

2015-2016 Heating Season	
G004/M-15-645	Quantity (dk)
FT-A (12 months)	8,000
FT-A (November through March)	5,700
BP Seasonal (Firm Gas to TBS)	-
TFX (November through March)	2,000
TFX (12 months)	13,000
FT-A (November through March)	2,000
BP Seasonal (Firm Gas to Chisago) 1/	730
Heating Season Total Capacity	15,700
Non-Heating Season Total Capacity	8,000
Total Entitlement	15,700
Total Annual Transportation	8,000
Total Season Transportation	7,700
Total Percent Seasonal	49.04%

2016-2017 Heating Season		
G004/M-16-557	Quantity (dk)	Difference
FT-A (12 months)	8,000	0
FT-A (November through March)	5,000	(700)
BP Seasonal (Firm Gas to TBS)	-	0
TFX (November through March)	2,000	0
TFX (12 months)	13,000	0
FT-A (November through March)	2,000	0
BP Seasonal (Firm Gas to Chisago) 1/	-	0
FT-A (November - March)	1,350 1,400	1,350 1,400
Heating Season Total Capacity	16,350 16,400	659 700
Non-Heating Season Total Capacity	8,000	0
Total Entitlement	16,350 16,400	650 700
Total Annual Transportation	8,000	0
Total Season Transportation	7,000 8,400	(700) 700
Total Percent Seasonal	42.81% 51.22%	-6.23% 2.18%

^{1/} Does not impact demand profile.

GREAT PLAINS NATURAL GAS CO. DEMAND PROFILE SOUTH DISTRICT -UPDATE-

2014-2015 Heating Season	
G004/M-14-563	Quantity (dk)
TF-12 Base	5,100
TF-12 Variable	2,435
FT-A (April through October)	5,000
TF-5 (November through March)	3,410
TFX (November through March)	6,200
FDD-1 Reservation	4,640
Heating Season Total Capacity	17,145
Non-Heating Season Total Capacity	12,535
Total Entitlement (Including Peak Shaving)	17,145
Total Annual Transportation	7,535
Total Season Transportation	9,610
Percent TF-5	31.16%
Total Percent Seasonal	56.05%

2015-2016 Heating Season	
G004/M-15-645	Quantity (dk)
TF-12 Base	4,604
TF-12 Variable	2,931
FT-A (April through October)	5,000
TF-5 (November through March)	3,410
TFX (November through March)	6,200
TFX (Annual)	2,000
TFX - Capacity Release	(1,300)
FDD-1 Reservation	4,640
Heating Season Total Capacity	17,845
Non-Heating Season Total Capacity	14,535
Total Entitlement	17,845
Total Annual Transportation	9,535
Total Season Transportation	10,310
Percent TF-5	31.16%
Total Percent Seasonal	57.78%

2016-2017 Heating Season G004/M-16-557	Quantity (dk)	Difference
TF-12 Base	4,604 5,421	9 817
TF-12 Variable	2,931 2,114	9 (817)
FT-A (April through October)	5,000	Ó
TF-5 (November through March)	3,410	0
TFX (November through March)	6,200	0
TFX (Annual)	2,000	0
TFX - Capacity Release	(1,300) $(1,000)$	0 300
FDD-1 Reservation	4,640	0
Heating Season Total Capacity	17,845 18,145	0 300
Non-Heating Season Total Capacity	14,535	0
Total Entitlement	17,845 18,145	0 300
Total Annual Transportation	9,535	0
Total Season Transportation	10,310 10,610	0 300
Percent TF-5	31.16%	0.00%
Total Percent Seasonal	57.78% 58.47%	0.00% 0.69%

GREAT PLAINS NATURAL GAS CO. DEMAND ENTITLEMENT FILING 2016 - 2017 HEATING SEASON DESIGN DAY - NOVEMBER 2016 -UPDATE-

	Custo	omer Factor	rs 1/	Design	No. of	Projected	Peak/	Projected Peak		Projected		
Area	Dk/day	Dk/DD	RSqr	HDD 2/	Customers 3/	Customers 4/	Customer	Day (dk)	L&UA 5/	Design	Capacity	Reserve
Crookston	0.03961	0.01374	0.97169	96	2,501	2,530	1.35865	3,438	24	3,462		
North 4	0.05577	0.01330	0.96137	91	7,075	7,127	1.26607	9,020	63	9,083		
Wahpeton	0.07470	0.01413	0.98257	91	2,170	2,197	1.36053	2,990	21	3,011		
Total North District					11,746	11,854		15,448	108	15,556	16,350 16,400	5.1% 5.4%
South 13	0.05233	0.01622	0.97828	83	11,884	11,959	1.39859	16,725	117	16,842	17,845 18,145	6.0% 7.7%
Total					23,630	23,813		32,173	225	32,398	34,195 34,545	5.5% 6.6%

^{1/} Use per customer factors based on regression analysis for the 36 months ending March 2016.

^{2/} Design Heating Degree Days Base 60 degrees F.

^{3/} Reflects monthly average for December 2015 - February 2016.

^{4/} Customer growth is based on regression analysis for the 36 months ending March 2016 with composite growth rates of: Crookston = 1.30%, North = 0.85%, Wahpeton = 1.21%, South = 0.70%.

^{5/} Lost and Unaccounted for Gas percentage of 0.7%.

GREAT PLAINS NATURAL GAS CO. RATE EFFECT OF PROPOSED DEMAND - NOVEMBER 1, 2016 NORTH DISTRICT -UPDATE-

			0. 0					
					%	Change from		Change from
	Last Rate	Last Demand	June	November	Last Rate	Last Demand	June 2016	June 2016
	Case 1/	Change 2/	2016 PGA	2016 PGA	Case	Change	Rates	Rates
Residential								
Commodity Cost of Gas	\$3.1328	\$2.4418	\$1.9588	1.9588 \$2.8714	-37.5% -8.3%	-19.8% 17.6%	0.0% 46.6%	\$0.000 \$0.9126
Demand Cost of Gas	1.5215	1.6118	1.6503	1.6352 1.6360	7.5%	1.5%	-0.9%	(0.0151) (0.0143)
Commodity Margin 3/	1.7207	1.7207	1.7207	1.7207	0.0%	0.0%	0.0%	0.0000
Total Rate	6.3750	5.7743	5.3298	5.3147 6.2281	-16.6% -2.3%	-8.0% 7.9%	-0.3% 16.9%	(0.0151) 0.8983
Average Annual Usage (dk)	103.8	103.8	103.8	103.8				
Average Annual Cost of Gas	\$661.73	\$599.37	\$553.23	\$551.67 \$646.48	-16.6% -2.3%	-8.0% 7.9%	-0.3% 16.9%	(\$1.56) \$93.25
Firm General Service								
Commodity Cost of Gas	\$3.1328	\$2.4418	\$1.9588	1.9588 \$2.8714	-37.5% -8.3%	-19.8% 17.6%	0.0% 46.6%	\$0.000 \$0.9126
Demand Cost of Gas	1.5215	1.6118	1.6503	1.6352 1.6360	7.5%	1.5%	-0.9%	(0.0151) (0.0143)
Commodity Margin 3/	1.4071	1.4071	1.4071	1.4071	0.0%	0.0%	0.0%	0.0000
Total Rate	6.0614	5.4607	5.0162	5.0011 5.9145	-17.5% -2.4%	-8.4% 8.3%	-0.3% 17.9%	(0.0151) 0.8983
Average Annual Usage (dk)	375.7	375.7	375.7	375.7				
Average Annual Cost of Gas	\$2,277.27	\$2,051.58	\$1,884.59	\$1,878.91 \$2,222.08	-17.5% -2.4%	-8.4% 8.3%	-0.3% 17.9%	(\$5.68) \$337.49
-	Commodity	r Change	Demand	Change	Total Cha	inge	Average Annual	

(Percent)

-0.9%

-0.9%

(\$/dk)

(0.0151) 0.8983

(\$0.0151) \$0.8983

(Percent)

0.0% 46.6%

0.0% 46.6%

(\$/dk)

\$0.0000 \$0.9126

0.0000 0.9126

Customer Class

Firm General Service

Residential

(\$/dk)

(0.0151) (0.0143)

(\$0.0151) (\$0.0143)

Bill Change

(\$1.56) \$93.25

(\$5.68) \$337.49

(Percent)

-0.3% 16.9%

-0.3% 17.9%

^{1/} Base Cost of Gas Effective January 1, 2016 in Docket No. G004/MR-15-878 or Docket No. G004/MR-16-834.

^{2/} Demand in Docket No. G004/AA-15-951, effective November 1, 2015.

^{3/} Includes CCRA and GAP. CCRC change of \$0.304 and CCRA change of (\$.0304) effective January 1, 2016 - Docket No. G004/GR-15-879.

GREAT PLAINS NATURAL GAS CO. RATE EFFECT OF PROPOSED DEMAND - NOVEMBER 1, 2016 SOUTH DISTRICT -UPDATE-

						Change from		
	Last Rate Case 1/	Last Demand Change 2/	May 2016 PGA 4/	November 2016 PGA	Last Rate Case	Last Demand Change	May 2016 Rates	May 2016 Rates
Residential								
Commodity Cost of Gas	\$3.2123	\$2.5794	\$2.0658	\$2.0658 \$2.8854	-35.7% -10.2%	-19.9% 11.9%	0.00% 39.7%	\$0.0000 \$0.8196
Demand Cost of Gas	1.2379	1.3854	1.2324	4.2324 1.2341	-0.4% -0.3%	-11.0% -10.9%	0.00% 0.1%	0.0000 0.0017
Commodity Margin 3/	1.3367	1.3367	1.3367	1.3367	0.0%	0.0%	0.0%	0.0000
Total Rate	5.7869	5.3015	4.6349	4.6349 5.4562	-19.9% -5.7%	-12.6% 2.9%	0.00% 17.7%	0.0000 0.8213
Average Annual Usage (dk)	88.2	88.2	88.2	88.2				
Average Annual Cost of Gas	\$510.40	\$467.59	\$408.80	\$408.80 \$481.24	-19.9% -5.7%	-12.6% 2.9%	0.00% 17.7%	\$0.00 \$72.44
Firm General Service								
Commodity Cost of Gas	\$3.2123	\$2.5794	\$2.0658	\$2.0658 \$2.8854	-35.7% -10.2%	-19.9% 11.9%	0.00% 39.7%	\$0.0000 \$0.8196
Demand Cost of Gas	1.2379	1.3854	1.2324	1.2324 1.2341	-0.4% -0.3%	-11.0% -10.9%	0.00% 0.1%	0.0000 0.0017
Commodity Margin 3/	1.0889	1.0889	1.0889	1.0889	0.0%	0.0%	0.0%	0.0000
Total Rate	5.5391	5.0537	4.3871	4.3871 5.2084	-20.8% -6.0%	-13.2% 3.1%	0.00% 18.7%	0.0000 0.8213
Average Annual Usage (dk)	340.9	340.9	340.9	340.9				
Average Annual Cost of Gas	\$1,888.28	\$1,722.81	\$1,495.56	\$1,495.56 \$1,775.54	-20.8% -6.0%	-13.2% 3.1%	0.00% 18.7%	\$0.00 \$279.98
							Average	
	Commodity	Change	Dema	ind Change	Total C	hange	Annual	
Customer Class	(\$/dk)	(Percent)	(\$/dk)	(Percent)	(\$/dk)	(Percent)	Bill Change	
Note that the second of the se								

0.0% 0.1%

0.0% 0.1%

\$0.0000 \$0.8213

0.0000 0.8213

% Change from

0.0% 17.7%

0.0% 18.7%

\$0.00 \$72.44

0.00 279.98

0.0% 39.7%

0.0% 39.7%

\$0.0000 \$0.8196

0.0000 0.8196

\$0.0000 \$0.0017

0.0000 0.0017

Residential

Firm General Service

Change from

^{1/} Base Cost of Gas Effective January 1, 2016 in Docket No. G004/MR-15-878 or Docket No. G004/MR-16-834.

^{2/} Demand in Docket No. G004/AA-15-1011, effective December 1, 2015.

^{3/} Includes CCRA and GAP. CCRC change of \$0.304 and CCRA change of (\$.0304) effective January 1, 2016 - Docket No. G004/GR-15-879.

^{4/} Great Plains did not file a South District PGA for June 2016.

GREAT PLAINS NATURAL GAS CO. DEMAND ENTITLEMENT ANALYSIS NORTH DISTRICT -UPDATE-

	Number of Firm Customers				-UPDAT sign Day Requirer		Total Entitlement + Storage + Peak Shaving			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Heating	Number of	Change From	% Change From	Design Day	Change From		Total Entitlement	Change From	% Change From	% of Reserve
Season	Customers	Previous Year	Previous Year	(dk)	Previous Year	Previous Year	(dk)	Previous Year	Previous Year	Margin [(7)-(4)]/(4)
2016-2017	11,854	11	0.09%	15,556	147	0.95%	16,350 16,400	650 700	4.14% 4.46%	5 10% 5.43%
2015-2016	11,843	161	1.38%	15,409	597	4.03%	15,700	200	1.29%	1.89%
2014-2015	11,682	103	0.89%	14,812	672	4.75%	15,500	500	3.33%	4.64%
2013-2014	11,579	172	1.51%	14,140	(104)	-0.73%	15,000	0	0.00%	6.08%
2012-2013	11,407	177	1.58%	14,244	176	1.25%	15,000	159	1.07%	5.31%
2011-2012	11,230	48	0.43%	14,068	(96)	-0.68%	14,841	(1,000)	-6.31%	5.49%
2010-2011	11,182	(12)	-0.11%	14,164	(248)	-1.72%	15,841	0	0.00%	11.84%
2009-2010	11,194	8	0.07%	14,412	(37)	-0.26%	15,841	(1,000)	-5.94%	9.92%
2008-2009	11,186	41	0.37%	14,449	(413)	-2.78%	16,841	0	0.00%	16.55%
2007-2008	11,145	28	0.25%	14,862	(289)	-1.91%	16,841	0	0.00%	13.32%
2006-2007	11,117	(64)	-0.57%	15,151	(673)	-4.25%	16,841	0	0.00%	11.15%
2005-2006	11,181	81	0.73%	15,824	(49)	-0.31%	16,841	0	0.00%	6.43%
2004-2005	11,100	25	0.23%	15,873	(121)	-0.76%	16,841	0	0.00%	6.10%
2003-2004 1/	11,075	2,375	27.30%	15,994	2,559	19.05%	16,841	4,154	32.74%	5.30%
2002-2003	8,700	180	2.11%	13,435	(1,231)	-8.39%	12,687	(2,780)	-17.97%	-5.57%
2001-2002	8,520	19	0.22%	14,666	212	1.47%	15,467	0	0.00%	5.46%
2000-2001	8,501	304	3.71%	14,454	0	0.00%	15,467	0	0.00%	7.01%
1999-2000	8,197	82	1.01%	14,454	618	4.47%	15,467	0	0.00%	7.01%
1998-1999	8,115	227	2.88%	13,836	244	1.80%	15,467	0	0.00%	11.79%
1997-1998	7,888	215	2.80%	13,592	2,415	21.61%	15,467	3,950	34.30%	13.79%
1996-1997	7,673	267	3.61%	11,177	379	3.51%	11,517	1,459	14.51%	3.04%
1995-1996	7,406			10,798			10,058			-6.85%
Annual Avera			2.40%			1.96%			2.91% 2.93%	6.58% 6.60%
		irm Peak Day Se			100 22					
	(11)	(12)	(13)	(14)	(15)	(16)	(17)			
I be a beautiful	Firm	01	0/ 0/	Excess Per	Design Day	Entitlement	Peak Day			
Heating	Peak Day	Change From	% Change From	Customer	per Customer	per Customer	Sendout per			
Season	Seridout (dk)	Previous Year	Previous Year	[(7)-(4)]/(1)	(4)/(1)	(7)/(1)	Customer (11)/(1)			
2016-2017				0.0670 0.0712	1.3123	1.3793 1.3835				
2015-2016	11,664	(2,204)	-15.89%	0.0246	1.3011	1.3257	0.9849			
2014-2015	13,868	632	4.77%	0.0589	1.2679	1.3268	1.1871			
2013-2014	13,236	1,530	13.07%	0.0743	1.2212	1.2954	1.1431			
2012-2013	11,706	3,265	38.68%	0.0663	1.2487	1.3150	1.0262			
2011-2012	8,441	(2,617)	-23.67%	0.0688	1.2527	1.3215	0.7516			
2010-2011	11,058	2,134	23.91%	0.1500	1.2667	1.4167	0.9889			
2009-2010	8,924	(769)	-7.93%	0.1277	1.2875	1.4151	0.7972			
2008-2009	9,693	(348)	-3.47%	0.2138	1.2917	1.5055	0.8665			
2007-2008	10,041	451	4.70%	0.1776	1.3335	1.5111	0.9009			
2006-2007	9,590	43	0.45%	0.1520	1.3629	1.5149	0.8626			
2005-2006	9,547	(923)	-8.82%	0.0910	1.4153	1.5062	0.8539			
2004-2005	10,470	(942)	-8.25%	0.0872	1.4300	1.5172	0.9432			
2003-2004	11,412	1,606	16.38%	0.0765	1.4442	1.5206	1.0304			
2002-2003	9,806	(3,572)	-26.70%	(0.0860)	1.5443	1.4583	1.1271			
2001-2002	13,378	1,699	14.55%	0.0940	1.7214	1.8154	1.5702			
2000-2001	11,679	(1,699)	-12.70%	0.1192	1.7003	1.8194	1.3738			
1999-2000	13,378	2,196	19.64%	0.1236	1.7633	1.8869	1.6321			
1998-1999	11,182	(748)	-6.27%	0.2010	1.7050	1.9060	1.3779			
1007 1000		207		0 2277	1.7231	1.9608	1.5124			
1997-1998	11,930	267	2.29%	0.2377						
1996-1997	11,663	551	4.96%	0.0443	1.4567	1.5010	1.5200			

GREAT PLAINS NATURAL GAS CO. DEMAND ENTITLEMENT ANALYSIS SOUTH DISTRICT -UPDATE-

	Number of Firm Customers				sign Day Requirer	nent	Total Entitlement + Storage + Peak Shaving			
Heating Season	(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)
2016-2017	11,959	(80)	-0.66%	16,842	(16)	-0.09%	17.845 18,145	0 300	0.00% 1.68%	5.96% 7.74%
2015-2016	12,039	197	1.66%	16,858	546	3.35%	17,845	700	4.08%	5.85%
2014-2015	11,842	193	1.66%	16,312	1,019	6.66%	17,145	1,500	9.59%	5.11%
2013-2014	11,649	118	1.02%	15,293	443	2.98%	15,645	0	0.00%	2.30%
2012-2013	11,531	(13)	-0.11%	14,850	(18)	-0.12%	15,645	0	0.00%	5.35%
2011-2012	11,544	(8)	-0.07%	14,868	(297)	-1.96%	15,645	(380)	-2.37%	5.23%
2010-2011	11,552	10	0.09%	15,165	(267)	-1.73%	16,025	(1,170)	-6.80%	5.67%
2009-2010	11,542	77	0.67%	15,432	156	1.02%	17,195	(170)	-0.98%	11.42%
2008-2009	11,465	8	0.07%	15,276	(301)	-1.93%	17,365	0	0.00%	13.68%
2007-2008	11,457	(27)	-0.24%	15,577	(117)	-0.75%	17,365	0	0.00%	11.48%
2006-2007	11,484	(224)	-1.91%	15,694	(699)	-4.26%	17,365	0	0.00%	10.65%
2005-2006	11,708	(92)	-0.78%	16,393	(336)	-2.01%	17,365	0	0.00%	5.93%
2004-2005	11,800	60	0.51%	16,729	92	0.55%	17,365	0	0.00%	3.80%
2003-2004	11,740	40	0.34%	16,637	(413)	-2.42%	17,365	0	0.00%	4.38%
2002-2003	11,700	76	0.65%	17,050	(2,058)	-10.77%	17,365	(2,600)	-13.02%	1.85%
2001-2002	11,624	189	1.65%	19,108	7	0.04%	19,965	0	0.00%	4.49%
2000-2001	11,435	(41)	-0.36%	19,101	0	0.00%	19,965	0	0.00%	4.52%
1999-2000	11,476	280	2.50%	19,101	340	1.81%	19,965	0	0.00%	4.52%
1998-1999	11,196	(25)	-0.22%	18,761	374	2.03%	19,965	0	0.00%	6.42%
1997-1998	11,221	306	2.80%	18,387	431	2.40%	19,965	2,000	11.13%	8.58%
1996-1997	10,915	235	2.20%	17,956	353	2.01%	17,965	1,008	5.94%	0.05%
1995-1996	10,680			17,603			16,957			-3.67%
Annual Avera	age		0.55%			-0.15%			0.36% 0.44%	5.62% 5.70%

	F	irm Peak Day S	endout				
Heating Season	(11) Firm Peak Day Sendout (dk)	(12) Change From Previous Year	(13) % Change From Previous Year	(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)
2016-2017				0.0839 0.1090	1.4083	1,4922 1.5173	
2015-2016	15,582	351	2.30%	0.0820	1.4003	1.4823	1.2943
2014-2015	15,231	774	5.35%	0.0703	1.3775	1.4478	1.2862
2013-2014	14,457	1,941	15.51%	0.0302	1.3128	1.3430	1.2411
2012-2013	12,516	2,248	21.89%	0.0689	1.2878	1.3568	1.0854
2011-2012	10,268	(1,652)	-13.86%	0.0673	1.2879	1.3552	0.8895
2010-2011	11,920	(692)	-5.49%	0.0744	1.3128	1.3872	1.0319
2009-2010	12,612	(962)	-7.09%	0.1527	1.3370	1.4898	1.0927
2008-2009	13,574	888	7.00%	0.1822	1.3324	1.5146	1.1840
2007-2008	12,686	401	3.26%	0.1561	1.3596	1.5157	1.1073
2006-2007	12,285	(789)	-6.03%	0.1455	1.3666	1.5121	1.0697
2005-2006	13,074	(996)	-7.08%	0.0830	1.4002	1.4832	1.1167
2004-2005	14,070	(626)	-4.26%	0.0539	1.4177	1.4716	1.1924
2003-2004	14,696	425	2.98%	0.0620	1,4171	1.4791	1.2518
2002-2003	14,271	2.151	17.75%	0.0269	1.4573	1.4842	1.2197
2001-2002	12,120	(2,724)	-18.35%	0.0737	1.6438	1.7176	1.0427
2000-2001	14.844	(1,921)	-11.46%	0.0756	1.6704	1.7460	1.2981
1999-2000	16,765	828	5.20%	0.0753	1.6644	1.7397	1.4609
1998-1999	15,937	(133)	-0.83%	0.1075	1.6757	1.7832	1.4235
1997-1998	16,070	115	0.72%	0.1406	1.6386	1.7793	1,4321
1996-1997	15,955	(418)	-2.55%	0.0008	1.6451	1.6459	1.4617
1995-1996	16,373	(m(2.332)	(0.0605)	1.6482	1.5877	1.5331
* **			0 250/	0 0707 0 0808	1 4573	1-5370 1 5382	1.2245