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April 26, 2019

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

Mr. William Grant
Deputy Commissioner
Division of Energy Resources
Minnesota Department of Commerce
85 Seventh Place East, Suite 500
St. Paul, MN 55101-2198

Re: Docket No. G004/M-19-CIP Tracker and Demand Side Management Incentive

> Docket No. G004/CIP-16-121 2018 Conservation Improvement Program Status Report

Dear Mr. Wolf and Mr. Grant:

Great Plains Natural Gas Co. (Great Plains), a Division of Montana-Dakota Utilities Co., herewith electronically files its 2018 Conservation Improvement Program (CIP) Status Report for the period of January 1, 2018 through December 31, 2018, its 2018 Conservation Improvement Program (CIP) Tracker filing (CCRA), and the Demand Side Management (DSM) Incentive for the period of January 1, 2018 through December 31, 2018.

The 2018 CIP expenditures were \$566,621, which exceeds the minimum spending requirement of \$121,325, and was approximately 63 percent of the authorized budget for 2018, as established by Decision of the Deputy Commissioner, Department of Commerce on November 3, 2016. Great Plains' programs provided total annual energy savings of 36,083 dk, which was 63 percent of the authorized level. The total lifetime energy reduction related to the 2018 CIP projects is 469,079 dk. The variance in expenditures and energy savings from the authorized portfolio expenditures for 2018 is primarily attributable to lower participation in the Commercial and Industrial Program, including Custom Projects. The continuing low commodity price of natural gas has

decreased the incentive for customers to partake in Commercial and Industrial conservation projects. Excluding this line item, 2018 expenditures were at approximately 86 percent of the budgeted expenditures.

Pursuant to the Commission's Order issued on November 23, 2016, in Docket No. G004/M-16-384, Great Plains has calculated the CCRA based on the existing tracker balance, as well as the projected sales, expenditures, financial incentive, and any pertinent adjustments that may occur over the period the CCRA will be in place. Carrying charges are calculated at the short-term debt cost authorized in Great Plains' most recent rate case, Docket No. G004/GR-15-879. There was no financial incentive achieved for 2018. Please see Attachment E, page 4 for a summary of the projected CIP tracker activity and ending balance on August 2020.

The CIP Tracker filing reflects a proposed CCRA of \$(0.0337) per dk, which is a decrease of \$0.0467 per dk from the current CCRA. For a typical residential customer using 77 dk per year, this reflects a decrease of \$3.59 annually or \$0.30 per month. Great Plains requests that the proposed CCRA be implemented September 1, 2019. Attachment A provides the Conservation Improvement Program Adjustment Clause tariff, 6th Revised Sheet No. 5-111.

Great Plains DSM Financial Incentive did not meet the considerations required pursuant to Minnesota Statute, Section 216B.16. The energy saved and net benefit derived from Great Plains' 2018 CIP program do not qualify the Company to receive an incentive for the 2018 CIP program year, pursuant to Docket No. E,G-999/CI-08-133, Order Adopting Modifications to Shared Savings Demand-Side Management Financial Incentive Plan.

This filing includes the 2018 CIP Status Report, CIP Tracker filing, and CIP Demand-Side Management Incentive filing with all supporting attachments.

Please refer all inquiries regarding this filing to:

Ms. Tamie A. Aberle Director of Regulatory Affairs Great Plains Natural Gas Co. 400 North Fourth Street Bismarck, ND 58501

Great Plains respectfully requests this filing be accepted as being in full compliance with the filing requirements of this Commission and the Department of Commerce.

Sincerely,

/s/ Tamie A. Aberle

Tamie A. Aberle Director of Regulatory Affairs

cc: Brian M. Meloy

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GREAT PLAINS NATURAL GAS CO. 2018 CONSERVATION INCENTIVE PROGRAMS (CIP) STATUS REPORT

Pursuant to Minnesota Statute 7690.0550 and the Minnesota Department of Commerce, Division of Energy Resources (Department) November 3, 2016 Decision on the 2017-2019 CIP Triennial Filing in Docket G004/CIP-16-121, Great Plains submits this status report on its Conservation Improvement Program (CIP). This report covers the 2018 CIP year: January 1, 2018 through December 31, 2018.

I. Overall Summary:

The approved 2018 budget for the CIP was \$897,408, while Great Plains' actual expenditures for the twelve-month period ending December 31, 2018 were \$566,621, which exceeds the minimum spending requirement of \$121,325. The low-income expenditures of \$82,136 exceeded the minimum spending requirement of \$50,375 based on the methodology established in the 2013 legislation. Please see Attachment B for a summary of the details of the expenditures, participants and decatherm (dk) savings for 2018.

Great Plains achieved 63.1 percent of its total expenditure goal and 47.7 percent of its Low-income expenditure goal, as demonstrated below:

		Expenditures		% of
	Authorized 1/	Actual	Difference	Authorized
Residential and Small Commercial				
Space Heating Equipment	\$143,931	\$215,617	\$71,866	149.8%
Water Heating Equipment	14,167	13,147	(1,020)	92.8%
Attic Insulation	405	0	(405)	0.0%
Pilotless Fireplace	507	97	(410)	19.1%
Residential Energy Assessment	21,950	3,166	(18,784)	14.4%
Total Residential	\$180,960	\$232,027	\$51,067	128.2%
Low Income				
Weatherization	\$96,890	\$41,564	(\$55,326)	42.9%
Furnace Replacement	71,030	40,092	(30,938)	56.4%
Furnace/Boiler Tune-up	4,240	480	(3,760)	11.3%
Hot Water Heater Temp Set-Back	0	0	0	0.0%_
Total Low-Income	\$172,160	\$82,136	(\$90,024)	47.7%
Commercial & Industrial				
Space Heating Equipment	\$47,874	\$22,184	(\$25,690)	46.3%
Water Heating Equipment	2,793	1,185	(1,608)	42.4%
Commercial Boiler Equipment	27,513	987	(26,526)	3.6%
Foodservice Equipment	2,538	0	(2,538)	0.0%
Custom	418,849	216,938	(201,911)	51.8%
Building Certification Program	5,077	0	(5,077)	0.0%

Commercial Energy Assessment	6,029	0	(6,029)	0.0%
Industrial Energy Assessment	7,615	0	(7,615)	0.0%_
Total Commercial and Industrial	\$518,288	\$241,294	(\$276,995)	46.6%
CIP Assessments	26,000	11,164	(14,836)	42.9%
Total CIP Program	\$897,408	\$566,621	(\$330,787)	63.1%

The actual 2018 Residential and Small Commercial Program expenditures, including administration expenses, were 28.2 percent over the budgeted expenditure goal. The primary reason for the increase in this program's expenditures is due to participation in Space Heating Equipment, which was 38.8 percent over authorized participation and 49.8 percent of budgeted expenditures. The variance in participation and expenditures in the Residential and Small Commercial Program is largely offset by the lower than authorized participation and expenditures in the Low Income and Commercial & Industrial Programs. Total Portfolio expenditures were 63.1 percent of authorized and participation was 88.3 percent of authorized.

The variance from the authorized total portfolio expenditures for 2018 is primarily attributable to the lower participation in the Commercial and Industrial Program, including Custom Projects. The continuing low commodity price of natural gas has decreased the incentive for customers to partake in custom conservation projects. Excluding this line item, 2018 expenditures were approximately 86 percent of the budgeted expenditures.

Great Plains achieved 63.2 percent of its 2018 authorized dk savings target.

	İ	Dk Savings		% of
	Authorized 1/	Actual	Difference	Authorized
Residential and Small Commercial				
Space Heating Equipment	6,063	9,060	2,997	149.4%
Water Heating Equipment	1,075	753	(322)	70.0%
Attic Insulation	13	0	(13)	0.0%
Pilotless Fireplace	22	4	(18)	18.2%
Residential Energy Assessment	0	0	0_	0.0%
Total Residential	7,173	9,817	2,644	136.9%
Low Income				
Weatherization	1,050	220	(830)	21.0%
Furnace Replacement	323	194	(129)	60.1%
Furnace/Boiler Tune-up	74	8	(66)	10.8%
Hot Water Heater Temp Set-Back	14	0	(14)	0.0%
Total Low-Income	1,461	422	(1,039)	28.9%
Commercial & Industrial				
Space Heating Equipment	2,949	1,015	(1.934)	34.4%
Water Heating Equipment	161	144	(17)	89.4%
Commercial Boiler Equipment	1,105	39	(1.066)	3.5%
Foodservice Equipment	257	0	(257)	0.0%

Custom	44,000	24,646	(19,354)	56.0%
Building Certification Program	0	0	0	0.0%
Commercial Energy Assessment	0	0	0	0.0%
Industrial Energy Assessment	0_	0_	0	0.0%_
Total Commercial and Industrial	48,472	25,844	(22,628)	53.3%
Total CIP Program	57,106	36,083	(21,023)	63.2%

The overall dk savings achieved was 36,083 dk, which is less than the authorized goal of 57,106 dk for the year; however, this is a 165.8 percent increase in dk savings compared to the 2017 result of 13,577 dk. The shortfall in actual dk savings from the authorized 2018 portfolio savings is attributable to lower participation in the Commercial and Industrial Program. Excluding this line item, 2018 dk savings were approximately 119 percent of the authorized dk savings.

In summary:

- The Residential Space Heating Equipment program provided additional savings of 2,449 dk over last year and 2,997 in dk savings over the authorized dk savings.
- The Custom Program provided savings of 24,646 dk over last year. However, this program was still significantly under the authorized expenditures and savings for 2018.
- The total portfolio cost per dk decreased from \$29.69 in 2017 to \$15.70 in 2018.

Great Plains plans to build upon its program successes in the residential programs, and to continue marketing its programs through its website, bill inserts, direct mail campaigns, and other marketing media as appropriate. Great Plains' CIP Program Manager will continue to work directly with the local contractor network on program awareness and education and will continue the involvement with the custom programs.

The cost per dk for the total portfolio is \$15.70 per dk or \$0.01 per dk below the authorized level, as shown in the table below. The total cost per dk saved for the Residential sector is slightly lower than the authorized cost per dk. The cost per dk saved for the Low-Income sector is higher than authorized. The primary driver for this increase in cost per dk saved compared to authorized is higher weatherization costs per participant. For the Commercial and Industrial sector, the actual cost per dk saved was lower than authorized.

The authorized and actual cost per dk saved are:

	Cost	per Dk Save	:d	% of
	Authorized 1/	Actual	Difference	Authorized
Residential				
Space Heating Equipment	\$23.74	\$23.80	\$0.06	100.25%
Water Heating Equipment			4.28	132.47%
Attic Insulation and Bypass	31.15	0.00	(31.15)	0.00%
Pilotless Fireplace	23.05	24.25	1.20	105.21%
Residential Energy Assessment	0.00	0.00	0.00	0.00%_
Total Residential	25.23	23.64	(1.59)	93.70%

Low Income				
Weatherization	92.28	188.93	96.65	204.74%
Furnace Replacement	219.91	206.66	(13.25)	93.97%
Furnace/Boiler Tune-up	57.30	60.00	2.70	104.71%
Total Low Income	117.84	194.64	76.80	165.17%
Commercial & Industrial				
Space Heating Equipment	\$16.23	\$21.86	\$5.63	134.69%
Water Heating Equipment	17.35	8.23	(9.12)	47.44%
Commercial Boiler Equipment	24.90	25.31	0.41	101.65%
Foodservice Equipment	9.88	0.00	(9.88)	0.00%
Custom	9.52	8.80	(0.72)	92.44%
Building Certification Program	0.00	0.00	0.00	0.00%
Commercial Energy Assessment	0.00	0.00	0.00	0.00%
Industrial Energy Assessment	0.00	0.00	0.00	0.00%
Total Commercial	\$10.69	\$9.34	(\$1.35)	87.37%
Total CIP Program 2/	\$15.71	\$15.70	(\$0.01)	99.94%

^{1/ 2017-2019} Triennial Plan for Natural Gas CIP, Docket No. G004/CIP-16-121. Approved by the MN DOC on November 3, 2016.

The total portfolio and each program that had participation were cost effective with a Utility Cost Test ratio of 1.00 or greater, with the exception of the Low-Income and Commercial Boiler programs, which had a Utility Cost Test ratio under 1.00. The results of the cost/benefit analysis are shown below:

	RIM	Utility	Societal	Participant
Residential				
Space Heating Equipment	0.59	2.66	1.60	2.02
Water Heating Equipment	0.60	2.81	1.74	2.88
Attic Insulation and Bypass	***			
Pilotless Fireplace	0.60	2.74	1.96	3.08
Residential Energy Assessment	0.00	0.00	0.00	1.16
Total Residential Portfolio	0.59	2.54	1.51	1.95
Low Income				
Weatherization	0.27	0.42	0.98	3.28
Furnace Replacement	0.26	0.39	0.78	1.86
Furnace/Boiler Tune-up	0.16	0.20	0.21	1.36
Hot Water Heater Temp Set-back				
Total Low Income Portfolio	0.26	0.40	0.83	2.34
Commercial and Industrial				
Space Heating Equipment	0.66	3.66	3.25	2.66
Water Heating Equipment	0.73	8.06	2.64	2.37
Commercial Boiler Equipment	0.29	0.46	0.12	0.34
Foodservice Equipment	ME APP NO	***		

^{2/} Includes direct assessment charges.

Custom Program	0.71	5.85	5.29	5.29
Building Certification Program	and and des		nga ning sar	
Commercial Energy Assessment	00 Vin 44			
Industrial Energy Assessment	age Nov-gill		400 400 400	
Total Commercial & Industrial Portfolio	0.72	6.39	6.05	5.49
Total Portfolio	0.64	3.22	2.37	3.27

The BENCOST Summary for Great Plains' overall CIP program for 2018, as well as the summary for each program is provided as Attachment C. The ESP™ Project Information Sheets will be provided as Attachment D when available.

Great Plains did not have any expenditures related to research and development, distributed and renewable generation projects or evaluation.

Program Modifications

Great Plains has not submitted a modification to its 2017–2019 Triennial Plan.

II. Status Report by Project:

Residential and Small Commercial Programs

1. Residential Space Heating Program

Great Plains offers a three-tiered rebate plan (\$15, \$50, or \$75 depending on features) for installation of programmable thermostats, a \$300 rebate for a 94 percent AFUE or greater furnace, a \$400 rebate for a 96 percent AFUE or greater furnace, a \$300 rebate for a boiler 84 percent AFUE or greater, a \$500 rebate for a 91 percent AFUE or greater boiler, and a \$50 rebate for a furnace or boiler tune-up. The program is available to residential customers.

The Space Heating program overall achieved 138.8 percent of the participant goal and achieved 149.4 percent of its energy savings goal. The rebates for replacement of higher efficiency furnaces (96 percent AFUE or greater) and high efficiency boilers (91 percent AFUE or greater) exceeded the authorized level, which indicates that customers are interested in the higher efficiency appliances.

Great Plains tracked the number of rebates provided for installation in new homes versus for replacement equipment and type of dwelling information. Replacement equipment accounted for 96 percent of participants with 4 percent of participants representing new home construction. Great Plains has historically experienced low residential new construction growth in its service territory and expects the trend to continue.

Single family homes made up 91 percent of participants, duplexes represented 2 percent, town house and condos 1 percent and all other the remaining 6 percent of participants.

2. Water Heating Equipment Upgrade Incentive Program

Great Plains provides a \$100 rebate for the installation of a .67 EF or greater natural gas water heater, and a \$250 rebate for a .82 EF tankless natural gas water heater. This program also includes a free low-flow shower head kit upon request to customers that have natural gas water heating.

Great Plains achieved 70.0 percent of authorized dk savings with 92.8 percent of authorized expenditures and 80.0 percent of authorized participation levels in 2018. Both of the .67 EF or greater water heating and Tankless Water Heating programs exceeded the authorized dk savings in 2018. Low Flow Showerhead programs underperformed authorized participation and dk savings levels.

3. Residential Attic Insulation

The Residential Attic Insulation Program provides a dollar per square foot rebate to customers for the installation or replacement of attic insulation. In 2018, Great Plains did not have any participants in this program. As a result, it did not meet its authorized participation and dk savings levels.

4. Pilotless Fireplace

The Residential Pilotless Fireplace Program is a program that offers residential customers a \$75 rebate for the installation of a qualifying pilotless natural gas fireplace. Participation, expenditures and dk savings were 20.0 percent, 19.1 percent and 18.2 percent of authorized, respectively.

5. Residential Energy Assessment

Great Plains offers residential customers, whose primary heat source is natural gas, a comprehensive energy assessment, which includes analyses and recommendations on ways to increase energy efficiency in existing residential homes. Customers are charged a co-pay of \$50, while low-income customers are not charged for an audit. In addition to the audit, customers receive weatherization materials valued at approximately \$10 which include weather stripping, caulk and a caulking gun, a filter whistle, outlet and switch plate gaskets and energy educational information.

The energy assessments are performed by state certified auditors and provide Great Plains' customers with information on energy conservation measures, potential costs for implementing the identified measures and the estimated energy savings for the measures. The assessment includes, at a minimum, a blower door test, carbon monoxide (CO) testing of combustion appliances, and if the home has atmospherically-vented appliances, natural draft and worst-case depressurization (WCD) tests.

Great Plains saw an increase in participants in its Residential Energy Assessment program in 2018 compared to 2017. Participation was 10.8 percent of authorized and expenditures were 14.4 percent of authorized.

6. Low Income Programs

Great Plains offers conservation measures to low income customers via three programs by funding weatherization measures through CAP agencies, funding for an emergency replacement of a furnace or boiler and funding for furnace and boiler tune-ups for qualified low-income customers. The maximum funding available to the CAP agency for a qualified customer is \$1,800 for weatherization, \$2,500 for a

furnace replacement, \$5,000 for a boiler replacement and \$200 for a furnace or boiler tune-up.

The Low Income programs participation was 25.0 percent of authorized while dk savings represents 28.9 percent of authorized. A summary of projects and dk savings is provided in Attachment B, page 8.

Commercial and Industrial Customer Programs

7. Commercial and Industrial Space Heating Equipment Program

The Commercial and Industrial Space Heating Equipment program provides commercial and industrial customers a cash rebate for the installation of qualifying high-efficiency space heating equipment with minimum input ratings. The program includes a rebate of \$300 for a 94 percent or greater AFUE furnace and \$400 for a 96 percent or greater AFUE furnace. The rebates for the 85 percent or greater high efficiency hot water boilers, 88 percent or greater high efficiency hot water boilers, 84 percent or greater AFUE low pressure boilers, and 83 percent or greater AFUE high pressure boilers vary based on the size and efficiency of equipment. The program also includes a rebate of \$250 for low-intensity tube-type infrared heaters and \$300 for 88 percent or greater condensing unit heaters.

Overall, the participation was 39.4 percent of authorized with dk savings at 34.4 percent of authorized. There was a substantial decrease in participation from 72 participants in 2017 to 26 participants in 2018.

8. Commercial and Industrial Water Heating Equipment Program

The Commercial and Industrial Water Heating Equipment program provides commercial and industrial customers a cash incentive for the installation of qualifying commercial natural gas water heating equipment. The program includes a rebate of \$100 for a .64 EF or greater storage type (≥ 40 gallons) water heater and a rebate based on the installed BTUH size of the water heater for 88 percent Condensing Efficiency water heaters.

Overall participation was 42.9 percent of authorized. The corresponding dk savings was only 89.4 percent of authorized due to the efficiency of the installed equipment.

9. Commercial and Industrial Boiler Equipment Program

The Commercial and Industrial Boiler Equipment program provides commercial and industrial customers a cash incentive for the repair or upgrade of boiler equipment with qualifying energy efficiency boiler equipment. The program includes boiler O2 controls, modulating burners, boiler stack dampers, boiler turbulators, boiler outdoor

air resets, boiler cut-out controls, boiler tune-ups and steam traps, with the rebate based on the type of equipment and kBTUH levels.

The Commercial and Industrial Boiler Equipment program had three participants in 2018. All participants were in the Commercial Boiler Tune-up program. Participation was 7.1% of authorized, with a corresponding dk savings of 3.5% of authorized.

10. Foodservice Equipment Program

The Foodservice equipment program provides the restaurant industry and public facilities, such as schools and hospitals, cash incentives for the installation of natural gas foodservice cooking equipment. There are separate rebates for two groups of food service equipment. The first tier provides a \$500 rebate for the following equipment types: convection ovens, conveyor ovens, fryers, pasta cookers, charbroilers, salamander broilers, rotisserie ovens, and griddles. The second tier provides a \$1,000 rebate for the following equipment types: combi-ovens, upright broilers, rotating rack ovens, and steamers.

There were no Foodservice program participants in 2018.

11. Commercial and Industrial Custom Program

The Commercial and Industrial Custom Program offers commercial and industrial customers a cash rebate for an energy saving project that is not eligible under a prescriptive program. Custom projects require the involvement of both the customer and the Company working together to develop cost-effective energy saving projects specific to the individual customer's business. Each project is individually evaluated using established criteria and utilizing the BENCOST model to determine eligibility and rebate amounts. Great Plains offers an incentive of \$10 per dk or up to 50 percent of the equipment cost or buy down the project cost to a simple payback of one year, whichever is less.

There were three Commercial and Industrial Custom Program participants in 2018, which was 27.3 percent of the authorized participation. The program achieved energy savings of 216,938 dk, or 51.8 percent of the authorized savings level. The cost per dk for the program also came in below the authorized cost of \$9.52 per dk with an actual cost per dk of \$8.80.

A brief summary of the custom projects follows:

- Project #1: A make-up air project for an agricultural/food processing customer.
- Project #2: The installation of new, more efficient grain dryers for a large industrial agricultural processing facility.
- Project #3: A boiler exhaust retrofit project to increase efficiency of grain dryers for an industrial processing facility.

12. Building Certification Program

The Building Certification Program provides rebates to qualifying customers that participate in the Energy Star, Leadership in Energy and Environmental Design (LEED), or Green Globes Certified Buildings Programs.

ENERGY STAR Labeled Buildings Program

Great Plains will grant a rebate of 50 percent of the cost of professional engineering services up to a maximum of \$3,000 per facility. This rebate is available to new and existing commercial or industrial buildings that meet the eligibility requirements as set by ENERGY STAR and that use natural gas as the primary heating source.

<u>Leadership in Energy and Environmental Design (LEED) Building Certification</u> Program

Great Plains will grant a rebate of 50 percent of the cost of application fees and/or professional engineering services up to a maximum of \$5,000 per facility. This rebate is available to new and existing buildings that are eligible under the requirements of the LEED rating systems and that use natural gas as the primary heating source.

Green Globes™ Certified Buildings

Great Plains will grant a rebate of 50 percent of the cost of independent third-party review and site assessments up to a maximum of \$2,500 per facility. This rebate is available to new and existing commercial or industrial buildings that meet the minimum 35 percent threshold of the new construction self-assessment or the continual improvement for existing buildings assessment and that use natural gas as the primary heating source.

Great Plains did not have any participation in the building certification program in 2018.

13. Commercial Energy Assessment Program

The Commercial Energy Assessment Program provides commercial customers using more than 1,000 dk annually a comprehensive energy assessment which includes analyses and recommendations on ways to increase energy efficiency in existing commercial buildings. The program offers the following services to participants: an analysis of recent natural gas usage (excluding process load) at the customer's facility, a thorough inspection of the customer's facility including the building envelope, insulation and installed natural gas equipment, a review of how the natural gas equipment is currently operated and a report of energy related opportunities identified during the assessment.

The commercial energy assessment is performed by third-party certified energy managers and provides Great Plains' customers with information on energy conservation measures, potential costs for implementing the identified measures

and the estimated energy savings for the measures. Customers are responsible for a co-payment of \$150 for the assessment which is refundable upon implementation of an energy saving project identified in the assessment.

Great Plains did not have any participation in the commercial energy assessment program in 2018.

14. Industrial Energy Assessment Program

The Industrial Energy Assessment Program provides industrial and grain-drying customers with a comprehensive energy assessment which includes analyses and recommendations on ways to increase energy efficiency in existing facilities. The program is available to customers with industrial processing load of at least 1,000 dk annually and customers with natural gas grain-drying load.

The industrial energy assessment is performed by third-party certified energy managers and provides Great Plains' customers with information on energy conservation measures, potential costs for implementing the identified measures and the estimated energy savings for the measures. Industrial customers are responsible for a co-payment of \$500 for an industrial assessment and \$250 per assessment for a grain dryer which is refundable upon implementation of an energy saving project identified in the assessment.

Great Plains did not have any participants in the industrial energy assessment program in 2018.

15.CIP Assessment Charges

The CIP Assessment Charges from the Department of Commerce, Division of Energy Resources (Department) related to Technical Assistance, Research and Development (R&D) grants and Facilities Energy Efficiency are fees assessed on a quarterly basis. These expenses are not directly related to Great Plains' CIP Program, but are tracked and recovered through the Conservation Cost Recovery Charge (CCRC) and the Conservation Cost Recovery Adjustment (CCRA) charged to the Company's customers

In 2018, CIP assessments amounted to \$11,164, which is below the \$26,000 authorized.

16. Employee Expenses

Pursuant to Minnesota Statues 2008, Section 216B.16, Great Plains recorded minimal employee expenses for travel in 2018. Great Plains has not exceeded the 0.5 percent of total annual CIP expense limit of \$2,833.

	Employ	/ee Expenses	
	Residential and Commercial	Residential Attic	Total
Vehicles	\$0	\$0	\$0
Commercial Air	0	0	0
Personal Vehicle Use	136	0	136
Meals	0	0	0
Other Reimbursable Expenses	00	0	0
Total	\$136	\$0	<u>\$136</u>

GREAT PLAINS NATURAL GAS CO. CONSERVATION IMPROVEMENT PROGRAM TRACKER REPORT

III: Conservation Improvement Tracker Program:

Pursuant to the Order issued in Docket No. E,G-999/CI-08-133, Great Plains submits for approval its report on collections and expenditures from the Conservation Improvement Program (CIP) and the calculation of a proposed Conservation Improvement Resource Adjustment (CCRA) proposed to be effective September 1, 2019.

Attachment E, page 1 is the calculation of the proposed CCRA using estimated volumes excluding CIP-exempt customer volumes, as authorized in Docket No. G004/M-12-439. The proposed CCRA is negative \$0.0337 per dk for all non-CIP Exempt customers, a decrease of \$0.0467 from the current CCRA (established in Docket No. G-004/GR-18-118). For a typical residential customer using 77 dk per year, this reflects a decrease of \$3.59 annually or \$0.30 per month.

The CIP True-up on page 2 includes the balance in the CIP account at December 31, 2017, as well as the projected sales, expenditures, and any pertinent adjustments that may occur over the period the CCRA will be in place. The Company does not qualify to receive a 2018 DSM financial incentive. Carrying charges are calculated at the short-term debt cost authorized in Great Plains' most recently filed rate case, Docket No. G004/GR-15-879.

The detailed activity by month is shown on pages 3 and 4.

Attachment A is the CCRA tariff sheet (Sheet No. 5-111) with the proposed rate per dk.

2018 DEMAND-SIDE MANAGEMENT (DSM) INCENTIVE

IV: Demand-Side Management Incentive:

Great Plains submits this report in compliance with the Commission's Order approving the natural gas DSM Financial Incentive program, Docket No. E,G-999/CI-08-133.

Attachment F shows the calculation of the DSM Incentive for 2018 based on the results of the 2018 CIP program. As shown in Attachment B, Great Plains total energy savings in 2018 were 36,083 dk, which results in an achievement level of 0.64%. This level of achievement is below the minimum level required to receive a financial incentive, which is an achievement level greater than 0.70%, or energy savings greater than 39,064 dk. Therefore, Great Plains' 2018 CIP results do not qualify for a DSM incentive.

The Commission approved a conservation improvement plan incentive program for gas and electric utilities in its January 27, 2010 Order Establishing Utility Performance Incentives for Utility Conservation in Docket No. G,E-999/CI-08-133. Great Plains' plan is consistent with the four considerations contained in Section 216B.16.subd.6c.

1. Whether the plan is likely to increase utility investment in cost-effective energy conservation.

The incentive plan is likely to increase Great Plains' investment in cost-effective energy conservation because the incentive for achieving each new increment of energy savings increases as the percent of goal achieved increases. No significant incentive is provided unless Great Plains meets or exceeds its expected energy savings at minimum statutory spending guidelines. The increasing increment of the incentive motivates Great Plains to exceed energy savings achievable at statutory spending levels.

The DSM Financial Incentive Plan has increased Great Plains' investment in costeffective energy conservation because the mechanism encourages cost-effective spending above the statutory minimum.

2. Whether the plan is compatible with the interest of utility ratepayers and other interested parties.

Great Plains' Plan is compatible with the interest of utility customers and other interested parties because it does not receive a significant incentive until it extends beyond the energy savings goals associated with statutory spending requirements. In addition, the incentive never exceeds the incremental increase in net benefits that are created by surpassing the incentive energy savings goals. The incentive is only a fraction of the achieved net benefits and therefore customers receive the vast majority of benefits achieved under the CIP programs.

3. Whether the plan links the incentive to the utility's performance in achieving cost-effective conservation

Great Plains' DSM Financial Incentive Plan links the incentive to its performance in achieving cost-effective conservation. If Great Plains' CIP Program is not cost-effective, there are no net benefits, and, thus, no incentive. As a CIP Program's cost effectiveness increases (increased Mcf saved per dollars spent), net benefits increase, and thus, the incentive increases. Therefore, the plan is directly linked to the cost-effectiveness of the program.

4. Whether the plan is in conflict with other provisions of Minnesota Statute 216B

Great Plains' Plan does not conflict with other provisions of 216B, which requires that all rates be just and reasonable. Awarding incentives under the Plan will not result in unjust or unreasonable rates because the incentives are not cumulative and are only a small portion of the net benefits (avoided costs).

Attachment A

GREAT PLAINS NATURAL GAS CO.



A Division of Montana-Dakota Utilities Co.

State of Minnesota Gas Rate Schedule – MNPUC Volume 2

Section No. 5

6th Revised Sheet No. 5-111

Canceling 5th Revised Sheet No. 5-111

CONSERVATION IMPROVEMENT PROGRAM ADJUSTMENT CLAUSE

of the distribution delivery charge authorized in Docket No. G004/GR-15-879. The CCRC is approved and applied on a per dk basis by dividing the test-year CIP expenses by the test-year sales volumes (net of CIP-exempt volumes).

Determination of Conservation Cost Recovery Adjustment:

The CCRA Factor shall be calculated for each customer class by dividing the allocated recoverable Conservation Improvement Program costs, not recovered through the Base Charge by the projected sales volumes, excluding CIP-exempt customer volumes, for a designated recovery period. The factor may be adjusted annually with approval of the Minnesota Public Utilities Commission.

The applicable rate that will be assessed to all non-CIP exempt customers in each rate class is:

Base Charge	Adjustment
CCRC	CCRA Factor
\$0.0556	(\$0.0337)

Exemption:

Any customer account determined by the Commissioner to qualify for a CIP exemption as a Large Customer Facility or a Commercial Gas Customer pursuant to Minnesota Statutes 216B.241 and 216B.2421, shall be exempt from the CCRC and the CCRA. Customer accounts granted exemption by a decision of the Commissioner after the beginning of the calendar year shall be credited for any CIP collections billed after January 1st of the year following the Commissioner's decision.

Any customer account determined by the MPUC to qualify for a CIP exemption as a Large Energy Facility pursuant to Minnesota Statutes 216B.16, subd. 6b(b) and 216B.2421, subd. 2(1), shall be exempt from the CCRC and the CCRA Factor.

For Large Customer Facilities, Commercial Gas Customers or Large Energy Facilities, determined to be CIP exempt, the Flexible Distribution Charge will be reduced by the CCRC for exempt customers served under a specific flexed contract. Exempt customers not served under a flexed contract will be billed a credit CCRC. Upon exemption from the conservation program charges, no exempted customer may participate in the Company's gas conservation improvement program unless the owner of the facility submits a filing with the Commissioner or the MPUC to withdraw its exemption.

Date Filed: April 26, 2019 Effective Date:

Issued By: Tamie A. Aberle Docket No.:

Director - Regulatory Affairs



GREAT PLAINS NATURAL GAS CO.



A Division of MDU-Resources Group, Inc. Montana-Dakota Utilities Co.

State of Minnesota Gas Rate Schedule – MNPUC Volume 2

Section No. 5

5th Revised Sheet No. 5-111

Canceling 4th Revised Sheet No. 5-111

CONSERVATION IMPROVEMENT PROGRAM ADJUSTMENT CLAUSE

of the distribution delivery charge authorized in Docket No. G004/GR-15-879. The CCRC is approved and applied on a per dk basis by dividing the test-year CIP expenses by the test-year sales volumes (net of CIP-exempt volumes).

Determination of Conservation Cost Recovery Adjustment:

The CCRA Factor shall be calculated for each customer class by dividing the allocated recoverable Conservation Improvement Program costs, not recovered through the Base Charge by the projected sales volumes, excluding CIP-exempt customer volumes, for a designated recovery period. The factor may be adjusted annually with approval of the Minnesota Public Utilities Commission.

The applicable rate that will be assessed to all non-CIP exempt customers in each rate class is:

Base Charge CCRC C S0.0556 \$0.0

Adjustment CCRA Factor \$0.0130(\$0.0337)

Exemption:

Any customer account determined by the Commissioner to qualify for a CIP exemption as a Large Customer Facility or a Commercial Gas Customer pursuant to Minnesota Statutes 216B.241 and 216B.2421, shall be exempt from the CCRC and the CCRA. Customer accounts granted exemption by a decision of the Commissioner after the beginning of the calendar year shall be credited for any CIP collections billed after January 1st of the year following the Commissioner's decision.

Any customer account determined by the MPUC to qualify for a CIP exemption as a Large Energy Facility pursuant to Minnesota Statutes 216B.16, subd. 6b(b) and 216B.2421, subd. 2(1), shall be exempt from the CCRC and the CCRA Factor.

For Large Customer Facilities, Commercial Gas Customers or Large Energy Facilities, determined to be CIP exempt, the Flexible Distribution Charge will be reduced by the CCRC for exempt customers served under a specific flexed contract. Exempt customers not served under a flexed contract will be billed a credit CCRC. Upon exemption from the conservation program charges, no exempted customer may participate in the Company's gas conservation improvement program unless the owner of the facility submits a filing with the Commissioner or the MPUC to withdraw its exemption.

Date Filed:

September 12, 2018

Effective Date:

Docket No.:

Service rendered on and

after October 1, 2018

Issued By:

Tamie A. Aberle Director – Regulatory Affairs

G004/M-18-118

GREAT PLAINS NATURAL GAS CO. SUMMARY OF 2018 CIP AUTHORIZED VS. ACTUAL EXPENDITURES, PARTICIPANTS AND DK SAVINGS

% of	Authorized	9	149.4%	%0.07	%0.0	18.2%	0.0%	136.9%		21.0%	60.1%	10.8%	%0:0	28.9%		34.4%	89.4%	3.5%	%0.0	26.0%	%0.0	%0:0	%0.0	53.3%		63.2%
	Difference	1	7,887	(322)	(13)	(18)	0	2,644		(830)	(129)	(99)	(14)	(1,039)		(1,934)	(17)	(1,066)	(257)	(19,354)	0	0	0	(22,628)		(21,023)
Dk Savings	Actual	0	090'6	753	0	4	0	9,817		220	194	80	0	422		1,015	144	39	0	24,646	0	0	0	25,844		36,083
D	Authorized 1/	6	6,063	1,075	13	22	0	7,173		1,050	323	74	14	1,461		2,949	161	1,105	257	44,000	0	0	0	48,472		57,106
% of	Authorized	0	138.8%	80.08	%0.0	20.0%	10.8%	102.6%		26.7%	58.8%	10.0%	%0.0	25.0%		39.4%	42.9%	7.1%	%0.0	27.3%	0.0%	%0.0	0.0%	25.5%		88.3%
	Difference		96	(104)	(2)	4)	(28)	28		(44)	(2)	(18)	(15)	(84)		(40)	4	(38)	(3)	(8)	£)	(2)	(2)	(102)		(158)
Participants	Actual	î	5	415	0	_	7	1,124		16	10	7	0	28		56	က	က	0	က	0	0	0	35		1,187
Pa	Authorized 1/	i C	വാ	519	2	5	65	1,096		9	17	20	15	112		99	7	42	က	7	_	2	2	137		1,345
% of	Authorized		149.8%	92.8%	%0:0	19.1%	14.4%	128.2%		42.9%	56.4%	11.3%	%0.0	47.7%		46.3%	42.4%	3.6%	%0.0	51.8%	%0.0	%0.0	%0.0	46.6%	42.9%	63.1%
	Difference	9	020'I./¢	(1,020)	(405)	(410)	(18,784)	\$51,067		(\$55,326)	(30,938)	(3,760)	0	(\$90,024)		(\$25,690)	(1,608)	(26,526)	(2,538)	(201,911)	(5,077)	(6,029)	(7,615)	(\$276,994)	(14,836)	(\$330,787)
Expenditures	Actual	6 7	110,612	13,147	0	26	3,166	\$232,027		\$41,564	40,092	480	0	\$82,136		\$22,184	1,185	286	0	216,938	0	0	0	\$241,294	11,164	\$566,621
9	Authorized 1/		4145,951	14,167	405	202	21,950	\$180,960		\$96,890	71,030	4,240	0	\$172,160		\$47,874	2,793	27,513	2,538	418,849	5,077	6,029	7,615	\$518,288	26,000	\$897,408
		Residential and Small Commercial	Space Heating Equipment	Water Heating Equipment	Attic Insulation	Pilotless Fireplace	Residential Energy Assessment	Total Residential	Low Income	Weatherization	Furnace Replacement	Furnace/Boiler Tune-up	Hot Water Heater Temp Set-Back	Total Low-Income	Commercial & Industrial	Space Heating Equipment	Water Heating Equipment	Commercial Boiler Equipment	Foodservice Equipment	Custom	Building Certification Program	Commercial Energy Assessment	Industrial Energy Assessment	Total Commercial and Industrial	CIP Assessments	Total CIP Program

1/ 2017-2019 Triennial Plan for Natural Gas CIP, Docket No. G004/CIP-16-121. Approved by the MN DOC on November 3, 2016.

LOW INCOME AND RENTER PARTICIPANTS GREAT PLAINS NATURAL GAS CO. SUMMARY OF 2018 CIP

	Ш	Expenditures		% of	ď	Participants		% of	۵	Dk Savings		% of
	Authorized 1/	Actual	Difference	Authorized	Authorized 1/	Actual	Difference	Authorized	Authorized 1/	Actual	Difference	Authorized
Low Income Participants												
Space Heating Equipment 2/	\$3,742	\$18,112	\$14,370	484.0%	13	20	37	384.6%	156	762	909	488.5%
Water Heating Equipment 3/	1,006	158	(848)	15.7%	37	τ	(36)	2.7%	77	2	(75)	2.6%
Attic Insulation	0	0	0	%0.0	0	0	0	%0.0	0	0	0	%0.0
Pilotless Fireplace	0	0	0	%0:0	0	0	0	%0.0	0	0	0	0.0%
Residential Energy Assessment	1,690	0	(1,690)	%0.0	വ	0	(2)	%0.0	0	0	0	0.0%
Total Low Income Participants	\$6,438	\$18,270	\$11,832	283.8%	55	51	(4)	92.7%	233	764	531	327.9%
Total Low Income Programs	\$172,160	\$82,136	(\$90,024)	47.7%	112	28	(84)	25.0%	1,461	422	(1,039)	28.9%
Grand Total Low Income	\$178,598	\$100,406	(\$78,192)	56.2%	167	79	(88)	47.3%	1,694	1,186	(208)	70.0%
						•						
Renter Participants												
Space Heating Equipment 2/	\$17,128	\$20,699	\$3,571	120.8%	09	52	(8)	86.7%	720	934	214	129.7%
Water Heating Equipment 3/	1,176	1,275	66	108.4%	43	28	(15)	65.1%	88	119	30	133.7%
Attic Insulation	0	0	0	%0.0	0	0	0	%0.0	0	0	0	0.0%
Pilotless Fireplace	0	26	26	%0.0	0		~	0.0%	0	4	4	%0:0
Residential Energy Assessment	329	0	(329)	%0.0	~	0	(E)	%0.0	0	0	0	0.0%
Total Renters	\$18,633	\$22,071	\$3,438	118.5%	104	81	(23)	77.9%	809	1,057	248	130.7%

1/ 2017-2019 Triennial Plan for Natural Gas CIP, Docket No. G004/CIP-16-121. Approved by the MN DOC on November 3, 2016.
2/ Includes rental property from the Furnace, Boiler, Furnace Tune-up and Programmable Thermostat programs.
3/ Includes rental property from the Water Heating Equipment and Low Flow Showerhead programs.

GREAT PLAINS NATURAL GAS CO. SUMMARY OF 2018 CIP PROGRAM RESULTS

% of	Authorized		234 9%	190.1%	143.8%	14.5%	73.3%	80.2%	241.6%	102.6%	160.5%	315.5%	149.4%		176.9%	106.1%	65.5%	%0.07	%0.0	18 2%	0.0%	136.9%	90	2.0%	40.0%	%0.01 %0.00	28.9%
	Difference		85	100	67	(65)	(761)	(16)	2,874	0	23	681	2,997		20	က	(345)	(322)	(13)	(18)	0	2,644	(0830)	(020)	(621)	(00)	(1,039)
Dk Savings	Actual		148	211	220	7	2,089	65	4,904	354	61	266	090'6		46	52	655	753	0	4	0	9,817	020	7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	1 α	0 0	422
	Authorized 1/		63	111	153	92	2,850	81	2,030	345	38	316	6,063		26	49	1,000	1,075	13	22	0	7,173	1.050	323	223	1 4	1,461
% of	Authorized		236.0%	193.3%	144.0%	20.0%	81.3%	250.0%	233.0%	94.0%	140.0%	275.0%	138.8%		125.0%	114.3%	78.4%	80.0%	0.0%	20.0%	10.8%	102.6%	%2 90	58.7.75 58.8%	10.0%	0.0%	25.0%
S	Difference		34	28	1	(2)	(28)	9	133	6)	2	21	196		က	_	(108)	(104)	(2)	(4)	(28)	28	(44)		(3)	(15)	(84)
Participants	Actual		29	28	36	7	122	9	233	141	7	33	701		15	80	392	415	0	•	7	1,124	7	2	50	10	28
	Authorized 1/		25	30	25	4	150	4	100	150	2	12	202		12	7	200	519	2	5	65	1,096	909	17	00	15	112
% of	Authorized		226.7%	-	138.1%				(1				149.8%		200.8%	183.6%	54.5%	92.8%	0.0%	19.1%	14.4%	128.2%	42.9%	56 4%	11.3%	0.0%	47.7%
1000	Difference		\$641	1,655	996	(843)	(13,346)	3,024	66,777	(1,166)	695	13,283	\$71,686		\$1,634	1,976	(4,630)	(\$1,020)	(\$405)	(\$410)	(\$18,784)	\$51,067	(\$55,326)	(30,938)	(3,760)	0	(\$90,024)
씲	Actual		\$1,147	3,682	3,499	778	47,442	5,185	120,810	8,964	2,722	21,388	\$215,617		\$3,255	4,340	5,552	\$13,147	0\$	\$97	\$3,166	\$232,027	\$41,564	40.092	480	0	\$82,136
1	- Authorized 1/		\$506	\$2,027	\$2,533	1,621	60,788	2,161	54,033	10,130	2,027	8,105	\$143,931		\$1,621	2,364	10,182	\$14,167	\$405	\$507	\$21,950	\$180,960	\$96,890	71,030	4.240	0	\$172,160
Drogram	ה המושבות ה	Residential and Small Commercial Space Heating Equipment	Programmable Thermostats Tier 1	Programmable Thermostats Tier 2	Programmable Thermostats Tier 3	Furnace Tier 1 - 94-96% AFUE - New	Furnace Tier 1 - 94-96% AFUE - Repl.	Furnace Tier 2 - 96%+ AFUE - New	Furnace Tier 2 - 96%+ AFUE - Repl.	Furnace and Boiler Tune-up	Boiler 1 - 84-90.9% AFUE	Boiler I ier 2 - 91%+ AFUE	l otal	Water Heat Equipment Upgrade	Water Heating (.67 EF)	Tankless Water Heating (.82 EF)	Low Showerheads	l otal	Attic Insulation	Pilotless Fireplace	Residential Energy Assessment	Total Residential Portfolio	<u>Low Income</u> Weatherization	Furnace Replacement	Furnace/Boiler Tune-up	Hot Water Heater Temp Set-Back	Total Low Income Portfolio

GREAT PLAINS NATURAL GAS CO. SUMMARY OF 2018 CIP PROGRAM RESULTS

% of Difference Authorized	(768) 12.7%		(121) 78.5%	(42)	4			(83) 0.0%	(141) 0.0%	%0.0 (66)	(1,934) 34.4%	(40) 0.0%	23 119.0%	(17) 89.4%	0.0%		(31) 0.0%	0.0%	0 0.0%	(55) 0.0%				ω	_		(1 066) 3 5%
Dk Savings / Actual Diffe	112	ı 0	443	c	460	ć	>	0	0	0	1,015 (0	144	144	0		0	0	0	0	0	0	,	39	0		000
Di Authorized 1/	088	75	564	70	886	,	40	83	141	66	2,949	40	121	161	0		31	0	0	55	37	0		28	202	417	4 40
% of Authorized	%0 02	%0:0	120.0%	7000	30.0%	Č	0.0%	%0.0	%0:0	%0:0	39.4%	0.0%	%0.09	42.9%	%0.0		%0.0	%0.0	0.0%	0.0%	0.0%	0.0%		20.0%	20.0%	%0:0	7 40/
s Difference	(20)	(2)	ີ ຕ	(5)	(2)		Ξ	Ξ	(2)	(2)	(40)	(2)	(2)	(4)	0		(E)	0	0	(E)	(E)	0		(2)	4	(30)	(00)
Participants 11/ Actual		0 6	15 18	c	10 3	,	_		5 0		66 26	2 0	5 3	7 3	0		1	0	0	1	1 0	0 0		4 2	5	30 0	C*
Authorized							_			. 0		. 0	. 0	. 0	.0		.0	. 0	. 0	vo.	vo.	ν _ο		o	9	9	
% of Authorized	%6 66	0.0%	133.4%	760 0	47.6%	•				%0.0	46.3%	0.0%	46.7%	42.4%	%0.0		0.0%	0.0%	%0.0	0.0%		%0.0			0		200
Difference	(\$7.403)	(1,015)	2,541	(4 020)	(10,904)	1	(\$1,586)	(\$1,904)	(\$1,586)	(\$1,904)	(\$25,690)	(\$254)	(1,354)	(\$1,608)	Ş		(1,586)	0	0	(635)	(381)			(451)	(1,481)	(21,992)	(OCT (CA)
Expenditures / Actual	\$2.7 1.16	0	10,156	c	9,912		>	0	0	0	\$22,184	\$0	1,185	\$1,185	0\$		0	0	0	0	0	0		564	423	0	1000
E Authorized 1/	\$0 57 0	1,015	7,615	1 000	20,816		1,586	1,904	1,586	1,904	\$47,874	\$254	2,539	\$2,793	09	•	1,586	0	0	635	381	0		1,015	1,904	21,992	C 7 1 1 C 0
Program	Commercial and Industrial Space Heating Equipment Firmare Tier 1 - 04-06%, AELIE - Real	Furnace Tier 2 - 96%+ AFUE - New	Furnace Tier 2 - 96%+ AFUE - Repl.	Commercial Hot Water Boiler	Tier 2 (88%+ AFUE)	Commercial LP & HP Steam Boilers	lier 1 (<300,000 BTUH)	Tier 2 (≥300,000 BTUH)	Infrared Heater	Condensing Unit Heater	Total Space Heating	Water Heating Equipment Water Heater .64 EF+ (≥40 Gallons)	Water Heater Storage 88% cond	Total Water Heating	Commercial Boiler Equipment O2 Control	Modulating Burners	Tier 1 (<2,500 kBTUH)	Tier 2 (>2,500 kBTUH)	Stack Dampers	Turbulators	Outdoor Air Reset	Cut-Out Control	Commercial Boiler Tune-Up	Tier 1 (<2,500 kBTUH)	Tier 2 (≥2,500 kBTUH)	Commercial Steam Traps	

GREAT PLAINS NATURAL GAS CO. SUMMARY OF 2018 CIP PROGRAM RESULTS

% of	Authorized		%0.0	0.0%	%0.0	26.0%	0.0%	0.0%	%0.0	53.3%	63.2%		
	Difference		(174)	(83)	(257)	(19,354)	`o	0	0	(22,628)	(21,023)		
Dk Savings	Actual		0	0	0	24,646	0	0	0	25,844	36,083		
ā	Authorized 1/		174	83	257	44,000	0	0	0	48,472	57,106		
% of	Authorized A		%0.0	%0.0	%0.0	27.3%	%0.0	0.0%	%0.0	25.5%	88.3%		
	Difference		(2)	(E)	(3)	(8)	Ξ	(2)	(2)	(102)	(158)		
Participants	Actual D		0	0	0	ო	0	0	0	35	1,187		
Pa	Authorized 1/		2	_	က	1	_	5	2	137	1,345		
% of	Authorized		0.0%	%0.0	%0.0	51.8%	%0.0	%0.0	%0.0	46.6%	63.7%	42.9%	63.1%
	Difference		(\$1,269)	(1,269)	(\$2,538)	(\$201,911)	(5,077)	(6,029)	(7,615)	(\$276,994)	(\$315,951)	(\$14,836)	(\$330,787)
Expenditures	Actual		\$0	0	\$ 0	\$216,938	0	0	0	\$518,288 \$241,294 (\$276,994)	\$871,408 \$555,457 (\$315,951)	\$26,000 \$11,164 (\$14,836)	<u>\$897,408</u> <u>\$566,621</u> (\$330,787)
Ш	Authorized 1/		\$1,269	1,269	\$2,538	\$418,849	2,077	6,029	7,615	\$518,288	\$871,408	\$26,000	\$897,408
	Program	Food Service Equipment	Lier 1 (\$500 Incentive)	Tier 2 (\$1,000 Incentive)	Total	Custom Projects	Building Certification	Comm. Energy Assessment	Industrial Energy Assessment	Total Commercial and Industrial Portfolio	Total	Direct Assessment Charges	Grand Total All Portfolios

1/ 2017-2019 Triennial Plan for Natural Gas CIP, Docket No. G004/CIP-16-121. Approved by the MN DOC on November 3, 2016.

GREAT PLAINS NATURAL GAS CO. COST PER DK SAVED 2018 ACTUAL TO AUTHORIZED

	Antoni	Co	st per Dk Save	ed	0/ ~5
	Actual Participants	Authorized 1/	Actual	Difference	% of Authorized
Residential and Small Commercial		ridifferized in	7101001	<u>Diriororioo</u>	Hattionizou
Space Heating Equipment					
Programmable Thermostats Tier 1	59	\$8.03	\$7.75	(\$0.28)	96.51%
Programmable Thermostats Tier 2	58	18.26	17.45	(0.81)	95.56%
Programmable Thermostats Tier 3	36	16.56	15.90	(0.66)	96.01%
Furnace Tier 1 - 94-96% AFUE - New	2	21.33	70.73	49.40	331.60%
Furnace Tier 1 - 94-96% AFUE - Repl.	122	21.33	22.71	1.38	106.47%
Furnace Tier 2 - 96%+ AFUE - New	10	26.68	79.77	53.09	298.99%
Furnace Tier 2 - 96%+ AFUE - Repl.	233 141	26.62	24.63	(1.99)	92.52%
Furnace and Boiler Tune-up Boiler Tier 1 - 84-90.9% AFUE	7	29.36 53.34	25.32 44.62	(4.04) (8.72)	86.24% 83.65%
Boiler Tier 2 - 91%+ AFUE	33	25.65	21.45	(4.20)	83.63%
Total Space Heating	701	\$23.74	\$23.80	\$0.06	100.25%
Total Opace Heating	701	Ψ23.74	Ψ23.00	Ψ0.00	100.2576
Water Heating Equipment					
Water Heating (.67 EF)	15	\$62.35	\$70.76	\$8.41	113.49%
Tankless Water Heating (.82 EF)	8	48.24	83.46	35.22	173.01%
Low Flow Showerheads	392	10.18	8.48	(1.70)	83.30%
Total Water Heating	415	\$13.18	\$17.46	\$4.28	132.47%
Attic Insulation	0	\$31.15	\$0.00	(\$31.15)	0.00%
Pilotless Fireplace	1	\$23.05	\$24.25	\$1.20	105.21%
Residential Energy Assessment	7	\$0.00	\$0.00	\$0.00	0.00%
Total Residential Portfolio	1,124	\$25.23	\$23.64	(\$1.59)	93.70%
Loudness					
Low Income Weatherization	16	\$92.28	¢400.02	\$96.65	204 740/
Furnace Replacement	10	219.91	\$188.93 206.66	(13.25)	204.74% 93.97%
Furnace/Boiler Tune-up	2	57.30	60.00	2.70	104.71%
Hot Water Heater Temp Set-Back	0	0.00	0.00	0.00	0.00%
Total Low Income Portfolio	28	\$117.84	\$194.64	\$76.80	165.17%
	<i>*</i>				
Commercial and Industrial					
Space Heating Equipment					
Furnace Tier 1 - 94-96% AFUE - Repl.	5	\$10.82	\$18.89	\$8.07	174.58%
Furnace Tier 2 - 96%+ AFUE - New	0	13.53	0.00	(13.53)	0.00%
Furnace Tier 2 - 96%+ AFUE - Repl.	18	13.50	22.93	9.43	169.85%
Commercial Hot Water Boiler					
Tier 1 (85%+ AFUE)	0	24.42	0.00	(24.42)	0.00%
Tier 2 (88%+ AFUE)	3	21.07	21.55	0.48	102.28%
Commercial LP & HP Steam Boilers	2			1 722.22	
Tier 1 (<300,000 BTUH)	0	39.65	0.00	(39.65)	0.00%
Tier 2 (≥300,000 BTUH)	0	22.94	0.00	(22.94)	0.00%
Infrared Heater	0	11.25	0.00	(11.25)	0.00%
Condensing Unit Heater	0	19.23	0.00	(19.23)	0.00%
Total Space Heating	26	\$16.23	\$21.86	\$5.63	134.69%

GREAT PLAINS NATURAL GAS CO. COST PER DK SAVED 2018 ACTUAL TO AUTHORIZED

		Cos	st per Dk Save	ed	
	Actual				% of
	Participants	Authorized 1/	Actual	Difference	Authorized
Water Heating Equipment					
Water Heater .64 EF+ (≥40 Gallons)	0	\$6.35	\$0.00	(\$6.35)	0.00%
Water Heater Storage 88% cond	3	20.98	8.23	(12.75)	39.23%
Total Water Heating	3	\$17.35	\$8.23	(\$9.12)	47.44%
Commercial Boiler Equipment					
O2 Control	0	\$0.00	\$0.00	\$0.00	0.00%
Modulating Burners	•	40.00	40.00	Ψ0.00	0.0070
Tier 1 (<2,500 kBTUH)	0	51.16	0.00	(51.16)	0.00%
Tier 2 (>2,500 kBTUH)	0	0.00	0.00	0.00	0.00%
Stack Dampers	0	0.00	0.00	0.00	0.00%
Turbulators	0	11.55	0.00	(11.55)	0.00%
Outdoor Air Reset	0	10.30	0.00	(10.30)	0.00%
Cut-Out Control	0	0.00	0.00	0.00	0.00%
Commercial Boiler Tune-Up	1				
Tier 1 (<2,500 kBTUH)	2	17.50	14.46	(3.04)	82.63%
Tier 2 (≥2,500 kBTUH)	1	3.76	0.00	(3.76)	0.00%
Commercial Steam Traps	0	52.74	0.00	(52.74)	0.00%
Total Commercial Boiler	3	\$24.90	\$25.31	\$0.41	101.65%
Foodservice Equipment					
Tier 1 (\$500 Incentive)	0	\$7.29	\$0.00	(\$7.29)	0.00%
Tier 2 (\$1,000 Incentive)	0	15.29	0.00	(15.29)	0.00%
Total Foodservice	0	\$9.88	\$0.00	(\$9.88)	0.00%
Custom Program	3	\$9.52	\$8.80	(\$0.72)	92.44%
Building Certification Program	0	0.00	0.00	0.00	0.00%
Commercial Energy Assessment	0	0.00	0.00	0.00	0.00%
Industrial Energy Assessment	0	0.00	0.00	0.00	0.00%
Total Commercial and Industrial Portfolio	35	\$10.69	\$9.34	(\$1.35)	87.37%
Grand Total All Portfolios 2/	1,187	\$15.71	\$15.70	(\$0.01)	99.94%

^{1/ 2017-2019} Triennial Plan for Natural Gas CIP, Docket No. G004/CIP-16-121. Approved by the MN DOC on November 3, 2016.

^{2/} Includes direct assessment charges.

GREAT PLAINS NATURAL GAS CO. SUMMARY OF LOW INCOME PROGRAMS 2018

	×	Weatherization	no	Furnace/E	Furnace/Boiler Replacement	acement	Furnac	Furnace/Boiler Tune-up	ne-up	Total	Total Low Income	ие
Agency/	Incentive	Ž	Ę	Incentive	ă.	Ę.	Incentive	줌.	į	Incentive	ă.	
CONSIGNITION INTERIOR	expense	Savings	A/UK	Expense	Savings	₩/UX	Expense	Savings	\$/DK	Expense	Savings	\$/Dk
Mahube												
-				\$2,500	8.2	\$304.88				\$2,500	8.2	\$304.88
5				2,364	38.2	61.88				2,364	38.2	61.88
თ ⁻	\$1,698	13.6	\$124.85							1,698	13.6	124.85
4 r	1,893	16.1	117.58		1	ļ				1,893	16.1	117.58
ဂ	1,753	16.1	108.88	2,370	10.5	225.71				4,123	26.6	155.00
	\$5,344	45.8	\$116.68	\$7,234	56.9	\$127.13	\$0	0.0	\$0.00	\$12,578	102.7	\$122.47
Prairie V Community Action Council Inc	tv Action Co	out line										
9	\$1 897	20.1	\$94.38	\$2.750	17 G	\$15B 25				CA 647	7 7 2	640006
· /-	1,813	11.8	153.64	2 750	35.3	77 90				44,047	17.7	\$123.20 06.80
. &	1 974	11.7	168 72) ·	2	2				1,000	17.7	30.00
ာတ	2,230	13.3	167.67							7.230	13.7	167.67
10	2,223	23.2	95.82	2,750	12.0	229.17				4.973	35.2	141.28
_	2,230	18.5	120.54	2,750	6.9	398.55				4.980	25.4	196.06
12	2,221	15.8	140.57	2,750	6.2	443.55				4,971	22.0	225.95
13	2,200	14.8	148.65	5,500	29.7	185.19				7,700	44.5	173.03
	\$16,788	129.2	\$129.94	\$19,250	107.7	\$178.74	\$0	0.0	\$0.00	\$36,038	236.9	\$152.12
West Central MN Communities Action, Inc	ommunities	Action, In	ڹ									
14	\$1,816	7.7	\$235.84				\$175	2.3	\$76.09	\$1,991	10.0	\$199.10
15	1,376	6.2	221.94							1,376	6.2	221.94
16	1,387	10.3	134.66		;		175	5.8	30.17	1,562	16.1	97.02
/-				\$2,750	29.5	\$93.22				2,750	29.5	93.22
	\$4,579	24.2	\$189.21	\$2,750	29.5	\$93.22	\$350	8.1	\$43.21	\$7,679	61.8	\$124.26
United Community Action	Action											
18	\$1,949	11.5	\$169.48							\$1,949	11.5	\$169.48
19	1,648	10.1	163.17							1,648	10.1	163.17
	\$3,597	21.6	\$166.53	\$0	0.0	\$0.00	\$0	0.0	\$0.00	\$3,597	21.6	\$166.53
Total Low Income	\$30,308	220.8	\$137.26	\$29,234	194.1	\$150.61	\$350	8.1	\$43.21	\$59,892	423.0	\$141.59
Total Participants Average Dk/Participant Saved	16 ant Saved			10			8				28 15.1	

Company: Great Plains Natural Gas Co. Project: Total Natural Gas Portfolio with Indirect Programs

Input Data			2018
1) Retail Rate (\$/MCF) =	\$5.7249	16 Utility Project Costs	
Escalation Rate =	4.00%	16 a) Administrative & Operating Costs = 16 b) Incentive Costs =	\$146,963 \$408.494
2) Non-Gas Fuel Retail Rate (\$/Fuel Unit) = Escalation Rate =	\$0.00 3.22%	16 c) Total Utility Project Costs =	\$555,457
Non-Gas Fuel Units (ie. kWh,Gallons, etc) =	kWh	17) Direct Participant Costs (\$/Part.) =	\$913
3) Commodity Cost (\$/MCF) =	\$4.27	18) Participant Non-Energy Costs (Annual \$/Part.) =	09
Escalation Rate =	4.00%	Escalation Rate =	2.16%
4) Demand Cost (\$/Unit/Yr) =	\$124.14	19) Participant Non-Energy Savings (Annual \$/Part) =	0%
Escalation Rate =	4.00%	Escalation Rate =	2.16%
5) Peak Reduction Factor =	0.23%	20) Project Life (Years) =	13
6) Variable O&M (\$/MCF) = Escalation Rate =	\$0.0424 4.00%	21) Avg. MCF/Part. Saved =	30.4
		22) Avg Non-Gas Fuel Units/Part. Saved =	247 KWh
7) Non-Gas Fuel Cost (\$/Fuel Unit) = Escalation Rate =	\$0.02153 3.22%	22a) Avg Additional Non-Gas Fuel Units/ Part. Used =	0 kWh
:	:	23) Number of Participants =	1,187
8) Non-Gas Fuel Loss Factor	5.28%		!
9) Gas Environmental Damage Factor =	\$0.3800	24} I otal Annual MCF Saved ≈	36,083
Escalation Rate =	2.16%	25) Incentive/Participant =	\$344.14
10) Non Gas Fuel Enviro. Damage Factor (\$/Unit) = Escalation Rate =	\$0.02322 2.16%		
11) Participant Discount Rate =	2.73%		
12) Utility Discount Rate =	8.96%		
13) Societal Discount Rate =	2.55%		
14) General Input Data Year =	2016		
15a) Project Analysis Year 1 = 15b) Project Analysis Year 2 = 15c) Project Analysis Year 3 =	2018		

			Inenniai	Inennia	
Cost Summary	2018	Test Results	VPV	B/C	
Utility Cost per Participant =	\$467.95	Ratepayer impact Measure Test	(\$994,396)	0.64	
Cost per Participant per MCF =	\$45.43	Utility Cost Test	\$1,235,357	3.22	
Lifetime Energy Reduction (MCF)	469,079	Societal Test	\$1,683,805	2.37	
Societal Cost per MCF	\$2.62	Participant Test	\$2,454,845	3.27	

Company: Great Plains Natural Gas Co. Project: Total Residential Portfolio

Input Data			2018
1) Retail Rate (\$/MCF) = Escalation Rate =	\$7.2476 4.00%	16 Utility Project Costs 16 a) Administrative & Operating Costs =	\$54,493
2) Non-Gas Fuel Retail Rate (\$/Fuel Unit) =	\$0.00	16 b) Incentive Costs = 16 c) Total Utility Project Costs =	\$177,534 \$232,027
Non-Gas Fuel Units (ie. KWh,Gallons, etc) =	3.22.70 KWh	17) Direct Participant Costs (\$/Part.) =	\$578
3) Commodity Cost (\$/MCF) =	\$4.27	18) Participant Non-Energy Costs (Annual \$/Part.) =	0\$
Escalation Rate =	4.00%	Escalation Rate =	2.16%
4) Demand Cost (\$/Unit/Yr) = Escalation Rate =	\$124.14	19) Participant Non-Energy Savings (Annual \$/Part) = Escalation Rate =	\$0 2.16%
5) Peak Reduction Factor =	1.00%	20) Project Life (Years) =	13
6) Variable O&M (\$/MCF) = Escalation Rate =	\$0.0424 4.00%	21) Avg. MCF/Part. Saved =	8.7
7) Non-Gas Fuel Cost (\$/Fuel Unit) = Escalation Rate =	\$0.02153 3.22%	22) Avg Non-Gas Fuel Units/Part. Saved = 22a) Avg Additional Non-Gas Fuel Units/ Part. Used =	239 KWh 0 KWh
8) Non-Gas Fuel Loss Factor	5.28%	23) Number of Participants =	1,124
9) Gas Environmental Damane Eartor =	40 3800	24) Total Annual MCF Saved =	9,817
Escalation Rate =	2.16%	25) Incentive/Participant =	\$157.95
10) Non Gas Fuel Enviro. Damage Factor (\$/Unit) = Escalation Rate =	\$0.02322 2.16%		
11) Participant Discount Rate =	2.55%		
12) Utility Discount Rate =	8.96%		
13) Societal Discount Rate =	2.55%		
14) General Input Data Year =	2016		
15a) Project Analysis Year 1 = 15b) Project Analysis Year 2 = 15c) Project Analysis Year 3 =	2018		

			Triennial	Triennial	
Cost Summary	2018	Test Results	NPV	B/C	
Utility Cost per Participant =	\$206.43	Ratepayer Impact Measure Test	(\$411,512)	0.59	
Cost per Participant per MCF ==	\$90.16	Utility Cost Test	\$356,485	2.54	
Lifetime Energy Reduction (MCF)	127,621	Societal Test	\$355,768	1.51	
Societal Cost per MCF	\$5.52	Participant Test	\$617,716	1.95	

Company; Great Plains Natural Gas Co. Project: Total Residential Space Heating Equipment

		2018
\$7.2476 4.00%	16 Utility Project Costs 16 a) Administrative & Operating Costs =	\$49,277
\$0.000	16 c) Total Utility Project Costs =	\$215,617
kWh	17) Direct Participant Costs (\$/Part.) =	\$889
\$4.27	18) Participant Non-Energy Costs (Annual \$/Part.) =	0\$
4.00%	Escalation Rate =	2.16%
\$124.14 4.00%	19) Participant Non-Energy Savings (Annual \$/Part) = Escalation Rate =	\$0 2.16%
1.00%	20) Project Life (Years) =	41
\$0.0424 4.00%	21) Avg. MCF/Part. Saved =	12.9
\$0.02153 3.22%	22) Avg Non-Gas Fuel Units/Part. Saved = 22a) Avg Additional Non-Gas Fuel Units/ Part. Used =	384 kWh O kWh
28%	23) Number of Participants =	701
	24) Total Annual MCF Saved =	090'6
0.3800 2.16%	25) Incentive/Participant =	\$237.29
\$0.0232 2.16%		
2.55%		
8.96%		
2.55%		
2016		
2018		
v ← ∪ , ∪ ∪	\$0.000 \$4.00% \$4.27 \$4.00% \$124.14 \$4.00% 1.00% \$0.02153 3.22% \$0.02153 3.22% \$0.0232 2.16% \$0.0232 2.16% \$0.0232 2.16% \$0.0232 2.16% 2.55% 8.96% 2.55% 2.55%	

Cost Summary	2018	Test Results	ΛΦΛ	B/C
Utility Cost per Participant =	\$307.58	Ratepayer Impact Measure Test	(\$390,319)	0.59
Cost per Participant per MCF =	\$92.76	Utility Cost Test	\$357,213	2.66
Lifetime Energy Reduction (MCF)	126,840	Societal Test	\$402,000	1.60
Societal Cost per MCF	\$5.30	Participant Test	\$634,208	2.02

Company: Great Plains Natural Gas Co. Project: Total Residential Water Heating Equipment

Input Data			2018
1) Retail Rate (\$/MCF) =	\$7.2476	16 Utility Project Costs	
Escalation Kate =	4.00%	16 a) Administrative & Operating Costs = 16 b) Incentive Costs =	\$4,470 \$8,677
 Non-Gas Fuel Retail Rate (\$/Fuel Unit) = Escalation Rate = 	\$0.000 3.22%	16 c) Total Utility Project Costs =	\$13,147
Non-Gas Fuel Units (ie. kWh,Gallons, etc) =	kWh	17) Direct Participant Costs (\$/Part.) =	\$60
3) Commodity Cost (\$/MCF) =	\$4.27	18) Participant Non-Energy Costs (Annual \$/Part.) =	0\$
Escalation Rate =	4.00%	Escalation Rate =	2.16%
4) Demand Cost (\$/Unit/Yr) =	\$124.14	19) Participant Non-Energy Savings (Annual \$/Part) =	0\$
Escalation Rate =	4.00%	Escalation Rate =	2.16%
5) Peak Reduction Factor =	1.00%	20) Project Life (Years) =	10
6) Variable O&M (\$/MCF) = Escalation Rate =	\$0.0424 4.00%	21) Avg. MCF/Part. Saved =	1,8
		22) Avg Non-Gas Fuel Units/Part. Saved =	0 kWh
7) Non-Gas Fuel Cost (\$/Fuel Unit) = Escalation Rate =	\$0.02153 3.22%	22a) Avg Additional Non-Gas Fuel Units/ Part. Used =	0 kWh
		23) Number of Participants =	415
8) Non-Gas Fuel Loss Factor	5.28%		;
9) Gas Environmental Damage Factor =	\$0.3800	24) iotal Annual MCF Saved =	753
Escalation Rate ≖	2.16%	25) Incentive/Participant =	\$20.91
10) Non Gas Fuel Enviro. Damage Factor (\$/Unit) = Escalation Rate =	\$0.0232 2.16%		
11) Participant Discount Rate =	2.55%		
12) Utility Discount Rate =	8.96%		
13) Societal Discount Rate =	2.55%		
14) General Input Data Year =	2016		
15a) Project Analysis Year 1 = 15b) Project Analysis Year 2 = 15c) Project Analysis Year 3 =	2018		

Cost Summary	2018	Test Results	NPV	B/C
Utility Cost per Participant =	\$31.68	Ratepayer Impact Measure Test	(\$24,433)	0.60
Cost per Participant per MCF =	\$50.93	Utility Cost Test	\$23,860	2.81
Lifetime Energy Reduction (MCF)	7,530	Societal Test	\$21,788	1.74
Societal Cost per MCF	\$3.90	Participant Test	\$46,706	2.88

Company: Great Plains Natural Gas Co. Project: Residential Attic Insulation

Input Data			2018
1) Retail Rate (\$/MCF) = Escalation Rate =	\$7.2476 4.00%	16 Utility Project Costs 16 a) Administrative & Operating Costs =	0\$
2) Non-Gas Fuel Retail Rate (\$/Fuel Unit) =	\$0.000	16 c) Total Utility Project Costs =	0.8
Localistical Profits (ie. kWh,Gallons, etc) ≂	5.22.% kWh	17) Direct Participant Costs (\$/Part.) =	\$1,632
3) Commodity Cost (\$/MCF) =	\$4.27	18) Participant Non-Energy Costs (Annual \$/Part.) =	0\$
Escalation Rate =	4.00%	Escalation Rate =	2.16%
4) Demand Cost (\$/Unit/Yr) = Escalation Rate =	\$124.14 4.00%	19) Participant Non-Energy Savings (Annual \$/Part) = Escalation Rate =	\$0 2.16%
5) Peak Reduction Factor =	1.00%	20) Project Life (Years) =	20
6) Variable O&M (\$MCF) = Escalation Rate =	\$0.0424 4.00%	21) Avg. MCF/Part. Saved =	6.6
7) Non-Gas Fuel Cost (\$/Fuel Unit) = Escalation Rate =	\$0.02153 3.22%	22) Avg Non-Gas Fuel Units/Part. Saved = 22a) Avg Additional Non-Gas Fuel Units/ Part. Used =	O KVVh O KVVh
8) Non-Gas Fuel Loss Factor	5.28%	23) Number of Participants =	
(O)		24) Total Annual MCF Saved =	0
Scalation Rate =	2.16%	25) Incentive/Participant =	#DIV/0!
10) Non Gas Fuel Enviro. Damage Factor (\$/Unit) = Escalation Rate =	\$0.0232 2.16%		
11) Participant Discount Rate =	2.55%		
12) Utility Discount Rate =	8.96%		
13) Societal Discount Rate =	2.55%		
14) General Input Data Year =	2016		
15a) Project Analysis Year 1 = 15b) Project Analysis Year 2 = 15c) Project Analysis Year 3 =	2018		

			Inennial Inennial	Iriennial	
Cost Summary	2018	Test Results	VPV	B/C	
Utility Cost per Participant =	io//\ightarrow	Ratepayer impact Measure Test	0\$	\$0 #DIV/0i	
Cost per Participant per MCF =	#DI/\/0i	Utility Cost Test	\$0	i0//\lQ#	
Lifetime Energy Reduction (MCF)	0	Societal Test	0\$	#DIV/0i	
Societal Cost per MCF	#DIV/0!	Participant Test	\$0	#DIV/0i	

Company: Great Plains Natural Gas Co. Project: Residential Pilotless Fireplace

Input Data			2018
1) Retail Rate (\$/MCF) = Escalation Rate =	\$7.2476 4.00%	16 Utility Project Costs 16 a) Administrative & Operating Costs = 16 b) Incention Costs =	\$22 876
2) Non-Gas Fuel Retail Rate (\$/Fuel Unit) = Escalation Rate = Non-Gas Fuel Units (ie. kWh, Gallons, etc) =	\$0.000 3.22% kWh	16 c) Total Utility Project Costs = 17) Direct Participant Costs (\$/Part.) =	\$97 \$97 \$193
3) Commodity Cost (\$/MCF) = Escalation Rate =	\$4.27 4.00%	18) Participant Non-Energy Costs (Annual \$/Part.) = Escalation Rate =	\$0 2.16%
4) Demand Cost (\$/Unit/Yr) = Escalation Rate =	\$124.14 4.00%	19) Participant Non-Energy Savings (Annual \$/Part) = Escalation Rate =	\$0 2.16%
5) Peak Reduction Factor =	1.00%	20) Project Life (Years) =	5.
6) Variable O&M (\$/MCF) = Escalation Rate =	\$0.0424	21) Avg. MCF/Part. Saved =	4.4
7) Non-Gas Fuel Cost (\$/Fuel Unit) = Escalation Rate =	\$0.02153 3.22%	22) Avg Non-Gas Fuel Units/Part. Saved = 22a) Avg Additional Non-Gas Fuel Units/ Part. Used =	o kvvh o kvvh
8) Non-Gas Fuel Loss Factor	5.28%	23) Number of Participants =	-
9) Gas Environmental Damage Factor = Escalation Rate =	\$0.3800 2.16%	24) Total Annual MCF Saved = 25) Incentive/Participant =	4 \$75.00
10) Non Gas Fuel Enviro. Damage Factor (\$/Unit) = Escalation Rate =	\$0.0232 2.16%		
11) Participant Discount Rate =	2.55%		
12) Utility Discount Rate ==	8.96%		
13) Societal Discount Rate =	2.55%		
14) General Input Data Year =	2016		
15a) Project Analysis Year 1 = 15b) Project Analysis Year 2 = 15c) Project Analysis Year 3 =	2018		

			rennial	riennial
Cost Summary	2018	Test Results	NPV B/C	B/C
Utility Cost per Participant =	\$97.00	Ratepayer Impact Measure Test	(\$178)	09.0
Cost per Participant per MCF =	\$66.21	Utility Cost Test	\$168	2.74
Lifetime Energy Reduction (MCF)	09	Societal Test	\$207	1.96
Societal Cost per MCF	\$3.58	Participant Test	\$402	3.08

Company: Great Plains Natural Gas Co. Project: Residential Energy Assessment Program

Input Data			2018
			ALL AND
1) Retail Rate (\$/MCF) ==	\$7.2476	16 Utility Project Costs	
Escalation Rate =	4.00%	16 a) Administrative & Operating Costs =	\$724
		16 b) Incentive Costs ==	\$2,442
2) Non-Gas Fuel Retail Rate (\$/Fuel Unit) =	\$0.000	16 c) Total Utility Project Costs =	\$3,166
Escalation Rate = Non-Gas Fuel Units (ie. kWh, Gallons, etc) =	3.22% KWh	17) Direct Participant Costs (\$/Part.) =	\$300
3) Commodity Cost (\$/MCF) =	\$4.27	18) Participant Non-Enerov Costs (Annual S/Part) =	Ç.
Escalation Rate =	4.00%	Escalation Rate =	2.16%
4) Demand Cost (\$/Unit/Yr) =	\$124.14	19) Participant Non-Energy Savings (Annual \$/Part) =	O G
Escalation Rate =	4.00%	Escalation Rate =	2.16%
5) Peak Reduction Factor =	1.00%	20) Project Life (Years) =	10
6) Variable O&M (\$/MCF) =	\$0.0424	21) Avg. MCF/Part. Saved =	
Escalation Rate =	4.00%		
7) Non-Gas Fuel Cost (\$/Fuel Unit) =	\$0.02153	22) Avg Non-Gas Fuel Units/Part. Saved = 22a) Avg Additional Non-Gas Fuel Inits/ Part Treed =	O KVVh O KVVh
Escalation Rate =	3.22%		
		23) Number of Participants =	7
8) Non-Gas Fuel Loss Factor	5.28%		•
9) Gas Environmental Damage Factor =	\$0.3800	24) iotal Annual MCF Saved ≃	o
Escalation Rate =	2.16%	25) Incentive/Participant =	\$348.86
10) Non Gas Fuel Enviro. Damage Factor (\$/Unit) = Escalation Rate =	\$0.0232 2.16%		
11) Participant Discount Rate =	2.55%		
12) Utility Discount Rate =	8.96%		
13) Societal Discount Rate =	2.55%		
14) General Input Data Year =	2016		
15a) Project Analysis Year 1 = 15b) Project Analysis Year 2 = 15c) Project Analysis Year 3 =	2018		

Cost Summary	2018	Test Results	NPV	B/C
Utility Cost per Participant =	\$452.29	Ratepayer Impact Measure Test	(\$3,166)	0.00
Cost per Participant per MCF =	#DIV/0!	Utility Cost Test	(\$3,166)	00.00
Lifetime Energy Reduction (MCF)	0	Societal Test	(\$2,824)	0.00
Societal Cost per MCF	#DIV/0i	Participant Test	\$342	1.16

Company: Great Plains Natural Gas Co. Project: Total Low Income Programs

Input Data			2018
1) Retail Rate (\$/MCF) =	\$7.2476	16 Utility P <u>roj</u> ect Costs	
Escalation Kate =	4.00%	16 a) Administrative & Operating Costs = 16 b) Incentive Costs =	\$22,244 \$59.892
2) Non-Gas Fuel Retail Rate (\$/Fuel Unit) = Escalation Rate =	\$0.000	16 c) Total Utility Project Costs =	\$82,136
Non-Gas Fuel Units (ie. kWh,Gallons, etc) =	kWh	17) Direct Participant Costs (\$/Part.) =	\$2,006
3) Commodity Cost (\$/MCF) =	\$4.27	18) Participant Non-Energy Costs (Annual \$/Part.) =	0\$
Escalation Rate =	4.00%	Escalation Rate =	2.16%
4) Demand Cost (\$/Unit/Yr) =	\$124.14	19) Participant Non-Energy Savings (Annual \$/Part) =	0\$
Escalation Rate =	4.00%	Escalation Rate =	2.16%
5) Peak Reduction Factor =	1.00%	20) Project Life (Years) =	19
6) Variable O&M (\$/MCF) = Escalation Rate =	\$0.0424 4.00%	21) Avg. MCF/Part. Saved =	15.1
7) Non-Gas Fuel Cost (\$/Fuel Unit) = Escalation Rate =	\$0.02153 3.22%	22) Avg Non-Gas Fuel Units/Part. Saved = 22a) Avg Additional Non-Gas Fuel Units/ Part. Used =	257 kWh 0 kWh
8) Non-Gas Fuel I oss Factor	5 28%	23) Number of Participants =	28
		24) Total Annual MCF Saved =	422
 9) Gas Environmental Damage Factor = Escalation Rate = 	\$0.3800 2.16%	25) Incentive/Participant =	\$2,139.00
10) Non Gas Fuel Enviro. Damage Factor (\$/Unit) = Escalation Rate =	\$0.0232 2.16%		
11) Participant Discount Rate =	2.55%		
12) Utility Discount Rate =	8.96%		
13) Societal Discount Rate =	2.55%		
14) General Input Data Year =	2016		
15a) Project Analysis Year 1 = 15b) Project Analysis Year 2 = 15c) Project Analysis Year 3 =	2018		

Cost Summary	2018	Test Results	NPV	B/C
Utility Cost per Participant =	\$2,933.43	Ratepayer Impact Measure Test	(\$92,112)	0.26
Cost per Participant per MCF =	\$327.11	Utility Cost Test	(\$49,427)	0.40
Lifetime Energy Reduction (MCF)	8,018	Societal Test	(\$13,631)	0.83
Societal Cost per MCF	\$9.78	Participant Test	\$75,254	2.34

Company: Great Plains Natural Gas Co. Project: Low Income Weatherization

Input Data			2018
1) Retail Rate (\$/MCF) = Escalation Rate =	\$7.2476 4.00%	16 Utility Project Costs 16 a) Administrative & Operating Costs =	\$11,256
2) Non-Gas Fuel Retail Rate (\$/Fuel Unit) = Escalation Rate =	\$0.000	To by incerture Costs = 16 c) Total Utility Project Costs =	\$30,308
Non-Gas Fuel Units (ie. kWh,Gallons, etc) =	kWh	17) Direct Participant Costs (\$/Part.) =	\$1,333
3) Commodity Cost (\$/MCF) =	\$4.27	18) Participant Non-Energy Costs (Annual \$/Part.) =	\$0
Escalation Rate =	4.00%	Escalation Rate =	2.16%
4) Demand Cost (\$/Unit/Yr) = Escalation Rate =	\$124.14 4.00%	19) Participant Non-Energy Savings (Annual \$/Part) = Escalation Rate =	\$0 2.16%
5) Peak Reduction Factor =	1.00%	20) Project Life (Years) =	20
6) Variable O&M (\$/MCF) = Escalation Rate =	\$0.0424 4.00%	21) Avg. MCF/Part. Saved =	17.5
7) Non-Gas Fuel Cost (\$/Fuel Unit) = Escalation Rate =	\$0.02153 3.22%	22) Avg Non-Gas Fuel Units/Parl. Saved = 22a) Avg Additional Non-Gas Fuel Units/ Parl. Used =	O KVVh O KVVh
8) Non-Gas Fuel Loss Factor	5.28%	23) Number of Participants =	16
9) Gas Environmental Damage Factor =	\$0.3800	24) Total Annual MCF Saved =	220
Escalation Rate ==	2.16%	25) incentive/Participant =	\$1,894.25
10) Non Gas Fuel Enviro. Damage Factor (\$/Unit) = Escalation Rate =	\$0.0232 2.16%		
11) Participant Discount Rate =	2.55%		
12) Utility Discount Rate ==	8.96%		
13) Societal Discount Rate =	2.55%		
14) General Input Data Year =	2016		
15a) Project Analysis Year 1 = 15b) Project Analysis Year 2 = 15c) Project Analysis Year 3 =	2018		

Cost Summary	2018	Test Results	Irienniai Trienniai NPV B/C	Triennial B/C
Utility Cost per Participant =	\$2,597.75	Ratepayer Impact Measure Test	(\$46,931)	0.27
Cost per Participant per MCF =	\$224.61	Utility Cost Test	(\$23,967)	0.42
Lifetime Energy Reduction (MCF)	4,400	Societal Test	(665\$)	0.98
Societal Cost per MCF	\$7.41	Participant Test	\$48,522	3.28

Company: Great Plains Natural Gas Co. Project: Low Income Furnace Replacement

Input Data			2018
1) Retail Rate (\$/MCF) = Escalation Rate =	\$7.2476 4.00%	16 Utility Project Costs 16 a) Administrative & Operating Costs =	\$10,858
2) Non-Gas Fuel Retail Rate (\$/Fuel Unit) = Escalation Rate =	\$0.000	io b) incentive Costs = 16 c) Total Utility Project Costs =	\$29,234 \$40,092
Non-Gas Fuel Units (ie. kWh,Gallons, etc) =	kWh	17) Direct Participant Costs (\$/Part.) =	\$3,449
3) Commodity Cost (\$/MCF) =	\$4.27	18) Participant Non-Energy Costs (Annual \$/Part.) =	0\$
Escalation Rate =	4.00%	Escalation Rate =	2.16%
4) Demand Cost (\$/Unit/Yr) = Escalation Rate =	\$124.14 4.00%	19) Participant Non-Energy Savings (Annual \$/Part) = Escalation Rate =	\$0 2.16%
5) Peak Reduction Factor =	1.00%	20) Project Life (Years) =	20
6) Variable O&M (\$/MCF) = Escalation Rate =	\$0.0424 4.00%	21) Avg. MCF/Part. Saved =	19.0
7) Non-Gas Fuel Cost (\$/Fuel Unit) = Escalation Rate =	\$0.02153 3.22%	22) Avg Non-Gas Fuel Units/Part. Saved = 22a) Avg Additional Non-Gas Fuel Units/ Part. Used =	720 KWIN O KWIN
8) Non-Gas Fuel Loss Factor	5.28%	23) Number of Participants =	10
9) Gas Environmental Damane Fartor =	0086	24) Total Annual MCF Saved =	194
Escalation Rate =	2.16%	25) Incentive/Participant =	\$2,923.40
10) Non Gas Fuel Enviro. Damage Factor (\$/Unit) = Escalation Rate =	\$0.0232 2.16%		
11) Participant Discount Rate =	2.55%		
12) Utility Discount Rate =	8.96%		
13) Societal Discount Rate =	2.55%		
14) General Input Data Year =	2016		
15a) Project Analysis Year 1 = 15b) Project Analysis Year 2 = 15c) Project Analysis Year 3 =	2018		

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Cost Summary	2018	Test Results	NPV	B/C
Utility Cost per Participant ≈	\$4,009.20	Ratepayer Impact Measure Test	(\$44,825)	0.26
Cost per Participant per MCF =	\$392.54	Utility Cost Test	(\$24,574)	0.39
Lifetime Energy Reduction (MCF)	3,880	Societal Test	(\$9,877)	0.78
Societal Cost per MCF	\$11.69	Participant Test	\$29,613	1.86

Company: Great Plains Natural Gas Co. Project: Low Income Furnace and Boiler Tuneup Program

Input Data			2018
1) Retail Rate (\$/MCF) =	\$7.2476	16 Utility Project Costs	
Escalation Rate =	4.00%	16 a) Administrative & Operating Costs = 16 b) Incentive Costs =	\$130 \$350
2) Non-Gas Fuel Retail Rate (\$/Fuel Unit) = Escalation Rate =	\$0.000	16 c) Total Utility Project Costs =	\$480
Non-Gas Fuel Units (ie. kWh,Gallons, etc) =	kWh	17) Direct Participant Costs (\$/Part.) =	\$175
3) Commodity Cost (\$/MCF) =	\$4.27	18) Participant Non-Energy Costs (Annual \$/Part.) =	09
Escalation Rate =	4.00%	Escalation Rate =	2.16%
4) Demand Cost (\$/Unit/Yr) =	\$124.14	 Participant Non-Energy Savings (Annual \$/Part) = 	0\$
Escalation Rate =	4.00%	Escalation Rate =	2.16%
5) Peak Reduction Factor =	1.00%	20) Project Life (Years) =	2
6) Variable O&M (\$/MCF) = Escalation Rate =	\$0.0424 4.00%	21) Avg. MCF/Part. Saved =	3.7
		22) Avg Non-Gas Fuel Units/Part. Saved =	0 kWh
7) Non-Gas Fuel Cost (\$/Fuel Unit) = Escalation Rate =	\$0.02153 3.22%	22a) Avg Additional Non-Gas Fuel Units/ Part. Used =	0 kWh
		23) Number of Participants =	2
8) Non-Gas Fuel Loss Factor	5.28%		,
9) Gas Environmental Damage Factor =	\$0.3800	24) Total Annual MCF Saved =	∞
Escalation Rate =	2.16%	25) Incentive/Participant =	\$175.00
10) Non Gas Fuel Enviro. Damage Factor (\$/Unit) = Escalation Rate =	\$0.0232 2.16%		
11) Participant Discount Rate =	2.55%		
12) Utility Discount Rate =	8.96%		
13) Societal Discount Rate =	2.55%		
14) General Input Data Year =	2016		
15a) Project Analysis Year 1 = 15b) Project Analysis Year 2 = 15c) Project Analysis Year 3 =	2018		

Cost Summary	2018	Test Results	NPV	B/C	
Utility Cost per Participant =	\$240.00	Ratepayer Impact Measure Test	(\$203)	0.16	
Cost per Participant per MCF =	\$112.16	Utility Cost Test	(\$386)	0.20	
Lifetime Energy Reduction (MCF)	16	Societal Test	(\$377)	0.21	
Societal Cost per MCF	\$30.00	Participant Test	\$126	1.36	

Company: Great Plains Natural Gas Co. Project: Low Income Water Heater with Temperature Setback

Input Data			2018
1) Retail Rate (\$/MCF) = Escalation Rate =	\$7.2476 4.00%	16 Utility Project Costs 16 a) Administrative & Operating Costs = 16 b) Incontine Costs	O 99
2) Non-Gas Fuel Retail Rate (\$/Fuel Unit) = Escalation Rate =	\$0.000	16 c) Total Utility Project Costs =	0\$
Non-Gas Fuel Units (ie. kWh,Gallons, etc) =	kWh	17) Direct Participant Costs (\$/Part.) =	\$0
3) Commodity Cost (\$/MCF) =	\$4.27	18) Participant Non-Energy Costs (Annual \$/Part.) =	\$0
Escalation Rate =	4.00%	Escalation Rate =	2.16%
4) Demand Cost (\$/Unit/Yr) = Escalation Rate =	\$124.14 4.00%	19) Participant Non-Energy Savings (Annual \$/Part) = Escalation Rate =	\$0 2.16%
5) Peak Reduction Factor =	1.00%	20) Project Life (Years) =	2
6) Variable O&M (\$/MCF) = Escalation Rate =	\$0.0424 4.00%	21) Avg. MCF/Part. Saved =	0.9
		22) Avg Non-Gas Fuel Units/Part. Saved =	0 kWh
7) Non-Gas Fuel Cost (\$/Fuel Unit) = Escalation Rate =	\$0.02153 3.22%	22a) Avg Additional Non-Gas Fuel Units/ Part. Used =	0 kWh
:		23) Number of Participants =	•
8) Non-Gas Fuel Loss Factor	5.28%	24) Total Annual MCF Saved =	c
9) Gas Environmental Damage Factor =	\$0.3800	יייין וסמו אוויימון וייסן סמסמין	ò
Escalation Rate =	2.16%	25) Incentive/Participant =	#DIV/0!
10) Non Gas Fuel Enviro. Damage Factor (\$/Unit) = Escalation Rate =	\$0.0232 2.16%		
11) Participant Discount Rate =	2.55%		
12) Utility Discount Rate =	%96.8		
13) Societal Discount Rate =	2.55%		
14) General Input Data Year =	2016		
15a) Project Analysis Year 1 = 15b) Project Analysis Year 2 = 15c) Project Analysis Year 3 =	2018		

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Cost Summary	2018	Test Results	VPV	B/C
Utility Cost per Participant =	#DIV/0!	Ratepayer Impact Measure Test	0\$	i0/\lQ# 0\$
Cost per Participant per MCF =	#DIV/0!	Utility Cost Test	0\$	#DIV/0i
Lifetime Energy Reduction (MCF)	0	Societal Test	\$0	#DIV/0i
Societal Cost per MCF	i0/\iQ#	Participant Test	0\$	#DIV/0i

Company: Great Plains Natural Gas Co. Project: Total Commercial & Industrial Portfolio

Input Data			2018
		46 Hillian Designed Conte	
1) Retail Kate (\$/MtCr) = Escalation Rate =	4.00%	16 Outlify Floyect Costs 16 a) Administrative & Operating Costs =	\$70,226
		16 b) Incentive Costs =	\$171,068
2) Non-Gas Fuel Retail Rate (\$/Fuel Unit) =	\$0.00	16 c) Total Utility Project Costs =	\$241,294
Escalation Rate = Non-Gas Fuel Units (ie. kWh,Gallons, etc) =	3.22% KWh	17) Direct Participant Costs (\$/Part.) =	\$10,776
3) Commodity Cost (\$/MCF) =	\$4.27	18) Participant Non-Energy Costs (Annual \$/Part.) =	0\$
Escalation Rate =	4.00%	Escalation Rate =	2.16%
4) Demand Cost (\$/Unit/Yr) =	\$124.14	19) Participant Non-Energy Savings (Annual \$/Part) =	09
Escalation Rate =	4.00%	Escalation Rate =	2.16%
5) Peak Reduction Factor =	%60.0	20) Project Life (Years) =	18
6) Variable O&M (\$/MCF) =	\$0.0424	21) Avg. MCF/Part. Saved ==	738.4
Lacalation Trate	2	22) Avg Non-Gas Fuel Units/Part. Saved =	473 kWh
7) Non-Gas Fuel Cost (\$/Fuel Unit) =	\$0.02153	22a) Avg Additional Non-Gas Fuel Units/ Part. Used =	0 kWh
Escalation Rate =	3.22%	23) Number of Participants =	35
8) Non-Gas Fuel Loss Factor	5.28%	24) Tetal Annual MCE Saved =	25.844
a) Gas Environmental Damage Factor =	\$0.3800		-
Escalation Rate =	2.16%	25) Incentive/Participant =	\$4,887.66
10) Non Gas Fuel Enviro. Damage Factor (\$/Unit) = Escalation Rate =	\$0.02322 2.16%		
11) Participant Discount Rate =	8.96%		
12) Utility Discount Rate =	8.96%		
13) Societal Discount Rate =	2.55%		
14) General Input Data Year =	2016		
15a) Project Analysis Year 1 = 15b) Project Analysis Year 2 = 15c) Project Analysis Year 3 =	2018		

			Trienniai	Inennial
Cost Summary	2018	Test Results	NPV	B/C
Utility Cost per Participant =	\$6,894.11	Ratepayer Impact Measure Test	(\$600,202)	0.72
Cost per Participant per MCF =	\$23.93	Utility Cost Test	\$1,300,949	6:39
Lifetime Energy Reduction (MCF)	465,192	Societal Test	\$2,261,103	6.05
Societal Cost per MCF	\$0.96	Participant Test	\$1,695,059	5.49

Company: Great Plains Natural Gas Co. Project: Total Commercial Space Heating Equipment

Input Data			2018
1) Datail Data (SMMCE) =	NC NO 93	18 I Hillity Drojact Cycle	
י וכנייון ואיני (פוניים) –	170.00	i de la constant de l	
Escalation Kale =	4.00%	16 a) Administrative & Operating Costs = 16 b) Incentive Costs =	\$6,457 \$15,727
- Visit Household State Charles Control of the Cont	6	2 of Total Wilds Design Control	407 704
Escalation Rate =	3.22%	יי כי וסימו סיוווין דוסיכי סיסים	\$27,104
Non-Gas Fuel Units (ie. kWh,Gallons, etc) ==	kWh	17) Direct Participant Costs (\$/Part.) =	\$1,693
3) Commodity Cost (\$/MCF) =	\$4.27	18) Participant Non-Energy Costs (Annual S/Part) =	08
Escalation Rate =	4.00%	Escalation Rate =	2.16%
4) Demand Cost (\$/Unit/Yr) =	\$124.14	19) Participant Non-Energy Savings (Annual \$/Part) =	0\$
Escalation Rate =	4.00%	Escalation Rate =	2.16%
5) Peak Reduction Factor =	1.00%	20) Project Life (Years) =	20
6) Variable O&M (\$/MCF) =	\$0.0424	21) Avg. MCF/Part. Saved =	39.0
Escalation Rate =	4.00%		
		22) Avg Non-Gas Fuel Units/Part. Saved =	637 kWh
7) Non-Gas Fuel Cost (\$/Fuel Unit) =	\$0.02153	22a) Avg Additional Non-Gas Fuel Units/ Part. Used =	0 kWh
Escalation Rate =	3.22%		
		23) Number of Participants =	26
8) Non-Gas Fuel Loss Factor	5.28%		
		24) Total Annual MCF Saved ≃	1,015
9) Gas Environmental Damage Factor =	\$0.3800		
Escalation Rate =	2.16%	25) Incentive/Participant =	\$604.88
10) Non Gas Fuel Enviro. Damage Factor (\$/Unit) = Escalation Rate =	\$0.02322 2.16%		

8.96% 8.96%

11) Participant Discount Rate =

12) Utility Discount Rate =

2.55% 2016 2018

15a) Project Analysis Year 1 = 15b) Project Analysis Year 2 = 15c) Project Analysis Year 3 =

13) Societal Discount Rate =14) General Input Data Year =

			Triennial	Triennial
Cost Summary	2018	Test Results	NPV	B/C
Utility Cost per Participant =	\$853.23	Ratepayer impact Measure Test	(\$42,483)	0.66
Cost per Participant per MCF ≔	\$65.29	Utility Cost Test	\$59,004	3.66
Lifetime Energy Reduction (MCF)	20,300	Societal Test	\$113,805	3.25
Societal Cost per MCF	\$2.49	Participant Test	\$73,196	2.66

Company: Great Plains Natural Gas Co. Project: Total Commercial Water Heating Equipment

Data			2018
in part course			
1) Retail Rate (\$/MCF) = Escalation Rate =	\$6.9424 4.00%	16 Utility Project Costs 16 a) Administrative & Operating Costs =	\$345
		16 b) Incentive Costs =	\$840
2) Non-Gas Fuel Retail Rate (\$/Fuel Unit) =	\$0.000	16 c) Total Utility Project Costs =	\$1,185
Locatation rate Non-Gas Fuel Units (ie. kWh,Gallons, etc) =	KWh	17) Direct Participant Costs (\$/Part.) =	\$1,800
3) Commodity Cost (\$/MCF) =	\$4.27	18) Participant Non-Energy Costs (Annual \$/Part.) =	0\$
Escalation Rate =	4.00%	Escalation Rate =	2.16%
4) Demand Cost (\$/Unit/Yr) =	\$124.14	19) Participant Non-Energy Savings (Annual \$/Part) =	0\$
Escalation Rate =	4.00%	Escalation Rate =	2.16%
5) Peak Reduction Factor =	1.00%	20) Project Life (Years) =	15
6) Variable O&M (\$/MCF) =	\$0.0424	21) Avg. MCF/Part. Saved =	48.0
Escalation Rate =	4.00%	22) Ava Non-Gas Firel Inits/Part Saved =	c WXX
7) Non-Gas Fuel Cost (\$/Fuel Unit) =	\$0.02153	22a) Avg Additional Non-Gas Fuel Units/ Part. Used =	0 kWh
Escalation Kate =	3.22%	23) Number of Participants =	ო
8) Non-Gas Fuel Loss Factor	5.28%		
		24) Total Annual MCF Saved =	144
9) Gas Environmental Damage Factor = Fecalation Rate =	\$0.3800	25) Incentive/Participant ≈	\$280.00
Lacaration Trate	3		
10) Non Gas Fuel Enviro. Damage Factor (\$/Unit) = Escalation Rate =	\$0.02322 2.16%		
11) Participant Discount Rate =	8.96%		
12) Utility Discount Rate =	8.96%		
13) Societal Discount Rate =	2.55%		
14) General Input Data Year =	2016		
15a) Project Analysis Year 1 = 15b) Project Analysis Year 2 = 15c) Project Analysis Year 3 =	2018		

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Cost Summary	2018	Test Results	NPV B/C	B/C
Utility Cost per Participant =	\$395.00	Ratepayer Impact Measure Test	(\$3,574)	0.73
Cost per Participant per MCF =	\$45.73	Utility Cost Test	\$8,370	8.06
Lifetime Energy Reduction (MCF)	2,160	Societal Test	\$9,431	2.64
Societal Cost per MCF	\$2.66	Participant Test	\$7,384	2.37

Company: Great Plains Natural Gas Co. Project: Total Commercial Boller Equipment

Input Data			2018
1) Retail Rate (\$/MCF) = Escalation Rate =	\$6.9424 4.00%	16 Utility Project Costs 16 a) Administrative & Operating Costs = 16 h) Incentive Costs =	\$287
2) Non-Gas Fuel Retail Rate (\$/Fuel Unit) = Escalation Rate =	\$0.000	16 c) Total Utility Project Costs =	Z86\$
Non-Gas Fuel Units (ie. kWh,Gallons, etc) =	kWh	17) Direct Participant Costs (\$/Part.) =	\$1,245
3) Commodity Cost (\$/MCF) =	\$4.27	18) Participant Non-Energy Costs (Annual \$/Part.) =	0\$
Escalation Rate =	4.00%	Escalation Rate =	2.16%
4) Demand Cost (\$/Unit/Yr) =	\$124.14	19) Participant Non-Energy Savings (Annual \$/Part) =	0\$
Escalation Rate =	4.00%	Escalation Rate ≖	2.16%
5) Peak Reduction Factor =	1.00%	20) Project Life (Years) =	2
6) Variable O&M (\$/MCF) = Escalation Rate =	\$0.0424 4.00%	21) Avg. MCF/Part. Saved =	13.0
		22) Avg Non-Gas Fuel Units/Part. Saved =	0 kWh
7) Non-Gas Fuel Cost (\$/Fuel Unit) = Escalation Rate =	\$0.02153 3.22%	22a) Avg Additional Non-Gas Fuel Units/ Part. Used =	0 kWh
		23) Number of Participants =	೯
8) Non-Gas Fuel Loss Factor	5.28%	24) Total Annual MCE Saved =	39
9) Gas Environmental Damage Factor =	\$0.3800		
Escalation Rate =	2.16%	25) Incentive/Participant =	\$233.33
10) Non Gas Fuel Enviro. Damage Factor (\$/Unit) = Escalation Rate =	\$0.02322 2.16%		
11) Participant Discount Rate =	8.96%		
12) Utility Discount Rate =	8.96%		
13) Societal Discount Rate =	2.55%		
14) General input Data Year =	2016		
15a) Project Analysis Year 1 = 15b) Project Analysis Year 2 = 15c) Project Analysis Year 3 =	2018		

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Cost Summary	2018	Test Results	NPV	B/C
Utility Cost per Participant =	\$329.00	Ratepayer Impact Measure Test	(\$1,101)	0.29
Cost per Participant per MCF =	\$121.08	Utility Cost Test	(\$529)	0.46
Lifetime Energy Reduction (MCF)	78	Societal Test	(\$3,519)	0.12
Societal Cost per MCF	\$51.56	Participant Test	(\$2,463)	0.34

Company: Great Plains Natural Gas Co. Project: Total Commercial Food Service Equipment Programs

Input Data			2018
1) Retail Rate (\$/MCF) =	\$6.9424	16 Utility Project Costs	
Escalation Rate =	4.00%	16 a) Administrative & Operating Costs = 16 b) Incentive Costs =	0\$
2) Non-Gas Fuel Retail Rate (\$/Fuel Unit) =	\$0.000	16 c) Total Utility Project Costs =	0\$
Escalation rate = Non-Gas Fuel Units (ie. kWh,Gallons, etc) =	3.22.70 KWh	17) Direct Participant Costs (\$/Part.) =	#DIV/0!
3) Commodity Cost (\$/MCF) =	\$4.27	18) Participant Non-Energy Costs (Annual \$/Part.) =	0\$
Escalation Rate =	4.00%	Escalation Rate =	2.16%
4) Demand Cost (\$/Unit/Yr) = Escalation Rate =	\$124.14 4.00%	19) Participant Non-Energy Savings (Annual \$/Part) = Escalation Rate =	\$0 2.16%
5) Peak Reduction Factor =	1.00%	20) Project Life (Years) =	#DIV/0!
6) Variable O&M (\$/MCF) =	\$0.0424	21) Avg. MCF/Part. Saved =	#DIV/0i
Cocalation hate -		22) Avg Non-Gas Fuel Units/Part. Saved =	#DIV/0i
7) Non-Gas Fuel Cost (\$/Fuel Unit) = Escalation Rate =	\$0.02153 3.22%	22a) Avg Additional Non-Gas Fuel Units/ Part. Used =	o kWh
		23) Number of Participants =	1
8) Non-Gas Fuel Loss Factor	5.28%	24) Total Annual MCF Saved =	0
9) Gas Environmental Damage Factor =	\$0.3800		
Escalation Rate =	2.16%	25) incentive/Participant =	#D!\/!Oj
10) Non Gas Fuel Enviro. Damage Factor (\$/Unit) = Escalation Rate =	\$0.02322 2.16%		
11) Participant Discount Rate =	8.96%		
12) Utility Discount Rate =	8.96%		
13) Societal Discount Rate =	2.55%		
14) General Input Data Year =	2016		
15a) Project Analysis Year 1 = 15b) Project Analysis Year 2 = 15c) Project Analysis Year 3 =	2018		

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Cost Summary	2018	Test Results	NPV	B/C
Utility Cost per Participant =	#DIV/0!	Ratepayer Impact Measure Test	#DIV/0!	#DIV/0!
Cost per Participant per MCF =	#D!V/0i	Utility Cost Test	#DIV/0!	#DIA/0i
Lifetime Energy Reduction (MCF)	#DIV/0i	Societal Test	#DIV/0i	#DIV/0i
Societal Cost per MCF	#DIV/0!	Participant Test	#DIV/0i	#DIV/0!

Company: Great Plains Natural Gas Co. Project: Commercial and Industrial Custom

Project: Commercial and moustrial Custom		
Project: Commercial	Program	

Input Data			2018
1) Retail Rate (\$/MCF) = Escalation Rate =	\$5.3024 4.00%	16 Utility Project Costs 16 a) Administrative & Operating Costs =	\$63,137
2) Non-Gas Fuel Retail Rate (\$/Fuel Unit) =	\$0.000	16 b) Incentive Costs = 16 c) Total Utility Project Costs =	\$153,801 \$216,938
Escalation Kate = Non-Gas Fuel Units (ie. kWh,Gallons, etc) =	3.22% KWh	17) Direct Participant Costs (\$/Ран.) =	\$108,000
3) Commodity Cost (\$/MCF) =	\$4.27	18) Participant Non-Energy Costs (Annual \$/Part.) =	0\$
Escalation Rate =	4.00%	Escalation Rate =	2.16%
4) Demand Cost (\$/Unit/Yr) = Escalation Rate =	\$124.14	19) Participant Non-Energy Savings (Annual \$/Рац) = Escalation Rate =	\$0 2.16%
5) Peak Reduction Factor =	%00.0	20) Project Life (Years) =	15
6) Variable O&M (\$/MCF) = Escalation Rate =	\$0.0424 4.00%	21) Avg. MCF/Part. Saved =	4,000.0
7) Non-Gas Fuel Cost (\$/Fuel Unit) =	\$0.02153	22) Avg Non-Gas Fuel Units/Part. Saved = 22a) Avg Additional Non-Gas Fuel Units/ Part. Used =	0 kWh
Escalation Rate =	3.22%		
8) Non-Gas Fuel Loss Factor	5.28%	23) Number of Participants =	က
		24) Total Annual MCF Saved =	24,646
9) Gas Environmental Damage Factor = Escalation Rate =	\$0.3800 2.16%	25) Incentive/Participant =	\$51,267.00
10) Non Gas Fuel Enviro. Damage Factor (\$/Unit) = Escalation Rate =	\$0.02322 2.16%		
11) Participant Discount Rate =	8.96%		
12) Utility Discount Rate =	8.96%		
13) Societal Discount Rate =	2.55%		
14) General Input Data Year =	2016		
15a) Project Analysis Year 1 = 15b) Project Analysis Year 2 = 15c) Project Analysis Year 3 =	2018		

			Inennial	Inennial
Cost Summary	2018	Test Results	NPV	B/C
Utility Cost per Participant =	\$72,312.67	Ratepayer Impact Measure Test	(\$508,456)	0.71
Cost per Participant per MCF =	\$45.08	Utility Cost Test	\$1,052,905	5.85
Lifetime Energy Reduction (MCF)	369,690	Societal Test	\$1,661,566	5.29
Societal Cost per MCF	\$1.05	Participant Test	\$1,391,162	5.29

Company: Great Plains Natural Gas Co. Project: Commercial Building Certification Program

Input Data			2018
1) Retail Rate (\$/MCF) =	\$5.3024	16 Utility Project Costs	
Escalation Rate =	4.00%	16 a) Administrative & Operating Costs = 16 b) Incentive Costs =	08
2) Non-Gas Fuel Retail Rate (\$/Fuel Unit) = Escalation Rate =	\$0.000	16 c) Total Utility Project Costs =	0\$
Non-Gas Fuel Units (ie. kWh,Gallons, etc) =	KWh	17) Direct Participant Costs (S/Part.) =	\$8,000
3) Commodity Cost (\$/MCF) =	\$4.27	18) Participant Non-Energy Costs (Annual \$/Part.) =	0\$
Escalation Rate =	4.00%	Escalation Rate =	2.16%
4) Demand Cost (\$/Unit/Yr) =	\$124.14	19) Participant Non-Energy Savings (Annual \$/Part) =	0\$
Escalation Rate =	4.00%	Escalation Rate =	2.16%
5) Peak Reduction Factor =	0.00%	20) Project Life (Years) =	•
6) Variable O&M (\$/MCF) = Eccalation Rate =	\$0.0424	21) Avg. MCF/Part. Saved =	•
		22) Avg Non-Gas Fuel Units/Part. Saved =	0 kWh
7) Non-Gas Fuel Cost (\$/Fuel Unit) = Escalation Rate =	\$0.02153 3.22%	22a) Avg Additional Non-Gas Fuel Units/ Part. Used =	ס איאי
		23) Number of Participants =	,
8) Non-Gas Fuel Loss Factor	5.28%	24) Total Apprila MACE Saved =	c
9) Gas Environmental Damage Factor =	\$0.3800	בין וטומן היוווממן ויוטן סמיכט –	o
Escalation Rate =	2.16%	25) Incentive/Participant =	#DIV/0!
10) Non Gas Fuel Enviro. Damage Factor (\$/Unit) = Escalation Rate =	\$0.02322 2.16%		
11) Participant Discount Rate =	8.96%		
12) Utility Discount Rate =	8.96%		
13) Societal Discount Rate =	2.55%		
14) General Input Data Year =	2016		
15a) Project Analysis Year 1 = 15b) Project Analysis Year 2 = 15c) Project Analysis Year 3 =	2018		

Cost Summary	2018	Test Results	NPV B/C	B/C
Utility Cost per Participant =	#DIV/0!	Ratepayer Impact Measure Test	\$	#DIV/0!
Cost per Participant per MCF =	#DIV/0!	Utility Cost Test	\$0	#DIV/0i
Lifetime Energy Reduction (MCF)	0	Societal Test	0\$	#DI/\/0i
Societal Cost per MCF	i0/\010#	Participant Test	\$0	#DIV/0i

Company: Great Plains Natural Gas Co. Project: Commercial Energy Assessment Program

Input Data			2018
1) Retail Rate (\$/MCF) =	\$5.3024	16 Utility Project Costs	
Escalation Rate =	4.00%	16 a) Administrative & Operating Costs = 16 b) Incertive Costs =	09
2) Non-Gas Fuel Retail Rate (\$/Fuel Unit) = Escalation Rate =	\$0.000	16 c) Total Utility Project Costs =	0\$
Non-Gas Fuel Units (ie. kWh,Gallons, etc) =	kWh	17) Direct Participant Costs (\$/Part.) =	\$1,100
3) Commodity Cost (\$/MCF) =	\$4.27	18) Participant Non-Energy Costs (Annual \$/Part.) =	0\$
Escalation Rate =	4.00%	Escalation Rate =	2.16%
4) Demand Cost (\$/Unit/Yr) =	\$124.14	19) Participant Non-Energy Savings (Annual \$/Part) =	0\$
Escalation Rate =	4.00%	Escalation Rate =	2.16%
5) Peak Reduction Factor =	%00.0	20) Project Lífe (Years) =	
6) Variable O&M (\$/MCF) =	\$0.0424	21) Avg. MCF/Part. Saved =	
Escaration Kate =	4.00%	22) Avg Non-Gas Fuel Units/Part. Saved =	0 kWh
7) Non-Gas Fuel Cost (\$/Fuel Unit) = Escalation Rate =	\$0.02153 3.22%	22a) Avg Additional Non-Gas Fuel Units/ Part. Used =	0 kWh
		23) Number of Participants =	•
8) Non-Gas Fuel Loss Factor	5.28%	- Kooley O TOM Journal A Joseph A Co.	c
0) Gae Environmental Damada Factor ::	\$0.3800	24) Fotal Amuai MCF Saved =	-
Escalation Rate =	2.16%	25) Incentive/Participant =	#DI/\0i
10) Non Gas Fuel Enviro. Damage Factor (\$/Unit) = Escalation Rate =	\$0.02322 2.16%		
11) Participant Discount Rate =	8.96%		
12) Utility Discount Rate =	8.96%		
13) Societal Discount Rate =	2.55%		
14) General Input Data Year =	2016		
15a) Project Analysis Year 1 = 15b) Project Analysis Year 2 = 15c) Project Analysis Year 3 =	2018		

Cost Summary	2018	Test Results	NPV	B/C
Utility Cost per Participant =	#DIV/0!	Ratepayer Impact Measure Test	80	#DIV/0!
Cost per Participant per MCF =	#DIV/0}	Utility Cost Test	0\$	#DIV/0!
Lifetime Energy Reduction (MCF)	0	Societal Test	\$0	#DIV/0!
Societal Cost per MCF	#DIV/0!	Participant Test	\$0	#DIV/0!

Company: Great Plains Natural Gas Co. Project: Industrial Energy Assessment Program

Input Data			2018
1) Retail Rate (\$/MCF) =	\$5.3024	16 Utility Project Costs	
Escalation Rate =	4.00%	16 a) Administrative & Operating Costs = 16 b) Incentive Costs =	08
2) Non-Gas Fuel Retail Rate (\$/Fuel Unit) = Escalation Rate =	\$0.000	16 c) Total Utility Project Costs =	0\$
Non-Gas Fuel Units (ie. kWh,Gallons, etc) =	kWh	17) Direct Participant Costs (\$/Part.) =	\$3,400
3) Commodity Cost (\$/MCF) =	\$4.27	18) Participant Non-Energy Costs (Annual \$/Part.) =	0\$
Escalation Rate =	4.00%	Escalation Rate =	2.16%
4) Demand Cost (\$/Unit/Yr) =	\$124.14	19) Participant Non-Energy Savings (Annual \$/Part) =	0\$
Escalation Rate =	4.00%	Escalation Rate =	2.16%
5) Peak Reduction Factor =	0.00%	20) Project Life (Years) =	•
6) Variable O&M (\$/MCF) = Escalation Rate =	\$0.0424 4.00%	21) Avg. MCF/Part. Saved =	
		22) Avg Non-Gas Fuel Units/Part. Saved =	0 kWh
7) Non-Gas Fuel Cost (\$/Fuel Unit) = Escalation Rate =	\$0.02153 3.22%	22a) Avg Additional Non-Gas Fuel Units/ Part. Used =	0 kWh
		23) Number of Participants =	1
8) Non-Gas Fuel Loss Factor	5.28%	- bound BMC County	c
9) Gas Environmental Damage Factor =	\$0.3800	24) Total Atlitudi MOT Gaved -	>
Escalation Rate =	2.16%	25) Incentive/Participant =	#DI/\/Oi
10) Non Gas Fuel Enviro. Damage Factor (\$/Unit) = Escalation Rate =	\$0.02322 2.16%		
11) Participant Discount Rate =	8.96%		
12) Utility Discount Rate =	8.96%		
13) Societal Discount Rate =	2.55%		
14) General Input Data Year =	2016		
15a) Project Analysis Year 1 = 15b) Project Analysis Year 2 = 15c) Project Analysis Year 3 =	2018		

			10000	- Indilling
Cost Summary	2018	Test Results	NPV	B/C
Utility Cost per Participant =	#DIV/0!	Ratepayer Impact Measure Test	\$0	#DIV/0!
Cost per Participant per MCF =	#DIV/0i	Utility Cost Test	\$0	#DIV/0i
Lifetime Energy Reduction (MCF)	0	Societal Test	\$0	#DIV/0!
Societal Cost per MCF	#DI/\io	Participant Test	0\$	#DIV/0i

GREAT PLAINS NATURAL GAS CO. CIP RATE TRUE-UP FILING DOCKET NO. G004/M-19-____

		Total			
Projected	Volumetric	Under/(Over)	Proposed	Current	
Dk 1/	Allocation	Recovery	CCRA	CCRA 2/	<u>Change</u>
1,472,872	21.3822%	(\$49,661)	(\$0.0337)	\$0.0130	(\$0.0467)
1,258,408	18.2688%	(42,430)	(0.0337)	0.0130	(0.0467)
1,048,200	15.2171%	(35,342)	(0.0337)	0.0130	(0.0467)
3,108,814	45.1319%	(104,822)	(0.0337)	0.0130	(0.0467)
6,888,294	100.0000%	(\$232,255)			
	Dk 1/ 1,472,872 1,258,408 1,048,200 3,108,814	Dk 1/ Allocation 1,472,872 21.3822% 1,258,408 18.2688% 1,048,200 15.2171% 3,108,814 45.1319%	Projected Dk 1/ Volumetric Allocation Under/(Over) 1,472,872 21.3822% (\$49,661) 1,258,408 18.2688% (42,430) 1,048,200 15.2171% (35,342) 3,108,814 45.1319% (104,822)	Projected Dk 1/ Volumetric Allocation Under/(Over) Recovery Proposed CCRA 1,472,872 21.3822% (\$49,661) (\$0.0337) 1,258,408 18.2688% (42,430) (0.0337) 1,048,200 15.2171% (35,342) (0.0337) 3,108,814 45.1319% (104,822) (0.0337)	Projected Dk 1/ Volumetric Allocation Under/(Over) Recovery Proposed CCRA CCRA 2/ CCRA 2/ 1,472,872 21.3822% (\$49,661) (\$0.0337) \$0.0130 1,258,408 18.2688% (42,430) (0.0337) 0.0130 1,048,200 15.2171% (35,342) (0.0337) 0.0130 3,108,814 45.1319% (104,822) (0.0337) 0.0130

Rate change for the average residential customer using 77 Dk per year.

					i otai
	Dk 3/	CCRC	CCRA	Total	CIP Cost
Current Rate	77	\$0.0556 4/	\$0.0130 2/	\$0.0686	\$5.28
Proposed Rate	77	0.0556	(0.0337)	0.0219	1.69
Change		\$0.0000	(\$0.0467)	(\$0.0467)	

The average residential customer will pay an annual CIP cost of \$1.69 per year.

- 1/ Docket No. G004/M-12-439 designates using projected dk throughput for the period in which the CCRA is proposed to be in effect. The proposed time period is 12 months running from September 2019 - August 2020.
- 2/ Authorized in Docket No. G004/M-18-118, effective October 1, 2018.
- 3/ Reflects average normalized 2018 residential dk per customer.
- 4/ Authorized in Docket No. G004/GR-15-879, effective January 1, 2017.

GREAT PLAINS NATURAL GAS CO. CCRA FILING AND DEMAND INCENTIVE DOCKET NO. G004/M-19-____

CIP True-Up	Beginning Balance	Expenses	Carrying Charges	Billed Recovery	Net Activity	Ending Balance
2018 Activity	\$224,198	\$566,621	(\$9,581)	\$1,612,042	(\$1,055,002)	(\$830,804)
2019 Activity January - March Actual April - August 2019 Projected	(\$830,804)	\$83,859 311,546	(\$3,496) (6,099)	\$196,768 106,579	(\$116,405) 198,868	
	(\$830,804)	\$395,405	(\$9,595)	\$303,347	\$82,463	(\$748,341)
2020 Activity Sept. 2019 - Aug. 2020 Projected	(\$748,341)	\$905,183	(\$6,108)	\$382,989 1/	\$516,086	(\$232,255)
Projected Balance September 1, 2019	(\$830,804)	\$1,300,588	(\$15,703)	\$686,336	\$598,549	(\$232,255)
2018 DSM Incentive to be recorded in Se	ptember 2019					0
Total projected Under/(Over) Recovery to	be recovered	through CCRA	from Sept 201	9 - August 2020	ı	(\$232,255)

^{1/} Projected CCRC recovery from Sept 2019 - August 2020.2/ The actual Achievement Level of 0.64% was less than the Earning Threshold of 0.70%.

GREAT PLAINS NATURAL GAS CO. CIP PROGRAM 2018

	Beginning	Carrying	Current Month		Billed Recovery	y	Ending
Month	Balance	Charge 1/	Charges	CCRC 2/	CCRA 2/	Total	Balance
December 2017							\$224,198
January 2018	\$224,198	\$301	\$27,231	\$55,293	\$208,558	\$263,851	(12,121)
February	(12,121)	(16)	30,662	53,393	201,365	254,758	(236,233)
March	(236,233)	(317)	36,838	51,586	194,553	246,139	(445,851)
April	(445,851)	(598)	18,660	44,328	167,198	211,526	(639,315)
May	(639,315)	(858)	35,884	32,209	121,487	153,696	(757,985)
June	(757,985)	(1,017)	20,033	19,576	73,809	93,385	(832,354)
July	(832,354)	(1,117)	44,324	12,046	45,410	57,456	(846,603)
August	(846,603)	(1,136)	60,625	12,020	45,320	57,340	(844,454)
September	(844,454)	(1,133)	25,022	13,670	51,537	65,207	(885,772)
October	(885,772)	(1,188)	57,298	23,452	74,713	98,165	(927,827)
November	(927,827)	(1,245)	43,219	40,348	10,777	51,125	(936,978)
December	(936,978)	(1,257)	166,825	48,138	11,256	59,394	(830,804)
Total 2018	, , ,	(\$9,581)	\$566,621	\$406,059	\$1,205,983	\$1,612,042	

^{1/} Reflects the cost of short-term debt of 1.610% authorized in Docket No. G004/GR-15-879.

2/ Rates effective with service rendered on and after:

January 1, 2018 - August 31, 2018 <u>Docket No. G004/M-17-338.</u>

CCRC \$0.0556 CCRA \$0.2097 September 1, 2018 - August 31, 2019 <u>Docket No. G004/M-18-118.</u> \$0.0556 \$0.0130

GREAT PLAINS NATURAL GAS CO. CIP PROGRAM 2019

			Current				
	Beginning	Carrying	Month		Billed Recovery	,	Ending
Month	Balance	Charge 1/	Charges	CCRC 2/	CCRA 2/	Total	<u>Balance</u>
December 2018							(\$830,804)
January 2019	(\$830,804)	(\$1,115)	\$30,453	\$51,085	\$11,948	\$63,033	(864,499)
February	(864,499)	(1,160)	25,070	56,441	13,197	69,638	(910,227)
March	(910,227)	(1,221)	28,336	51,950	12,147	64,097	(947,209)
April - est.	(947,209)	(1,269)	32,350	31,680	7,407	39,087	(955,215)
May - est.	(955,215)	(1,280)	62,244	17,921	4,190	22,111	(916,362)
June - est.	(916,362)	(1,228)	34,807	11,673	2,729	14,402	(897,185)
July - est.	(897, 185)	(1,202)	76,904	11,649	2,724	14,373	(835,856)
Aug est.	(835,856)	(1,120)	105,241	13,459	3,147	16,606	(748,341)
Total 2019 YTD	,	(\$9,595)	\$395,405	\$245,858	\$57,489	\$303,347	
			-				
Sept est.	(\$748,341)	(\$1,003)	\$43,407 3/	\$18,265	(\$11,071)	\$7,194	(\$713,131)
Oct est.	(713,131)	(956)	99,426	34,168	(20,710)	13,458	(628,119)
Nov est.	(628,119)	(842)	75,020	41,728	(25,292)	16,436	(570,377)
Dec est.	(570,377)	(764)	289,600	51,679	(31,324)	20,355	(301,896)
Jan. 2020 - est.	(301,896)	(405)	30,602	55,529	(33,657)	21,872	(293,571)
Feb est.	(293,571)	(393)	25,244	50,139	(30,390)	19,749	(288,469)
Mar est.	(288,469)	(387)	28,513	44,859	(27,190)	17,669	(278,012)
Apr est.	(278,012)	(373)	32,508	31,804	(19,277)	12,527	(258,404)
May - est.	(258,404)	(346)	62,565	17,965	(10,889)	7,076	(203,261)
Jun est.	(203,261)	(272)	35,051	11,696	(7,089)	4,607	(173,089)
Jul est.	(173,089)	(232)	77,367	11,674	(7,076)	4,598	(100,552)
Aug est.	(100,552)	(135)	105,880	13,483	(8,172)	5,311	(118)
Total 2020 YTD	, , ,	(\$6,108)	\$905,183	\$382,989	(\$232,137)	\$150,852	

^{1/} Reflects the cost of short-term debt of 1.610% authorized in Docket No. G004/GR-15-879.

2/ Rates effective with service rendered on and after:

Current: September 1, 2018 - August 31, 2019 Docket No. G004/M-18-118. \$0.0556 CCRC \$0.0130

Proposed: September 1, 2019 - August 31, 2020 Docket No. G004/M-18- . \$0.0556 (\$0.0337)

3/ Includes 2018 projected financial incentive of:

CCRA

\$0

GREAT PLAINS NATURAL GAS CO. PERFORMANCE INCENTIVE MODEL

Inputs	
3-year Weather-Normalized Sales Average (Dth)	5,627,380
1.0% Energy Savings	56,274
Size of steps in Energy Savings	5,627
Approved CIP Budget	\$897,408
Approved CIP Energy Goal	57,106
Estimated Net Benefits at Approved Goal	\$1,652,364
Energy savings at 1.5%	84,411

Incentive Calibration		
Maximum Percent of Benefits Awarded	12.00%	
Earning Threshold	0.70%	
Maximum Achievement Level	1.20%	
Increment	7.5	% Point

Estimated Incentive Levels

Estimated intentive Levels					Average	Incremental
Achievement		Percent of	Estimated Benefits	Incentive	Incentive per	Incentive
Level (% of sales)	Energy Saved	Benefits Awarded	Achieved	Award	unit Saved	Units Saved
0.0%	0	0.00%	\$0	\$0	\$0.00	-
0.1%	5,627	0.00%	\$162,828	\$0	\$0.00	\$0.00
0.2%	11,255	0.00%	\$325,657	\$0	\$0.00	\$0.00
0.3%	16,882	0.00%	\$488,485	\$0	\$0.00	\$0.00
0.4%	22,510	0.00%	\$651,314	\$0	\$0.00	\$0.00
0.5%	28,137	0.00%	\$814,142	\$0	\$0.00	\$0.00
0.6%	33,764	0.00%	\$976,971	\$0	\$0.00	\$0.00
0.7%	39,392	8.25%	\$1,139,799	\$94,033	\$2.39	\$16.71
0.8%	45,019	9.00%	\$1,302,627	\$117,236	\$2.60	\$4.12
0.9%	50,646	9.75%	\$1,465,456	\$142,882	\$2.82	\$4.56
1.0%	56,274	10.50%	\$1,628,284	\$170,970	\$3.04	\$4.99
1.1%	61,901	11.25%	\$1,791,113	\$201,500	\$3.26	\$5.43
1.2%	67,529	12.00%	\$1,953,941	\$234,473	\$3.47	\$5.86
1.3%	73,156	12.00%	\$2,116,770	\$254,012	\$3.47	\$3.47
1.4%	78,783	12.00%	\$2,279,598	\$273,552	\$3.47	\$3.47
1.5%	84,411	12.00%	\$2,442,426	\$293,091	\$3.47	\$3.47
1.6%	90,038	12.00%	\$2,605,255	\$312,631	\$3.47	\$3.47
1.7%	95,665	12.00%	\$2,768,083	\$332,170	\$3.47	\$3.47
1.8%	101,293	12.00%	\$2,930,912	\$351,709	\$3.47	\$3.47
1.9%	106,920	12.00%	\$3,093,740	\$371,249	\$3.47	\$3.47
2.0%	112,548	12.00%	\$3,256,569	\$390,788	\$3.47	\$3.47

2018 Great Plains

Projected Gas CIP Incentive Results	
Spending	\$566,621
Energy Saved (Dth)	36,083
Net Benefits Achieved	\$1,235,357
Resulting Incentive	
Achievement Level	0.64%
Percent of Net Benefits Awarded	0.0000%
Financial Incentive Award	\$0
Incentive/First Year Dth Saved \$	\$0.0000
Incentive/Net Benefits	0.00%
Incentive/CIP Expenditures	0.00%