A Division of Montana-Dakota Utilities Co.

705 West Fir Avenue
Mailing Address:
P.O. Box 176

Fergus Falls, MN 56538-0176
(218) 736-6935

August 31, 2020

Re: Annual Report; Automatic Adjustment Docket No. G999/AA-20-172

Dear Mr. Seuffert:

Great Plains Natural Gas Co. (Great Plains), a Division of Montana-Dakota Utilities Co., 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 - Summary of Gas Costs Recovered
Degree Day and Volume Information
Exhibit B - Independent Auditor's Report reviewing the accounting procedures of Great
Plains' purchased gas adjustment
Exhibit C - Schedule of Contractor Main Strikes
Exhibit D - Meter Testing Updates
Exhibit E - Curtailment and Penalties
If you have any questions regarding this filing, please contact me at (701) 222-7855, or Brian M. Meloy, at (612) 335-1451.

Sincerely,
/s/Travis R. Jacobson
Travis R. Jacobson
Director of Regulatory Affairs
cc: Brian M. Meloy

# GREAT PLAINS NATURAL GAS CO. AUTOMATIC PURCHASED GAS ADJUSTMENT REPORT <br> MINNESOTA RULE 7825.2800-7825.2830 <br> FOR THE TWELVE MONTHS ENDING JUNE 30, 2020 

## Procurement Policy (7825.2800)

Great Plains Natural Gas Co.'s (Great Plains) distribution system is served by the Viking Gas Transmission Company (VGT) pipeline and the Northern Natural Gas Company (NNG) pipeline. The following is a summary of Great Plains' firm gas entitlement contracts in effect for the 2019-2020 heating season, which were reported in the Informational Update Filing on Great Plains' 2019 Demand Entitlement Filing (DEQ) in Docket No. G004/M-19-430 on November 1, 2019.

| Supplier | Contract Type | Units | Expires |
| :---: | :---: | :---: | :---: |
| NNG | TF12 (Base \& Variable) | 7,535 dk/Day | 10/31/24 |
| NNG | TF5 (Seasonal) | 3,410 dk/Day | 10/31/24 |
| NNG | TFX (Seasonal) | 5,200 dk/Day | 10/31/24 |
| NNG | TFX (Negotiated) | 1,000 dk/Day | 3/31/25 |
| NNG | TFX (Annual) | 2,000 dk/Day | 10/31/25 |
| NNG | TFX (Annual) | 13,000 dk/Day | 3/31/24 |
| NNG | TFX (Seasonal) | 2,000 dk/Day | 10/31/24 |
| VGT | FT-A | 8,000 dk/Day | 10/31/22 |
| VGT | FT-A | 5,000 dk/Day | 10/31/22 |
| VGT | FT-A | 5,000 dk/Day | 10/31/23 |
| VGT | FT-A (Seasonal) | 2,000 dk/Day | 10/31/22 |

Great Plains provides service to 18 communities located in western Minnesota and one community in eastern North Dakota. To meet its design day delivery obligation, Great Plains utilizes pipeline capacity on both VGT and NNG pipelines.

To serve customers connected to VGT, Great Plains delivers natural gas to city gates connected to VGT using a combination of two options. The first option is to deliver gas from the Ventura market area on NNG to Chisago, which serves as an interconnect between NNG and VGT. The second option is to purchase gas at VGT's Emerson location and deliver gas directly to VGT city gates.

To deliver gas from the Ventura market area, Great Plains utilizes $13,000 \mathrm{dk} /$ day of annual capacity on a NNG TFX contract and $2,000 \mathrm{dk} /$ day of seasonal capacity on a NNG TFX contract. These contracts deliver natural gas to Chisago. This gas is subsequently transported from Chisago to VGT city gates using corresponding VGT capacity of $13,000 \mathrm{dk} /$ day of annual capacity and $2,000 \mathrm{dk} / \mathrm{day}$ of seasonal capacity.

Additionally, Great Plains may purchase natural gas at VGT's Emerson receipt location and deliver to city gates interconnecting with VGT. To transport this, Great Plains may use either (1) $5,000 \mathrm{dk} /$ day of annual capacity incremental to the capacity stated in the preceding paragraph or (2) up to $5,000 \mathrm{dk}$ /day of the previously mentioned 13,000 dk/day of annual VGT capacity.

Great Plains has a total of $19,145 \mathrm{dk}$ per day of firm transportation capacity on NNG to meet its southwestern Minnesota design day delivery requirements. Although this amount of capacity exceeds current requirements, Great Plains continues to believe it will require this amount of capacity in the future and the opportunity to own contract capacity at present is more economical than future construction.

Great Plains also utilizes NNG's firm storage service. This service enables Great Plains to purchase gas during the summer months, when gas has historically been cheaper, for winter withdrawal. In addition to this service being an additional firm source of supply during the heating season, another benefit of this storage service is for real time nominations, whereby storage can be nominated on a 4-hour notice, which minimizes potential penalty situations.

Great Plains has contracted for 2,500 dk per day of VGT's Load Management Service (LMS) and 2,500 dk per day of NNG's System Management Service (SMS) to cover daily delivery variances. These variances may be caused by fluctuations from temperature forecasting or customer consumption changes.

Gas supply is contracted on a seasonal basis from suppliers on a least cost and demonstrated delivery reliability basis.

## Dispatching Policy (7825.2800)

Great Plains continues to use telemetry and computer systems to monitor its pipeline deliveries. This has allowed the Company to minimize the use of daily contracts and minimize associated demand contract charges from suppliers.

## Actions to Minimize Cost (7825.2800)

Company personnel continuously monitor the industry markets to ensure its procurement policies will minimize gas costs without jeopardizing the Company's responsibility to deliver. Great Plains will continue to evaluate its gas supply portfolio to provide its firm customers with reliable gas supply on a best cost basis to ensure its procurement policies will minimize gas costs without jeopardizing the Company's responsibility to deliver. Great Plains' transmission capacity, including capacity releases as applicable, is discussed in its annual Demand Entitlement filing.

Great Plains actively participates with a group of regional utility companies and municipalities on issues related to NNG. This group exists specifically to review and intervene in FERC matters that affect the cost of gas to the Company's service area.

## Conservation (7825.2800)

On November 26, 2019, the Department approved Great Plains' Conservation Improvement Program (CIP) Extension Plan (2020 Extension) in Docket No. G004/CIP-$16-121$ with a budget of $\$ 902,858$ in 2020 and with associated dk savings of $57,307 \mathrm{dk}$.

Similar to prior CIP plans, the Great Plains 2020 CIP Extension Plan includes programs applicable to residential, as well as commercial and industrial customers. In addition, the plan provides funding assistance to eligible low-income participants for weatherization and the emergency replacement or tune-up of a furnace or boiler. The 2020 CIP Extension Plan also offers a water heater temperature set-back program to eligible low-income participants.

## Purchased Gas Adjustment Rule Variances (7825.2810 subpart 2(A))

Great Plains did not request a variance from the purchased gas adjustment rules for the twelve months ending June 30, 2020.

## Level of Customer-owned Gas Volumes (7825.2810 subpart 2(C))

Great Plains transported 4,176,591 dk for Minnesota end-use customers on its distribution system for the twelve months ending June 30, 2020.

## Explanation of Over/Under Recoveries (7825.2810 subpart 2(D))

The total (over)under recovery for Minnesota for the twelve months ending June 30, 2020 was:
$\left.\begin{array}{ccccc}\begin{array}{c}\text { Recovered } \\ \text { Costs }\end{array} & & \text { Actual Costs }\end{array} \begin{array}{c}\text { (Over)Under } \\ \text { Recovery }\end{array} ~ \begin{array}{c}\text { Re of } \\ \text { Actual }\end{array}\right]$

Pipeline demand charges were under-recovered by $\$ 64,568$ or 1.27 percent due to the following:

- Great Plains recovers demand costs on a volumetric basis, while costs are assessed on a fixed monthly basis. Generally, demand costs are under-recovered
during the summer months, when firm sales volumes are low and over-recovered during the winter months when sales volumes are high.
- VGT and NNG implemented interim rate increases that resulted in higher demand costs beginning in January 1, 2020.
- Weather was 1.95 percent colder than normal for the twelve months ending June 30, 2020. Please see Exhibit A, page 5 for a monthly degree day analysis.

The commodity components of the PGA were over-recovered by $\$ 214,603$ or 2.49 percent due to timing differences between the cost of gas recovered in rates and the actual gas costs.

The calculation of the GCR and details of each of the components of demand and commodity by month are included in Exhibit A.

## Impact of Market Forces on Gas Costs (7825.2830)

Resilient domestic production has resulted in a low natural gas price environment this summer. While natural gas-fired generation has increased demand, both regionally and throughout the US, steady production has allowed storage levels to rise significantly over last year's levels and return well above the five-year average.

Great Plains is on track to fill its storage level prior to the beginning of the upcoming heating season. Current supply and demand levels are expected to keep the commodity cost of gas in the $\$ 2.50-\$ 3.50$ range given average regional weather which should provide supply stability, thus keeping the price of natural gas from increasing significantly. Great Plains has and will continue to minimize its exposure to these shortterm pricing spikes through its strategy of securing a majority of its monthly supply needs on a fixed or first-of-the-month index pricing.

The continuing shift of electric generation from coal to natural 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 $\$ 776$ 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 C 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."

The Gas Distribution Standards, Section 7 has been recently updated, specifically the combination of the Random Sampling Section and Large Capacity Meters Section. Great Plains has removed the Large Capacity Meters Section and combined small and large meter random sampling in the Random Sampling Section so that all meters are held to the same standards. See Exhibit D 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-17-493, 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 E for Great Plains' curtailment activities.

## GREAT PLAINS NATURAL GAS CO. SUMMARY OF (OVER) UNDER RECOVERIES TWELVE MONTHS ENDING JUNE 30, 2020 <br> MINNESOTA SYSTEM

Firm
Interruptible
Total

Firm Interruptible Total
$\left.\begin{array}{cccccc}\begin{array}{c}\text { Recovered } \\ \text { Costs }\end{array} & & \begin{array}{c}\text { Actual } \\ \text { Costs }\end{array} & & \begin{array}{c}\text { (Over)Under } \\ \text { Recovery }\end{array} & \end{array} \begin{array}{c}\text { \% of } \\ \text { Actual }\end{array}\right]$

| Beginning Balance | (Over) Under Recovery | GCR Recovery | Ending Balance |
| :---: | :---: | :---: | :---: |
| (\$640,239) | (\$117,444) | \$565,999 | (\$191,684) |
| $(106,374)$ | $(32,591)$ | 35,778 | $(103,187)$ |
| (\$746,613) | (\$150,035) | \$601,777 | (\$294,871) |


| Recovered Costs | Actual Costs | (Over)Under Recovery | \% of Actual |
| :---: | :---: | :---: | :---: |
| \$373,569 | \$366,218 | $(\$ 7,351)$ | 2.01\% |
| 233,523 | 227,063 | $(6,460)$ | 2.85\% |
| 233,523 | 227,063 | $(6,460)$ | 2.85\% |
| 38,961 | 39,355 | 394 | 1.00\% |
| $(43,639)$ | $(34,855)$ | 8,784 | 25.20\% |
| $(3,871)$ | $(32,174)$ | $(28,303)$ | 87.97\% |
| 1,454,284 | 1,503,402 | 49,118 | 3.27\% |
| 661,689 | 519,846 | $(141,843)$ | 27.29\% |
| 199,010 | 154,261 | $(44,749)$ | 29.01\% |
| 256,008 | 265,338 | 9,330 | 3.52\% |
| 184,397 | 147,050 | $(37,347)$ | 25.40\% |
| 321,416 | 331,507 | 10,091 | 3.04\% |
| 330,565 | 341,847 | 11,282 | 3.30\% |
| 101,702 | 80,299 | $(21,403)$ | 26.65\% |
| 697,990 | 721,788 | 23,798 | 3.30\% |
| 119,695 | 121,313 | 1,618 | 1.33\% |
| 138,164 | 120,703 | $(17,461)$ | 14.47\% |
| $(691,223)$ | $(429,693)$ | 261,530 | 60.86\% |
| \$4,605,763 | \$4,670,331 | \$64,568 | 1.38\% |
| 6,439,707 | 6,257,695 | $(182,012)$ | 2.91\% |
| \$11,045,470 | \$10,928,026 | (\$117,444) | 1.07\% |


| \$2,404,987 | \$2,372,396 | $(\$ 32,591)$ | 1.37\% |
| :---: | :---: | :---: | :---: |
| 429,693 | 429,693 | 0 | 0.00\% |
| \$2,834,680 | \$2,802,089 | (\$32,591) | 1.16\% |
| \$13,880,150 | \$13,730,115 | (\$150,035) | 1.09\% |



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Beginning
Balance

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FT－A－Zone 1－1（Cat．3）
FT－A－Capacity Release
FT－A－Capacity Release
TFX－Winter／Seasonal
TFX－Summer
TF12 Base－Summer

TF12 Variable－Winter
TFX－Summer
TFX－Winter
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TFX Negotiated Contract－Winter FDD－1 Reservation
Interruptible Demand Credit Total Demand Cost

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TFX－Winter／Seasonal
TF12 Base－Summer
TF12 Variable－Summer
TF12 Variable－Summer
TF12 Variable－Winter TFX－Summer

TFX Negotiated Contract－Winter FDD－1 Reservation
Interruptible Demand Credit
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Total Recovered Through PGA
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Total Recovered FDD－1 Reservation
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Total Recovered Through PGA
GCR Adjustment
Total Recovered FDD－1 Reservation
Interruptible Demand Credit
Total Demand Cost
Commodity Cost
Total Recovered Through PGA
GCR Adjustment
Total Recovered

| Description $\quad \begin{gathered}\text { Beginning } \\ \text { Balance }\end{gathered}$ | July | August | September | October | November | December | January | February | March | April | May | June | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Recovered thru PGA: |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Commodity Cost | \$110,300 | \$102,626 | \$99,529 | \$108,886 | \$275,584 | \$608,141 | \$302,841 | \$208,587 | \$218,509 | \$184,305 | \$92,229 | \$93,450 | \$2,404,987 |
| Interruptible Demand Charge | 15,664 | 16,355 | 16,082 | 18,531 | 44,391 | 81,535 | 41,614 | 44,246 | 50,437 | 48,702 | 28,629 | 23,507 | 429,693 |
| Total | \$125,964 | \$118,981 | \$115,611 | \$127,417 | \$319,975 | \$689,676 | \$344,455 | \$252,833 | \$268,946 | \$233,007 | \$120,858 | \$116,957 | \$2,834,680 |
| GCR Adjustment | 21,244 | 22,181 | 14,122 | $(5,487)$ | $(13,294)$ | $(25,033)$ | $(11,214)$ | $(8,472)$ | $(9,711)$ | $(9,574)$ | $(5,628)$ | $(4,912)$ | $(35,778)$ |
| Total Recovered | \$147,208 | \$141,162 | \$129,733 | \$121,930 | \$306,681 | \$664,643 | \$333,241 | \$244,361 | \$259,235 | \$223,433 | \$115,230 | \$112,045 | \$2,798,902 |
| Actual Cost of Gas: |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Commodity Cost of Gas | \$98,046 | \$97,023 | \$95,654 | \$110,217 | \$297,583 | \$648,869 | \$277,744 | \$202,881 | \$201,670 | \$174,055 | \$87,192 | \$81,462 | \$2,372,396 |
| Interruptible Demand Charge | 15,664 | 16,355 | 16,082 | 18,531 | 44,391 | 81,535 | 41,614 | 44,246 | 50,437 | 48,702 | 28,629 | 23,507 | 429,693 |
| Total Actual Gas Costs | \$113,710 | \$113,378 | \$111,736 | \$128,748 | \$341,974 | \$730,404 | \$319,358 | \$247,127 | \$252,107 | \$222,757 | \$115,821 | \$104,969 | \$2,802,089 |
| Current Month Under/(Over) Recovery | $(\$ 33,498)$ | $(\$ 27,784)$ | $(\$ 17,997)$ | \$6,818 | \$35,293 | \$65,761 | $(\$ 13,883)$ | \$2,766 | $(\$ 7,128)$ | (\$676) | \$591 | (\$7,076) | \$3,187 |
| Cumulative Balance $\quad \overline{(\$ 106,374)}$ | $(\$ 139,872)$ | (\$167,656) | $(\$ 185,653)$ | $(\$ 178,835)$ | $(\$ 143,542)$ | $(\$ 77,781)$ | $(\$ 91,664)$ | $(\$ 88,898)$ | $(\$ 96,026)$ | $(\$ 96,702)$ | $(\$ 96,111)$ | $(\$ 103,187)$ | $(\$ 103,187)$ |

GREAT PLAINS NATURAL GAS CO. TWELVE MONTHS ENDING JUNE 30, 2020 MINNESOTA SYSTEM

| RATES AND COSTS | June | July | August | September | October | November | December | January | February | March | April | May | June | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Rates Utilized in PGA (per dk) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Viking Gas Transmission: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| FT-A - Zone 1-1 (Cat. 3) | \$0.1373 | \$0.1373 | \$0.1373 | \$0.1373 | \$0.1373 | \$0.1373 | \$0.1465 | \$0.1400 | \$0.1400 | \$0.1150 | \$0.1150 | \$0.1150 | \$0.1150 |  |
| FT-A - Zone 1-1 (Cat. 3) | 0.0858 | 0.0858 | 0.0858 | 0.0858 | 0.0858 | 0.0858 | 0.0916 | 0.0875 | 0.0875 | 0.0719 | 0.0719 | 0.0719 | 0.0719 |  |
| FT-A - Zone 1-1 (Cat. 3) | 0.0858 | 0.0858 | 0.0858 | 0.0858 | 0.0858 | 0.0858 | 0.0916 | 0.0875 | 0.0875 | 0.0719 | 0.0719 | 0.0719 | 0.0719 |  |
| FT-A Seasonal | 0.0143 | 0.0143 | 0.0143 | 0.0143 | 0.0143 | 0.0143 | 0.0153 | 0.0146 | 0.0146 | 0.0120 | 0.0120 | 0.0120 | 0.0120 |  |
| FT-A - Capacity Release | (0.0091) | (0.0091) | (0.0091) | (0.0091) | (0.0091) | (0.0171) | (0.0171) | (0.0165) | (0.0165) | (0.0165) | (0.0165) | (0.0165) | (0.0165) |  |
| FT-A - Capacity Release | (0.0104) | (0.0104) | (0.0104) | (0.0104) | (0.0104) | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |  |
| Northern Natural Gas: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| TFX - Winter/Seasonal | 0.3719 | 0.3719 | 0.3719 | 0.3719 | 0.3719 | 0.3719 | 0.3719 | 0.6334 | 0.6334 | 0.6334 | 0.6334 | 0.6334 | 0.4598 |  |
| TFX - Summer | 0.1692 | 0.1692 | 0.1692 | 0.1692 | 0.1692 | 0.1692 | 0.1692 | 0.2882 | 0.2882 | 0.2882 | 0.2882 | 0.2882 | 0.2093 |  |
| TF12 Base - Summer | 0.0497 | 0.0497 | 0.0497 | 0.0497 | 0.0497 | 0.0510 | 0.0510 | 0.0869 | 0.0869 | 0.0869 | 0.0869 | 0.0869 | 0.0631 |  |
| TF12 Base - Winter | 0.0639 | 0.0639 | 0.0639 | 0.0639 | 0.0639 | 0.0656 | 0.0656 | 0.1118 | 0.1118 | 0.1118 | 0.1118 | 0.1118 | 0.0811 |  |
| TF12 Variable - Summer | 0.0484 | 0.0484 | 0.0484 | 0.0484 | 0.0484 | 0.0470 | 0.0470 | 0.0801 | 0.0801 | 0.0801 | 0.0801 | 0.0801 | 0.0582 |  |
| TF12 Variable - Winter | 0.0843 | 0.0843 | 0.0843 | 0.0843 | 0.0843 | 0.0820 | 0.0820 | 0.1396 | 0.1396 | 0.1396 | 0.1396 | 0.1396 | 0.1014 |  |
| TF5 | 0.0845 | 0.0845 | 0.0845 | 0.0845 | 0.0845 | 0.0845 | 0.0845 | 0.1440 | 0.1440 | 0.1440 | 0.1440 | 0.1440 | 0.1045 |  |
| TFX - Summer | 0.0260 | 0.0260 | 0.0260 | 0.0260 | 0.0260 | 0.0260 | 0.0260 | 0.0443 | 0.0443 | 0.0443 | 0.0443 | 0.0443 | 0.0322 |  |
| TFX - Winter | 0.1785 | 0.1785 | 0.1785 | 0.1785 | 0.1785 | 0.1785 | 0.1785 | 0.3040 | 0.3040 | 0.3040 | 0.3040 | 0.3040 | 0.2207 |  |
| TFX Negotiated Contract - Winter | 0.0440 | 0.0440 | 0.0440 | 0.0440 | 0.0440 | 0.0440 | 0.0440 | 0.0423 | 0.0423 | 0.0423 | 0.0423 | 0.0423 | 0.0423 |  |
| FDD-1 Reservation | 0.0312 | 0.0312 | 0.0312 | 0.0312 | 0.0312 | 0.0312 | 0.0312 | 0.0631 | 0.0631 | 0.0631 | 0.0631 | 0.0631 | 0.0502 |  |
| TFX - Capacity Release | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |  |
| TF12-Capacity Release | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |  |
| Interruptible Demand Credit | (0.1271) | (0.1271) | (0.1969) | (0.1969) | (0.1969) | (0.1897) | (0.1926) | (0.2956) | (0.2956) | (0.2879) | (0.2879) | (0.2879) | (0.2203) |  |
| Total Recovered in PGA per dk: |  | \$1.3282 | \$1.2584 | \$1.2584 | \$1.2584 | \$1.2673 | \$1.2862 | \$1.9552 | \$1.9552 | \$1.9041 | \$1.9041 | \$1.9041 | \$1.4568 |  |
| Interruptible Demand Charge | \$0.3428 | \$0.3428 | \$0.3428 | \$0.3428 | \$0.3428 | \$0.3302 | \$0.3352 | \$0.5301 | \$0.5301 | \$0.5163 | \$0.5163 | \$0.5163 | \$0.3950 |  |
| Weighted Avg. Commodity: | \$2.5395 | \$2.1498 | \$2.1534 | \$2.0432 | \$1.9558 | \$2.4377 | \$2.7959 | \$2.5375 | \$2.3464 | \$2.0525 | \$1.5765 | \$1.9583 | \$1.8532 |  |
| GCR Adjustment |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Firm | \$0.4859 | \$0.4859 | \$0.4859 | (\$0.2344) | (\$0.2344) | (\$0.2344) | (\$0.2344) | (\$0.2344) | (\$0.2344) | (\$0.2344) | (\$0.2344) | (\$0.2344) | (\$0.2344) |  |
| Interruptible | 0.4649 | 0.4649 | 0.4649 | (0.1015) | (0.1015) | (0.1015) | (0.1015) | (0.1015) | (0.1015) | (0.1015) | (0.1015) | (0.1015) | (0.1015) |  |
| Billed Dk Sales |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Firm |  | 48,865.1 | 39,545.6 | 46,378.3 | 91,684.0 | 236,737.3 | 376,891.1 | 506,883.2 | 456,700.4 | 440,921.2 | 304,312.4 | 161,555.2 | 72,305.4 | 2,782,779.2 |
| Interruptible |  | 45,696.0 | 47,711.3 | 46,914.0 | 54,057.4 | 130,977.3 | 246,634.4 | 110,487.4 | 83,467.2 | 95,676.9 | 94,329.0 | 55,450.0 | 48,368.5 | 1,059,769.4 |
| Total Dk |  | 94,561.1 | 87,256.9 | 93,292.3 | 145,741.4 | 367,714.6 | 623,525.5 | 617,370.6 | 540,167.6 | 536,598.1 | 398,641.4 | 217,005.2 | 120,673.9 | 3,842,548.6 |
| \% Firm to Total dk Sales |  | 51.68\% | 45.32\% | 49.71\% | 62.91\% | 64.38\% | 60.45\% | 82.10\% | 84.55\% | 82.17\% | 76.34\% | 74.45\% | 59.92\% | 72.42\% |
| \% Interruptible to Total dk Sales |  | 48.32\% | 54.68\% | 50.29\% | 37.09\% | 35.62\% | 39.55\% | 17.90\% | 15.45\% | 17.83\% | 23.66\% | 25.55\% | 40.08\% | 27.58\% |

GREAT PLAINS NATURAL GAS CO. ANNUAL REPORT OF AUTOMATIC ADJUSTMENT DEGREE DAY AND VOLUME ANALYSIS MINNESOTA

|  | Weighted Average Degree Days |  |  | Percent (Warmer)/Colder |
| :---: | :---: | :---: | :---: | :---: |
|  | Normal | Actual | Difference |  |
| July 2019 | 0 | 3 | 3 | 0.00\% |
| August | 0 | 0 | 0 | 0.00\% |
| September | 5 | 19 | 14 | 280.00\% |
| October | 160 | 198 | 38 | 23.75\% |
| November | 654 | 826 | 172 | 26.30\% |
| December | 856 | 865 | 9 | 1.05\% |
| January 2020 | 1,455 | 1,333 | (122) | -8.38\% |
| February | 1,422 | 1,378 | (44) | -3.09\% |
| March | 1,066 | 1,005 | (61) | -5.72\% |
| April | 763 | 783 | 20 | 2.62\% |
| May | 322 | 386 | 64 | 19.88\% |
| June 2020 | 30 | 68 | 38 | 126.67\% |
| Total | 6,733 | 6,864 | 131 | 1.95\% |


|  | Authorized <br> Volumes 1/ | Actual Dk | Dk Difference | \% <br> Difference |
| :---: | :---: | :---: | :---: | :---: |
| Volumes | 2,771,045.0 | 2,782,779.2 | 11,734.2 | 0.42\% |

1/ Authorized Residential and Firm General volumes per Docket Nos. G004/GR-15-879 and G004/MR-16-834.

## Exhibit B

## Exhibit B

## INDEPENDENT ACCOUNTANTS' REPORT

To the Managing Committee of Great Plains Natural Gas Co.:

We have examined the accompanying Schedule of Automatic Adjustment Clause for the Purchased Gas Cost (the "Schedule") included in the monthly filings of Great Plains Natural Gas Co. (the "Company"), a division of Montana-Dakota Utilities Co., a subsidiary of MDU Energy Capital, LLC (a wholly-owned subsidiary of MDU Resources Group, Inc.) for the twelve-month period from July 1, 2019 to June 30, 2020. The Company's management is responsible for calculation of the purchased gas cost factors in the Schedule in accordance with the criteria established by the Minnesota Public Utilities Commission (the "Commission") based upon Minnesota Administrative Rules Chapter 7825.2700. Our responsibility is to express an opinion on the Schedule based on our examination.

Our examination was conducted in accordance with attestation standards established by the American Institute of Certified Public Accountants. Those standards require that we plan and perform the examination to obtain reasonable assurance about whether the Schedule is in accordance with the criteria, in all material respects. An examination involves performing procedures to obtain evidence about the Schedule. The nature, timing, and extent of the procedures selected depend on our judgment, including an assessment of the risks of material misstatement of the Schedule, whether due to fraud or error. We believe that the evidence we obtained is sufficient and appropriate to provide a reasonable basis for our opinion.

In our opinion, the Schedule of Automatic Adjustment Clause for the Purchased Gas Cost included in the monthly filings of Great Plains Natural Gas Co. for the twelvemonth period from July 1, 2019 to June 30, 2020, presents the purchased gas cost factors in accordance with the Minnesota Administrative Rules Chapter 7825.2700, in all material respects.

This report is intended solely for the information and use of the Company and the Commission, and is not intended to be, and should not be, used by anyone other than the specified parties.


August 28, 2020

GREAT PLAINS NATURAL GAS CO.
SCHEDULE OF AUTOMATIC ADJUSTMENT CLAUSE FOR THE PURCHASED GAS COST ADJUSTMENT IN DOLLARS PER DECATHERM
FOR THE PERIOD FROM JULY 1, 2019 TO JUNE 30, 2020

| Month | Firm | Interruptible |
| :--- | :---: | :---: |
| July | 0.2448 | 0.0976 |
| August | 0.1786 | 0.1012 |
| September | $(0.6519)$ | $(0.5754)$ |
| October | $(0.7393)$ | $(0.6628)$ |
| November | $(0.2485)$ | $(0.1935)$ |
| December | 0.1286 | 0.1697 |
| January | 0.4051 | $(0.0146)$ |
| February | 0.2140 | $(0.2057)$ |
| March | $(0.1310)$ | $(0.5134)$ |
| April | $(0.6070)$ | $(0.9894)$ |
| May | $(0.2252)$ | $(0.6076)$ |
| June | $(0.7776)$ | $(0.8340)$ |

# GREAT PLAINS NATURAL GAS CO. CONTRACTOR MAIN STRIKES 

JULY 2019 - JUNE 2020

| Party |  |  | Dk |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Date | Involved | Location | Repair Cost 1/ | Gas Lost | Gas Cost 21 |
| 07/16/19 | Contractor | Redwood Falls | \$4,822 | 223.2 | \$776 |
|  |  |  | \$4,822 |  | \$776 |

1/ Reimbursement is recorded as credit to Acct. 887, maintenance of mains.
2/ Credited to cost of gas.

## Exhibit D

## Exhibit D

## TESTING GAS METERS

## DOMESTIC METERS

1. When testing domestic gas meters, the term "check" rate is flow at approximately $20 \%$ of the meter's rated capacity. "Open" rate is approximately $100 \%$ of the rated flow capacity at $1 / 2$ " differential.
2. Accuracy refers to a meter's degree of measurement error. A $100 \%$ accurate meter has $0 \%$ error. Spread is the range between check and open test results.
3. All new domestic meters purchased will have temperature compensation. Manufacturer settings shall be within $+/-0.25 \%$ accuracy at the open and check rates. They shall have $1 / 2 \mathrm{X} 2$-foot test dials. Circular dials shall be preferred.
4. The Meter Shop shall randomly test five meters or five percent (5\%) of all meters received whichever is greater, on each purchase order. They will be considered satisfactory if all meters are within $+/-$ $1 \%$ accuracy with less than $0.60 \%$ spread between the check and open rates. If one or more of the meters in the sample do not pass, the Meter Shop will test a second random sample. If the second sample fails, the meter shop will immediately notify the General Office Gas Measurement Manager to determine the course of action.
5. When receiving a new shipment of domestic meters or indexes, remove and check five indexes from the shipment for proper registration.

On circular dial indexes, rotate the two-foot test dial manually 50 revolutions and the hand should then be at digit " 1 " on the " 1 thousand foot" circle ( 1 ccf ) if the index is registering properly.
6. The Meter Shop will not release any meter, from a new shipment, for service meters before successfully performing all acceptance tests.

## RANDOM SAMPLING

1. Meters with synthetic diaphragms will be tested on a Random Sample basis according to test programs filed in each State.
2. Meters removed from service that in-test within $+/-0.5 \%$ accuracy on both open and check rates with less than $0.60 \%$ spread, have an acceptable differential and that pass the "low light" test are satisfactory and may return to service without adjustment and/or repair. The "low light" rate is approximately the same as an appliance pilot light load.
3. Meters tested and repaired in the Meter Shop shall be adjusted to test within $+/-0.5 \%$ accuracy with less than $0.60 \%$ spread.
4. New large capacity diaphragm meters purchased will be temperature compensated. They shall be set at the factory between $-0.5 \%$ to $0.0 \%$ accuracy.
5. To verify the index to meter drive ratio on large meters, a final flow test must be made with the service index installed. The service index is the index that will be recording the customer usage when the meter is in service.

The only exception is when an integrating and/or recording instrument is installed in the field after
the meter leaves the Meter Shop. In this case, make the final flow test with the proper standard index that is on the meter until installing the instrument. When making the instrument installation, the installer must verify that the instrument drive corresponds to the standard index on the meter. Meters set on pounds shall be checked onsite within two months for regulation accuracy and meter registration on the corrector. The proper factors on the customer account cut-in shall be verified with CIS billing information.

## INDEXES AND ELECTRONIC CORRECTORS

1. All electronic correction devices shall be set to read in Mcf for the corrected read and CCF for the uncorrected electronic read. It is also advised that the electronic uncorrected read be set to match the mechanical read to assist in identifying drive ratio errors. Site information files shall be printed and filed for reference.
2. Check correction factors at least twice yearly for reasonable operation by comparing the actual corrected factor to a calculated correction factor.

## RETIREMENT OF GAS METERS AND REGULATORS

1. Transfer gas modules (ERT's) and meters for retirement (because of obsolescence, damage or other cause) to the Bismarck Gas Meter Shop for examination and testing. In the Region, the Region Director or District Manager shall designate an employee to make the examination and determine the disposition of the material(s).
2. On a monthly basis, Regions and Districts shall report the retirement of regulators through the developed "On-Line" process. The Gas Measurement Manager shall review for approval.
3. The Meter Shop may complete appropriate documentation as directed by the Fixed Assets department to retire regulators, gas modules, or meters.
4. Destroy retired regulators and meters unless there is special authorization for alternate disposal or sale. A designee of either the Meter Shop, Region Director, or District Manager shall witness and certify to the destruction of retired equipment.

Comply with the procedure in the Environmental Regulatory Compliance Manual when retiring regulators and meters

# GREAT PLAINS NATURAL GAS CO. CURTAILMENT REQUIREMENTS AND PENALTIES 

JULY 2019 - JUNE 2020

Great Plains' curtailment requirements and penalties information:
a. One transmission-level curtailment events occurred during the period beginning July 2019 through June 2020. This event resulted from insufficient upstream transmission capacity to provide service to interruptible customers. That event was:

1) 9:00 a.m. on 9/26/2019 until 6:00 p.m. on 09/27/2019

- Three customers were requested to curtail gas usage
- All customers complied with the request

Grain Drying customers were not allowed to run during the following gas days due to the operating conditions described below:

| Start Date | End Date | Description | Non-Compliant <br> Customers |
| :---: | :---: | :--- | :--- |
| $9 / 26 / 19$ | $9 / 27 / 19$ | No grain dryers receiving service off the <br> VGT Vergas Lateral allowed to take <br> deliveries <br> (VGT Mainline Outage) | None |
| $10 / 30 / 19$ | $10 / 31 / 19$ | Due to limited capacity on NNG that we <br> were maxing out due to colder than <br> normal temperatures, resulted in any <br> NNG grain dryers who called to run <br> after gas was purchased not being <br> allowed to run. <br> (NNG summer capacity limits) | None |
| $11 / 6 / 19$ | $11 / 7 / 2019$ | Vergas Lateral pressure issues, dryers <br> allowed to run per rotating schedule <br> from the field with different start/end <br> times (VGT) | None |
| $11 / 10 / 19$ | $11 / 14 / 19$ | Vergas Lateral pressure issues, dryers <br> allowed to run per rotating schedule <br> from the field with different start/end <br> times (VGT) | None |
| $11 / 20 / 19$ | $11 / 22 / 19$ | Extreme operating conditions (VGT) | None |
| $12 / 9 / 19$ | $12 / 11 / 19$ | Extreme operating conditions (VGT) | None |
| $12 / 9 / 19$ | $12 / 11 / 19$ | Extreme operating conditions (NNG) | None |
| $12 / 10 / 19$ | $12 / 11 / 19$ | No grain dryers receiving service from <br> NNG city gates allowed to take <br> deliveries (NNG SOL) | None |


| $1 / 10 / 20$ | $1 / 10 / 20$ | No grain dryers receiving service from <br> NNG city gates allowed to take <br> deliveries (NNG SOL) | None |
| :--- | :---: | :--- | :--- |
| $1 / 15 / 20$ | $1 / 16 / 20$ | No grain dryers receiving service from <br> NNG city gates allowed to take <br> deliveries (NNG SOL) | None |
| $1 / 18 / 20$ | $1 / 21 / 20$ | No grain dryers receiving service from <br> NNG city gates allowed to take <br> deliveries (NNG SOL) | None |
| $2 / 12 / 20$ | $2 / 14 / 20$ | No grain dryers receiving service from <br> NNG city gates allowed to take <br> deliveries (NNG SOL) | None |
| $2 / 19 / 20$ | $2 / 19 / 20$ | No grain dryers receiving service from <br> NNG city gates allowed to take <br> deliveries (NNG SOL) | None |

b. There were no issues of non-compliance against curtailment orders from July 1, 2019 through June 30, 2020.
c. The specific commodity rate charged for the unauthorized gas used and how that rate is determined.

Not Applicable.
d. The financial penalty, if any, assessed by the company to the customer, including calculations in determining the penalty or penalties.

Not Applicable.
e. A discussion about utility communication with each customer regarding noncompliance with interruptions (excluding invoices).

Each year, prior to the heating season, all customers that receive natural gas service under any interruptible rate schedule are provided a letter describing their level of service. The letter describes means of notification and penalty for failure to curtail.


[^0]:    Total Actual Gas Costs

