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December 3, 2018

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

Re: Revenue Decoupling Mechanism Rates and Decoupling Evaluation Report for Year 2 of Pilot Program, Docket No. G004/GR-15-879

Dear Mr. Wolf:

Great Plains Natural Gas Co. (Great Plains), a Division of MDU Resources Group, Inc., herewith electronically submits Revenue Decoupling Mechanism 2nd Revised Sheet No. 5-126, attached hereto as Exhibit A, reflecting the Revenue Decoupling Mechanism (RDM) rates to be effective January 1, 2019. The Company's second Decoupling Evaluation Report of its three-year Revenue Decoupling Pilot Program is also provided. Attachment A, Page 9 of the Decoupling Report contains information that has been designated as Confidential Information – Not for Public Disclosure and is furnished in accordance with Minnesota Statute 13.37 Subd. 1(b). One copy of the public version is also filed electronically.

On September 6, 2016, the Commission issued its Findings of Fact, Conclusions, and Order in the Company's last general rate case, Docket No. G004/GR-15-879, approving Great Plains' proposed RDM with those modifications noted in the Order. In addition, the Company is including in its Evaluation Report the decoupling calculations using the per-customer method and the per-customer class method as ordered in Paragraph 26c of the Commission's Order.

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

Sincerely,

/s/ Tamie A. Aberle

Tamie A. Aberle Director of Regulatory Affairs

cc: Brian M. Meloy

Exhibit A

Exhibit A

GREAT PLAINS NATURAL GAS CO.



A Division of MDU Resources Group, Inc.

State of Minnesota Gas Rate Schedule – MNPUC Volume 2

Section No. 5

2nd Revised Sheet No. 5-126

Canceling 1st Revised Sheet No. 5-126

REVENUE DECOUPLING MECHANISM

Pilot Program:

The RDM established under this tariff is new to the Company's rate design and was not included in any prior rate structure of the Company. The RDM will be effective for a pilot period of 36 months from the date the program is authorized to become effective. The Company may request approval from the Commission to extend the RDM beyond the pilot period.

Annual RDM Adjustment:

- a. No later than December 1st of the calendar year following the Commission's approval of the RDM tariff, and each December 1st thereafter, the Company shall file with the Commission a report that specifies the RDM adjustments to be effective for each rate class. The initial report shall reflect a 12-month period beginning October 1, 2016, the first day of the month following the final order of the Commission in Docket G004/GR-15-879.
- b. In the event any portions of the proposed rate adjustments are modified by the Commission, the proposed rate adjustments shall be adjusted in accordance with the Commission's order.
- c. The Company shall record its best estimate of the amounts to be recognized under the RDM so as to reflect in its books and records a fair representation of the impact of this rider in actual earnings. Such estimate shall be adjusted, if necessary, upon filing the RDM calculations with the Commission, and again upon final Commission approval.

Revenue Decoupling Mechanism:	Rate per Dk
Residential	
North District Rate N60	(\$0.0402)
South District Rate S60	(\$0.0377)
Firm General	
North District Rate N70	(\$0.0001)
South District Rate S70	\$0.0871
Small Interruptible Sales & Transportation	
North District Rates N71 and N81	\$0.0413
South District Rates S71 and S81	(\$0.0296)
Large Interruptible Sales & Transportation	
North District Rates N82 and N85	(\$0.4106)
South District Rates S82 and S85	(\$0.1850)

Date Filed: December 3, 2018 Effective Date: January 1, 2019

Issued By: Tamie A. Aberle Docket No.: G004/GR-15-879

Director - Regulatory Affairs

Tariffs Reflecting Proposed Changes

GREAT PLAINS NATURAL GAS CO.



A Division of MDU Resources Group, Inc.

State of Minnesota Gas Rate Schedule – MNPUC Volume 2

Section No. 5 1st Revised Sheet No. 5-126 Canceling Original Sheet No. 5-126

REVENUE DECOUPLING MECHANISM

Pilot Program:

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- b. In the event any portions of the proposed rate adjustments are modified by the Commission, the proposed rate adjustments shall be adjusted in accordance with the Commission's order.
- c. The Company shall record its best estimate of the amounts to be recognized under the RDM so as to reflect in its books and records a fair representation of the impact of this rider in actual earnings. Such estimate shall be adjusted, if necessary, upon filing the RDM calculations with the Commission, and again upon final Commission approval.

Revenue Decoupling Mechanism:	Rate per Dk
Residential	
North District Rate N60	(\$ 0.2842 0.0402)
South District Rate S60	(\$ 0.2003 <u>0.0377)</u>
Firm General	
North District Rate N70	<u>(\$0.24540.0001)</u>
South District Rate S70	\$ 0.2008 0.0871
Small Interruptible Sales & Transportation	
North District Rates N71 and N81	\$ 0.1059 <u>0.0413</u>
South District Rates S71 and S81	(\$ 0.0472 0.0296)
Large Interruptible Sales & Transportation	
North District Rates N82 and N85	<u>(\$0.11780.4106)</u>
South District Rates S82 and S85	(\$ 0.1568 <u>0.1850</u>)

Date Filed: December 1, 2017 Effective Date: January 1, 2018

Issued By: Tamie A. Aberle Docket No.: G004/GR-15-879

Director – Regulatory Affairs

Decoupling Evaluation Report

Docket G-004/GR-15-879

Evaluation Period: 10/1/17 - 9/30/18

Table of Contents

Section A: Exec	utive Summary	Page 1
Section B: Timel	line for Evaluation	Page 3
_	nue Accrued and Collected Under Full Revenue upling	Page 4
	nation of Great Plains Natural Gas Co.'s Commitment creased Energy Savings	Page 16
Section E: Relate	ed Rate and Usage Information	Page 31
Section F: Other	Information	Page 37
Section E: Attac	hment List	Page 40

Evaluation Report For Great Plains Natural Gas Co.'s Revenue Decoupling Mechanism 10/1/2017 – 9/30/2018

A. EXECUTIVE SUMMARY

Great Plains Natural Gas Co. (Great Plains or the Company), a Division of MDU Resources Group, Inc., submits this Evaluation Report for its Revenue Decoupling Mechanism (RDM) to the Minnesota Public Utilities Commission (Commission). In the Company's 2015 Rate Case, Docket No. G004/GR-15-879, the Commission authorized the Company to implement a full RDM as a three-year pilot program¹.

In this Evaluation Report, the data and supporting calculations for the decoupling adjustment factors (Revenue Decoupling Mechanism rates) that will be implemented on customer bills effective January 1, 2019 are provided. The RDM compares the level of non-gas revenues authorized in the last general rate case (excluding those revenues associated with the Conservation Cost Recovery Charge (CCRC)), adjusted for customer growth, to the level of non-gas revenues collected by rate class to determine either a revenue shortfall or surplus for the 12-month period beginning October 1, 2017. The RDM is symmetrical, meaning an adjustment per Dk per rate class is calculated whether a revenue shortfall or surplus exists. Decoupling surcharges are limited to 10% of the authorized non-gas revenues (design revenues) for each individual rate class. Refunds are not limited by a cap.

For the second evaluation period, October 2017 through September 2018, the Company incurred an overall revenue surplus of \$203,278, and an under-recovered balance of \$31,869 from the October 2016 – September 2017 initial evaluation period. Decoupling adjustments were calculated separately for the four rate classes for the North and South rate areas. The four rate classes for each area are: Residential, Firm General, Small Interruptible, and Large Interruptible. All but two of the rate classes indicate a need for a decoupling refund, with the Firm General rate class for the South

¹ Findings of Fact, Conclusions, and Order issued September 6, 2016 in Docket No. GR-15-879 (September 2016 Order), Order Paragraph 26.

and the Small Interruptible rate class for the North indicating a surcharge. Generally, the rate classes requiring a refund were the result of higher than authorized sales. The surcharge for the Firm General South rate class was a result of lower than authorized volumes and customers while the surcharge for the Small Interruptible North rate class was attributable to a lower than authorized customer count.

Neither decoupling surcharge adjustment was limited because of the cap imposed on decoupling surcharges. Refund amounts are not restricted. Detailed information regarding the decoupling adjustment calculations is provided in Section C of this report.

Residential customers used approximately 50,000, or 3%, more dekatherms than anticipated in the reporting period. During that time period the average per-dekatherm charge was approximately \$6.48 for an overall cost of \$320,000. The decoupling refunds for the residential classes will return approximately \$57,000 of that total to the customers.

Supplementary detailed information regarding the Company's commitment to conservation, as well as customer usage information is provided in Sections D through F.

B. TIMELINE FOR EVALUATION

Approval of Full Decoupling

 September 6, 2016 – Commission ordered full-decoupling for Great Plains Natural Gas Co. (Docket G-004/GR-15-879 – page 56, ordering point 26).

Pilot Year 1

- October 1, 2016 the first Evaluation Period (10/1/16-9/30/17) begins.
- September 30, 2017 the first Evaluation Period (10/1/16-9/30/17) ends.
- December 1, 2017 the first Evaluation Report was submitted to the Commission by Great Plains Natural Gas Co.
- January 1, 2018 the Revenue Decoupling Mechanism rates were implemented.

Pilot Year 2

- October 1, 2017 the second Evaluation Period (10/1/17-9/30/18) begins.
- September 30, 2018 the second Evaluation Period (10/1/17-9/30/18) ends.
- December 1, 2018 the second Evaluation Report is submitted to the Commission by Great Plains Natural Gas Co.
- January 1, 2019 the updated Revenue Decoupling Mechanism rates are effective.

Pilot Year 3

- October 1, 2018 the third Evaluation Period (10/1/18-9/30/19) begins.
- September 30, 2018 the third Evaluation Period (10/1/18-9/30/19) ends.
- December 1, 2019 the third Evaluation Report is submitted to the Commission by Great Plains Natural Gas Co.
- January 1, 2020 the updated Revenue Decoupling Mechanism rates are effective.

C. REVENUE ACCRUED AND COLLECTED UNDER FULL REVENUE DECOUPLING

Overview of Model

Great Plains submits its second-year pilot results following the methods authorized in Docket No. G-004/GR-15-879. Throughout the year (October 2017) - September 2018), the Company tracked its sales and transportation volumes and customer counts for use in the Revenue Decoupling Mechanism (RDM). The Company calculated a decoupling accrual monthly and aggregated the amounts quarterly for accrual entries made as part of its quarter-end accounting activity. At the end of the twelve-month evaluation period, the annual RDM adjustments by rate class were calculated. For purposes of the RDM, the following eight rate classes are considered: Residential Rate N60, Residential Rate S60, Firm General Rate N70, Frim General Rate S70, Small Interruptible Sales and Transport Rates N71 and N81, Small Interruptible Sales and Transport Rates S71 and S81, Large Interruptible Sales and Transport Rates N85 and N82, and Large Interruptible Sales and Transport Rates N85 and N82. The RDM rate classes are consistent with how the Company computed the distribution charges in its most recent rate case; in effect, the rate design approved in the Company's most recent general rate case is maintained within the RDM rate structure as well.

The quarterly accounting entries reflected the over/under-collection of non-gas revenues for the decoupling program, consistent with the Company's Revenue Decoupling Mechanism tariff which states: "The Company shall record its best estimate of the amounts to be recognized under the RDM so as to reflect in its books and records a fair representation of the impact of this rider in actual earnings." The net amount will be carried until the end of the Evaluation Period and will not result in changes on customer's bills until the January after the Evaluation Period.

Calculation of Decoupling Accrual and Annual Adjustment

For purposes of the quarterly accruals, the actual non-gas revenue is compared to the Designed Revenue (as defined in the Revenue Decoupling Mechanism

tariff) to determine the decoupling accrual amount for each rate class individually. The actual customer count and billed volumes are used to calculate the actual non-gas revenue by applying the applicable basic service charges and tariffed delivery charge rates less the applicable CCRC.

The actual non-gas revenue is compared to the Designed Revenue for the period to determine the gross adjustment amount by rate class. The Designed Revenue is defined in the Revenue Decoupling Mechanism tariff as the product of the greater of the actual or authorized customers multiplied by the authorized margin per customer for that month. Determining Designed Revenue in this manner allows for the authorized non-gas margin to adjust for customer growth and protects against unintended consequences of the pilot that can arise if customer counts decline. For instance, if the calculation were to simply use the actual customer count instead of authorized, the result of lower than authorized customer counts would be decreased Designed Revenue even though there has not been a corresponding decrease in the non-gas revenue requirements, since the majority of the Company's costs are fixed. Actual revenue exceeding Designed Revenue indicates an amount owed as a refund to customers, while Designed Revenue exceeding actual revenue indicates a surcharge amount due from customers.

The monthly results are aggregated quarterly for an accrual entry made as part of the quarter-end accounting activities. In calculating the final decoupling adjustment amounts by rate class after the evaluation period is complete, actual customer counts are updated to replace any estimated information included in the accrual. The Company's final adjustments are then calculated on an annual basis rather than as a summation of the individual months used for purposes of the accounting accruals. This annual adjustment calculation is consistent with the derivation of the Company's rates which uses an annual average customer count. Decoupling adjustments are also evaluated against the established cap based on ten percent of Designed Revenues (for surcharges) as authorized in Docket No. G004/GR-15-879.

C-1) Monthly, annual, cumulative revenue deferred.

What was the monthly, annual, and cumulative amount of revenue over/under collected by rate class through the RDM during the period being evaluated, before and after any adjustments to reflect the 10% cap? A discussion describing actions leading to these adjustments will be provided.

Table C-1a provides a summary of the decoupling adjustment by rate class before and after any adjustments to reflect the 10% cap, as well as prior period adjustments. The calculations are provided in Attachment A, pages 2-9.

Table C-1a - Decoupling Adjustment balance thru September 30, 2018 1/

Rate Class	Decoupling Adjustment Balance through September 30, 2018	Capped Adjustment	Adjustment to Reflect 10% Cap	Under/(Over) Prior Period Adjustment 2/	Adjusted Balance
Residential Rate - N60	(\$34,980)	\$207,785	\$0	\$7,492	(\$27,488)
Residential Rate - S60	(\$38,736)	\$215,244	\$0	\$9,563	(\$29,173)
Firm General - N70	(\$3,143)	\$117,240	\$0	\$3,069	(\$74)
Firm General - S70	\$52,458	\$152,995	\$0	\$11,762	\$64,220
Small Interruptible - N71 & N81	\$17,715	\$56,664	\$0	\$1,089	\$18,804
Small Interruptible - S71 & S81	(\$12,643)	\$56,267	\$0	\$1,026	(\$11,617)
Large Interruptible - N85 & N82	(\$27,764)	\$26,697	\$0	(\$98,949)	(\$126,713)
Large Interruptible - S85 & S82	(\$156,185)	\$45,631	\$0	(\$2,380)	(\$158,565)
Total Under / (Over) Collection	(\$203,278)	\$878,523	\$0	(\$67,328)	(\$270,606)

^{1/} Excluding flexible rate contract customers as authorized in Docket No. G004/GR-15-879.

The under and over recovery of the 2016 – 2017 evaluation period balances by rate class, as well as corrections made are included in the calculation of the 2017 – 2018 decoupling factors to be implemented January 1, 2019 (amounts shown in Prior Period Adjustment column in Table C-1a). See Table C-1b for the development of the Prior Period Adjustment amounts.

^{2/} Including corrections to the decoupling adjustments for S71/S81 and N85/N82 rate classes, as noted in Table C-1b.

Table C-1b: Prior Period Adjustment

Rate Class	2018 Decoupling Revenue	Period 1 Decoupling Adjustment	Prior Period Balance	Corrections 1/	Prior Period Adjustment
Residential Rate - N60	\$177,542	\$185,034	\$7,492	\$0	\$7,492
Residential Rate - S60	\$141,327	\$150,890	\$9,563	\$0	\$9,563
Firm General - N70	\$118,549	\$121,618	\$3,069	\$0	\$3,069
Firm General - S70	\$134,080	\$145,842	\$11,762	\$0	\$11,762
Small Interruptible - N71 & N81	\$37,163	\$38,252	\$1,089	\$0	\$1,089
Small Interruptible - S71 & S81	\$17,762	\$14,648	(\$3,114)	\$4,140	\$1,026
Large Interruptible - N85 & N82	\$33,363	\$37,751	\$4,388	(\$103,337)	(\$98,949)
Large Interruptible - S85 & S82	(\$263,350)	(\$265,730)	(\$2,380)	\$0	(\$2,380)
Total Under / (Over) Collection	\$396,436	\$428,305	\$31,869	(\$99,197)	(\$67,328)

^{1/} Corrections resulting from errors agreed to as noted in Reply Comments the Company submitted October 4, 2018. See Section C-5 for further discussion.

Revenue Deferral for October 2017 - September 2018 Evaluation Period

At the end of the second year of the pilot, September 30, 2018, the net decoupling balance, inclusive of the prior period adjustments, due to customers is \$270,606. The rate classes will be refunded or surcharged as necessary on a per Dk basis beginning January 1, 2019.

Anticipated adjustments to Decoupling Balance in 2019:

The Company does not anticipate any adjustments to the balance as of September 30, 2018. However, the Company has not received final authorization for the decoupling factors that have been in place since January 1, 2018. If the Commission were to require any modifications to those factors the Company would adjust the decoupling balances accordingly, by class. Detailed monthly, year-end, and cumulative calculations are contained in Attachment A.

C-2) Monthly, annual, cumulative revenue recovered.

What was the monthly, annual, and cumulative amount of revenue recovered by rate schedule through the decoupling mechanism during the period being evaluated? A discussion describing actions leading to these adjustments will be provided.

Table C-2 below includes the revenue collected through the RDM in 2018

(recovery of the first evaluation period decoupling balances). The factors were charged beginning January 1, 2018 and billed over the subsequent 12-month period. The amounts in the table represent actual amounts collected for January – October and estimated amounts to be collected in November and December of 2018. The estimated amounts were derived by multiplying actual 2017 volumes for each rate class by the corresponding decoupling factor.

Table C-2: Decoupling Revenue

Rate Class	2018 Decoupling Revenue
Residential Rate - N60	\$177,542
Residential Rate - S60	\$141,327
Firm General - N70	\$118,549
Firm General - S70	\$134,080
Small Interruptible - N71 & N81	\$37,163
Small Interruptible - S71 & S81	\$17,762
Large Interruptible - N85 & N82	\$33,363
Large Interruptible - S85 & S82	(\$263,350)
Total Under / (Over) Collection	\$396,436

C-3) Calculations of and Adjustment(s) due to the 10% revenue cap (if any)

What was the mathematical result of the 10% cap calculation for each of the evaluation periods in the 36 months of the decoupling program?

The Company has provided the calculation, by rate class, for the 10% revenue cap in Attachment A pages 2-9. The line labeled "Designed Non-Gas Revenues" for each rate class is multiplied by 10% to determine the RDM adjustment cap in total dollars. The cap did not impact any of the decoupling adjustment balances for the reporting period.

C-4) Discussion of actions affecting decoupling calculations

Has Great Plains made any changes to its methods or calculations of the decoupling deferral over the course of the pilot? Describe any such changes, their purpose, and impact on the deferral.

A Rate S82 customer that was included in the authorized customer count and volumes from the 2015 rate case at the maximum rate per Dk is now served under a flexible contract rate as of January 1, 2018. In order to properly recognize the actual non-gas revenues the Company received from this customer in 2018, while at a rate other than the Rate S82 maximum rate, Great Plains adjusted the decoupling calculation for the Large Interruptible S85-S82 rate class - specifically to the computation of the actual non-gas revenue for the class. Actual non-gas revenue was computed in two steps. First, all volumes excluding the January – September 2018 volumes for the newly contracted-rate customer were multiplied by the authorized distribution rate. Second, January – September 2018 volumes for the newly contracted-rate customer were multiplied by that customer's contractual distribution rate. These two amounts were summed and compared to the designed non-gas revenues for the class to determine the surplus/shortfall of revenue. No adjustments were made to authorized volumes or customer counts. Even though flexible contract rate customers are not subject to the RDM per the RDM tariff, it is necessary to continue taking into consideration the margin associated with this flexible contract customer going forward since the volumes were included in the authorized count and volumes for Rate S82 in the most recent case. Otherwise, the entire differential would be collected through the decoupling surcharge. The detailed calculation for the Large Interruptible Rates S85 & S82 class is included as page 9 of Attachment A.

C-5) Changes to methodology, input values or calculations – purpose and impact Were there any issues that arose regarding the methodology or input values for calculation of the accounting journal entries which implemented the decoupling accrual? Explain and quantify the impact of any changes in methodology or input values.

The Reply Comments received from the Minnesota Department of Commerce regarding the Company's first decoupling evaluation report indicated that the Company's approach to the decoupling adjustment calculation for the Large

Interruptible – North (N85 & N82) customer class was incorrect for that reporting period. In its Reply Comments dated October 4, 2018, the Company agreed with the Department's assertion that the Designed Revenues formula was incorrectly applied for that class and provided a corrected decoupling adjustment. The asfiled calculation for the class for the first reporting period of October 2016 – September 2017 indicated a surcharge for the class of \$37,751. The corrected calculation resulted in a refund amount of \$65,586. The difference of \$103,337 is shown in Table C-1b above. For the second reporting period the Company calculated the decoupling adjustment for the class in the same manner the corrected computation was performed for the first reporting period.

C-6) Pretax margin and net income impact

What was the net income impact resulting from the recoverable revenue accrual for the period being evaluated as a result of the pilot? What percentage of net income for the Company's operations is represented by the accruals in each year?

Table C-6: Decoupling Impact

First Evaluation Period Decoupling Adjustment 1/	\$329,108
2017 Effective Tax Rate	41.37%
Decoupling Impact Tax-Effected	\$192,956
Net Operating Income - 2017	\$1,024,808
Decoupling Impact as % of Net Operating Income	18.8%
1/ As corrected, see Table C-1b.	

C-7) By rate class – recorded gas margin revenue – before and after accrual What was Great Plains' recorded gas margin revenue by rate class for the period being evaluated, before and after decoupling deferrals?

Decoupling accrual amounts are calculated monthly and booked quarterly to record the Company's best estimate of the amounts to be recognized under the RDM. At the end of the evaluation period the final decoupling adjustment amount

by rate class is calculated, including the applicable adjustment necessary to reflect the required 10% cap. Table C-7 shows actual margin by rate schedule as well as what the margin would be including the decoupling adjustment or the final accrual, for each rate class.

Table C-7: Margin by Rate Class 1/

Rate Class	 Designed Revenue	R	Actual evenue 2/	Decoupling Adjustment 3/	Revenue w/Decoupling Accrual
Residential Rate - N60	\$ 2,077,847	\$	2,112,827	(\$27,488)	\$2,085,339
Residential Rate - S60	2,152,435		2,191,171	(29,173)	2,161,998
Firm General - N70	1,172,399		1,175,542	(74)	1,175,468
Firm General - S70	1,529,949		1,477,491	64,220	1,541,711
Small Interruptible - N71 & N81	566,643		548,928	18,804	567,732
Small Interruptible - S71 & S81	562,667		575,310	(11,617)	563,693
Large Interruptible - N85 & N82	266,974		294,738	(126,713)	168,025
Large Interruptible - S85 & S82	456,305		612,490	(158,565)	453,925
Total	\$ 8,785,219	\$	8,988,497	(\$270,606)	\$8,717,891

^{1/} Excluding flexible rate contract customers as authorized in Docket No. G004/GR-15-879.

C-8) By rate class – decoupling surcharge/refund revenue Billing Factors Provide a detailed calculation of the factors to be billed by rate class for the upcoming year. (January 2019 – December 2019)

The calculation of the adjustment factors to billed for the period January 1, 2019 through December 31, 2019 is provided on page 1 of Attachment A. A summary of the adjustment factors and the decoupling adjustment per bill based on average use is provided in Table C-8.

^{2/} As calculated for each rate class in Attachment A.

^{3/} Includes under/(over) prior period adjustment (Table C-1a).

Table C-8: RDM Adjustment Factors 1/

Rate Class	1	coupling justment / Dk	Average Monthly Use (Dk)	Average Monthly Decoupling Adjustment		
Residential Rate - N60	\$	(0.0402)	6.7	(\$0.27)		
Residential Rate - S60	\$	(0.0377)	6.2	(\$0.23)		
Firm General - N70	\$	(0.0001)	33.0	\$0.00		
Firm General - S70	\$	0.0871	35.5	\$3.09		
Small Interruptible - N71 & N81	\$	0.0413	527.1	\$21.77		
Small Interruptible - S71 & S81	\$	(0.0296)	454.3	(\$13.45)		
Large Interruptible - N85 & N82	\$	(0.4106)	5,144.0	(\$2,112.13)		
Large Interruptible - S85 & S82	\$	(0.1850)	10,203.9	(\$1,887.72)		
1/ Excluding flexible rate contract customers as authorized in Docket No. G004/GR-15-879.						

C-9) Monthly bill impact for the upcoming year?

What is the monthly residential customer bill impact of the decoupling rate adjustment for customers during the recovery period?

The monthly estimated bill impacts of the decoupling factor for the residential rate classes are illustrated in Tables C-9a and C-9b below. The Company divided projected 2019 sales by authorized customers from the Company's most recent rate case, Docket No. G004/GR-15-879, to determine average use per customer. The Company's Phase 3 rates as authorized in that case, which will also go into effect on January 1, 2019, and gas costs as of November 1, 2018 were used for calculating the total bill amounts.

Table C-9a: Residential Customer Bill Impact - Residential Rate - N60

Month	Use per Customer	Decoupling Impact	Total Bill	Decoupling % of Total Bill
January	16.1	\$ (0.65)	\$ 114.94	-0.57%
February	13.5	(0.54)	97.59	-0.55%
March	10.5	(0.42)	77.57	-0.54%
April	5.4	(0.22)	43.54	-0.51%
May	1.7	(0.07)	18.84	-0.37%
June	0.6	(0.02)	11.5	-0.17%
July	0.7	(0.03)	12.17	-0.25%
August	0.7	(0.03)	12.17	-0.25%
September	1.3	(0.05)	16.18	-0.31%
October	5.4	(0.22)	43.54	-0.51%
November	10.1	(0.41)	74.9	-0.55%
December	14.3	(0.57)	102.93	-0.55%
Total	80.3	\$ (3.23)	\$ 625.87	-0.52%

Docket No. G004/GR-15-879 - Phase 3 Rates - Residential Rate - N60					
Basic Service Charge	\$	7.50	per month		
Distribution Charge	\$	1.7832	per Dk		
CIP Base	\$	0.0556	per Dk		
Cost of Gas	\$	4.6994	per Dk		
CCRA, GAP & GUIC	\$	0.1754	per Dk		
Decoupling Adjustment	\$	(0.0402)	per Dk		

Table C-9b: Residential Customer Bill Impact - Residential Rate - S60

Month	Use per Customer	Decoupling Impact	Total Bill	Decoupling % of Total Bill
January	15.2	\$ (0.57)	\$ 108.97	-0.52%
February	12.5	(0.47)	90.95	-0.52%
March	10.0	(0.38)	74.26	-0.51%
April	5.1	(0.19)	41.55	-0.46%
May	1.4	(0.05)	16.85	-0.30%
June	0.5	(0.02)	10.84	-0.18%
July	0.6	(0.02)	11.51	-0.17%
August	0.6	(0.02)	11.51	-0.17%
September	0.9	(0.03)	13.51	-0.22%
October	4.7	(0.18)	38.88	-0.46%
November	9.6	(0.36)	71.59	-0.50%
December	13.6	(0.51)	98.29	-0.52%
Total	74.7	\$ (2.80)	\$ 588.71	-0.48%

Docket No. G004/GR-15-879 - Phase 3 Rates - Residential Rate - S60						
Basic Service Charge	\$	7.50	per month			
Distribution Charge	\$	1.7832	per Dk			
CIP Base	\$	0.0556	per Dk			
Cost of Gas	\$	4.6994	per Dk			
CCRA, GAP & GUIC	\$	0.1754	per Dk			
Decoupling Adjustment	\$	(0.0377)	per Dk			

C-10) Results under "Traditional", (i.e. no decoupling) regulation

A comparison of how revenues under traditional regulation would have differed from those collected under the decoupling pilot; and an evaluation of if the pilot stabilized revenues for the schedules under the pilot.

See Table C-10 below.

Table C-10: Decoupling vs. Traditional

Rate Class	Total Revenue 10/1/17 - 9/30/18		Decoupling Revenue 1/1/18 - 9/30/18		Traditional Revenue	
Residential Rate - N60	\$	5,528,713	\$	129,762	\$	5,398,951
Residential Rate - S60		5,967,438		105,277		5,862,161
Firm General - N70		3,697,130		87,234		3,609,896
Firm General - S70		4,982,338		101,719		4,880,619
Small Interruptible - N71 & N81		1,593,952		21,782		1,572,170
Small Interruptible - S71 & S81		1,812,955		10,465		1,802,490
Large Interruptible - N85 & N82		1,024,901		24,101		1,000,800
Large Interruptible - S85 & S82		637,252		(193,152)		830,404
Total Under / (Over) Collection	\$	25,244,679	\$	287,188	\$	24,957,491

The decoupling adjustment proposed for each rate schedule stabilizes revenues in the sense that it allows the Company to recover the revenue authorized by the Commission in its most recent rate case.

C-11) Rate Cases filings during evaluation period – impact on methods/mechanics

Did Great Plains file any rate cases during the pilot period? If so, when? To the extent new base rates took effect during the pilot period, when did those new rates take effect and what impact did that have on the methods and mechanics of the RDM over/under collection calculations?

The Company did not file any general rate cases during the evaluation period. However, the increases approved in the most recent general rate case did include a three-year phase-in procedure for consolidating the Company's two rate areas. This phase-in had an impact on the revenue decoupling calculations for the second evaluation period of October 2017 – September 2018 to reflect the change in distribution rates associated with Phase 2 of the phase-in plan that became effective January 1, 2018. Computing authorized non-gas revenues on an annual basis, as is done for each of the customer classes for decoupling purposes, requires a single distribution rate for each of those classes. However, with the

phase-in of rates resulting from the most recent general rate case three months of the second evaluation period (October – December 2017) had different rates in effect than the remaining nine months of the period (January – September 2018). The Company developed a weighted average distribution rate for each class based on the monthly authorized volumes from the most recent case. This ensures the authorized non-gas revenues for each class are not over or understated by using a distribution rate in the calculation effectively charged during the evaluation period. The third evaluation period of October 2018 – September 2019 will be impacted in the same manner by the final phase-in of rates will be addressed similarly. Finally, the impacts of the TCJA in Docket No. E,G-999/CI-17-895 will be addressed accordingly upon issuance of an order in that docket.

D. EVALUATION OF GREAT PLAINS NATURAL GAS CO.'S COMMITMENT TO INCREASED ENERGY SAVINGS

This section compares energy conservation efforts in the pre-decoupling baseline period (defined as 2013 to 2016) and the post-decoupling evaluation period and includes CIP expenditures and energy savings in the last calendar year.

Conservation program results are collected and reported on a calendar year basis for the annual status reports, and therefore conservation information included in the Full Decoupling Evaluation report follows a calendar year cutoff, and not the October to September decoupling period. Therefore, the conservation information lags by nine months.

D-1) A comparison of the Company's annual CIP expenditures and resulting energy savings in the pre-decoupling baseline period to the expenditures and savings in the post-decoupling evaluation period, updated to include CIP expenditures and energy savings since the Company's most recent decoupling evaluation report, for the overall CIP portfolio and by customer and program segment.

This is the first evaluation report reflecting a full year of CIP expenditures and energy savings post-decoupling. The 2013-2015 CIP Triennial period plus the 2016 extension has been defined as the pre-decoupling baseline period for which the post-decoupling results will be measured against.

With the exception of the commercial and industrial customer segment which saw a twelve percent increase in conservation savings in 2017, the Company's CIP energy savings for 2017 did not exceed the pre-decoupling averages as shown in the D1a graph and table below. The Company attributes this reduction to record low gas prices decreasing the incentive for customers to partake in CIP projects. In addition, Great Plains did not have any Commercial Custom Project rebates in 2017. This program typically provides the bulk of the energy savings for Great Plains' CIP portfolio.

The graphs and tables below provide more detailed information regarding the expenditures and energy savings by program and customer segment. The predecoupling averages, the pre-decoupling averages excluding the commercial custom program results, and 2017 results are shown.

Graph D-1a: Great Plains CIP Energy Savings (Dk) by Customer Segment

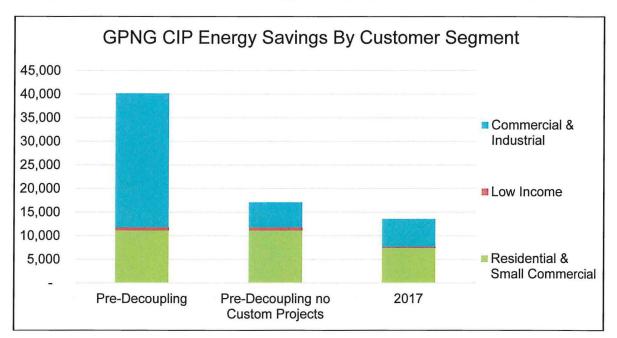


Table D-1a: Great Plains CIP Energy Savings (Dk) by Customer Segment

Year/Period	Residential & Small Commercial	Low Income	Commercial & Industrial	Custom Project	Overall Program
2013	10,010	1,073	3,705	181	14,969
2014	11,751	561	7,476	-	19,788
2015	11,610	649	6,066	51,068	69,393
2016	10,991	467	4,024	41,187	56,669
Pre-Decoupling Average	11,091	688	5,318	23,109	40,205
2017	7,387	250	5,940	-	13,577
2017 Percent Change From 2013-16 Average	-33%	-64%	12%	-100%	-66%

Graph D-1b: Great Plains CIP Expenditures by Customer Segment

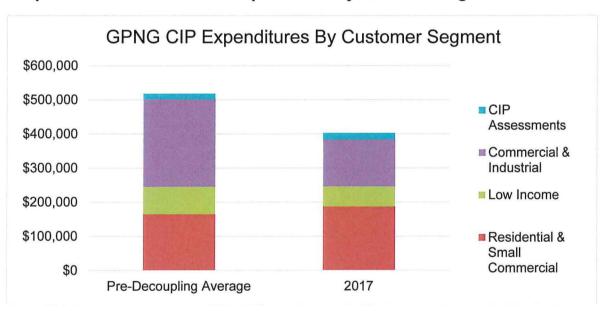


Table D-1b: Great Plains CIP Expenditures by Customer Segment

Year/Period	Residential & Small Commercial		Low Income		Commercial & Industrial		CIP Assessments		Overall Program	
2013	\$	163,900	\$	99,443	\$	92,875	\$	22,575	\$	378,793
2014	\$	159,646	\$	69,905	\$	93,951	\$	3,878	\$	327,380
2015	\$	159,636	\$	70,389	\$	475,518	\$	19,101	\$	724,644
2016	\$	176,012	\$	80,810	\$	363,630	\$	21,691	\$	642,143
Pre-Decoupling Average	\$	164,799	\$	80,137	\$	256,494	\$	16,811	\$	518,240
2017	\$	187,072	\$	58,553	\$	138,061	\$	19,432	\$	403,118
2017 Percent Change From 2013-16		14%		-27%		-46%		16%		-22%

D-2) For each year under consideration, energy savings from Company-sponsored CIP programs will be compared to the applicable three-year weather- normalized sales average at the portfolio level only, since the statutory savings goal is set at the portfolio level.

The graph and table below show the Company's annual energy savings achievement as a percent of sales from 2013 to 2017.

Graph D-2: Great Plains CIP Energy Savings as a Percent of Weather-Normalized Sales (based on the applicable 3-year average)

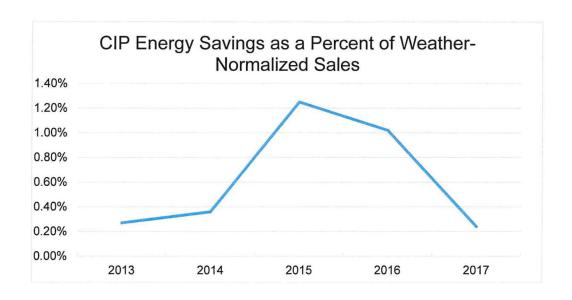


Table D-2: Great Plains CIP Energy Savings as a Percent of Weather-Normalized Sales (based on the applicable 3-year average)

CIP Plan Period	Year	Applicable 3-year Average Weather Normalized Sales (Dk) 1/	Annual Energy Savings (Dk)	Energy Savings as a % of Sales
	2013	5,570,068	14,969	0.27%
2013-2015 Triennial Period	2014	5,570,068	19,788	0.36%
	2015	5,570,068	69,393	1.25%
Extension of 2013-2015 Triennial	2016	5,570,068	56,669	1.02%
2017-2019 Triennial Period	2017	5,580,608	13,577	0.24%

^{1/} Reflects average normalized sales for the years 2013-2015, excluding CIP exempt customer dk throughout. Refer to Docket No. G004/CIP-16-121, Exhibit C, Page 1.

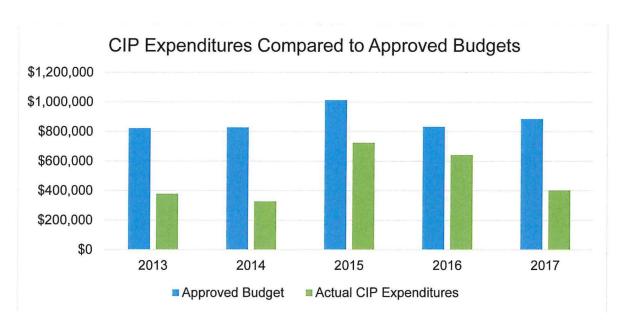
D-3) How did the Company's CIP energy savings achievements and expenditures compare to its Commissioner-approved energy savings goals and budgets for the years under consideration?

Actual CIP energy savings were 24% of the approved goal in 2017 compared to 100% of goal in 2016. Actual expenditures were 46% of approved budget in 2017 compared to 77% in 2016. The shortfall in actual Dk savings and expenditures from the approved budget levels is primarily attributable to the lack of custom projects. The graphs below illustrate the Company's annual energy savings achievements and annual CIP spending compared to the approved goal and budget for each year (2013-2017).

Graph D-3a: Great Plains Annual CIP Energy Savings Goals Compared to Actual Energy Savings (DT)



Graph D-3b: Great Plains Annual CIP Budgets Compared to Actual Expenditures



D-4) What were the associated "lost margins" from Company-sponsored CIP programs for each year under consideration, in total and by rate class? The "lost margin" were calculated by multiplying first year energy savings achieved by the applicable margin.

Table D-4 shows the lost margins associated with the Company's CIP energy savings from 2013 to 2017. The figures shown are single-year figures and do not reflect the reduced sales due to energy savings over the lifetime of the installed equipment.

Table D-4: Great Plains Lost Margins due to CIP Energy Savings by Rate Class 2013-2017

Rate Class	2013	2014	2015	2016 1/	2017 2/
Residential Rate - N60	\$7,954	\$7,671	\$8,443	\$9,438	\$5,545
Residential Rate - S60	8,583	9,992	9,342	10,019	7,091
Total Residential	16,537	17,663	17,785	19,457	12,636
Firm General - N70	902	762	3,201	15,016	2,109
Firm General - S70	1,842	2,059	1,360	9,227	3,828
Total Firm General	2,744	2,821	4,561	24,243	5,937
Small IT Sales Rate - N71	954	1,538	3,756		825
Small IT Transport - N81					
Small IT North - Total	954	1,538	3,756	-	825.00
Small IT Sales Rate - S71	180	2,762	4,382		232
Small IT Transport - S81				31,048	691
Small IT South - Total	180	2,762	4,382	31,048	923
Large IT Sales Rate - N85			23		
Large IT Transport Rate - N82					
Large IT North - Total	-	-	23	-	-
Large IT Sales Rate - S85		200		301	
Large IT Transport Rate - S82			11,611		
Large IT South - Total	_	200	11,634	301	0
Total Minnesota	\$20,415	\$24,984	\$42,118	\$75,049	\$20,321

^{1/} Lost margins calculated by mulitplying first year energy savings achieved by the applicable margin. The applicable margin reflects the tariffed Distribution Delivery Charge excluding CIP base rate per dk as authorized in Docket No. G004/M-16-384 and implemented January 1, 2017.

D-5) Since the most recent Full Revenue Decoupling Evaluation Report, has the Company proposed or implemented any changes or expansions to its energy conservation program offerings? Identify and describe such changes or expansions.

Great Plains has not made any changes or expansions to its energy conservation program offerings since its most recent Full Revenue Decoupling Evaluation Report.

D-6) Describe the Company's marketing and outreach efforts related to CIP. Since the most recent Full Revenue Decoupling Evaluation Report, has

^{2/} The applicable margin reflects the tariffed Distribution Delivery Charge excluding CIP base rate/dk as authorized for Phase 2 in Docket No. G004/M-16-384 and implemented January 1, 2018.

the Company changed its marketing strategy or tactics for CIP in general or for specific CIP programs? How do recent marketing and outreach efforts compare to prior years?

Great Plains markets and promotes its CIP programs to both its customers and the local contractor network. Great Plains also provides educational information to customers on ways to save energy in their home or businesses. The primary channels used by the Company are through its website and bill inserts. The Company's website and bill insert expenditures are not directly charged to CIP expense. The Company also utilizes billboard advertising on occasion to promote the CIP programs. Several contractors throughout the Great Plains' service territory also promote the programs available to customers.

The promotional materials are designed to encourage customers to participate in the Company's CIP programs by purchasing qualifying high-efficiency equipment, having a low-cost energy assessment performed on their home to identify energy savings, or installing low-cost measures to save energy in their home or business. Great Plains' CIP Energy Services Manager also works directly with the local contractor network on program awareness and education and will work directly with customers with outreach activities to promote all of the CIP programs including the custom program.

The level of expenditures for advertisements and promotions in the Company's CIP program for 2013-2016 period and 2017 is provided in Table D-6 below:

Table D-6: Great Plains Annual Expenditures for Advertising and Promotion

Year	Exp	enditure
2013	\$	6,890
2014	\$	-
2015	\$	_
2016	\$	1,095
2013-2016 Average	\$	1,996
2017	\$	4,875

D-7) What were the annual revenues collected from ratepayers to fund CIP programs, by rate class, for each year under consideration?

Annual revenues collected from ratepayers to fund the Company's CIP are provided by rate class for 2013 to 2018 in Table D-7 below.

Table D-7: Great Plains Annual CIP Recovery by Rate Class

Rate Class	2013 1/	2014 1/	2015 1/	2016	2017	2018 2/
Residential Rate - N60				\$28,110	\$108,081	\$148,150
Residential Rate - S60				32,173	120,194	168,586
Total Residential				60,283	228,275	316,736
Firm General - N70				21,099	81,400	110,254
Firm General - S70				30,139	115,434	159,569
Total Firm General				51,238	196,834	269,823
Small IT Sales Rate - N71				13,999	43,252	50,427
Small IT Transport - N81				2,323	8,411	14,471
Small IT North - Total				16,322	51,663	64,898
Small IT Sales Rate - S71				14,741	55,880	61,490
Small IT Transport - S81				960	4,049	4,462
Small IT South - Total				15,701	59,929	65,952
Large IT Sales Rate - N85				11,391	44,565	43,169
Large IT Transport Rate - N82 3/				31,543	103,520	136,094
Large IT North - Total				42,934	148,085	179,263
Large IT Sales Rate - S85				2,329	9,976	13,772
Large IT Transport Rate - S82 3/				112,977	405,442	492,915
Large IT South - Total				115,306	415,418	506,687
Total Minnesota	\$530,277	\$784,249	\$499,061	\$301,784	\$1,100,204	\$1,403,359

^{1/} Information not available by rate class.

D-8) What were the lifetime energy savings that can be attributed to the Company's CIP offerings for each year under consideration? How do lifetime energy savings in the decoupled period compare to the pre-decoupling period?

^{2/} CIP recovery through September 30.

^{3/} Includes recovery under flex contract rates.

Graph D-8 below shows the annual level of lifetime energy savings for the Company's CIP beginning in 2013.

Lifetime Energy Savings Created Annually (Dk) 900,000 800,000 700,000 600,000 500,000 400,000 300,000 200,000 100,000 0 2013 2014 2015 2016 2017

Graph D-8: Annual Lifetime Energy Savings for the Great Plains CIP

D-9) What changes in participation, cost-effectiveness, or other metrics that gauge the performance of the CIP programs have occurred during the years under consideration?

Participation:

Great Plains has a small rural customer base (approximately 22,000 total Minnesota customers as of October 2018) with very low new customer growth in the service territory; customer participation is primarily tied to the retrofit and replacement market for most of the Company's CIP rebates. As reflected in Table D-9a below, customer participation in the Company's CIP program in 2017 was 1,108 which was a slight increase over the average of the pre-decoupling program years.

While Great Plains saw decreases in participation, cost-effectiveness, and firstyear energy savings in 2017, much of this can be attributed to low participation in Great Plains' Commercial Custom Project program. Due to the Company's small customer base, the participation in the Custom Project program can vary significantly.

Great Plains continues to offer a robust portfolio of energy efficiency programs that covers most end use technologies for all customer segments. The Company also introduces new CIP projects and offerings to meet the needs of its customers and thus increase the participation in the Company's CIP.

Table D-9a: Great Plains Annual CIP Participation

Year	Actual Participation
2013	1,023
2014	1,311
2015	1,121
2016	911
2013-2016 Average	1,092
2017	1,108

Cost-effectiveness:

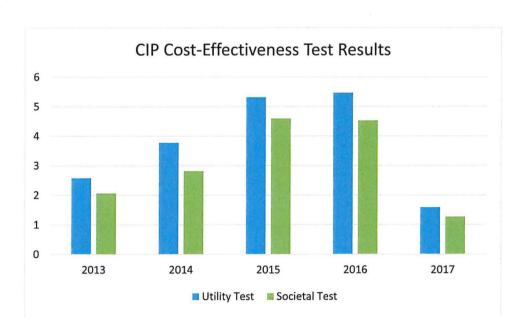
Table D-9b below, shows the cost-effectiveness test scores for each CIP Program year from 2013 to 2017 from the Utility and Societal perspective. The cost-effectiveness score represents the ratio of the benefits to the costs for a program; a score higher than one means the benefits are greater that the costs and the program is considered cost-effective. The utility test score reflects the costs and benefits that accrue to the utility, while the societal test score considers costs and benefits from a societal perspective. The primary difference between these tests are the societal test includes the cost to participants as well as the cost of the utility programs, while the utility test considers only the cost of the programs themselves. The societal test also includes the environmental benefit of avoided energy use.

Both the utility and the societal test scores are influenced by a variety of factors, some a result of program achievements like energy savings or budget. However, some external factors also affect cost-effectiveness scores. Both the utility test and the societal test are highly sensitive to changes in the commodity cost of

gas. The increased cost of achieving additional savings (discussed further below) also creates downward pressure on cost-effectiveness ratios.

Despite the challenges of maintaining cost-effective natural gas energy efficiency programs in a time of declining natural gas commodity costs, the Company's CIP has been cost-effective from both the societal and utility test perspective every year since 2013. Therefore, in spite of the reduction in energy savings this past year, the Company's CIP program continues to produce more benefits than it does costs for the Company's customers.

The Company's CIP Cost-Effectiveness Test Results were lower than the 2013-2016 test period due to lower participation than previous years. This was primarily driven by lower participation in the Company's Commercial Custom Project program.



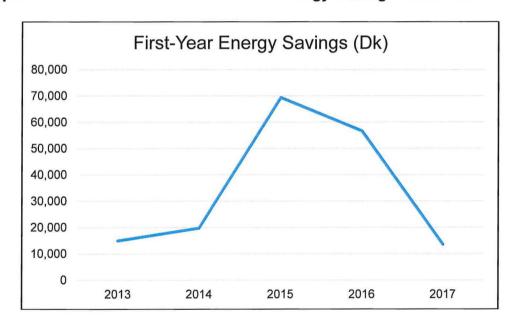
Graph D-9b: Great Plains CIP Cost-Effectiveness Test Results

Energy Savings:

First-year energy savings is a key metric in determining the success and effectiveness of an energy efficiency program. As mentioned above, Great

Plains has a small rural customer base with very low new customer growth in the service territory, and therefore the first-year energy savings is significantly impacted by participation in the Company's custom efficiency program that is primarily used by large commercial and industrial customers. Annual first-year energy savings for 2013 to 2017 are shown in Table D-9c below. The higher achievements in 2015 and 2016 where driven by completion of a few large custom efficiency projects, while stable participation was experienced in the prescriptive residential and commercial segments.

The Company's 2017 CIP First-Year Energy Savings were lower primarily due to no participation in the Company's Commercial Custom Project program.



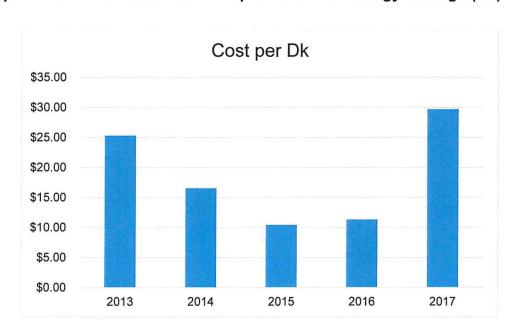
Graph D-9c: Great Plains CIP First-Year Energy Savings Achievements

Cost per First-Year Energy Savings:

The cost to achieve incremental energy savings tends to increase as a utility strives to achieve greater levels of savings. This is because a utility must move beyond the easiest energy efficiency opportunities and pursue more expensive energy savings opportunities.

The cost per first-year energy savings achievements from 2013 to 2017 is shown

below in Table D-9d. The decrease in the Company's CIP cost per first-year energy savings for 2013 through 2016 was primarily driven by increased participation in the Company's custom energy efficiency program that is typically more cost-effective on a cost per unit saved than the Company's other CIP prescriptive measures. The Company's overall cost per unit of first-year energy savings will therefore fluctuate based on the participation in the Company's custom efficiency program. The lower participation rate in the Company's 2017 CIP programs, especially the low participation in the custom efficiency program, resulted in a higher cost per unit saved than previous years.



Graph D-9d: Great Plains CIP Cost per First-Year Energy Savings (Dk)

D-10) Describe low-income specific programs and/or impacts. What were the low- income CIP savings for the post-decoupling implementation time period compared to the pre-decoupling period?

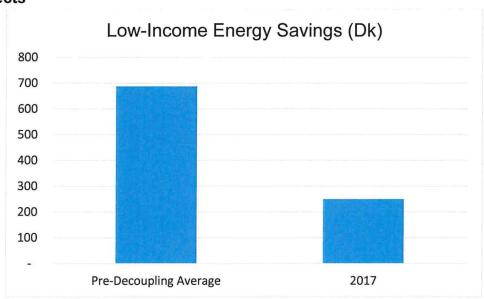
Great Plains offers conservation measures to low income customers through three programs. The first of the three programs is the funding of weatherization measures through Community Action partnership (CAP) agencies and the maximum funding available to the CAP agency for a qualified customer is \$1,800 for weatherization. The second program

provides funding for an emergency replacement of a furnace or boiler. The maximum funding available to the CAP agency per emergency is \$2,500 for a furnace replacement and \$5,000 for a boiler replacement. The third program provides funding for furnace and boiler tune-ups for qualified low-income customers. The maximum funding available to the CAP agency per furnace or boiler tune-up is \$200.

In 2017, the Company had lower participation in its low-income program than the 2013-2016 pre-decoupling years. This was primarily due to difficulties the CAP agencies had spending the funding that was available to them. The Company has been engaged with the CAP agencies throughout 2018 to find solutions to these difficulties and plans to make changes to the low-income programs in the 2020-2022 CIP Triennial filing.

Graph D-10 shows the annual energy savings achieved in the Company's low-income projects from 2013 to 2017.

Graph D-10: Great Plains CIP Energy Savings from Low-Income Projects



D-11) What other information, whether qualitative or quantitative, should be considered in evaluating the Company's commitment to energy efficiency and conservation?

Great Plains is committed to energy efficiency and the Company consistently strives to meet or exceed its annual energy savings goal. Great Plains is a small natural gas distribution company with a very small customer base and very low new customer growth, however the Company offers a robust and comprehensive portfolio of efficiency programs and continuously seeks to it improve its CIP offerings to achieve more energy savings and meet customer's needs.

Company personnel regularly attend trade shows, industry conferences, and other events to develop new ideas for program enhancements and to stay abreast of energy efficiency trends.

Finally, as additional evidence of Great Plain's continued commitment to conservation and energy efficiency the Company's 2017-2019 CIP Triennial Plan includes a stable energy savings goal as compared to this study period and provides for further enhanced program offerings to meet customer needs.

E. RELATED RATE AND USAGE INFORMATION

E-1) Total Dekatherms by Rate Schedule - What were the total dekatherm sales and transportation volumes by rate schedule in the period being evaluated?

Table E-1: Actual and Authorized Dk by Rate Class 1/

Rate Class	Actuals 10/1/17 - 9/30/18	Authorized 1/1/16 - 12/31/16 2/
Residential Rate - N60	713,283	693,245
Residential Rate - S60	802,989	773,680
Firm General - N70	535,007	528,173
Firm General - S70	753,826	775,947
Small IT Rates N71 & N81	376,742	376,652
Small IT Rates S71 & S81	401,878	380,202
Large IT Rates N85 & N82	300,630	271,268
Large IT Rates S85 & S82	1,924,553	996,847
Total Minnesota	5,808,908	4,796,014

^{1/} Excluding flexible rate contract customers as authorized in Docket No. G004/GR-15-879

The sales and transportation volumes shown in Table E-1 reflect the actual sales and transportation Dk billed customers by rate schedule for the twelve months ended September 30, 2018, excluding the Dk billed transportation customers served under a flexible contract rate at the time the pilot was approved. The table does include volumes for a customer that was included as an authorized Rate S82 customer but transitioned to a flexible contract rate as of January 1, 2018. While this customer ceased to be subject to the RDM effective January 1, 2018, the volumes and revenues must be taken into account for purposes of the decoupling calculation for the Large IT Rates S85 & S82 rate class. Section C-4 provides further detail.

Also included in Table E-1 are the sales and transportation Dk by rate class authorized in the Company's last general rate case, Docket No. G004/GR-15-879, and reflect a projected 2016 time period (January 1 through December 31).

E-2) Gas Margin - What were the total gas margin revenues by rate schedule in the period being evaluated?

^{2/} Projected 2016 as authorized in Docket No. G004/GR-15-879

Table E-2: Total Margin by Rate Class 1/										
Rate Class	Actuals 10/1/17 - 9/30/18									
Residential Rate - N60	\$2,343,479									
Residential Rate - S60	2,388,422									
Firm General - N70	1,320,048									
Firm General - S70	1,637,241									
Small IT Rates N71 & N81	598,584									
Small IT Rates S71 & S81	610,150									
Large IT Rates N85 & N82	339,443									
Large IT Rates S85 & S82	427,756									
Total Minnesota	\$9,665,123									
1/ Excluding flexible rate contract custor	mers as authorized in									
Docket No. G004/GR-15-879										

The margin revenue reflected in Table E-2 reflects the actual distribution revenues, excluding the CCRC, recorded by rate schedule for the twelve months ended September 30, 2018.

E-3) Customer Growth - What was the average annual gas customer growth by rate schedule for the period being evaluated? How does this compare to Great Plains Natural Gas Co.'s historical levels of gas customer growth prior to the Company's decoupling mechanism? What were the average annual customer count totals by rate schedule for the period being evaluated?

The customer growth rates by rate schedule are shown in Table E-3A and reflect the customer growth rates by year for the 12 months ending September 30 of each respective year.

Table E-3A: Customer Growth

Rate Class	2018	2017	2016	2015	2014
Residential Rate - N60	1.0%	0.7%	0.5%	0.6%	1.2%
Residential Rate - S60	0.5%	0.4%	-2.1%	2.4%	1.0%
Firm General - N70	-0.9%	2.4%	-0.4%	4.8%	3.5%
Firm General - S70	2.6%	2.1%	0.4%	4.4%	5.4%
Small IT Rates N71 & N81	-2.9%	-10.5%	-1.3%	4.1%	5.7%
Small IT Rates S71 & S81	0.0%	-8.1%	2.8%	2.9%	-1.4%
Large IT Rates N85 & N82	0.0%	-16.7%	0.0%	20.0%	0.0%
Large IT Rates S85 & S82	0.0%	0.0%	-36.4%	57.1%	0.0%
Total Minnesota	0.8%	0.7%	-0.8%	2.0%	1.6%

Table E-3B shows the customer counts by rate schedule for the each of the respective twelve-month periods ending September 30 of each respective year. Also included in Table E-3B is the level of customers by rate schedule authorized in the Company's last general rate case, Docket No. G004/GR-15-879.

Table E-3B: Customer Counts 1/

Rate Class	Authorized	2018	2017	2016	2015	2014	2013
Residential Rate - N60	8,499	8,537	8,453	8,398	8,359	8,310	8,211
Residential Rate - S60	10,337	10,336	10,284	10,247	10,465	10,215	10,111
Firm General - N70	1,271	1,259	1,270	1,240	1,245	1,188	1,148
Firm General - S70	1,731	1,785	1,740	1,705	1,699	1,627	1,543
Small IT Rates N71 & N81	72	66	68	76	77	74	70
Small IT Rates S71 & S81	72	68	68	74	72	70	71
Large IT Rates N85 & N82	5	5	5	6	6	5	5
Large IT Rates S85 & S82	7	7	7	7	11	7	7
Total Minnesota	21,994	22,063	21,895	21,753	21,934	21,496	21,166
% Residential	86%	86%	86%	86%	86%	86%	87%

^{1/} Residential and Firm General customers reflect the average billing determinants for the twelve months ended September 30 of each year. All other classes reflect the maximum number of customers taking service under the applicable rate for the twelve months ended September 30 of each year. Note: Excludes flexible rate contract customers as authorized in Docket No. G004/GR-15-879.

The Residential and Firm General rate classes reflect the average annual customer counts by rate schedule consistent with the methodology used for these rate classes' customer counts in the Company's 2015 general rate case. The remaining classes reflect the total number of customers served under the applicable rate schedule for the twelve-month period ending September 30 of each respective year, consistent with the methodology used for the customer counts in the Company's 2015 general rate case.

E-4) Percentage of customers (count and sales volume) residential versus firm general and interruptible service. What proportion of customers subject to decoupling was residential versus firm general and interruptible?

As shown in Table E-3B, 86 percent of the Company's customers are residential. Table E-4 reflects the Dk sales by rate class for the twelve-month period ending September 30 of each respective year, excluding transportation customers served under a flexible contract rate. For the most recent 12-month period ended September 30, 2018, 26 percent of the Company's sales volumes were residential.

Table E-4: Dk Usage 1/2/

Rate Class	Authorized	2018	2017	2016	2015	2014	2013
Residential Rate - N60	693,245	713,283	602,412	573,218	669,443	747,572	675,784
Residential Rate - S60	773,680	802,989	675,685	642,807	730,462	867,544	778,378
Firm General - N70	528,173	535,007	447,124	422,950	347,161	545,788	481,419
Firm General - S70	775,947	753,826	633,205	609,705	804,498	741,052	675,315
Small IT Rates N71 & N81	376,652	376,742	350,351	300,013	364,767	400,049	312,290
Small IT Rates S71 & S81	380,202	401,878	374,402	286,514	356,699	434,753	304,637
Large IT Rates N85 & N82	271,268	300,630	327,319	289,574	242,914	274,593	276,484
Large IT Rates S85 & S82	996,847	1,924,553	1,694,483	1,773,334	962,023	928,184	1,019,071
Total Minnesota	4,796,014	5,808,908	5,104,981	4,898,115	4,477,967	4,939,535	4,523,378
% Residential	31%	26%	25%	25%	31%	33%	32%

^{1/} Twelve months ending September 30.

E-5) Use per Customer – On a rate class basis, how has the actual annual gas use per customer changed?

Table E-5: Actual Use per Customer

Rate Class	Authorized	2018	2017	2016	2015	2014	2013
Residential Rate - N60	81.6	83.6	71.3	68.3	80.1	90.0	82.3
Residential Rate - S60	74.8	77.7	65.7	62.7	69.8	84.9	77.0
Firm General - N70	415.6	424.9	352.1	341.1	278.8	459.4	419.4
Firm General - S70	448.3	422.3	363.9	357.6	473.5	455.5	437.7
Small IT Rates N71 & N81	5,231.3	5,708.2	5,152.2	3,947.5	4,737.2	5,406.1	4,461.3
Small IT Rates S71 & S81	5,280.6	5,910.0	5,505.9	3,871.8	4,954.2	6,210.8	4,290.7
Large IT Rates N85 & N82	54,253.6	60,126.0	65,463.8	48,262.3	40,485.7	54,918.6	55,296.8
Large IT Rates S85 & S82	142,406.7	274,936.1	242,069.0	253,333.4	87,456.6	132,597.7	145,581.6

E-6) Customer Information – impact on model

- a) What was the impact of new customers and/or customer migration on the decoupling calculations for the period being evaluated? Specifically, what was:
 - i. The number of customers used (by rate class) in the decoupling calculations.
 - ii. The number of customers approved (by rate class) in the most recent general rate case (Docket No. G004/GR-15-879),
 - iii. The difference between i and ii,
 - iv. The margin associated with iii, and
 - v. The per customer impact of iv.

The number of actual monthly customers by rate class is included in Attachment A as are the authorized customers as approved in the Company's

^{2/} Excluding flexible rate contract customers as authorized in Docket No. G004/GR-15-879.

most recent general rate case, Docket No. G004/GR-15-879. Table E-6 shows the difference in annual customers when comparing the total number of actual customers to that authorized. Customer counts for the reporting period were generally in line with authorized customer counts.

Table E-6: Impact of New Customers

Rate Class	Authorized Customers	2018 Customers	Difference	Authorized Margin per Customer	Margin Associated with Customer Difference
Residential Rate - N60	8,499	8,537	38	\$244.48	\$9,290
Residential Rate - S60	10,337	10,336	(1)	208.23	(208)
Firm General - N70	1,271	1,259	(12)	922.42	(11,069)
Firm General - S70	1,731	1,785	54	864.19	46,666
Small IT Rates N71 & N81	72	66	(6)	7,870.04	(47,220)
Small IT Rates S71 & S81	72	68	(4)	7,814.82	(31,259)
Large IT Rates N85 & N82	5	5	0	53,394.80	0
Large IT Rates S85 & S82	7	7	0	65,186.43	0
Total Minnesota	21,994	22,063	69		(\$33,800)

- b) Did Great Plains Natural Gas Co. implement any changes to the methodology to account for new customers during the pilot?
 No changes in methodology were made to account for new customers during the second evaluation period of the pilot.
- What were the monthly numbers of customers served, by rate class, in the evaluation period?
 Attachment A includes the actual monthly customers by rate class for this evaluation period.
- d) For the evaluation period being reported on, what was the actual average annual usage for customers subject to the decoupling rider?
 Table E-5 shows the actual average annual use per customer for the years 2013 through 2018.

E-7) Class Migration Information

a) What was the annual number of customer migrations between rate classes during the during the time of the pilot?
 One Large Interruptible Transportation Service Rate S82 customer became a contract rate customer effective January 1, 2018.

- b) Based on the answer to a) above, did customer migration have any impact upon the decoupling accruals since initiation of the pilot? Furthermore, what is the actual (or estimated if actual data is not available) Dk use resulting from customer migrations between rate classes. The impact of the customer moving from Rate 82 (South) to a contract rate is
- c) Does the Company periodically audit or verify rate class customer eligibility? If so, describe the timing and procedures for such audits.
 Yes, Great Plains Natural Gas Co. routinely reviews a number of reports to ensure customers are correctly served under the appropriate rate schedule.

F. OTHER INFORMATION

discussed in Section C-4 of this report.

1. Recognition of Decoupling by Credit Rating Agencies or financial analysts

Was the decoupling pilot Mechanism in Minnesota recognized in any public reports issued by credit rating agencies or financial analysts? If so, provide a copy of the report.

Credit Rating Agencies

The Company searched all available credit rating agency reports available and did not find any references to Great Plains Natural Gas Co.'s decoupling program.

Financial Analyst Reports

The Company searched all available financial analyst reports and did not find any references to Great Plains Natural Gas Co.'s decoupling program.

- 2. Other Information the company or interested parties deem helpful?
- a) Problems encountered suggestions for improvement
 Great Plains has no additional information to report at this time.
- b) Impact on service quality

The most recent Service Quality report for 2017 was filed on April 18, 2018 under Docket No. G-004/M-18-286. The Company believes that the RDM has had no impact on the quality of service customers have received during the evaluation period.

c) Other

In the Final Order of the Company's most recent rate case, the Commission ordered the Company, in its annual decoupling reports, to provide calculations of its decoupling adjustments derived using a per-customer method and a per-customer-class method proposed by Commission Staff.

As stated earlier, the Company determines the decoupling adjustment for each rate class by comparing actual non-gas revenues to the designed nongas revenues. The designed non-gas revenue is computed as authorized margin per customer times the greater of actual customers or authorized customers, where authorized margin per customer is non-gas revenues divided by the number of customers per rate class as authorized in the Company's last general rate case. The formula could have been stated another way to reflect the calculation: The Designed Revenues equals the authorized margin per customer multiplied by the authorized customers unless the actual customers are greater than authorized, in which case the actual customers multiplied by authorized margin per customer equals Designed Revenues. The purpose of using the greater of actual or authorized customer counts is to allow for customer growth in excess of authorized to provide incremental revenues necessary to recover any required investment necessary to connect the new customer in accordance with the authorized gas extension policies. The RDM should not penalize the Company by limiting Designed Revenues to the authorized margin times the lower than actual authorized customer count.

The Company continues to advocate that the formula set forth in the Revenue Decoupling rate schedule does not provide the Company the option of picking and choosing the metric that is most advantageous to the Company. The Company's understanding is that Commission Staff interpreted its formula as two separate calculations and termed the two calculations or methodologies referenced as 1) total revenues and 2) percustomer. It is the Company's understanding that the total revenues option referred to by Staff is what the Commission noted as the per-customer-class method in its Final Order. Staff recommended that the Company use one of the two "options", effectively eliminating the part of the Company's calculation that utilizes the greater of actual or authorized customer counts.

Each "option" essentially eliminates a customer count safeguard that the authorized calculation method builds in. Under the assumption that actual use per customer is exactly as authorized, the total revenue or percustomer-class option would effectively force the Company to forfeit any customer growth beyond authorized levels, while the per-customer option potentially prevents the Company from recovering its authorized revenue requirement in a situation when actual customer count is less than authorized. Further unintended consequences can occur under the latter scenario if customers happen to have higher than authorized use per customer, which can result in a refund being issued even though the authorized revenue requirement amount has not been collected. This exact scenario played out with the Small Interruptible - N71 & N81 rate class for the second evaluation period. The same could result if the opposite were true and customer count exceeded authorized levels but use per customer was low resulting in a surcharge even though ample dollars were collected to satisfy the authorized revenue requirement.

The Company's authorized calculation automatically protects against these unintended results. Attachment B includes a schedule for each rate class showing how the two alternate options would have worked in practice for the first evaluation period.

G. ATTACHMENT LIST

- A: RDM Detailed Calculations
- B: Alternate Decoupling Adjustment Calculations

Decoupling Adjustment Factor Calculations Summary 1/

Rate Class	Capped Decoupling Adjustment	Forecast Volumes (2019) 2/	Decoupling Adjustment / Dk
Residential Rate - N60	\$ (27,488)	683,981	\$ (0.0402)
Residential Rate - S60	(29,173)	773,867	\$ (0.0377)
Firm General - N70	(74)	504,015	\$ (0.0001)
Firm General - S70	64,220	737,728	\$ 0.0871
Small Interruptible - N71 & N81	18,804	455,449	\$ 0.0413
Small Interruptible - S71 & S81	(11,617)	392,549	\$ (0.0296)
Large Interruptible - N85 & N82	(126,713)	308,639	\$ (0.4106)
Large Interruptible - S85 & S82	(158,565)	857,125	\$ (0.1850)

^{1/} Excluding flexible rate contract customers as authorized in Docket No. G004/GR-15-879.

^{2/} For sales rates the forecast volumes are normalized volumes forecast for 2019. For transport rates the actual volumes for the 12 months ended September 2018 were used.

GREAT PLAINS NATURAL GAS CO. GAS UTILITY - MINNESOTA RDM Adjustment Calculation - Residential Rate - N60

Residential Rate - N60	 Oct-17	ı	Nov-17	Dec-17	Jan-18	Feb-18	l	Mar-18	Apr-18	_	May-18	Jun-18	Jul-18	Aug-18	 Sep-18	D	Annual ecoupling Calc
Authorized Customers 1/	8,241		8,302	8,730	8,608	 8,506		8,608	8,731		8,741	8,486	 8,353	8,404	8,282		8,499
Authorized Sales - Dk 1/	24,125		64,056	91,300	139,619	131,717		97,054	71,682		36,603	13,865	7,279	6,101	9,844		693,245
Authorized Basic Service Charge 1/	\$ 7.50	\$	7.50	\$ 7.50	\$ 7.50	\$ 7.50	\$	7.50	\$ 7.50	\$	7.50	\$ 7.50	\$ 7.50	\$ 7.50	\$ 7.50	\$	90.00
Authorized Distribution Charge excluding CIP 1/2/	\$ 1.9915	\$	1.9915	\$ 1.9915	\$ 1.8598	\$ 1.8598	\$	1.8598	\$ 1.8598	\$	1.8598	\$ 1.8598	\$ 1.8598	\$ 1.8598	\$ 1.8598	\$	1.8939
Authorized Basic Service Charge Revenues																\$	764,910
Authorized Distribution Charge Revenues (excl CIP) Authorized Non-Gas Revenues																<u>\$</u>	1,312,937 2,077,847
Authorized Margin per Customer																\$	244.48
Actual Customers	8,369		7,905	8,293	8,549	8,540		8,597	8,598		8,679	8,586	8,541	8,485	8,454		8,466
Actual Sales - Dk	14,861		49,713	90,295	151,644	126,476		118,299	84,939		45,741	10,945	6,753	6,931	6,688		713,283
Actual Basic Service Charge Revenues																\$	761,940
Actual Distribution Charge Revenues (excl CIP)																\$	1,350,887
Actual Non-Gas Revenues																\$	2,112,827
Designed Non-Gas Revenues 3/																\$	2,077,847
Under / (Over) Collection																\$	(34,980)

Designed Non-Gas Revenues \$ 2,077,847

RDM Adjustment Cap (10% of Designed non-gas revenue) 10%

Capped amount for surcharge (no cap on refunds) \$ 207,785

^{1/} As authorized in Docket No. G004/GR-15-879. The annual calculation reflects a weighted average distribution charge based on authorized monthly volumes to account for Phase 2 rates going into effect 1/1/2018.

2/	Weight	ed Average	Di	stribution	Rate	э
	179,481	25.89%	\$	1.9915	\$	0.5156
	513,764	74.11%	\$	1,8598	\$	1.3783
					•	1 8030

^{3/} Designed Non-Gas Revenues serves as the basis for calculating the 10% RDM adjustment cap.

GREAT PLAINS NATURAL GAS CO GAS UTILITY - MINNESOTA RDM Adjustment Calculation - Residential Rate - S60

Decide did Deter 000	0-447		4 7	,	D 47	lam 40	Feb-18	Waa 40	A 40	A 49		hum 40		tl 40		4B		S 40		Annual ecoupling
Residential Rate - S60	 Oct-17	<u>F</u>	lov-17		10,706	 Jan-18	 	 Mar-18	 Apr-18	 10,470		Jun-18 10,730		Jul-18		10,159		Sep-18		Calc
Authorized Customers 1/	10,073		10,023			10,346	10,358	10,346	10,519					10,321				9,998		10,337
Authorized Sales - Dk 1/	19,574		64,061		109,863	161,621	158,914	111,178	79,766	39,226		12,147		5,338		5,184		6,808		773,680
Authorized Basic Service Charge 1/	\$ 7.50	\$	7.50	\$	7.50	\$ 7.50	\$ 7.50	\$ 7.50	\$ 7.50	\$ 7.50	\$	7.50	\$	7.50	\$	7.50	\$	7.50	\$	90,00
Authorized Distribution Charge excluding CIP 1/2/	\$ 1.4911	\$	1.4911	\$	1.4911	\$ 1.6091	\$ 1.6091	\$ 1.6091	\$ 1.6091	\$ 1.6091	\$	1.6091	\$	1.6091	\$	1.6091	\$	1.6091	\$	1.5796
Authorized Basic Service Charge Revenues																			\$	930,330
Authorized Distribution Charge Revenues (excl CIP)																			\$	1,222,105
Authorized Non-Gas Revenues																				2,152,435
Authorized Margin per Customer																			\$	208.23
Actual Customers	9,829		9,862		10,059	10,424	10,383	10,436	10,428	10,550		10,390		10,299		10,301		10,074		10,253
Actual Sales - Dk	14,050		57,842		95,601	164,640	144,563	137,452	99,343	56,440		11,733		7,143		7,459		6,723		802,989
Actual Basic Service Charge Revenues																			\$	922,770
Actual Distribution Charge Revenues (excl CIP)																			\$	1,268,401
Actual Non-Gas Revenues																				2,191,171
Designed Non-Gas Revenues 3/																				2,152,435
Under / (Over) Collection																			\$	(38,736)
under / (Over) Collection																			Ψ	(30,730)
														г)esir	aned Non-	.Gas	Revenues	. \$	2,152,435
											RΠ	M Adjustm	ent (Cap (10% o	•	-				10%
											,	-		mount for s		•	_			215,244
												Capp	ea a	mount for s	urcn	arge (no c	ap o	in retunas,	Þ	215,244

^{1/} As authorized in Docket No. G004/GR-15-879. The annual calculation reflects a weighted average distribution charge based on authorized monthly volumes to account for Phase 2 rates going into effect 1/1/2018.

2/	Weighte	ed Average	Di	stribution	Rate	
	193,498	25.01%	\$	1.4911	\$	0.3729
	580,182	74.99%	\$	1.6091	\$	1.2067
					\$	1.5796

^{3/} Designed Non-Gas Revenues serves as the basis for calculating the 10% RDM adjustment cap.

GREAT PLAINS NATURAL GAS CO. GAS UTILITY - MINNESOTA RDM Adjustment Calculation - Firm General - N70

Firm General - N70	,	Oct-17		lov-17	_	ec-17		Jan-18		Feb-18		Mar-18		Apr-18		May-18		Jun-18		Jul-18		\ug-18		Sep-18		Annual ecoupling Calc
Small Firm - Authorized Customers 1/	`	797		732		865	`	840		815		821		824	, ,	811		807		793		792		789	-	808
Large Firm - Authorized Customers 1/		459		458		489		469		462		452		451		457		454		467		482		463		463
Authorized Sales - Dk 1/		22,218		47.460		68.731		99.234		92,608		68,601		51.321		29,316		14.790		10,985		10,482		12,427		528,173
Authorized Sales - DR II		22,210		47,400		00,751		33,234		32,000		00,001		31,321		23,310		14,730		10,505		10,402		12,421		320,173
Small Firm Authorized Basic Service Charge 1/	\$	23.00	\$	23.00	\$	23.00	\$	23.00	\$	23.00	\$	23.00	\$	23.00	\$	23.00	\$	23,00	\$	23.00	\$	23.00	\$	23.00	\$	276.00
Large Firm Authorized Basic Service Charge 1/	\$	28.50	\$	28,50	\$	28.50	\$	28,50	\$	28,50	\$	28.50	\$	28.50	\$	28.50	\$	28.50	\$	28.50	\$	28.50	\$	28.50	\$	342.00
Authorized Distribution Charge excluding CIP 1/2/	\$	1.5806	\$		\$		\$	1,4682	\$	1.4682		1.4682		1,4682	\$	1.4682	\$	1.4682	\$		\$	1,4682		1,4682		1.4977
ridation and a state of the sta	•		•		•		•		•		*		•		*		•		•		•		•		•	
Authorized Basic Service Charge Revenues																									\$	381,354
Authorized Distribution Charge Revenues (excl CIP)																									\$	791,045
Authorized Non-Gas Revenues																									-	1,172,399
Addition 25d Notifical Revenues																									Ψ	1,172,555
Authorized Margin per Customer																									\$	922.42
Small Firm - Actual Customers		824		747		799		830		837		834		858		829		817		811		806		810		817
Large Firm - Actual Customers		448		407		425		439		436		440		433		443		439		433		432		439		435
Actual Sales - Dk		17,046		39,722		62,660		105,072		89,900		78,533		62,907		33,366		13,420		10,458		11,100		10,824		535,007
Adda dates - Di		11,040		05,722		02,000		100,012		05,500		10,000		02,007		00,000		10,420		10,400		11,700		70,024		555,007
Actual Basic Service Charge Revenues																									æ	374,262
Actual Distribution Charge Revenues (excl CIP)																									φ.	801,280
· , ,																									-	
Actual Non-Gas Revenues																										1,175,542
Designed Non-Gas Revenues 3/																										1,172,399
Under / (Over) Collection																									\$	(3,143)
																				_			_	_	_	
																	_					gned Non-				1,172,399
																	RD			Cap (10% c						10%
																		Capp	ed a	mount for s	urch	narge (no c	ap o	on refunds) \$	117,240

^{1/} As authorized in Docket No. G004/GR-15-879. The annual calculation reflects a weighted average distribution charge based on authorized monthly volumes to account for Phase 2 rates going into effect 1/1/2018.

2/	Weighte	ed Average	Dis	stribution	Rate	8
	138,409	26.21%	\$	1.5806	\$	0.4143
	389,764	73.79%	\$	1.4682	\$	1.0834
					\$	1 4977

GREAT PLAINS NATURAL GAS CO. GAS UTILITY - MINNESOTA RDM Adjustment Calculation - Firm General - S70

																				De	coupling
Firm General - S70	 oct-17	Nov-		Dec-1		Jan-18	 Feb-18	 Mar-18	 Арг-18	٨	Nay-18		Jun-18		Jul-18	P	\ug-18		Sep-18		Calc
Small Firm - Authorized Customers 1/	1,082	1	,050	1,	64	1,147	1,172	1,112	1,132		1,159		1,137		1,098		1,096		1,064		1,118
Large Firm - Authorized Customers 1/	634		602	•	24	614	634	589	614		584		611		609		618		631		614
Authorized Sales - Dk 1/	29,176	63	766	101,	13	145,318	145,907	99,858	76,145		42,494		21,261		16,362		16,491		17,956		775,947
Small Firm Authorized Basic Service Charge 1/	\$ 23.00		3.00		00		23.00	23.00	23.00	•	23.00	•	23.00		23.00		23.00		23.00		276.00
Large Firm Authorized Basic Service Charge 1	\$ 28.50		8.50	\$ 28	50	\$ 28.50	\$ 28.50	\$ 28.50	\$ 28.50	\$	28.50	\$	28.50	\$	28.50	\$	28.50	\$	28.50	\$	342.00
Authorized Distribution Charge excluding CIP 1/2/	\$ 1.2026	\$ 1.	2026	\$ 1.20	26	\$ 1.2792	\$ 1.2792	\$ 1.2792	\$ 1.2792	\$	1.2792	\$	1.2792	\$	1.2792	\$	1.2792	\$	1.2792	\$	1.2600
Authorized Basic Service Charge Revenues																				\$	518,556
Authorized Distribution Charge Revenues (excl CIP)																				\$	977,693
Authorized Non-Gas Revenues																				\$	1,496,249
Authorized Margin per Customer																				\$	863.89
Small Firm - Actual Customers	1,096		,079	1,	05	1,155	1,188	1,165	1,312		1,492		1,144		1,141		1,154		1,152		1,182
Large Firm - Actual Customers	581		571		77	595	596	597	595		598		593		591		589		585		589
Actual Sales - Dk	19,755	50	,190	82,	376	141,070	125,045	123,696	88,498		55,441		19,311		15,852		16,834		15,759		753,826
Actual Basic Service Charge Revenues																				\$	527,670
Actual Distribution Charge Revenues (excl CIP)																				\$	949,821
Actual Non-Gas Revenues																				- -	1,477,491
Designed Non-Gas Revenues 3/																				•	1,529,949
Under / (Over) Collection																				\$ _	52,458
Onder / (Otter) Gonecaon																				Ψ	32,430
																•	gned Non-				1,529,949
												RDI	√l Adjustm	ent (Cap (10% o	f De	signed nor	n-ga:	s revenue)		10%

1/ As authorized in Docket No. G004/GR-15-879. The annual calculation reflects a weighted average distribution charge based on authorized monthly volumes to account for Phase 2 rates going into effect 1/1/2018.

2/	Weight	ted Average	Di	stribution	Rate	.
	194,155	25.02%	\$	1.2026	\$	0.3009
	581,792	74.98%	\$	1.2792	\$	0.9591
					\$	1.2600

3/ Designed Non-Gas Revenues serves as the basis for calculating the 10% RDM adjustment cap.

Annual

Capped amount for surcharge (no cap on refunds) \$

GREAT PLAINS NATURAL GAS CO. GAS UTILITY - MINNESOTA RDM Adjustment Calculation - Small Interruptible - North (N71 & N81)

																							nnual
	_				_						_												oupling
Small Interruptible - North (N71 & N81)		oct-17	^	lov-17		ec-17	 an-18	 Feb-18	!	Mar-18		pr-18	 flay-18		Jun-18	;	Jul-18		\ug-18	<u>s</u>	ep-18	(Calc
Small IT Sales - Authorized Customers 1/		70		70		70	70	70		70		70	70		70		70		70		70		70
Small IT Transport - Authorized Customers 1/		2		2		2	2	2		2		2	2		2		2		2		2		2
Authorized Sales - Dk 1/		56,724		31,403		45,047	54,777	36,890		41,583		32,240	21,050		16,317		11,626		12,441		16,554		376,652
Small IT Sales Authorized Basic Service Charge 1/	\$	145.00	\$	145.00	\$	145.00	\$ 145.00	\$ 145.00	\$	145.00	\$	145.00	\$ 145.00	\$	145.00	\$	145.00	\$	145.00	\$	145.00	\$	1,740.00
Large IT Transport Authorized Basic Service Charge 1/	\$	200.00	\$	200.00	\$	200.00	\$ 200.00	\$ 200.00	\$	200.00	\$	200.00	\$ 200.00	\$	200.00	\$	200.00	\$	200.00	\$	200.00	\$	2,400.00
Authorized Distribution Charge excluding CIP 1/2/	\$	1.1738	\$	1.1738	\$	1.1738	\$ 1.1652	\$ 1.1652	\$	1.1652	\$	1.1652	\$ 1,1652	\$	1.1652	\$	1.1652	\$	1.1652	\$	1.1652	\$	1.1683
Authorized Basic Service Charge Revenues																						\$	126,600
Authorized Distribution Charge Revenues (excl CIP)																						\$	440,043
Authorized Non-Gas Revenues																					-	\$	566,643
Authorized Margin per Customer																						\$	7,870.04
Small IT Sales - Actual Customers		60		60		56	58	54		56		57	57		57		57		57		57		57
Small IT Transport - Actual Customers		4		4		4	4	4		4		4	5		5		5		5		5		4
Actual Sales - Dk		13,582		53,423		65,118	49,049	45,659		42,686		37,768	24,886		12,065		9,578		11,236		11,692		376,742
																						_	100 700
Actual Basic Service Charge Revenues																						\$	108,780
Actual Distribution Charge Revenues (excl CIP)																					_	\$	440,148
Actual Non-Gas Revenues																						\$	548,928
Designed Non-Gas Revenues 3/																						\$	566,643
Under / (Over) Collection																						\$	17,715
																		•	ed Non-G			\$	566,643
														RDN	/i Adjustme	ent C	ap (10% of	Des	signed non-	-gas	revenue) _		10%
														(Capped a	mou	nt for sure	char	ge (no ca	p on	refunds)	\$	56,664

^{1/} As authorized in Docket No. G004/GR-15-879. The annual calculation reflects a weighted average distribution charge based on authorized monthly volumes to account for Phase 2 rates going into effect 1/1/2018.

2/	Weight	ted Average Di	stribution	Rat	е
	133,174	35.36% \$	1.1738	\$	0.4151
	243,478	64.64% \$	1.1652	\$	0.7532
				-	1 1600

^{3/} Designed Non-Gas Revenues serves as the basis for calculating the 10% RDM adjustment cap.

GREAT PLAINS NATURAL GAS CO. GAS UTILITY - MINNESOTA RDM Adjustment Calculation - Small Interruptible - South (S71 & S81)

Annual Decoupling Apr-18 May-18 Small Interruptible - South (S71 & S81) Oct-17 Nov-17 Dec-17 Jan-18 Feb-18 Mar-18 Jun-18 Jul-18 Aug-18 Sep-18 Calc 69 69 69 69 69 69 69 69 69 69 Small IT Sales - Authorized Customers 1/ 69 69 69 3 3 3 3 3 3 3 3 Small IT Transport - Authorized Customers 1/ 3 3 3 3 3 Authorized Sales - Dk 1/ 63,803 33,809 28,842 38,881 41,275 28,884 31,413 25,875 29,782 20,876 19,152 17,610 380,202 145.00 \$ 145.00 \$ 145.00 \$ 145.00 \$ 145.00 \$ 145.00 \$ 1.740.00 Small IT Sales Authorized Basic Service Charge 1/ 145.00 \$ 145.00 145.00 \$ 145.00 \$ 145.00 \$ 145.00 \$ \$ 200.00 200,00 \$ 200.00 \$ 200.00 \$ 200.00 \$ 200.00 200,00 200.00 200.00 \$ 200.00 200.00 \$ 200.00 2,400.00 Large IT Transport Authorized Basic Service Charge 1/ \$ \$ \$ \$ \$ \$ \$ 1.1481 \$ Authorized Distribution Charge excluding CIP 1/2/ 1.1395 \$ 1.1395 \$ 1,1395 \$ 1.1481 \$ 1.1481 \$ 1.1481 \$ 1.1481 \$ 1.1481 \$ 1.1481 \$ 1.1481 \$ 1.1481 \$ 1.1452 127,260 Authorized Basic Service Charge Revenues 435.407 Authorized Distribution Charge Revenues (excl CIP) 562,667 Authorized Non-Gas Revenues \$ 7,814.82 **Authorized Margin per Customer** Small IT Sales - Actual Customers 60 63 59 57 57 61 58 60 66 79 61 61 62 Small IT Transport - Actual Customers 3 3 3 3 3 3 3 3 3 3 3 56,760 36,124 28,223 30,795 21,535 Actual Sales - Dk 21,389 75,134 34,697 34,019 22,164 21,746 19,292 401,878 Actual Basic Service Charge Revenues 115,080 460,230 Actual Distribution Charge Revenues (excl CIP) 575,310 Actual Non-Gas Revenues 562,667 Designed Non-Gas Revenues 3/ Under / (Over) Collection (12.643)Designed Non-Gas Revenues \$ 562,667 RDM Adjustment Cap (10% of Designed non-gas revenue) Capped amount for surcharge (no cap on refunds) \$ 56,267

1/ As authorized in Docket No. G004/GR-15-879. The annual calculation reflects a weighted average distribution charge based on authorized monthly volumes to account for Phase 2 rates going into effect 1/1/2018.

2/	Weight	ted Average Di	stribution	Rate	е
	126,454	33.26% \$	1.1395	\$	0.3790
	253,748	66.74% \$	1.1481	\$	0.7662
				-\$	1.1452

GREAT PLAINS NATURAL GAS CO. GAS UTILITY - MINNESOTA RDM Adjustment Calculation - Large Interruptible - North (N85 & N82)

Large Interruptible - North (N85 & N82)	Oct-17	1	Nov-17)ec-17	jan-18	Feb-18	1	Mar-18	Apr-18	N	Лау-18		Jun-18		Jul-18	A	\ug-18	s	ep-18		Annual coupling Calc
Large IT Sales - Authorized Customers 1/	 5		5	 5	 5	 5		5	5		5		5		5		5		5	-	5
Large IT Transport - Authorized Customers 1/	-		-	-	-	-		-	-				-		-		•		_		-
Authorized Sales - Dk 1/	22,352		21,267	23,193	26,613	25,119		26,747	29,053		18,745		21,050		21,810		17,117		18,202		271,268
Large IT Sales Authorized Basic Service Charge 1/	\$ 230.00	\$	230.00	\$ 230.00	\$ 230.00	\$ 230.00	\$	230.00	\$ 230.00	\$	230.00	\$	230.00	\$	230.00	\$	230.00	\$	230.00	\$	2,760.00
Large IT Transport Authorized Basic Service Charge 1/	\$ 260.00	\$	260.00	\$ 260.00	\$ 260.00	\$ 260.00	\$	260.00	\$ 260.00	\$	260.00	\$	260.00	\$	260.00	\$	260.00	\$	260.00	\$	3,120.00
Authorized Distribution Charge excluding CIP 1/2/	\$ 1.1637	\$	1.1637	\$ 1.1637	\$ 0.8581	\$ 0.8581	\$	0.8581	\$ 0.8581	\$	0.8581	\$	0.8581	\$	0.8581	\$	0.8581	\$	0.8581	\$	0.9333
Authorized Basic Service Charge Revenues																				\$	13,800
Authorized Distribution Charge Revenues (excl CIP) Authorized Non-Gas Revenues																				\$	253,174 266,974
Authorized Margin per Customer																				\$	53,394.80
Large IT Sales - Actual Customers	4		4	4	4	4		4	4		4		4		4		4		4		4
Large IT Transport - Actual Customers	1		1	1	1	1		1	1		1		1		1		1		1		1
Actual Sales - Dk	26,104		25,073	26,444	23,667	22,567		25,870	28,616		27,403		24,122		22,360		23,915		24,490		300,630
Actual Basic Service Charge Revenues Actual Distribution Charge Revenues (excl CIP) Actual Non-Gas Revenues Designed Non-Gas Revenues 3/ Under / (Over) Collection												RDI		ent (•	gned Non-G		Revenues		14,160 280,578 294,738 266,974 (27,764) 266,974 10%
																	narge (no ca	_			26,697
													Сарр	eu a	IIIOURI IOI S	GICI	iaiye (110 Ca	ah o	rieiunas	jφ	20,097

^{1/} As authorized in Docket No. G004/GR-15-879. The annual calculation reflects a weighted average distribution charge based on authorized monthly volumes to account for Phase 2 rates going into effect 1/1/2018.

2/	Weight	ed Average	Di	stribution	Rat	8
	66,812	24.63%	\$	1.1637	\$	0.2866
	204,456	75.37%	\$	0.8581	\$	0.6467
					-\$	0.9333

RDM Adjustment Calculation - Large Interruptible - South (S85 & S82)

Large Interruptible - South (S85 & S82)	Oct-17		Nov-17	Dec-17		Jan-18	Feb-18		lar-18	,	Npr-18	1.0	fay-18	Jun-1	D	Jul-18		Aug-18		ep-18		Annual upling Calc
Large IT Sales - Authorized Customers 1/		1	1	DEC-17	1	1	 1		1		1		1	Juliet	1	301-10	1	Aug-10	31	8p-10 1	Deco	uping Calc
Large IT Transport - Authorized Customers 1/	(3	6	,	3	6	6		6		6		6		6		6	É	:	6		6
Authorized Sales - Dk 1/	73,45		119,300	141,280		132,844	133,258		125,253		122,867		43,833	23,	234	23,	-	22,148		36,254		996,847
Large IT Sales Authorized Basic Service Charge 1/ Large IT Transport Authorized Basic Service Charge 1/ Authorized Distribution Charge excluding CIP 1/ 2/	\$ 230.00 \$ 260.00 \$ 0.380	\$	230.00 260.00 0.3809	\$ 260.00	\$ 0	230.00 260.00 0.4641	\$ 230.00 260.00 0.4641	-	230.00 260.00 0.4641	\$	230.00 260.00 0.4641	\$	230.00 \$ 260.00 \$ 0.4641 \$	\$ 26	0.00 0.00 641	\$ 260	.00 \$.00 \$	260.00	\$	230.00 260.00 0.4641	\$	2,760.00 3,120.00 0.4362
Authorized Basic Service Charge Revenues Authorized Distribution Charge Revenues (excl CIP) Authorized Non-Gas Revenues																					\$ \$	21,480 434,825 456,305
Authorized Margin per Customer																					\$	65,186.43
Large IT Sales - Actual Customers		1	1		1	1	1		1		1		1		1		1			1		1
Large IT Transport - Actual Customers	•	6	6		6	6	6		6		6		6		6		6	6	3	6		6
Actual Sales excluding TF-5 - Dk 3/ Actual Sales - TF-5 - Dk 3/	TRADE SEC	RETE	EGINS																	T	RADE S	ECRET ENDS
Actual Basic Service Charge Revenues 3/																					\$	21,480
Actual Distribution Charge Revenues (excl CIP) Actual Non-Gas Revenue - Customer TF-5																					\$ \$	ECRET ENDS
Total Actual Non-Gas Revenues																					S S	612,490
Designed Non-Gas Revenues 4/																					ď.	456,305
Under / (Over) Collection																					\$	(156,185)
1/ As authorized in Docket No. G004/GR-15-879.													R)% of I	signed Nor Designed no charge (no	on-gas	revenue)		456,305 10% 45,631
2/	334,03 662,81	7	ed Average 33.51% 66.49%	\$ 0.380	9 \$	0.1276 0.3086																

^{3/} Effective January 1, 2018 a Rate S82 customer moved to a flexible contract rate. In calculating actual non-gas revenues this customer's volumes are included at the authorized distribution rate for the class for October-December 2017. The customer's actual non-gas revenues for January-September 2018 are calculated using the contract distribution rate for this customer of [TRADE SECRET BEGINS] [TRADE SECRET ENDS] per Dk. The basic service charge for the customer remained \$260.00 per month following it's transition to a contract rate.

^{4/} Designed Non-Gas Revenues serves as the basis for calculating the 10% RDM adjustment cap and is unaffected by the move of one customer from Rate S82 to a contract rate.

GREAT PLAINS NATURAL GAS CO. GAS UTILITY - MINNESOTA RDM Adjustment Calculation - Residential Rate - N60

Residential Rate - N60 Authorized Customers 1/		Oct-17 8,241	Nov-17 8,302	Dec-17 8,730	 Jan-18 8,608	F	Feb-18 8,506	!	Mar-18 8,608	 Apr-18 8,731	!	May-18 8,741	Ji	un-18 8,486		Jul-18 8,353		Aug-18 8,404	 Sep-18 8,282	De	Annual ecoupling Calc 8,499
Authorized Customers 1/ Authorized Sales - Dk 1/		24,125	64,056	91,300	139,619		131,717		97,054	71,682		36,603		13,865		7,279		6,101	9,844		693,245
Authorized Basic Service Charge 1/ Authorized Distribution Charge excluding CIP 1/2/	\$ \$	7.50 1.9915	7.50 1.9915	7.50 1.9915	7.50 1.8598	\$ \$	7.50 1.8598	\$ \$	7.50 1.8598	7.50 1.8598		7.50 1.8598	\$ \$	7.50 1.8598	\$ \$	7.50 1.8598	-	7.50 1.8598	7.50 1.8598		90.00 1.8939
Authorized Basic Service Charge Revenues Authorized Distribution Charge Revenues (excl CIP) Authorized Non-Gas Revenues																				\$ \$	764,910 1,312,937 2,077,847
Authorized Margin per Customer																				\$	244.48
Actual Customers Actual Sales - Dk		8,369 14,861	7,905 49,713	8,293 90,295	8,549 151,644		8,540 126,476		8,597 118,299	8,598 84,939		8,679 45,741		8,586 10,945		8,541 6,753		8,485 6,931	8,454 6,688		8,466 713,283
Actual Basic Service Charge Revenues Actual Distribution Charge Revenues (excl CIP) Actual Non-Gas Revenues Designed Non-Gas Revenues 3/ Under / (Over) Collection																				\$ \$ \$ \$	761,940 1,350,887 2,112,827 2,077,847 (34,980)

Designed Non-Gas Revenues \$ 2,077,847

RDM Adjustment Cap (10% of Designed non-gas revenue) 10%

Capped amount for surcharge (no cap on refunds) \$ 207,785

^{1/} As authorized in Docket No. G004/GR-15-879. The annual calculation reflects a weighted average distribution charge based on authorized monthly volumes to account for Phase 2 rates going into effect 1/1/2018.

2/	Weigh	ted Average Di	stribution	Rat	е
	179,481	25.89% \$	1.9915	\$	0.5156
	513,764	74.11% \$	1.8598	\$	1.3783
				-	4 9020

^{3/} Designed Non-Gas Revenues serves as the basis for calculating the 10% RDM adjustment cap.

	ods for Calculating Decoupling Adjustment
Alternate Option #1 - Total Revenues/Per-Customer-Class	0.0077.017
Revenues Allowed (total authorized)	\$ 2,077,847
Actual Revenues	\$ 2,112,827
Under (Over) Collection	\$ (34,980)
Alternate Option #2 - Per Customer Revenues Allowed (authorized margin x actual cus. Ct) Actual Revenues Under (Over) Collection	\$ 2,069,768 <u>\$ 2,112,827</u> \$ (43,059)

GREAT PLAINS NATURAL GAS CO GAS UTILITY - MINNESOTA RDM Adjustment Calculation - Residential Rate - S60

Residential Rate - S60	(Oct-17	Nov-17	Dec-17	Jan-18	Feb-18	ı	Mar-18	Apr-18	1	May-18		Jun-18		Jul-18		\ug-18	5	Sep-18		Annual ecoupling Calc
Authorized Customers 1/		10,073	 10,023	 10,706	 10,346	 10,358		10,346	 10,519		10,470		10,730		10,321		10,159		9,998		10,337
Authorized Sales - Dk 1/		19,574	64,061	109,863	161,621	158,914		111,178	79,766		39,226		12,147		5,338		5,184		6,808		773,680
Authorized Basic Service Charge 1/	\$	7.50	\$ 7.50	7.50	7.50	\$ 7.50	\$	7.50	7.50	\$	7.50	\$	7.50		7.50	\$	7.50	\$	7.50		90.00
Authorized Distribution Charge excluding CIP 1/2/	\$	1.4911	\$ 1.4911	\$ 1.4911	\$ 1.6091	\$ 1.6091	\$	1.6091	\$ 1.6091	\$	1.6091	\$	1.6091	\$	1.6091	\$	1.6091	\$	1,6091	\$	1.5796
Authorized Basic Service Charge Revenues																				\$	930,330
Authorized Distribution Charge Revenues (excl CIP)																				_\$_	1,222,105
Authorized Non-Gas Revenues																				\$	2,152,435
Authorized Margin per Customer																				\$	208.23
Actual Customers		9,829	9,862	10,059	10,424	10,383		10,436	10,428		10,550		10,390		10,299		10,301		10,074		10,253
Actual Sales - Dk		14,050	57,842	95,601	164,640	144,563		137,452	99,343		56,440		11,733		7,143		7,459		6,723		802,989
Actual Basic Service Charge Revenues																				\$	922,770
Actual Distribution Charge Revenues (excl CIP)																				\$	1,268,401
Actual Non-Gas Revenues																				\$	2,191,171
Designed Non-Gas Revenues 3/																				\$	2,152,435
Under / (Over) Collection																				\$	(38,736)
															[)esi	gned Non-	Gas	Revenues	\$	2,152,435
												RD	M Adjustme				_	~			10%
													Cappe	ed a	mount for s	urch	narge (no c	ap or	n refunds)	\$	215,244

1/ As authorized in Docket No. G004/GR-15-879. The annual calculation reflects a weighted average distribution charge based on authorized monthly volumes to account for Phase 2 rates going into effect 1/1/2018.

2/	Weight	ted Average Dis	stribution	Rate	3
	193,498	25.01% \$	1.4911	\$	0.3729
	580,182	74.99% \$	1.6091	\$	1.2067
				\$	1.5796

Alto	ernate Methods for Calculating Decoupling Adjustment
Alternate Option #1 - Total Revenues/Per-Customer-Class	
Revenues Allowed (total authorized)	\$ 2,152,435
Actual Revenues	\$ 2,191,171
Under (Over) Collection	\$ (38,736)
Alternate Option #2 - Per Customer	
Revenues Allowed (authorized margin x actual cus. Ct)	\$ 2,134,982
Actual Revenues	\$_2,191,171
Under (Over) Collection	\$ (56,189)

GREAT PLAINS NATURAL GAS CO. GAS UTILITY - MINNESOTA RDM Adjustment Calculation - Firm General - N70

																		-	Annual
Firm General - N70	Oct-17	lov-17	Dec-17	Jan-18	Feb-18	Маг-18	Apr-18		/lay-18		lun-18		Jul-18		ug-18		ep-18		coupling Calc
Small Firm - Authorized Customers 1/	 797	 732	 865	 840	 815	821	 824	R	811		807		793		792		789		808
Large Firm - Authorized Customers 1/	459	458	489	469	462	452	451		457		454		467		482		463		463
Authorized Sales - Dk 1/	22,218	47,460	68,731	99,234	92,608	68,601	51,321		29,316		14,790		10,985		10,482		12,427		528,173
Small Firm Authorized Basic Service Charge 1/	\$ 23.00	\$	23.00	\$	23.00	\$	23.00	\$	23.00	\$	23.00	\$	276.00						
Large Firm Authorized Basic Service Charge 1/	\$ 28.50	\$	28.50	\$	28.50	\$	28.50	\$	28.50	\$	28.50	\$	342.00						
Authorized Distribution Charge excluding CIP 1/2/	\$ 1.5806	\$ 1.5806	\$ 1.5806	\$ 1.4682	\$ 1.4682	\$ 1.4682	\$ 1.4682	\$	1.4682	\$	1.4682	\$	1.4682	\$	1.4682	\$	1.4682	\$	1.4977
Authorized Basic Service Charge Revenues																		\$	381,354
Authorized Distribution Charge Revenues (excl CIP)																		\$	791,045
Authorized Non-Gas Revenues																		\$	1,172,399
Authorized Margin per Customer																		\$	922.42
Small Firm - Actual Customers	824	747	799	830	837	834	858		829		817		811		806		810		817
Large Firm - Actual Customers	448	407	425	439	436	440	433		443		439		433		432		439		435
Actual Sales - Dk	17,046	39,722	62,660	105,072	89,900	78,533	62,907		33,366		13,420		10,458		11,100		10,824		535,007
																			.=
Actual Basic Service Charge Revenues																		\$	374,262
Actual Distribution Charge Revenues (excl CIP)																		<u>\$</u>	801,280
Actual Non-Gas Revenues																			1,175,542
Designed Non-Gas Revenues 3/																			1,172,399
Under / (Over) Collection																		\$	(3,143)
														•	ned Non-C				
										KD					signed non				10%
											Capp	ed a	mount for s	urch	arge (no ca	ib ou	retunds)	\$	117,240

1/ As authorized in Docket No. G004/GR-15-879. The annual calculation reflects a weighted average distribution charge based on authorized monthly volumes to account for Phase 2 rates going into effect 1/1/2018.

2/	Weight	ted Average	Di:	stribution	Rate	•
	138,409	26.21%	\$	1.5806	\$	0.4143
	389,764	73.79%	\$	1.4682	\$	1.0834
					-	1 4977

Alternate Option #1 - Total Revenues/Per-Customer-Class	Alternate Methods for Calculating Decoupling Adjustment
Revenues Allowed (total authorized)	\$ 1,172,399
Actual Revenues	_\$ 1,175,542_
Under (Over) Collection	\$ (3,143)
Alternate Option #2 - Per Customer	
Revenues Allowed (authorized margin x actual cus. Ct)	\$ 1,154,870
Actual Revenues	<u>\$ 1,175,542</u>
Under (Over) Collection	\$ (20,672)

GREAT PLAINS NATURAL GAS CO. GAS UTILITY - MINNESOTA RDM Adjustment Calculation - Firm General - S70

																			Annual
Firm General - S70	Oct-17	Nov-17	,	Dec-17	Jan-18	Feb-18	Mar-18	Арг-18	May-18		lun-18		Jul-18		40		40		coupling Calc
Small Firm - Authorized Customers 1/	 1,082	 1,050		1,164	 1,147	 1,172	 1,112	 1,132	 1,159		1,137		1,098	A	ug-18 1,096		1,064		1,118
Large Firm - Authorized Customers 1/	634	602		624	614	634	589	614	584		611		609		618		631		614
Authorized Sales - Dk 1/	29,176	63,766		101,213	145,318	145,907	99,858	76,145	42,494		21,261		16,362		16,491		17,956		775,947
		,				,,	,	,	,		,		.0,000		,		,		,
Small Firm Authorized Basic Service Charge 1/	\$ 23.00	\$ 23.00	\$	23.00	\$ 23.00	\$ 23.00	\$ 23.00	\$ 23.00	\$ 23.00	\$	23.00	\$	23.00	\$	23.00	\$	23.00	\$	276.00
Large Firm Authorized Basic Service Charge 1	\$ 28.50	\$ 28.50	\$	28.50	\$ 28.50	\$ 28.50	\$ 28.50	\$ 28.50	\$ 28.50	\$	28.50	\$	28.50	\$	28.50	\$	28.50	\$	342.00
Authorized Distribution Charge excluding CIP 1/2/	\$ 1.2026	\$ 1.2026	\$	1.2026	\$ 1.2792	\$ 1.2792	\$ 1.2792	\$ 1.2792	\$ 1.2792	\$	1.2792	\$	1.2792	\$	1.2792	\$	1.2792	\$	1.2600
Authorized Basic Service Charge Revenues																		ę.	518,556
Authorized Distribution Charge Revenues (excl CIP)																		¢	977,693
Authorized Non-Gas Revenues																		*	1,496,249
Additional day November																		Ψ	1,400,240
Authorized Margin per Customer																		\$	863.89
Small Firm - Actual Customers	1,096	1,079		1,105	1,155	1,188	1,165	1,312	1,492		1,144		1,141		1,154		1,152		1,182
Large Firm - Actual Customers	581	571		577	595	596	597	595	598		593		591		589		585		589
Actual Sales - Dk	19,755	50,190		82,376	141,070	125,045	123,696	88,498	55,441		19,311		15,852		16,834		15,759		753,826
Actual Basic Service Charge Revenues																		\$	527,670
Actual Distribution Charge Revenues (excl CIP)																		\$	949,821
Actual Non-Gas Revenues																		\$	1,477,491
Designed Non-Gas Revenues 3/																		\$	1,529,949
Under / (Over) Collection																		\$	52,458
																	_		
										DD:	4 A alianata			-			Revenues	\$	1,529,949
										KUI	n Aajustm	ent	Cap (10% o	Des	agnea non	-gas	revenue)		10%

1/ As authorized in Docket No. G004/GR-15-879. The annual calculation reflects a weighted average distribution charge based on authorized monthly volumes to account for Phase 2 rates going into effect 1/1/2018.

2/ Weighted Average Distribution Rate 194,155 25,02% \$ 1,2026 \$ 0,3009 581,792 74.98% \$ 1.2792 \$ 0.9591 \$ 1.2600

3/ Designed Non-Gas Revenues serves as the basis for calculating the 10% RDM adjustment cap.

Alternate Methods for Calculating Decoupling Adjustment

Alternate Option #1 - Total Revenues/Per-Customer-Class

Revenues Allowed (total authorized) Actual Revenues

Under (Over) Collection

Alternate Option #2 - Per Customer

Revenues Allowed (authorized margin x actual cus. Ct)

Actual Revenues

Under (Over) Collection

\$ 1,496,249
\$ 1,477,491
\$ 18,758

Capped amount for surcharge (no cap on refunds) \$ 152,995

RDM Adjustment Calculation - Small Interruptible - North (N71 & N81)

Small Interruptible - North (N71 & N81)	,	Oct-17	Nov-17	C)ec-17	J	Jan-18	Feb-18	ı	Mar-18	Apr-18	N	May-18		Jun-18		Jul-18	A	ug-18	s	ep-18	Dec	Annual coupling Calc
Small IT Sales - Authorized Customers 1/		70	 70		70		70	 70		70	70		70		70		70		70		70		70
Small IT Transport - Authorized Customers 1/		2	2		2		2	2		2	2		2		2		2		2		2		2
Authorized Sales - Dk 1/		56,724	31,403		45,047		54,777	36,890		41,583	32,240		21,050		16,317		11,626		12,441		16,554		376,652
Small IT Sales Authorized Basic Service Charge 1/	\$	145.00	\$ 145.00	\$	145.00	\$	145.00	\$ 145.00	\$	145.00	\$ 145.00	\$	145.00	\$	145.00	\$	145.00	\$	145.00	\$	145.00	\$	1,740.00
Large IT Transport Authorized Basic Service Charge 1/	\$	200.00	\$ 200.00	\$	200.00	\$	200.00	\$ 200.00	\$	200.00	\$ 200.00	\$	200.00	\$	200.00	\$	200.00	\$	200.00	\$	200.00	\$	2,400.00
Authorized Distribution Charge excluding CIP 1/2/	\$	1.1738	\$ 1,1738	\$	1.1738	\$	1.1652	\$ 1.1652	\$	1.1652	\$ 1.1652	\$	1.1652	\$	1.1652	\$	1.1652	\$	1.1652	\$	1.1652	\$	1.1683
Authorized Basic Service Charge Revenues																						\$	126,600
Authorized Distribution Charge Revenues (excl CIP)																						\$	440,043
Authorized Non-Gas Revenues																						\$	566,643
Authorized Margin per Customer																						\$	7,870.04
Small IT Sales - Actual Customers		60	60		56		58	54		56	57		57		57		57		57		57		57
Small IT Transport - Actual Customers		4	4		4		4	4		4	4		5		5		5		5		5		4
Actual Sales - Dk		13,582	53,423		65,118		49,049	45,659		42,686	37,768		24,886		12,065		9,578		11,236		11,692		376,742
And all Basis Comits Channel Basis																						•	100 700
Actual Basic Service Charge Revenues																						Þ	108,780
Actual Distribution Charge Revenues (excl CIP)																						\$	440,148
Actual Non-Gas Revenues																						Þ	548,928
Designed Non-Gas Revenues 3/																						_	566,643
Under / (Over) Collection																						Þ	17,715
																	Des	igne	ed Non-Ga	as R	evenues	\$	566,643
																	ap (10% of						10%
														•	Capped a	mot	ınt for surc	har	ge (no car	on c	refunds)	\$	56,664

^{1/} As authorized in Docket No. G004/GR-15-879. The annual calculation reflects a weighted average distribution charge based on authorized monthly volumes to account for Phase 2 rates going into effect 1/1/2018.

2/	Weight	ed Average	. Di	stribution	Rate	е
	133,174	35,36%	\$	1.1738	\$	0.4151
	243,478	64.64%	\$	1.1652	\$	0.7532
					-	4 4600

	Alternate Methods for Calculating Decoupling Adjustment	
Alternate Option #1 - Total Revenues/Per-Customer-Class		
Revenues Allowed (total authorized)		566,643
Actual Revenues	<u>\$</u>	548,928
Under (Over) Collection	\$	17,715
Alternate Option #2 - Per Customer		
Revenues Allowed (authorized margin x actual cus. Ct)	·	480,072
Actual Revenues	<u>\$</u>	548,928
Under (Over) Collection	\$	(68,856)

RDM Adjustment Calculation - Small Interruptible - South (S71 & S81)

																									Annual
	_													_						_		_			coupling
Small Interruptible - South (S71 & S81)	Oc	t-17	Nov-1		Dec-17		Jan-18	!	Feb-18	!	Mar-18		\pr-18		May-18		ın-18	:	Jul-18	A	ug-18	S	ep-18		Calc
Small IT Sales - Authorized Customers 1/		69		69	69		69		69		69		69		69		69		69		69		69		69
Small IT Transport - Authorized Customers 1/		3		3	3		3		3		3		3		3		3		3		3		3		3
Authorized Sales - Dk 1/	(63,803	33,8	09	28,842		38,881		41,275		28,884		31,413		25,875		29,782		20,876		19,152		17,610		380,202
Small IT Sales Authorized Basic Service Charge 1/	\$ ·	145.00	\$ 145	00 9	145.00	\$	145.00	\$	145.00	\$	145,00	\$	145.00	\$	145.00	\$	145.00	s	145.00	s	145.00	\$	145.00	\$	1,740.00
Large IT Transport Authorized Basic Service Charge 1/			\$ 200			\$	200.00		200.00		200.00	•		\$	200.00		200.00	•		Š	200.00	•	200.00	¢	2,400.00
Authorized Distribution Charge excluding CIP 1/2/	\$		\$ 1.13			\$	1.1481	•		\$		\$		\$	1.1481	-	1.1481		1.1481	\$	1,1481		1.1481	\$	1.1452
Additionized Distribution Charge excluding CIF 1/2/	Φ	1.1353	Ψ 1.1	9J 4	1.1353	Ą	1.1401	Φ	1, 1401	Ψ	1.1401	Ψ	1.1401	φ	1.1401	φ	1.1401	Φ	3.1401	Φ	1.1401	Đ	1.1401	Ф	1.1452
Authorized Basic Service Charge Revenues																								\$	127,260
Authorized Distribution Charge Revenues (excl CIP)																								\$	435,407
Authorized Non-Gas Revenues																								- -	562,667
, tatilonized from odd ffor sildeb																								•	002,007
Authorized Margin per Customer																								\$	7,814.82
Small IT Sales - Actual Customers		60		63	59		57		57		61		58		60		66		79		61		61		62
Small IT Transport - Actual Customers		3		3	3		3		3		3		3		3		3		3		3		3		3
Actual Sales - Dk		21,389	56.	60	75,134		34,697		34,019		36,124		28,223		30,795		21,535		22,164		21,746		19,292		401,878
, , , , , , , , , , , , , , , , , , ,		,	,		(,		- 1,		,		,		,				,				,=		
Actual Basic Service Charge Revenues																								¢	115,080
Actual Distribution Charge Revenues (excl CIP)																								φ	460,230
Actual Non-Gas Revenues																								<u>\$</u>	
																								Þ	575,310
Designed Non-Gas Revenues 3/																								\$	562,667
Under / (Over) Collection																								\$	(12,643)
																				loci-	nod Nos f	Con!	Revenues	•	562,667
																DOM	l Adinot-	ont (•					
																KUN	-		Cap (10% c		-	-			10%
																	Сарр	eo a	mount for s	urch	arge (no c	ap o	n retunds)	Ъ	56,267

Alternate Methods for Calculating Decoupling Adjustment

^{1/} As authorized in Docket No. G004/GR-15-879. The annual calculation reflects a weighted average distribution charge based on authorized monthly volumes to account for Phase 2 rates going into effect 1/1/2018.

2/	Weighte	d Average	Di	stribution	Rate	е
	126,454	33.26%	\$	1.1395	\$	0.3790
	253,748	66.74%	\$	1.1481	\$	0.7662
					_	4 4 4 5 0

3/ Designed Non-Gas Revenues serves as the basis for calculating the 10% RDM adjustment cap.

Revenues Allowed (total authorized)
Actual Revenues
Under (Over) Collection

Alternate Option #2 - Per Customer
Revenues Allowed (authorized margin x actual cus. Ct)
Actual Revenues
Under (Over) Collection

Alternate Option #1 - Total Revenues/Per-Customer-Class

\$ 562,667 \$ 575,310

(12,643)

RDM Adjustment Calculation - Large Interruptible - North (N85 & N82)

																								Annual
Large Interruptible - North (N85 & N82)	O	ct-17	Nov	17	De	c-17	J	an-18	Feb-18	ı	Mar-18	А	рг-18	Ma	ay-18	Jı	n-18		Jul-18	Δ	ug-18	s	ep-18	Decoupling Calc
Large IT Sales - Authorized Customers 1/		5		5		5		5	 5		5		5		5		5		5		5		5	5
Large IT Transport - Authorized Customers 1/				-		-		-	_		-		_		_						_			_
Authorized Sales - Dk 1/		22,352	2	1,267		23,193		26,613	25,119		26,747		29,053		18,745		21,050		21,810		17,117		18,202	271,268
Large IT Sales Authorized Basic Service Charge 1/	\$	230.00	\$ 2	30.00	\$	230.00	\$	230.00	\$ 230.00	\$	230.00	\$	230.00	\$	230.00	\$	230,00	\$	230.00	\$	230.00	\$	230.00	\$ 2,760.00
Large IT Transport Authorized Basic Service Charge 1/	\$	260.00	\$ 2	50.00	\$	260.00	\$	260.00	\$ 260.00	\$	260.00	\$	260.00	\$	260.00	\$	260.00	\$	260.00	\$	260.00	\$	260.00	\$ 3,120,00
Authorized Distribution Charge excluding CIP 1/2/	\$	1.1637	\$ 1	1637	\$	1.1637	\$	0.8581	\$ 0.8581	\$	0.8581	\$	0.8581	\$	0.8581	\$	0.8581	\$	0.8581	\$	0.8581	\$	0.8581	\$ 0.9333
Authorized Basic Service Charge Revenues																								\$ 13,800
Authorized Distribution Charge Revenues (excl CIP)																								\$ 253,174
Authorized Non-Gas Revenues																							•	\$ 266,974
Authorized Margin per Customer																								\$ 53,394.80
Large IT Sales - Actual Customers		4		4		4		4	4		4		4		4		4		4		4		4	4
Large IT Transport - Actual Customers		1		1		1		1	1		1		1		1		1		1		1		1	1
Actual Sales - Dk		26,104	2	5,073		26,444		23,667	22,567		25,870		28,616		27,403		24,122		22,360		23,915		24,490	300,630
Actual Basic Service Charge Revenues																								\$ 14,160
Actual Distribution Charge Revenues (excl CIP)																								\$ 280,578
Actual Non-Gas Revenues																								\$ 294,738
Designed Non-Gas Revenues 3/																								\$ 266,974 \$ (27,764)
Under / (Over) Collection																								\$ (27,764)
																					gned Non-G			
																RDM	-				signed nor	-		
																	Cap	oed a	mount for	surch	narge (no c	ap or	n refunds)	\$ 26,697

^{1/} As authorized in Docket No. G004/GR-15-879. The annual calculation reflects a weighted average distribution charge based on authorized monthly volumes to account for Phase 2 rates going into effect 1/1/2018.

2/	Weight	ed Average	Di	stribution	Rate	2
	66,812	24.63%	\$	1.1637	\$	0.2866
	204,456	75.37%	\$	0.8581	\$	0.6467
					\$	0.9333

3/ Designed Non-Gas Revenues serves as the basis for calculating the 10% RDM adjustment cap.

Actual Revenues Under (Over) Collection

Alternate Option #1 - Total Revenues/Per-Customer-Class		
Revenues Allowed (total authorized)	\$ 266,974	,
Actual Revenues	\$ 294,738	
Under (Over) Collection	\$ (27,764))
Alternate Option #2 - Per Customer Revenues Allowed (authorized margin x actual cus. Ct)	\$ 266,974	ļ.

Alternate Methods for Calculating Decoupling Adjustment

RDM Adjustment Calculation - Large Interruptible - South (S85 & S82)

Large Interruptible - South (S85 & S82)	c	Oct-17		Nov-17		Dec-17		Jan-18		Feb-18		Mar-18	Apr-18	Mav-18	Jun-1	8	Jul-18		Aug-18	5	Sep-18		Annual upling Calc
Large IT Sales - Authorized Customers 1/		1		1		1		1		1		1	 1	 1		1		1		1	1		1
Large IT Transport - Authorized Customers 1/		6		6		6		6		e	i	6	6	6		6		6		3	6		6
Authorized Sales - Dk 1/		73,457		119,300		141,280		132,844		133,258	1	125,253	122,867	43,833	23	234	23,	19	22,14	3	36,254		996,847
Large IT Sales Authorized Basic Service Charge 1/	\$	230.00	\$	230.00	\$	230.00	\$	230.00	\$	230.00	\$	230.00	\$ 230.00	\$ 230.00	\$ 23	0.00	\$ 230	.00 \$	230.0	0 \$	230.00	\$	2,760.00
Large IT Transport Authorized Basic Service Charge 1/	\$	260.00	\$	260.00	\$	260.00	\$	260.00	\$	260.00	\$	260.00	\$ 260.00	\$ 260.00	\$ 26	0.00	\$ 260	.00 \$	260.0	0 \$	260.00	\$	3,120.00
Authorized Distribution Charge excluding CIP 1/2/	\$	0.3809	\$	0.3809	\$	0.3809	\$	0.4641	\$	0.4641	\$	0.4641	\$ 0.4641	\$ 0.4641	\$ 0.4	641	\$ 0.4	341 \$	0.464	1 \$	0.4641	\$	0.4362
Authorized Basic Service Charge Revenues																						\$	21,480
Authorized Distribution Charge Revenues (excl CIP)																						\$	434,825
Authorized Non-Gas Revenues																						\$	456,305
Authorized Margin per Customer																						\$	65,186.43
Large IT Sales - Actual Customers		1		1		1		1		1		1	1	1		1		1		1	1		1
Large IT Transport - Actual Customers		6		6		6		6		6	3	6	6	6		6		6		6	6		6
Actual Sales excluding TF-5 - Dk 3/	TRA	DE SECR	ET B	EGINS																			
Actual Sales - TF-5 - Dk 3/																							
, islasi salos III s Bito																					7	RADE S	ECRET ENDS
Actual Basic Service Charge Revenues 3/																						\$	21,480
																					TR	ADE SE	CRET BEGINS
Actual Distribution Charge Revenues (excl CIP)																						\$	
Actual Non-Gas Revenue - Customer TF-5																					_	\$	
T. I.																					1	-	ECRET ENDS
Total Actual Non-Gas Revenues																						\$	612,490
Designed Non-Gas Revenues 4/																						\$	456,305 (156,185)
Under / (Over) Collection																						Þ	(156,165)
														_					signed No				456,305
														R					Designed r				10%
1/ As authorized in Docket No. G004/GR-15-879.															*	_appec	amount	tor su	charge (no	cap o	n retunas) \$	45,631
2/		We	iahte	ed Avera	ae Di	stribution	Rat	e															
-		334,037				0.3809		0.1276	_														
		662,810		66.499																			
							\$	0.4362	_														

^{3/} Effective January 1, 2018 a Rate S82 customer moved to a flexible contract rate. In calculating actual non-gas revenues this customer's volumes are included at the authorized distribution rate for the class for October-December 2017. The customer's actual non-gas revenues for January-September 2018 are calculated using the contract distribution rate for this customer of [TRADE SECRET BEGINS] [TRADE SECRET ENDS] per Dk. The basic service charge for the customer remained \$260.00 per month following it's transition to a contract rate.

Alternate Methods for Calculating Decoupling Adjustment

4/ Designed Non-Gas Revenues serves as the basis for calculating the 10% RDM adjustment cap and is unaffected by the move of one customer from Rate S82 to a contract rate.

Actual Revenues

Under (Over) Collection

Alternate Option #1 - Total Revenues/Per-Customer-Class Revenues Allowed (total authorized) Actual Revenues Under (Over) Collection Alternate Option #2 - Per Customer Revenues Allowed (authorized margin x actual cus. Ct) \$ 456,305 \$ (156,185) Alternate Option #2 - Per Customer Revenues Allowed (authorized margin x actual cus. Ct) \$ 456,305

612,490

(156,185)