



A Division of Montana-Dakota Utilities Co.

*705 West Fir Avenue
Mailing Address: PO Box 176
Fergus Falls, MN 56538-0176
1-877-267-4764
www.gpng.com*

May 1, 2024

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

Ms. Michelle Gransee
Deputy Commissioner
Division of Energy Resources
Minnesota Department of Commerce
85 Seventh Place East, Suite 500
St. Paul, MN 55101-2198

**RE: CIP Tracker and Demand Side Management Incentive
Docket No. G004/M-24-___**

**2023 Conservation Improvement Program Status Report
Docket No. G004/CIP-20-477**

Dear Mr. Seuffert and Ms. Gransee:

Great Plains Natural Gas Co. (Great Plains), a Division of Montana-Dakota Utilities Co., herewith electronically files its 2023 Conservation Improvement Program (CIP) Status Report for the period of January 1, 2023 through December 31, 2023, its 2023 Conservation Improvement Program (CIP) Tracker filing (CCRA), and the Demand Side Management (DSM) Incentive for the period of January 1, 2023 through December 31, 2023.

The 2023 CIP expenditures were \$877,986 which exceeds the minimum spending requirement of \$139,710 and represents approximately 87 percent of the authorized budget for 2023, as established by Decision of the Deputy Commissioner, Department of Commerce on November 7, 2023. Great Plains' programs provided total annual energy savings of 85,711 dk, which was approximately 139 percent of the authorized level. The total lifetime energy reduction related to the 2023 CIP projects is 1,028,532 dk. The expenditures and energy savings for 2023 is primarily attributable to the Commercial and Industrial Portfolio within the Commercial Boiler Equipment and Commercial Custom Programs.

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-19-511. There was a financial incentive achieved for 2023. Please see Attachment D, page 3 for a summary of the projected CIP tracker activity and ending balance on August 2025.

The CIP Tracker filing reflects a proposed CCRA of \$0.0202 per dk, which is an increase of \$0.0298 per dk from the current CCRA. For a typical residential customer using 75.9 dk per year, this reflects an increase of \$2.26 annually or \$0.19 per month. Great Plains requests that the proposed CCRA be implemented September 1, 2024. Attachment A provides the Conservation Improvement Program Adjustment Clause tariff, 4th Revised Sheet No. 5-111.

Great Plains DSM Financial Incentive meets the four considerations required pursuant to Minnesota Statute, Section 216B.16. The energy saved and net benefit derived from Great Plains' 2023 CIP program is \$2,782,406 which qualifies the Company to receive an incentive of \$278,241 for the 2023 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. Great Plains may elect to carry forward energy savings to future years pursuant to Section 216B.241, Subd 1c(d).

This filing includes the 2023 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:

Mr. Travis R. Jacobson
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/ Travis R. Jacobson

Travis R. Jacobson
Director of Regulatory Affairs

cc: Kristin Stastny

Index

Section I: 2023 CIP Status Report Overview Summary	Page 1
Section II: Status Report by Project	Page 5
Section III: Conservation Improvement Tracker Program	Page 12
Section IV: 2023 Demand-Side Management Incentive	Page 12
Section V: Attachments	
Attachment A - CIP Adjustment Clause Tariff	
Attachment B - CIP Status Summary	
Attachment C - BENCOST for CIP programs	
Attachment D - CIP Tracker True-up Filing	
Attachment E - Financial Incentive Mechanism	
Note: Project Information Sheets will be submitted upon approval and software availability.	

**GREAT PLAINS NATURAL GAS CO.
2023 CONSERVATION INCENTIVE PROGRAMS (CIP) STATUS REPORT**

Pursuant to Minnesota Statute 7690.0550 and the Minnesota Department of Commerce, Division of Energy Resources (Department) November 24, 2020, Decision on the 2021-2023 CIP Triennial Filing in Docket G004/CIP-20-477 and November 7, 2023 Decision on the Low-Income Portfolio Modification to the 2021-2023 CIP Triennial Filing in Docket G004/CIP-20-477, Great Plains submits this status report on its Conservation Improvement Program (CIP). This report covers the 2023 CIP year: January 1, 2023 through December 31, 2023.

I. Overall Summary:

The approved 2023 budget for the CIP was \$1,014,096, while Great Plains' actual expenditures for the twelve-month period ending December 31, 2023, were \$877,986, which exceeds the minimum spending requirement of \$139,710. The low-income expenditures of \$64,965 does not exceed the minimum spending requirement of \$118,157 based on the methodology established in the 2013 legislation and revised in the ECO Act of 2021.

Please see Attachment B for a summary of the details of the expenditures, participants, and decatherm (dk) savings for 2023.

Great Plains achieved 86.6 percent of its total expenditure goal and 36.9 percent of its Low-income expenditure goal, as demonstrated below:

	Expenses			Percent of Authorized
	Authorized ^{1/}	Actual	Difference	
<u>Residential Programs</u>				
Space Heating Equipment	\$204,838	\$183,551	(\$21,287)	89.6%
Water Heating Equipment	16,464	11,391	(5,073)	69.2%
Attic Insulation	225	218	(7)	96.9%
Pilotless Fireplace	225	218	(7)	96.9%
Residential Energy Assessment	24,358	14,121	(10,237)	58.0%
Total Residential Programs	<u>\$246,110</u>	<u>\$209,499</u>	<u>(\$36,611)</u>	<u>85.1%</u>
<u>Low Income Programs</u>				
Weatherization	\$63,208	\$46,479	(\$16,729)	73.5%
Furnace and Boiler Replacement	34,982	6,852	(28,130)	19.6%
Furnace and Boiler Tune-Up	1,020	0	(1,020)	0.0%
Hot Water Heater Temp Set-Back	0	0	0	0.0%
Low Income Multi-Family Building Efficiency	59,128	4,723	(54,405)	8.0%
Total Low Income Programs	<u>\$158,338</u>	<u>\$58,054</u>	<u>(\$100,284)</u>	<u>36.7%</u>
Pre-Weatherization: Healthy Air Account	<u>\$17,724</u>	<u>\$6,911</u>	<u>(\$10,813)</u>	<u>39.0%</u>
Total Low Income Programs	<u>\$176,062</u>	<u>\$64,965</u>	<u>(\$111,097)</u>	<u>36.9%</u>
<u>Commercial and Industrial Programs</u>				
Commercial Space Heating Equipment	\$51,362	\$29,889	(\$21,473)	58.2%
Commercial Water Heating Equipment	1,881	2,396	515	127.4%
Commercial Boiler Equipment	6,392	1,516	(4,876)	23.7%
Commercial Food Service	2,686	632	(2,054)	23.5%
Commercial Custom	483,780	542,274	58,494	112.1%
Commercial Building Certification	5,376	0	(5,376)	0.0%
Commercial Energy Assessment	6,384	0	(6,384)	0.0%
Industrial Energy Assessment	8,063	0	(8,063)	0.0%
Total Commercial and Industrial Programs	<u>\$565,924</u>	<u>\$576,707</u>	<u>\$10,783</u>	<u>101.9%</u>
Direct Assessment Charges	<u>26,000</u>	<u>26,815</u>	<u>815</u>	<u>103.1%</u>
Grand Total of All Programs	<u>\$1,014,096</u>	<u>\$877,986</u>	<u>(\$136,110)</u>	<u>86.6%</u>

^{1/} 2021-2023 Conservation Improvement Program Triennial Modification approved by the MN DOC on November 7, 2023 in Docket No. G004/CIP-20-477.

The expenditures for 2023 is primarily attributable to the Commercial and Industrial Portfolio within the Commercial Boiler Equipment and Commercial Custom Programs.

Great Plains achieved 139.3 percent of its 2023 authorized dk savings target.

	Dk Savings			Percent of Authorized
	Authorized 1/	Actual	Difference	
<u>Residential Programs</u>				
Space Heating Equipment	7,798	6,925	(873)	88.8%
Water Heating Equipment	594	192	(402)	32.3%
Attic Insulation	7	14	7	200.0%
Pilotless Fireplace	9	9	0	100.0%
Residential Energy Assessment	0	0	0	0.0%
Total Residential Programs	<u>8,408</u>	<u>7,140</u>	<u>(1,268)</u>	<u>84.9%</u>
<u>Low Income Programs</u>				
Weatherization	331	171	(160)	51.7%
Furnace and Boiler Replacement	152	20	(132)	13.2%
Furnace and Boiler Tune-Up	19	0	(19)	0.0%
Hot Water Heater Temp Set-Back	9	3	(6)	33.3%
Low Income Multi-Family Building Efficiency	600	90	(510)	15.0%
Total Low Income Programs	<u>1,111</u>	<u>284</u>	<u>(827)</u>	<u>25.6%</u>
Pre-Weatherization: Healthy Air Account				
Total Low Income Programs	<u>1,111</u>	<u>284</u>	<u>(827)</u>	<u>25.6%</u>
<u>Commercial and Industrial Programs</u>				
Commercial Space Heating Equipment	2,771	1,469	(1,302)	53.0%
Commercial Water Heating Equipment	26	1,236	1,210	4753.8%
Commercial Boiler Equipment	973	25,598	24,625	2630.8%
Commercial Food Service	262	40	(222)	15.3%
Commercial Custom	48,000	49,944	1,944	104.1%
Commercial Building Certification	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 Programs	<u>52,032</u>	<u>78,287</u>	<u>26,255</u>	<u>150.5%</u>
Direct Assessment Charges				
Grand Total of All Programs	<u>61,551</u>	<u>85,711</u>	<u>24,160</u>	<u>139.3%</u>

1/ 2021-2023 Conservation Improvement Program Triennial Modification approved by the MN DOC on November 7, 2023 in Docket No. G004/CIP-20-477.

The overall dk savings achieved was 85,711 dk, which is more than the authorized goal of 61,551 dk for the year. The increase in actual dk savings from the authorized 2023 portfolio savings is attributable to the participation in the Commercial Boiler Equipment Program and the Commercial Custom Program. The direct partnership with Frontier Energy, which provided Great Plains' customers with awareness and education on Commercial Custom Programs, assisted in the Company's ability to exceed the energy savings goal.

In summary:

- The Commercial and Industrial Programs had an increase in savings of 64,025 dk compared to last year. The majority of this came from the Commercial Custom Projects which had an increase of 36,978 dk compared to last year and Commercial Boiler Equipment which had an increase of 25,210 dk compared to last year.
- The total portfolio cost per dk decreased from \$23.21 in 2022 to \$10.24 in 2023.

Great Plains plans to build upon its program successes in the Commercial and Industrial Programs, and to continue marketing its programs through its website, targeted online advertising, bill inserts, and other marketing media as appropriate. Great Plains' Energy Service Representative will continue to work directly with the local contractor network on program awareness and education and will continue to seek opportunities to engage customer involvement in the Commercial Custom Program.

Furthermore, in late 2022, Great Plains engaged the services of Frontier Energy, a leading consulting firm that specializes in sustainability. Frontier Energy continues to work directly with commercial customers in the Company's service territory in order to increase engagement in the Commercial Custom Program. More recently, Great Plains began working with Frontier Energy to administer the Low-Income Multi-Family Building Efficiency program and provide additional low-income programs to customers.

The cost per dk for the total portfolio is \$10.24 per dk or \$6.24 per dk below the authorized level, as shown in the table below. The primary driver for the cost per dk decrease is the Commercial Boiler Equipment Program. The total cost per dk shown below for Residential and Low-Income Programs were higher than authorized and Commercial and Industrial Programs were lower than authorized, this resulted in an overall lower than authorized cost per dk saved for total programs.

The authorized and actual cost per dk saved are:

	Cost per Dk Saved			% of Authorized
	Authorized 1/	Actual	Difference	
<u>Residential Programs</u>				
Space Heating Equipment	\$26.27	\$26.51	\$0.24	100.91%
Water Heating Equipment	27.72	59.33	31.61	214.03%
Attic Insulation and Bypass	32.14	15.57	(16.57)	48.44%
Pilotless Fireplace	25.00	24.22	(0.78)	96.88%
Residential Energy Assessment	0.00	0.00	0.00	0.00%
Total Residential Programs	29.27	29.34	0.07	100.24%
<u>Low Income Programs</u>				
Weatherization	190.96	271.81	80.85	142.34%
Furnace and Boiler Replacement	230.14	342.60	112.46	148.87%
Furnace and Boiler Tune-Up	53.68	0.00	(53.68)	0.00%
Hot Water Heater Temp Set-Back	0.00	0.00	0.00	0.00%
Low Income Multi-Family Building Efficiency	98.55	52.48	(46.07)	53.25%
Total Low Income Programs	142.52	204.42	61.90	143.43%
<u>Commercial and Industrial Programs</u>				
Space Heating Equipment	\$18.54	\$20.35	\$1.81	109.76%
Water Heating Equipment	72.35	1.94	(70.41)	2.68%
Commercial Boiler Equipment	6.57	0.06	(6.51)	0.91%
Commercial Food Service	10.25	15.80	5.55	154.15%
Commercial Custom	10.08	10.86	0.78	107.74%
Commercial Building Certification	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 and Industrial Programs	\$10.88	\$7.37	(\$3.51)	67.74%
Total Programs 2/	\$16.48	\$10.24	(\$6.24)	62.14%

1/ 2021-2023 Conservation Improvement Program Triennial Modification approved by the MN DOC on November 7, 2023 in Docket No. G004/CIP-20-477.

2/ Includes direct assessment charges.

Each portfolio that had participation was cost effective with a Utility Cost Test ratio of 1.00 or greater, except for the Low-Income portfolio. The Residential Portfolio was cost effective with a Utility Cost Test ratio greater than 1.00, however, the Residential Water Heating Equipment program was below the ratio of 1.00. The results of the cost/benefit analysis are shown below:

	RIM	Utility	Societal	Participant
Residential				
Space Heating Equipment	0.50	1.87	1.54	1.94
Water Heating Equipment	0.39	0.91	0.46	0.79
Attic Insulation and Bypass	0.60	5.54	2.03	2.53
Pilotless Fireplace	0.54	2.74	2.19	3.16
Residential Energy Assessment	0.00	0.00	0.00	1.71
Total Residential Portfolio	0.49	1.84	1.56	1.98
Low Income				
Weatherization	0.22	0.32	0.56	2.10
Furnace Replacement	0.18	0.25	0.58	2.05
Furnace/Boiler Tune-Up 1/	---	---	---	---
Hot Water Heater Temp Set-back	0.67	0.00	0.00	0.00
LI Multi-Family Building Efficiency	0.39	0.95	1.17	2.54
Total Low Income Portfolio	0.21	0.31	0.52	2.06
Commercial and Industrial				
Space Heating Equipment	0.62	4.24	2.40	2.31
Water Heating Equipment	0.71	40.46	14.96	12.83
Commercial Boiler Equipment	0.72	159.75	29.61	28.95
Foodservice Equipment	0.60	3.41	2.35	1.96
Custom Program	0.57	4.42	8.07	9.54
Building Certification Program 1/	---	---	---	---
Commercial Energy Assessment 1/	---	---	---	---
Industrial Energy Assessment 1/	---	---	---	---
Total Commercial & Industrial Portfolio	0.61	7.96	12.95	13.68
Total Portfolio	0.57	4.27	5.36	7.05

1/ No participants.

The BENCOST Summary for Great Plains' overall CIP program for 2023, as well as the summary for each program is provided as Attachment C.

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

Program Modifications

Great Plains was approved for a Low-Income Portfolio Modification to the 2021-2023 CIP Triennial Plan in Docket No. G004/CIP-20-477 on November 7, 2023.

II. Status Report by Project:

Residential 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 86.3 percent of the participant goal and achieved 88.8 percent of its energy savings goal. The rebates for programmable thermostats tier 3, replacement of higher efficiency furnaces (96 percent AFUE or greater) and furnace and boiler tune-ups 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 95 percent of participants with 5 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 95 percent of participants, duplexes represented 1 percent, town house and condos 3 percent and all other 1 percent of participants.

2. Water Heating Equipment Upgrade Incentive Program

Great Plains provides a \$100 rebate for the installation of an ENERGY STAR rated natural gas water heater, and a \$250 rebate for an ENERGY STAR rated 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 32.3 percent of authorized dk savings with 69.2 percent of authorized expenditures and 24.9 percent of authorized participation levels in 2023.

3. Residential Attic Insulation

The Residential Attic Insulation Program provides a cash rebate up to 50% of the project's costs, with a maximum of a \$150 rebate to customers for the installation of attic insulation. A Residential Energy Assessment is required prior to being eligible for this program.

Great Plains achieved 200.0 percent of authorized dk savings with 96.9 percent of authorized expenditures and 100.0 percent of authorized participation levels in 2023.

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.

Great Plains achieved 100.0 percent of authorized dk savings and authorized participation with 96.9 percent of authorized expenditures in 2023.

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 2023 compared to 2022. Participation was 29.2 percent of authorized and expenditures were 58.0 percent of authorized.

6. Low Income Programs

Great Plains offers conservation measures to low-income customers through five programs. The first program is the funding of weatherization measures through Community Action Partnership (CAP) agencies. The weatherization program is split into two categories: 1) a maximum funding of \$1,800 per qualified customer (up to 200% of the poverty level) available to the CAP agency, and 2) a maximum funding of \$2,500 per qualified customer (between 200-400% of the poverty level) available to the CAP agency. The second program provides funding for an emergency replacement of a furnace or boiler. The maximum funding available to the CAP agency per emergency is \$3,500 for a furnace replacement and \$5,000 for a boiler replacement. The third program provides funding for furnace and boiler tune-ups for qualified low-income customers. The maximum funding available to the CAP agency per furnace or boiler tune-up is \$200. The fourth program is the Hot Water Temp Set Back Program. There is no cash incentive associated with this program as Great Plains believes the participants will see immediate energy and cost savings. The fifth program provides funding for a Multi-Family Building Efficiency program that targets property owners of income qualified multi-family buildings, including 2 units or more and is available to new construction and existing property units. The program will provide a building assessment (in person, remote, or virtual) to help the property owner to better understand the buildings energy use and provide direct install of several low-cost improvements. Customers participating in this program will be offered rebates at 2 times the existing prescriptive rate of the current Great Plains CIP programs.

Great Plains has partnered with Frontier Energy to provide a turn-key Multi-Family Building Efficiency Program.

Great Plains had three less participants in its Low-Income Program in 2023 compared to 2022; however, the partnership with Frontier Energy provided one participant in the new Low-Income Multi-Family Building Efficiency Program in 2023.

Low-Income Portfolio participation was 30.8 percent of authorized and dk savings were 25.6 percent of authorized. All Low-Income Programs except for the Low-Income Multi-Family Building Efficiency Program work with the CAP agencies and report their energy savings 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 56.3 percent of authorized with dk savings at 53.0 percent of authorized.

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 ENERGY STAR rated storage type (less than or equal to 75,000 btu/hour) water heater and a rebate based on the installed BTUH size of the water heater for ENERGY STAR rated Condensing Efficiency water heaters valued at \$140/kBtuh input.

The Commercial and Industrial Water Heating Equipment Program had 9 participants in 2023. Participation was 128.6 percent of authorized, with a corresponding dk savings of 4,753.8 percent of authorized. The Water Heater Storage Condensing Program had the majority of the dk savings of 1,235.

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 as shown on the next page.

Equipment Type	Efficiency Requirement	Rebate Amount
Boiler O2 Control	All kBTuh levels	\$3,000
Modulating Burners	< 2,500 kBTuh	\$1,250
Modulating Burners	≥ 2,500 kBTuh	\$2,500
Boiler Stack Dampers	All kBTuh levels	\$500
Boiler Turbulators	All kBTuh levels	\$500
Boiler Outdoor Air Resets	All kBTuh levels	\$300
Boiler Cut-Out Controls	All kBTuh levels	\$100
Boiler Tune-Ups	< 2,500 kBTuh	\$200
Boiler Tune-Ups	≥ 2,500 kBTuh	\$300
Steam Traps	Steam Trap Survey Required	50% of Equipment Cost

The Commercial and Industrial Boiler Equipment Program had 4 participants in 2023. Participation was 11.1 percent of authorized, with a corresponding dk savings of 2,630.8 percent of authorized. The 4 participants were from the Boiler Tune-Up Tier 2 Program with dk savings of 25,598.

10. Commercial Food Service 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: deck oven, pizza deck oven, standard oven, range, standard char-broiler, standard salamander broiler, open flame rotisserie oven, and standard griddle. The second tier provides a \$1,000 rebate for the following equipment types: combined oven steamer, standard radiant broiler, rotating deck oven, and standard steamer.

The Commercial Food Service Program had 1 participant in 2023. Participation was 33.3 percent of authorized, with a corresponding dk savings of 15.3 percent of authorized.

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, 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 four Commercial and Industrial Custom Program participants in 2023. The program achieved energy savings of 49,944 dk, or 104.1 percent of the authorized savings level. The cost per dk for the program came in above the authorized cost of \$10.08 dk with an actual cost per dk of \$10.86.

A brief summary of the Industrial Agriculture Custom projects are as follows:

- Replaced pulp press spindles reducing moisture in pulp requiring less natural gas for drying.
- Upgrade of the pulp dryer control system.
- Pulp dryer insulation.
- Insulating pipes.

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, or Sustainable Buildings 2030.

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.

Leadership in Energy and Environmental Design (LEED) Building Certification 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.

Sustainable Buildings (SB2030)

Great Plains will rebate 100 percent of the first \$5,000 and 50 percent of additional costs for professional engineering services with a maximum payout of \$10,000 for commercial and industrial buildings that meet the SB2030 requirements.

Great Plains did not have any participation in the Building Certification Program in 2023.

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 2023.

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 2023.

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 2023, CIP assessments amounted to \$26,815 which is above the \$26,000 authorized.

16. Employee Expenses

Pursuant to Minnesota Statutes 2008, Section 216B.16, Great Plains recorded employee expenses for travel in 2023. Great Plains did not exceed the 0.5 percent total annual CIP expense limit during 2023.

	<u>Employee Expense</u>
Vehicles	\$830
Commercial Air	0
Personal Vehicle Use	0
Meals	0
Other Reimbursable Expenses	<u>0</u>
Total	\$830

**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, 2024.

Attachment D, page 1, is the calculation of the proposed CCRA using estimated volumes excluding CIP-exempt customer volumes, as authorized in Docket Nos. G004/M-12-439 and G004/CIP-19-606. The proposed CCRA is \$0.0202 per dk for all non-CIP Exempt customers, an increase of \$0.0298 from the current CCRA (established in Docket No. G004/M-23-186). For a typical residential customer using 75.9 dk per year, this reflects an increase of \$2.26 annually or \$0.19 per month.

The CIP True-up, as shown on Attachment D, page 2, includes the balance in the CIP account as of December 31, 2023, as well as the projected sales, expenditures, 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' filed rate case, Docket No. G004/GR-19-511, as appropriate.

The detailed activity by month is shown in Attachment D pages 3 and 4.

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

As shown in Attachment E, the Company qualifies to receive a 2023 DSM financial incentive of \$278,241. Upon Commission approval it will be included as an expense in the 2025 CIP Tracker and Demand Side Management Incentive.

**2023 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 E shows the calculation of the DSM Incentive for 2023 based on the results of the 2023 CIP program. As shown in Attachment B, Great Plains total energy savings in 2023 were 85,711 dk, which results in an achievement level of 1.41%. This level of achievement is above the minimum level required to receive a financial incentive, which is an achievement level greater than 0.70%, or energy savings greater than 42,629 dk. Therefore, Great Plains' 2023 CIP results do qualify for a DSM incentive. Great Plains may elect to carry forward energy savings to future years pursuant to Section 216B.241, Subd 1c(d).

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 cost-effective 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 3

Section No. 5

4th Revised Sheet No. 5-111

Canceling 3rd Revised Sheet No. 5-111

CONSERVATION IMPROVEMENT PROGRAM ADJUSTMENT CLAUSE

charge authorized in Docket No. G004/GR-19-511. 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	Adjustment CCRA Factor
<u>\$0.0818</u>	<u>\$0.0202</u>

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: May 1, 2024

Effective Date:

Issued By: Travis R. Jacobson
Director – Regulatory Affairs

Docket No.:

Tariff Reflecting Proposed Changes



GREAT PLAINS NATURAL GAS CO.

A Division of Montana-Dakota Utilities Co.

State of Minnesota Gas Rate Schedule – MNPUC Volume 3

Section No. 5

~~3rd~~ 4th Revised Sheet No. 5-111

Canceling ~~2nd-3rd~~ Revised Sheet No. 5-111

CONSERVATION IMPROVEMENT PROGRAM ADJUSTMENT CLAUSE

charge authorized in Docket No. G004/GR-19-511. 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	Adjustment CCRA Factor
\$0.0818	(\$0.0096) <u>\$0.0202</u>

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: May 1, ~~2023~~ 2024

Effective Date: ~~Service rendered on and after October 1, 2023~~

Issued By: Travis R. Jacobson
Director – Regulatory Affairs

Docket No.: G004/M-23-186

**GREAT PLAINS NATURAL GAS CO.
GAS UTILITY - MINNESOTA
CONSERVATION IMPROVEMENT PROGRAM STATUS REPORT
SUMMARY OF PROGRAM RESULTS
2023**

	Expenses			Percent of Authorized	Participants			Percent of Authorized	Dk Savings			Percent of Authorized
	Authorized 1/	Actual	Difference		Authorized 1/	Actual	Difference		Authorized 1/	Actual	Difference	
Residential Programs												
Space Heating Equipment	\$204,838	\$183,551	(\$21,287)	89.6%	735	634	(101)	86.3%	7,798	6,925	(873)	88.8%
Water Heating Equipment	16,464	11,391	(5,073)	69.2%	485	121	(364)	24.9%	594	192	(402)	32.3%
Attic Insulation	225	218	(7)	96.9%	1	1	0	100.0%	7	14	7	200.0%
Pilotless Fireplace	225	218	(7)	96.9%	2	2	0	100.0%	9	9	0	100.0%
Residential Energy Assessment	24,358	14,121	(10,237)	58.0%	65	19	(46)	29.2%	0	0	0	0.0%
Total Residential Programs	\$246,110	\$209,499	(\$36,611)	85.1%	1,288	777	(511)	60.3%	8,408	7,140	(1,268)	84.9%
Low Income Programs												
Weatherization	\$63,208	\$46,479	(\$16,729)	73.5%	23	11	(12)	47.8%	331	171	(160)	51.7%
Furnace and Boiler Replacement	34,982	6,852	(28,130)	19.6%	8	1	(7)	12.5%	152	20	(132)	13.2%
Furnace and Boiler Tune-Up	1,020	0	(1,020)	0.0%	5	0	(5)	0.0%	19	0	(19)	0.0%
Hot Water Heater Temp Set-Back	0	0	0	0.0%	10	3	(7)	30.0%	9	3	(6)	33.3%
Low Income Multi-Family Building Efficiency	59,128	4,723	(54,405)	8.0%	6	1	(5)	16.7%	600	90	(510)	15.0%
Total Low Income Programs	\$158,338	\$58,054	(\$100,284)	36.7%	52	16	(36)	30.8%	1,111	284	(827)	25.6%
Pre-Weatherization: Healthy Air Account	\$17,724	\$6,911	(\$10,813)	39.0%								
Total Low Income Programs	\$176,062	\$64,965	(\$111,097)	36.9%	52	16	(36)	30.8%	1,111	284	(827)	25.6%
Commercial and Industrial Programs												
Commercial Space Heating Equipment	\$51,362	\$29,889	(\$21,473)	58.2%	64	36	(28)	56.3%	2,771	1,469	(1,302)	53.0%
Commercial Water Heating Equipment	1,881	2,396	515	127.4%	7	9	2	128.6%	26	1,236	1,210	4753.8%
Commercial Boiler Equipment	6,392	1,516	(4,876)	23.7%	36	4	(32)	11.1%	973	25,598	24,625	2630.8%
Commercial Food Service	2,686	632	(2,054)	23.5%	3	1	(2)	33.3%	262	40	(222)	15.3%
Commercial Custom	483,780	542,274	58,494	112.1%	12	4	(8)	33.3%	48,000	49,944	1,944	104.1%
Commercial Building Certification	5,376	0	(5,376)	0.0%	1	0	(1)	0.0%	0	0	0	0.0%
Commercial Energy Assessment	6,384	0	(6,384)	0.0%	5	0	(5)	0.0%	0	0	0	0.0%
Industrial Energy Assessment	8,063	0	(8,063)	0.0%	2	0	(2)	0.0%	0	0	0	0.0%
Total Commercial and Industrial Programs	\$565,924	\$576,707	\$10,783	101.9%	130	54	(76)	41.5%	52,032	78,287	26,255	150.5%
Direct Assessment Charges	26,000	26,815	815	103.1%								
Grand Total of All Programs	\$1,014,096	\$877,986	(\$136,110)	86.6%	1,470	847	(623)	57.6%	61,551	85,711	24,160	139.3%

1/ 2021-2023 Conservation Improvement Program Triennial Modification approved by the MN DOC on November 7, 2023 in Docket No. G004/CIP-20-477.

**GREAT PLAINS NATURAL GAS CO.
GAS UTILITY - MINNESOTA
CONSERVATION IMPROVEMENT PROGRAM STATUS REPORT
LOW INCOME AND RENTER PARTICIPANTS
SUMMARY OF PROGRAM RESULTS
2023**

	Expenses			Percent of Authorized	Participants			Percent of Authorized	Dk Savings			Percent of Authorized
	Authorized 1/	Actual	Difference		Authorized 1/	Actual	Difference		Authorized 1/	Actual	Difference	
<u>Low Income Participants</u>												
<u>Residential Programs</u>												
Space Heating Equipment 2/	\$7,169	\$13,032	\$5,863	181.8%	26	41	15	157.7%	276	448	172	162.3%
Water Heating Equipment 3/	1,218	3,850	2,632	316.1%	36	27	(9)	75.0%	44	61	17	138.6%
Attic Insulation	0	0	0	0.0%	0	0	0	0.0%	0	0	0	0.0%
Pilotless Fireplace	0	109	109	0.0%	0	1	1	0.0%	0	4	4	0.0%
Residential Energy Assessment	1,876	7,089	5,213	377.9%	5	9	4	180.0%	0	0	0	0.0%
Total Residential Programs	<u>\$10,263</u>	<u>\$24,080</u>	<u>\$13,817</u>	<u>234.6%</u>	<u>67</u>	<u>78</u>	<u>11</u>	<u>116.4%</u>	<u>320</u>	<u>513</u>	<u>193</u>	<u>160.3%</u>
Low Income Programs	\$158,338	\$58,054	(\$100,284)	36.7%	52	16	(36)	30.8%	1,111	284	(827)	25.6%
Grand Total of Low Income Programs	<u>\$168,601</u>	<u>\$82,134</u>	<u>(\$86,467)</u>	<u>48.7%</u>	<u>119</u>	<u>94</u>	<u>(25)</u>	<u>79.0%</u>	<u>1,431</u>	<u>797</u>	<u>(634)</u>	<u>55.7%</u>
<u>Renter Participants</u>												
<u>Residential Programs</u>												
Space Heating Equipment 2/	\$17,616	\$7,526	(\$10,090)	42.7%	63	23	(40)	36.5%	668	253	(415)	37.9%
Water Heating Equipment 3/	1,218	3,600	2,382	295.6%	36	30	(6)	83.3%	44	64	20	145.5%
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	0	3,177	3,177	0.0%	0	4	4	0.0%	0	0	0	0.0%
Total Residential Programs	<u>\$18,834</u>	<u>\$14,303</u>	<u>(\$4,531)</u>	<u>75.9%</u>	<u>99</u>	<u>57</u>	<u>(42)</u>	<u>57.6%</u>	<u>712</u>	<u>317</u>	<u>(395)</u>	<u>44.5%</u>
Total of Renter Programs	<u>\$18,834</u>	<u>\$14,303</u>	<u>(\$4,531)</u>	<u>75.9%</u>	<u>99</u>	<u>57</u>	<u>(42)</u>	<u>57.6%</u>	<u>712</u>	<u>317</u>	<u>(395)</u>	<u>44.5%</u>

1/ 2021-2023 Conservation Improvement Program Triennial Modification approved by the MN DOC on November 7, 2023 in Docket No. G004/CIP-20-477.

2/ Includes rental property from Programmable Thermostat, Furnance, Furnance and Boiler Tune-Up, and Boiler Programs.

3/ Includes rental property from the Water Heating Equipment and Low Flow Showerhead Programs.

**GREAT PLAINS NATURAL GAS CO.
GAS UTILITY - MINNESOTA
CONSERVATION IMPROVEMENT PROGRAM STATUS REPORT
PROGRAM RESULTS
2023**

	Expenses			Percent of Authorized	Participants			Percent of Authorized	Dk Savings			Percent of Authorized
	Authorized 1/	Actual	Difference		Authorized 1/	Actual	Difference		Authorized 1/	Actual	Difference	
Residential Programs												
Residential Space Heating Equipment												
Programmable Thermostats Tier 1	\$1,349	\$739	(\$610)	54.8%	60	34	(26)	56.7%	150	73	(77)	48.7%
Programmable Thermostats Tier 2	7,495	931	(6,564)	12.4%	100	13	(87)	13.0%	370	48	(322)	13.0%
Programmable Thermostats Tier 3	5,621	9,586	3,965	170.5%	50	89	39	178.0%	305	663	358	217.4%
Furnace Tier 1 - 94-95% AFUE - New	2,248	0	(2,248)	0.0%	5	0	(5)	0.0%	95	0	(95)	0.0%
Furnace Tier 1 - 94-95% AFUE - Replacement	67,456	13,477	(53,979)	20.0%	150	31	(119)	20.7%	2,850	531	(2,319)	18.6%
Furnace Tier 2 - 96%+ AFUE - New	11,992	4,058	(7,934)	33.8%	20	7	(13)	35.0%	406	48	(358)	11.8%
Furnace Tier 2 - 96%+ AFUE - Replacement	68,954	118,255	49,301	171.5%	115	204	89	177.4%	2,335	4,126	1,791	176.7%
Furnace and Boiler Tune-Up	14,990	16,361	1,371	109.1%	200	227	27	113.5%	460	555	95	120.7%
Boiler Tier 1 - 84-90.9% AFUE	2,248	1,304	(944)	58.0%	5	3	(2)	60.0%	38	17	(21)	44.7%
Boiler Tier 2 - 91%+ AFUE	22,485	18,840	(3,645)	83.8%	30	26	(4)	86.7%	789	864	75	109.5%
Total Residential Space Heating Equipment	\$204,838	\$183,551	(\$21,287)	89.6%	735	634	(101)	86.3%	7,798	6,925	(873)	88.8%
Residential Water Heating Equipment												
Water Heating (.67 EF)	\$3,747	\$5,941	\$2,194	158.6%	25	41	16	164.0%	45	88	43	195.6%
Tankless Water Heating (.82 EF)	3,747	2,899	(848)	77.4%	10	8	(2)	80.0%	9	16	7	177.8%
Low Flow Showerheads	8,970	2,551	(6,419)	28.4%	450	72	(378)	16.0%	540	88	(452)	16.3%
Total Residential Water Heating Equipment	\$16,464	\$11,391	(\$5,073)	69.2%	485	121	(364)	24.9%	594	192	(402)	32.3%
Attic Insulation	\$225	\$218	(\$7)	96.9%	1	1	0	100.0%	7	14	7	200.0%
Pilotless Fireplace	225	218	(7)	96.9%	2	2	0	100.0%	9	9	0	100.0%
Residential Energy Assessment	24,358	14,121	(10,237)	58.0%	65	19	(46)	29.2%	0	0	0	0.0%
Total Residential Programs	\$246,110	\$209,499	(\$36,611)	85.1%	1,288	777	(511)	60.3%	8,408	7,140	(1,268)	84.9%
Low Income Programs												
Weatherization	\$63,208	\$46,479	(\$16,729)	73.5%	23	11	(12)	47.8%	331	171	(160)	51.7%
Furnace and Boiler Replacement	34,982	6,852	(28,130)	19.6%	8	1	(7)	12.5%	152	20	(132)	13.2%
Furnace and Boiler Tune-Up	1,020	0	(1,020)	0.0%	5	0	(5)	0.0%	19	0	(19)	0.0%
Hot Water Heater Temp Set-Back	0	0	0	0.0%	10	3	(7)	30.0%	9	3	(6)	33.3%
Low Income Multi-Family Building Efficiency	59,128	4,723	(54,405)	8.0%	6	1	(5)	16.7%	600	90	(510)	15.0%
Total Low Income Programs	\$158,338	\$58,054	(\$100,284)	36.7%	52	16	(36)	30.8%	1,111	284	(827)	25.6%
Pre-Weatherization: Healthy Air Account	\$17,724	\$6,911	(\$10,813)	39.0%								
Total Low Income Programs	\$176,062	\$64,965	(\$111,097)	36.9%	52	16	(36)	30.8%	1,111	284	(827)	25.6%

1/ 2021-2023 Conservation Improvement Program Triennial Modification approved by the MN DOC on November 7, 2023 in Docket No. G004/CIP-20-477.

**GREAT PLAINS NATURAL GAS CO.
GAS UTILITY - MINNESOTA
CONSERVATION IMPROVEMENT PROGRAM STATUS REPORT
PROGRAM RESULTS
2023**

	Expenses			Percent of Authorized	Participants			Percent of Authorized	Dk Savings			Percent of Authorized
	Authorized 1/	Actual	Difference		Authorized 1/	Actual	Difference		Authorized 1/	Actual	Difference	
<u>Commercial and Industrial Programs</u>												
<u>Commercial Space Heating Equipment</u>												
Furnace Tier 1 - 94-95% AFUE - Replacement	\$6,048	\$379	(\$5,669)	6.3%	15	1	(14)	6.7%	464	19	(445)	4.1%
Furnace Tier 2 - 96%+ AFUE - New	1,612	506	(1,106)	31.4%	3	1	(2)	33.3%	99	16	(83)	16.2%
Furnace Tier 2 - 96%+ AFUE - Replacement	13,439	8,086	(5,353)	60.2%	25	16	(9)	64.0%	823	417	(406)	50.7%
Commercial Hot Water Boiler												
Tier 1 (85%+ AFUE)	2,042	0	(2,042)	0.0%	2	0	(2)	0.0%	79	0	(79)	0.0%
Tier 2 (88%+ AFUE)	22,039	19,907	(2,132)	90.3%	10	15	5	150.0%	988	939	(49)	95.0%
Commercial LP & HP Steam Boiler												
Tier 1 (<300,000 BTUH)	1,680	0	(1,680)	0.0%	1	0	(1)	0.0%	17	0	(17)	0.0%
Tier 2 (≥300,000 BTUH)	2,016	0	(2,016)	0.0%	1	0	(1)	0.0%	120	0	(120)	0.0%
Infrared Heater	1,680	632	(1,048)	37.6%	5	2	(3)	40.0%	141	66	(75)	46.8%
Condensing Unit Heater	806	379	(427)	47.0%	2	1	(1)	50.0%	40	12	(28)	30.0%
Total Commercial Space Heating Equipment	<u>\$51,362</u>	<u>\$29,889</u>	<u>(\$21,473)</u>	<u>58.2%</u>	<u>64</u>	<u>36</u>	<u>(28)</u>	<u>56.3%</u>	<u>2,771</u>	<u>1,469</u>	<u>(1,302)</u>	<u>53.0%</u>
<u>Commercial Water Heating Equipment</u>												
Water Heater .64 EF+ (≥40 Gallons)	\$269	\$253	(\$16)	94.1%	2	2	0	100.0%	6	1	(5)	16.7%
Water Heater Storage 88% Cond.	1,612	2,143	531	132.9%	5	7	2	140.0%	20	1,235	1,215	6175.0%
Total Commercial Water Heating Equipment	<u>\$1,881</u>	<u>\$2,396</u>	<u>\$515</u>	<u>127.4%</u>	<u>7</u>	<u>9</u>	<u>2</u>	<u>128.6%</u>	<u>26</u>	<u>1,236</u>	<u>1,210</u>	<u>4753.8%</u>
<u>Commercial Boiler Equipment</u>												
O2 Control	\$0	\$0	\$0	0.0%	0	0	0	0.0%	0	0	0	0.0%
Modulating Burner												
Tier 1 (<2,500 kBTUH)	0	0	0	0.0%	0	0	0	0.0%	0	0	0	0.0%
Tier 2 (>2,500 kBTUH)	3,360	0	(3,360)	0.0%	1	0	(1)	0.0%	293	0	(293)	0.0%
Stack Damper	0	0	0	0.0%	0	0	0	0.0%	0	0	0	0.0%
Turbulator	0	0	0	0.0%	0	0	0	0.0%	0	0	0	0.0%
Outdoor Air Reset	0	0	0	0.0%	0	0	0	0.0%	0	0	0	0.0%
Cut-Out Control	135	0	(135)	0.0%	1	0	(1)	0.0%	31	0	(31)	0.0%
Boiler Tune-Up												
Tier 1 (<2,500 kBTUH)	539	0	(539)	0.0%	2	0	(2)	0.0%	29	0	(29)	0.0%
Tier 2 (≥2,500 kBTUH)	806	1,516	710	188.1%	2	4	2	200.0%	203	25,598	25,395	12609.9%
Steam Trap	1,552	0	(1,552)	0.0%	30	0	(30)	0.0%	417	0	(417)	0.0%
Total Commercial Boiler Equipment	<u>\$6,392</u>	<u>\$1,516</u>	<u>(\$4,876)</u>	<u>23.7%</u>	<u>36</u>	<u>4</u>	<u>(32)</u>	<u>11.1%</u>	<u>973</u>	<u>25,598</u>	<u>24,625</u>	<u>2630.8%</u>

1/ 2021-2023 Conservation Improvement Program Triennial Modification approved by the MN DOC on November 7, 2023 in Docket No. G004/CIP-20-477.

**GREAT PLAINS NATURAL GAS CO.
GAS UTILITY - MINNESOTA
CONSERVATION IMPROVEMENT PROGRAM STATUS REPORT
PROGRAM RESULTS
2023**

	Expenses			Percent of Authorized	Participants			Percent of Authorized	Dk Savings			Percent of Authorized
	Authorized 1/	Actual	Difference		Authorized 1/	Actual	Difference		Authorized 1/	Actual	Difference	
<u>Commercial and Industrial Programs</u>												
<u>Commercial Food Service</u>												
Tier 1 (\$500 Incentive)	\$1,343	\$632	(\$711)	47.1%	2	1	(1)	50.0%	179	40	(139)	22.3%
Tier 2 (\$1,000 Incentive)	1,343	0	(1,343)	0.0%	1	0	(1)	0.0%	83	0	(83)	0.0%
Total Commercial Food Service	<u>\$2,686</u>	<u>\$632</u>	<u>(\$2,054)</u>	<u>23.5%</u>	<u>3</u>	<u>1</u>	<u>(2)</u>	<u>33.3%</u>	<u>262</u>	<u>40</u>	<u>(222)</u>	<u>15.3%</u>
Commercial Custom	\$483,780	\$542,274	\$58,494	112.1%	12	4	(8)	33.3%	48,000	49,944	1,944	104.1%
Commercial Building Certification	5,376	0	(5,376)	0.0%	1	0	(1)	0.0%	0	0	0	0.0%
Commercial Energy Assessment	6,384	0	(6,384)	0.0%	5	0	(5)	0.0%	0	0	0	0.0%
Industrial Energy Assessment	8,063	0	(8,063)	0.0%	2	0	(2)	0.0%	0	0	0	0.0%
Total Commercial and Industrial Programs	<u>\$565,924</u>	<u>\$576,707</u>	<u>\$10,783</u>	<u>101.9%</u>	<u>130</u>	<u>54</u>	<u>(76)</u>	<u>41.5%</u>	<u>52,032</u>	<u>78,287</u>	<u>26,255</u>	<u>150.5%</u>
Total Programs	<u>\$988,096</u>	<u>\$851,171</u>	<u>(\$136,925)</u>	<u>86.1%</u>	<u>1,470</u>	<u>847</u>	<u>(623)</u>	<u>57.6%</u>	<u>61,551</u>	<u>85,711</u>	<u>24,160</u>	<u>139.3%</u>
Direct Assessment Charges	<u>\$26,000</u>	<u>\$26,815</u>	<u>\$815</u>	<u>103.1%</u>								
Grand Total of All Programs	<u>\$1,014,096</u>	<u>\$877,986</u>	<u>(\$136,110)</u>	<u>86.6%</u>								

1/ 2021-2023 Conservation Improvement Program Triennial Modification approved by the MN DOC on November 7, 2023 in Docket No. G004/CIP-20-477.

**GREAT PLAINS NATURAL GAS CO.
GAS UTILITY - MINNESOTA
CONSERVATION IMPROVEMENT PROGRAM STATUS REPORT
COST PER DK SAVINGS
ACTUAL TO AUTHORIZED
2023**

	Actual Participants	Cost per Dk Savings			Percent of Authorized
		Authorized 1/	Actual	Difference	
<u>Residential Programs</u>					
<u>Residential Space Heating Equipment</u>					
Programmable Thermostats Tier 1	34	\$8.99	\$10.12	\$1.13	112.57%
Programmable Thermostats Tier 2	13	20.26	19.40	(0.86)	95.76%
Programmable Thermostats Tier 3	89	18.43	14.46	(3.97)	78.46%
Furnace Tier 1 - 94-95% AFUE - New	0	23.66	0.00	(23.66)	0.00%
Furnace Tier 1 - 94-95% AFUE - Replacement	31	23.67	25.38	1.71	107.22%
Furnace Tier 2 - 96%+ AFUE - New	7	29.54	84.54	55.00	286.19%
Furnace Tier 2 - 96%+ AFUE - Replacement	204	29.53	28.66	(0.87)	97.05%
Furnace and Boiler Tune-Up	227	32.59	29.48	(3.11)	90.46%
Boiler Tier 1 - 84-90.9% AFUE	3	59.16	76.71	17.55	129.67%
Boiler Tier 2 - 91%+ AFUE	26	28.50	21.81	(6.69)	76.53%
Total Residential Space Heating Equipment	<u>634</u>	<u>\$26.27</u>	<u>\$26.51</u>	<u>\$0.24</u>	<u>100.91%</u>
<u>Residential Water Heating Equipment</u>					
Water Heating (.67 EF)	41	\$83.27	\$67.51	(\$15.76)	81.07%
Tankless Water Heating (.82 EF)	8	416.33	181.19	(235.14)	43.52%
Low Flow Showerheads	72	16.61	28.99	12.38	174.53%
Total Residential Water Heating Equipment	<u>121</u>	<u>\$27.72</u>	<u>\$59.33</u>	<u>\$31.61</u>	<u>214.03%</u>
Attic Insulation	1	\$32.14	\$15.57	(\$16.57)	48.44%
Pilotless Fireplace	2	25.00	24.22	(0.78)	96.88%
Residential Energy Assessment	19	0.00	0.00	0.00	0.00%
Total Residential Programs	<u>777</u>	<u>\$29.27</u>	<u>\$29.34</u>	<u>\$0.07</u>	<u>100.24%</u>
<u>Low Income Programs</u>					
Weatherization	11	\$190.96	\$271.81	\$80.85	142.34%
Furnace and Boiler Replacement	1	230.14	342.60	112.46	148.87%
Furnace and Boiler Tune-Up	0	53.68	0.00	(53.68)	0.00%
Hot Water Heater Temp Set-Back	3	0.00	0.00	0.00	0.00%
Low Income Multi-Family Building Efficiency	1	98.55	52.48	(46.07)	53.25%
Total Low Income Programs	<u>16</u>	<u>\$142.52</u>	<u>\$204.42</u>	<u>\$61.90</u>	<u>143.43%</u>
<u>Commercial and Industrial Programs</u>					
<u>Commercial Space Heating Equipment</u>					
Furnace Tier 1 - 94-95% AFUE - Replacement	1	13.03	19.95	6.92	153.11%
Furnace Tier 2 - 96%+ AFUE - New	1	16.28	31.63	15.35	194.29%
Furnace Tier 2 - 96%+ AFUE - Replacement	16	16.33	19.39	3.06	118.74%
Commercial Hot Water Boiler					
Tier 1 (85%+ AFUE)	0	25.85	0.00	(25.85)	0.00%
Tier 2 (88%+ AFUE)	15	22.31	21.20	(1.11)	95.02%
Commercial LP & HP Steam Boiler					
Tier 1 (<300,000 BTUH)	0	98.82	0.00	(98.82)	0.00%
Tier 2 (≥300,000 BTUH)	0	16.80	0.00	(16.80)	0.00%
Infrared Heater	2	11.91	9.58	(2.33)	80.44%
Condensing Unit Heater	1	20.15	31.58	11.43	156.72%
Total Commercial Space Heating Equipment	<u>36</u>	<u>\$18.54</u>	<u>\$20.35</u>	<u>\$1.81</u>	<u>109.76%</u>

1/ 2021-2023 Conservation Improvement Program Triennial Modification approved by the MN DOC on November 7, 2023 in Docket No. G004/CIP-20-477.

**GREAT PLAINS NATURAL GAS CO.
GAS UTILITY - MINNESOTA
CONSERVATION IMPROVEMENT PROGRAM STATUS REPORT
COST PER DK SAVINGS
ACTUAL TO AUTHORIZED
2023**

	Actual Participants	Cost per Dk Savings			Percent of Authorized
		Authorized 1/	Actual	Difference	
<u>Commercial and Industrial Programs</u>					
<u>Commercial Water Heating Equipment</u>					
Water Heater .64 EF+ (≥40 Gallons)	2	\$44.83	\$253.00	\$208.17	564.35%
Water Heater Storage 88% Cond.	7	80.60	1.74	(78.86)	2.16%
Total Commercial Water Heating Equipment	<u>9</u>	<u>\$72.35</u>	<u>\$1.94</u>	<u>(\$70.41)</u>	<u>2.68%</u>
<u>Commercial Boiler Equipment</u>					
O2 Control	0	\$0.00	\$0.00	\$0.00	0.00%
Modulating Burner					
Tier 1 (<2,500 kBTUH)	0	0.00	0.00	0.00	0.00%
Tier 2 (>2,500 kBTUH)	0	11.47	0.00	(11.47)	0.00%
Stack Damper	0	0.00	0.00	0.00	0.00%
Turbulator	0	0.00	0.00	0.00	0.00%
Outdoor Air Reset	0	0.00	0.00	0.00	0.00%
Cut-Out Control	0	4.35	0.00	(4.35)	0.00%
Boiler Tune-Up					
Tier 1 (<2,500 kBTUH)	0	18.59	0.00	(18.59)	0.00%
Tier 2 (≥2,500 kBTUH)	4	3.97	0.06	(3.91)	1.51%
Steam Trap	0	3.72	0.00	(3.72)	0.00%
Total Commercial Boiler Equipment	<u>4</u>	<u>\$6.57</u>	<u>\$0.06</u>	<u>(\$6.51)</u>	<u>0.91%</u>
<u>Commercial Food Service</u>					
Tier 1 (\$500 Incentive)	1	\$7.50	\$15.80	\$8.30	210.67%
Tier 2 (\$1,000 Incentive)	0	16.18	0.00	(16.18)	0.00%
Total Commercial Food Service	<u>1</u>	<u>\$10.25</u>	<u>\$15.80</u>	<u>\$5.55</u>	<u>154.15%</u>
Commercial Custom	4	\$10.08	\$10.86	\$0.78	107.74%
Commercial Building Certification	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 Programs	<u>54</u>	<u>\$10.88</u>	<u>\$7.37</u>	<u>(\$3.51)</u>	<u>67.74%</u>
Total Programs 2/	<u>847</u>	<u>\$16.48</u>	<u>\$10.24</u>	<u>(\$6.24)</u>	<u>62.14%</u>

1/ 2021-2023 Conservation Improvement Program Triennial Modification approved by the MN DOC on November 7, 2023 in Docket No. G004/CIP-20-477.

2/ Includes direct assessment charges.

**GREAT PLAINS NATURAL GAS CO.
GAS UTILITY - MINNESOTA
CONSERVATION IMPROVEMENT PROGRAM STATUS REPORT
SUMMARY OF LOW INCOME CAP PROGRAMS
2023**

Agency	Participants	Weatherization			Furnace and Boiler Replacement			Furnace and Boiler Tune-Up			Hot Water Heater Temp Set-Back			Total Low Income		
		Incentive Expense	Dk Savings	Expense per Dk	Incentive Expense	Dk Savings	Expense per Dk	Incentive Expense	Dk Savings	Expense Per Dk	Incentive Expense	Dk Savings	Expense Per Dk	Incentive Expense	Dk Savings	Expense per Dk
<u>Prairie V Community Action Council</u>																
	1	\$2,146	19.0	\$112.95								0.9		\$2,146	19.9	\$107.84
	2	2,194	32.2	68.14								0.9		2,194	33.1	66.28
	3	2,129	12.7	167.64								0.9		2,129	13.6	156.54
		<u>\$6,469</u>	<u>63.9</u>	<u>\$101.24</u>	<u>\$0</u>	<u>0.0</u>	<u>\$0.00</u>	<u>\$0</u>	<u>0.0</u>	<u>\$0.00</u>	<u>\$0</u>	<u>2.7</u>	<u>\$0.00</u>	<u>\$6,469</u>	<u>66.6</u>	<u>\$97.13</u>
<u>West Central Minnesota Community</u>																
	1	\$7,562												\$7,562	0.0	\$0.00
		<u>\$7,562</u>	<u>0.0</u>	<u>\$0.00</u>	<u>\$0</u>	<u>0.0</u>	<u>\$0.00</u>	<u>\$0</u>	<u>0.0</u>	<u>\$0.00</u>	<u>\$0</u>	<u>0.0</u>	<u>\$0.00</u>	<u>\$7,562</u>	<u>0.0</u>	<u>\$0.00</u>
<u>United Community Action</u>																
	1	\$1,870	20.6	\$90.78	\$3,872	20.1	\$192.64							\$5,742	40.7	\$141.08
	2	586	8.3	70.60										586	8.3	70.60
	3	1,924	19.2	100.21										1,924	19.2	100.21
	4	2,105	13.2	159.47										2,105	13.2	159.47
	5	1,431	12.9	110.93										1,431	12.9	110.93
	6	1,925	24.5	78.57										1,925	24.5	78.57
	7	2,393	8.6	278.26										2,393	8.6	278.26
		<u>\$12,234</u>	<u>107.3</u>	<u>\$114.02</u>	<u>\$3,872</u>	<u>20.1</u>	<u>\$192.64</u>	<u>\$0</u>	<u>0.0</u>	<u>\$0.00</u>	<u>\$0</u>	<u>0.0</u>	<u>\$0.00</u>	<u>\$16,106</u>	<u>127.4</u>	<u>\$126.42</u>
Total	<u>11</u>	<u>\$26,265</u>	<u>171.2</u>	<u>\$153.42</u>	<u>\$3,872</u>	<u>20.1</u>	<u>\$192.64</u>	<u>\$0</u>	<u>0.0</u>	<u>\$0.00</u>	<u>\$0</u>	<u>2.7</u>	<u>\$0.00</u>	<u>\$30,137</u>	<u>194.0</u>	<u>\$155.35</u>

Participants

Weatherization	11
Furnace and Boiler Replacement	1
Furnace and Boiler Tune-Up	0
Hot Water Heater Temp Set-Back	3
Total	15

Average Dk Savings per Participant 12.9

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

Input Data		2023	
1) Retail Rate (\$/MCF) =	\$5.3900	16 Utility Project Costs	
Escalation Rate =	4.69%	16 a) Administrative & Operating Costs =	\$216,805
2) Non-Gas Fuel Retail Rate (\$/Fuel Unit) =	\$0.00	16 b) Incentive Costs =	\$634,366
Escalation Rate =	3.59%	16 c) Total Utility Project Costs =	\$851,171
Non-Gas Fuel Units (ie. kWh,Gallons, etc) =	kWh	17) Direct Participant Costs (\$/Part.) =	\$1,159
3) Commodity Cost (\$/MCF) =	\$3.25	18) Participant Non-Energy Costs (Annual \$/Part.) =	\$0
Escalation Rate =	4.69%	Escalation Rate =	2.30%
4) Demand Cost (\$/Unit/Yr) =	\$126.03	19) Participant Non-Energy Savings (Annual \$/Part) =	\$0
Escalation Rate =	4.69%	Escalation Rate =	2.30%
5) Peak Reduction Factor =	0.23%	20) Project Life (Years) =	12
6) Variable O&M (\$/MCF) =	\$0.0320	21) Avg. MCF/Part. Saved =	101.2
Escalation Rate =	4.69%	22) Avg Non-Gas Fuel Units/Part. Saved =	216 kWh
7) Non-Gas Fuel Cost (\$/Fuel Unit) =	\$0.02657	22a) Avg Additional Non-Gas Fuel Units/ Part. Used =	0 kWh
Escalation Rate =	3.59%	23) Number of Participants =	847
8) Non-Gas Fuel Loss Factor	7.70%	24) Total Annual MCF Saved =	85,711
9) Gas Environmental Damage Factor =	\$2.0700	25) Incentive/Participant =	\$748.96
Escalation Rate =	2.30%		
10) Non Gas Fuel Enviro. Damage Factor (\$/Unit) =	\$0.01984		
Escalation Rate =	2.30%		
11) Participant Discount Rate =	3.20%		
12) Utility Discount Rate =	5.79%		
13) Societal Discount Rate =	3.02%		
14) General Input Data Year =	2022		
15a) Project Analysis Year 1 =	2023		
15b) Project Analysis Year 2 =			
15c) Project Analysis Year 3 =			

Cost Summary	2023	Test Results	Triennial NPV	Triennial B/C
Utility Cost per Participant =	\$1,004.92	Ratepayer Impact Measure Test	(\$2,700,712)	0.57
Cost per Participant per MCF =	\$21.38	Utility Cost Test	\$2,782,406	4.27
Lifetime Energy Reduction (MCF)	1,028,532	Societal Test	\$5,219,922	5.36
Societal Cost per MCF	\$1.17	Participant Test	\$5,940,275	7.05

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

Input Data		2023	
1) Retail Rate (\$/MCF) =	\$6.7358	16 Utility Project Costs	
Escalation Rate =	4.69%	16 a) Administrative & Operating Costs =	\$64,376
2) Non-Gas Fuel Retail Rate (\$/Fuel Unit) =	\$0.00	16 b) Incentive Costs =	\$145,123
Escalation Rate =	3.59%	16 c) Total Utility Project Costs =	\$209,499
Non-Gas Fuel Units (ie. kWh,Gallons, etc) =	kWh	17) Direct Participant Costs (\$/Part.) =	\$523
3) Commodity Cost (\$/MCF) =	\$3.25	18) Participant Non-Energy Costs (Annual \$/Part.) =	\$0
Escalation Rate =	4.69%	Escalation Rate =	2.30%
4) Demand Cost (\$/Unit/Yr) =	\$126.03	19) Participant Non-Energy Savings (Annual \$/Part) =	\$0
Escalation Rate =	4.69%	Escalation Rate =	2.30%
5) Peak Reduction Factor =	1.00%	20) Project Life (Years) =	12
6) Variable O&M (\$/MCF) =	\$0.0320	21) Avg. MCF/Part. Saved =	9.2
Escalation Rate =	4.69%	22) Avg Non-Gas Fuel Units/Part. Saved =	233 kWh
7) Non-Gas Fuel Cost (\$/Fuel Unit) =	\$0.02657	22a) Avg Additional Non-Gas Fuel Units/ Part. Used =	0 kWh
Escalation Rate =	3.59%	23) Number of Participants =	777
8) Non-Gas Fuel Loss Factor	7.70%	24) Total Annual MCF Saved =	7,140
9) Gas Environmental Damage Factor =	\$2.0700	25) Incentive/Participant =	\$186.77
Escalation Rate =	2.30%		
10) Non Gas Fuel Enviro. Damage Factor (\$/Unit) =	\$0.01984		
Escalation Rate =	2.30%		
11) Participant Discount Rate =	3.02%		
12) Utility Discount Rate =	5.79%		
13) Societal Discount Rate =	3.02%		
14) General Input Data Year =	2022		
15a) Project Analysis Year 1 =	2023		
15b) Project Analysis Year 2 =	N/A		
15c) Project Analysis Year 3 =	N/A		

Cost Summary	2023	Test Results	Triennial NPV	Triennial B/C
Utility Cost per Participant =	\$269.63	Ratepayer Impact Measure Test	(\$395,381)	0.49
Cost per Participant per MCF =	\$86.15	Utility Cost Test	\$175,426	1.84
Lifetime Energy Reduction (MCF)	85,680	Societal Test	\$262,445	1.56
Societal Cost per MCF	\$5.49	Participant Test	\$399,830	1.98

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

Input Data		2023	
1) Retail Rate (\$/MCF) =	\$6.7358	16 Utility Project Costs	
Escalation Rate =	4.69%	16 a) Administrative & Operating Costs =	\$56,894
2) Non-Gas Fuel Retail Rate (\$/Fuel Unit) =	\$0.000	16 b) Incentive Costs =	\$126,657
Escalation Rate =	3.59%	16 c) Total Utility Project Costs =	\$183,551
Non-Gas Fuel Units (ie. kWh,Gallons, etc) =	kWh	17) Direct Participant Costs (\$/Part.) =	\$577
3) Commodity Cost (\$/MCF) =	\$3.25	18) Participant Non-Energy Costs (Annual \$/Part.) =	\$0
Escalation Rate =	4.69%	Escalation Rate =	2.30%
4) Demand Cost (\$/Unit/Yr) =	\$126.03	19) Participant Non-Energy Savings (Annual \$/Part) =	\$0
Escalation Rate =	4.69%	Escalation Rate =	2.30%
5) Peak Reduction Factor =	1.00%	20) Project Life (Years) =	11
6) Variable O&M (\$/MCF) =	\$0.0320	21) Avg. MCF/Part. Saved =	10.9
Escalation Rate =	4.69%	22) Avg Non-Gas Fuel Units/Part. Saved =	285 kWh
7) Non-Gas Fuel Cost (\$/Fuel Unit) =	\$0.02657	22a) Avg Additional Non-Gas Fuel Units/ Part. Used =	0 kWh
Escalation Rate =	3.59%	23) Number of Participants =	634
8) Non-Gas Fuel Loss Factor	7.70%	24) Total Annual MCF Saved =	6,925
9) Gas Environmental Damage Factor =	\$2.0700	25) Incentive/Participant =	\$199.77
Escalation Rate =	2.30%		
10) Non Gas Fuel Enviro. Damage Factor (\$/Unit) =	\$0.0198		
Escalation Rate =	2.30%		
11) Participant Discount Rate =	3.02%		
12) Utility Discount Rate =	5.79%		
13) Societal Discount Rate =	3.02%		
14) General Input Data Year =	2022		
15a) Project Analysis Year 1 =	2023		
15b) Project Analysis Year 2 =	N/A		
15c) Project Analysis Year 3 =	N/A		

Cost Summary	2023	Test Results	Triennial NPV	Triennial B/C
Utility Cost per Participant =	\$289.51	Ratepayer Impact Measure Test	(\$349,661)	0.50
Cost per Participant per MCF =	\$79.50	Utility Cost Test	\$160,429	1.87
Lifetime Energy Reduction (MCF)	76,175	Societal Test	\$229,297	1.54
Societal Cost per MCF	\$5.55	Participant Test	\$343,729	1.94

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

Input Data		2023	
1) Retail Rate (\$/MCF) =	\$6.7358	16 Utility Project Costs	
Escalation Rate =	4.69%	16 a) Administrative & Operating Costs =	\$2,970
2) Non-Gas Fuel Retail Rate (\$/Fuel Unit) =	\$0.000	16 b) Incentive Costs =	\$8,421
Escalation Rate =	3.59%	16 c) Total Utility Project Costs =	\$11,391
Non-Gas Fuel Units (ie. kWh,Gallons, etc) =	kWh	17) Direct Participant Costs (\$/Part.) =	\$275
3) Commodity Cost (\$/MCF) =	\$3.25	18) Participant Non-Energy Costs (Annual \$/Part.) =	\$0
Escalation Rate =	4.69%	Escalation Rate =	2.30%
4) Demand Cost (\$/Unit/Yr) =	\$126.03	19) Participant Non-Energy Savings (Annual \$/Part) =	\$0
Escalation Rate =	4.69%	Escalation Rate =	2.30%
5) Peak Reduction Factor =	1.00%	20) Project Life (Years) =	12
6) Variable O&M (\$/MCF) =	\$0.0320	21) Avg. MCF/Part. Saved =	1.6
Escalation Rate =	4.69%	22) Avg Non-Gas Fuel Units/Part. Saved =	0 kWh
7) Non-Gas Fuel Cost (\$/Fuel Unit) =	\$0.02657	22a) Avg Additional Non-Gas Fuel Units/ Part. Used =	0 kWh
Escalation Rate =	3.59%	23) Number of Participants =	121
8) Non-Gas Fuel Loss Factor	7.70%	24) Total Annual MCF Saved =	192
9) Gas Environmental Damage Factor =	\$2.0700	25) Incentive/Participant =	\$69.60
Escalation Rate =	2.30%		
10) Non Gas Fuel Enviro. Damage Factor (\$/Unit) =	\$0.0198		
Escalation Rate =	2.30%		
11) Participant Discount Rate =	3.02%		
12) Utility Discount Rate =	5.79%		
13) Societal Discount Rate =	3.02%		
14) General Input Data Year =	2022		
15a) Project Analysis Year 1 =	2023		
15b) Project Analysis Year 2 =	N/A		
15c) Project Analysis Year 3 =	N/A		

Cost Summary	2023	Test Results	Triennial NPV	Triennial B/C
Utility Cost per Participant =	\$94.14	Ratepayer Impact Measure Test	(\$16,390)	0.39
Cost per Participant per MCF =	\$230.71	Utility Cost Test	(\$1,040)	0.91
Lifetime Energy Reduction (MCF)	2,304	Societal Test	(\$19,561)	0.46
Societal Cost per MCF	\$15.73	Participant Test	(\$7,077)	0.79

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

Input Data		2023	
1) Retail Rate (\$/MCF) =	\$6.7358	16 Utility Project Costs	
Escalation Rate =	4.69%	16 a) Administrative & Operating Costs =	\$68
2) Non-Gas Fuel Retail Rate (\$/Fuel Unit) =	\$0.000	16 b) Incentive Costs =	\$150
Escalation Rate =	3.59%	16 c) Total Utility Project Costs =	\$218
Non-Gas Fuel Units (ie. kWh,Gallons, etc) =	kWh	17) Direct Participant Costs (\$/Part.) =	\$972
3) Commodity Cost (\$/MCF) =	\$3.25	18) Participant Non-Energy Costs (Annual \$/Part.) =	\$0
Escalation Rate =	4.69%	Escalation Rate =	2.30%
4) Demand Cost (\$/Unit/Yr) =	\$126.03	19) Participant Non-Energy Savings (Annual \$/Part) =	\$0
Escalation Rate =	4.69%	Escalation Rate =	2.30%
5) Peak Reduction Factor =	1.00%	20) Project Life (Years) =	20
6) Variable O&M (\$/MCF) =	\$0.0320	21) Avg. MCF/Part. Saved =	6.6
Escalation Rate =	4.69%	22) Avg Non-Gas Fuel Units/Part. Saved =	0 kWh
7) Non-Gas Fuel Cost (\$/Fuel Unit) =	\$0.02657	22a) Avg Additional Non-Gas Fuel Units/ Part. Used =	0 kWh
Escalation Rate =	3.59%	23) Number of Participants =	1
8) Non-Gas Fuel Loss Factor	7.70%	24) Total Annual MCF Saved =	14
9) Gas Environmental Damage Factor =	\$2.0700	25) Incentive/Participant =	\$150.00
Escalation Rate =	2.30%		
10) Non Gas Fuel Enviro. Damage Factor (\$/Unit) =	\$0.0198		
Escalation Rate =	2.30%		
11) Participant Discount Rate =	3.02%		
12) Utility Discount Rate =	5.79%		
13) Societal Discount Rate =	3.02%		
14) General Input Data Year =	2022		
15a) Project Analysis Year 1 =	2023		
15b) Project Analysis Year 2 =	N/A		
15c) Project Analysis Year 3 =	N/A		

Cost Summary	2023	Test Results	Triennial NPV	Triennial B/C
Utility Cost per Participant =	\$218.00	Ratepayer Impact Measure Test	(\$801)	0.60
Cost per Participant per MCF =	\$180.30	Utility Cost Test	\$990	5.54
Lifetime Energy Reduction (MCF)	280	Societal Test	\$1,073	2.03
Societal Cost per MCF	\$3.71	Participant Test	\$1,488	2.53

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

Input Data		2023	
1) Retail Rate (\$/MCF) =	\$6.7358	16 Utility Project Costs	
Escalation Rate =	4.69%	16 a) Administrative & Operating Costs =	\$68
2) Non-Gas Fuel Retail Rate (\$/Fuel Unit) =	\$0.000	16 b) Incentive Costs =	\$150
Escalation Rate =	3.59%	16 c) Total Utility Project Costs =	\$218
Non-Gas Fuel Units (ie. kWh,Gallons, etc) =	kWh	17) Direct Participant Costs (\$/Part.) =	\$193
3) Commodity Cost (\$/MCF) =	\$3.25	18) Participant Non-Energy Costs (Annual \$/Part.) =	\$0
Escalation Rate =	4.69%	Escalation Rate =	2.30%
4) Demand Cost (\$/Unit/Yr) =	\$126.03	19) Participant Non-Energy Savings (Annual \$/Part) =	\$0
Escalation Rate =	4.69%	Escalation Rate =	2.30%
5) Peak Reduction Factor =	1.00%	20) Project Life (Years) =	15
6) Variable O&M (\$/MCF) =	\$0.0320	21) Avg. MCF/Part. Saved =	4.4
Escalation Rate =	4.69%	22) Avg Non-Gas Fuel Units/Part. Saved =	0 kWh
7) Non-Gas Fuel Cost (\$/Fuel Unit) =	\$0.02657	22a) Avg Additional Non-Gas Fuel Units/ Part. Used =	0 kWh
Escalation Rate =	3.59%	23) Number of Participants =	2
8) Non-Gas Fuel Loss Factor	7.70%	24) Total Annual MCF Saved =	9
9) Gas Environmental Damage Factor =	\$2.0700	25) Incentive/Participant =	\$75.00
Escalation Rate =	2.30%		
10) Non Gas Fuel Enviro. Damage Factor (\$/Unit) =	\$0.0198		
Escalation Rate =	2.30%		
11) Participant Discount Rate =	3.02%		
12) Utility Discount Rate =	5.79%		
13) Societal Discount Rate =	3.02%		
14) General Input Data Year =	2022		
15a) Project Analysis Year 1 =	2023		
15b) Project Analysis Year 2 =	N/A		
15c) Project Analysis Year 3 =	N/A		

Cost Summary	2023	Test Results	Triennial NPV	Triennial B/C
Utility Cost per Participant =	\$109.00	Ratepayer Impact Measure Test	(\$506)	0.54
Cost per Participant per MCF =	\$68.64	Utility Cost Test	\$379	2.74
Lifetime Energy Reduction (MCF)	135	Societal Test	\$538	2.19
Societal Cost per MCF	\$3.36	Participant Test	\$832	3.16

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

Input Data		2023
1) Retail Rate (\$/MCF) =	\$6.7358	
Escalation Rate =	4.69%	
2) Non-Gas Fuel Retail Rate (\$/Fuel Unit) =	\$0.000	
Escalation Rate =	3.59%	
Non-Gas Fuel Units (ie. kWh,Gallons, etc) =	kWh	
3) Commodity Cost (\$/MCF) =	\$3.25	
Escalation Rate =	4.69%	
4) Demand Cost (\$/Unit/Yr) =	\$126.03	
Escalation Rate =	4.69%	
5) Peak Reduction Factor =	1.00%	
6) Variable O&M (\$/MCF) =	\$0.0320	
Escalation Rate =	4.69%	
7) Non-Gas Fuel Cost (\$/Fuel Unit) =	\$0.02657	
Escalation Rate =	3.59%	
8) Non-Gas Fuel Loss Factor	7.70%	
9) Gas Environmental Damage Factor =	\$2.0700	
Escalation Rate =	2.30%	
10) Non Gas Fuel Enviro. Damage Factor (\$/Unit) =	\$0.0198	
Escalation Rate =	2.30%	
11) Participant Discount Rate =	3.02%	
12) Utility Discount Rate =	5.79%	
13) Societal Discount Rate =	3.02%	
14) General Input Data Year =	2022	
15a) Project Analysis Year 1 =	2023	
15b) Project Analysis Year 2 =	N/A	
15c) Project Analysis Year 3 =	N/A	
16 Utility Project Costs		
16 a) Administrative & Operating Costs =		\$4,376
16 b) Incentive Costs =		\$9,745
16 c) Total Utility Project Costs =		\$14,121
17) Direct Participant Costs (\$/Part.) =		\$300
18) Participant Non-Energy Costs (Annual \$/Part.) =		\$0
Escalation Rate =		2.30%
19) Participant Non-Energy Savings (Annual \$/Part) =		\$0
Escalation Rate =		2.30%
20) Project Life (Years) =		10
21) Avg. MCF/Part. Saved =		-
22) Avg Non-Gas Fuel Units/Part. Saved =		0 kWh
22a) Avg Additional Non-Gas Fuel Units/ Part. Used =		0 kWh
23) Number of Participants =		19
24) Total Annual MCF Saved =		0
25) Incentive/Participant =		\$512.89

Cost Summary	2023	Test Results	Triennial NPV	Triennial B/C
Utility Cost per Participant =	\$743.21	Ratepayer Impact Measure Test	(\$14,121)	0.00
Cost per Participant per MCF =	#DIV/0!	Utility Cost Test	(\$14,121)	0.00
Lifetime Energy Reduction (MCF)	0	Societal Test	(\$10,076)	0.00
Societal Cost per MCF	#DIV/0!	Participant Test	\$4,045	1.71

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

Input Data		2023	
1) Retail Rate (\$/MCF) =	\$6.7358	16 Utility Project Costs	
Escalation Rate =	4.69%	16 a) Administrative & Operating Costs =	\$32,159
2) Non-Gas Fuel Retail Rate (\$/Fuel Unit) =	\$0.000	16 b) Incentive Costs =	\$32,806
Escalation Rate =	3.59%	16 c) Total Utility Project Costs =	\$64,965
Non-Gas Fuel Units (ie. kWh,Gallons, etc) =	kWh	17) Direct Participant Costs (\$/Part.) =	\$2,095
3) Commodity Cost (\$/MCF) =	\$3.25	18) Participant Non-Energy Costs (Annual \$/Part.) =	\$0
Escalation Rate =	4.69%	Escalation Rate =	2.30%
4) Demand Cost (\$/Unit/Yr) =	\$126.03	19) Participant Non-Energy Savings (Annual \$/Part) =	\$0
Escalation Rate =	4.69%	Escalation Rate =	2.30%
5) Peak Reduction Factor =	1.00%	20) Project Life (Years) =	16
6) Variable O&M (\$/MCF) =	\$0.0320	21) Avg. MCF/Part. Saved =	17.8
Escalation Rate =	4.69%	22) Avg Non-Gas Fuel Units/Part. Saved =	45 kWh
7) Non-Gas Fuel Cost (\$/Fuel Unit) =	\$0.02657	22a) Avg Additional Non-Gas Fuel Units/ Part. Used =	0 kWh
Escalation Rate =	3.59%	23) Number of Participants =	16
8) Non-Gas Fuel Loss Factor	7.70%	24) Total Annual MCF Saved =	284
9) Gas Environmental Damage Factor =	\$2.0700	25) Incentive/Participant =	\$2,050.38
Escalation Rate =	2.30%		
10) Non Gas Fuel Enviro. Damage Factor (\$/Unit) =	\$0.0198		
Escalation Rate =	2.30%		
11) Participant Discount Rate =	3.02%		
12) Utility Discount Rate =	5.79%		
13) Societal Discount Rate =	3.02%		
14) General Input Data Year =	2022		
15a) Project Analysis Year 1 =	2023		
15b) Project Analysis Year 2 =	N/A		
15c) Project Analysis Year 3 =	N/A		

Cost Summary	2023	Test Results	Triennial NPV	Triennial B/C
Utility Cost per Participant =	\$4,060.31	Ratepayer Impact Measure Test	(\$74,624)	0.21
Cost per Participant per MCF =	\$345.80	Utility Cost Test	(\$44,963)	0.31
Lifetime Energy Reduction (MCF)	4,544	Societal Test	(\$31,501)	0.52
Societal Cost per MCF	\$14.45	Participant Test	\$35,536	2.06

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

Input Data		2023	
1) Retail Rate (\$/MCF) =	\$6.7358	16 Utility Project Costs	
Escalation Rate =	4.69%	16 a) Administrative & Operating Costs =	\$20,214
2) Non-Gas Fuel Retail Rate (\$/Fuel Unit) =	\$0.000	16 b) Incentive Costs =	\$26,265
Escalation Rate =	3.59%	16 c) Total Utility Project Costs =	\$46,479
Non-Gas Fuel Units (ie. kWh,Gallons, etc) =	kWh	17) Direct Participant Costs (\$/Part.) =	\$2,363
3) Commodity Cost (\$/MCF) =	\$3.25	18) Participant Non-Energy Costs (Annual \$/Part.) =	\$0
Escalation Rate =	4.69%	Escalation Rate =	2.30%
4) Demand Cost (\$/Unit/Yr) =	\$126.03	19) Participant Non-Energy Savings (Annual \$/Part) =	\$0
Escalation Rate =	4.69%	Escalation Rate =	2.30%
5) Peak Reduction Factor =	1.00%	20) Project Life (Years) =	20
6) Variable O&M (\$/MCF) =	\$0.0320	21) Avg. MCF/Part. Saved =	14.4
Escalation Rate =	4.69%	22) Avg Non-Gas Fuel Units/Part. Saved =	0 kWh
7) Non-Gas Fuel Cost (\$/Fuel Unit) =	\$0.02657	22a) Avg Additional Non-Gas Fuel Units/ Part. Used =	0 kWh
Escalation Rate =	3.59%	23) Number of Participants =	11
8) Non-Gas Fuel Loss Factor	7.70%	24) Total Annual MCF Saved =	171
9) Gas Environmental Damage Factor =	\$2.0700	25) Incentive/Participant =	\$2,387.73
Escalation Rate =	2.30%		
10) Non Gas Fuel Enviro. Damage Factor (\$/Unit) =	\$0.0198		
Escalation Rate =	2.30%		
11) Participant Discount Rate =	3.02%		
12) Utility Discount Rate =	5.79%		
13) Societal Discount Rate =	3.02%		
14) General Input Data Year =	2022		
15a) Project Analysis Year 1 =	2023		
15b) Project Analysis Year 2 =	N/A		
15c) Project Analysis Year 3 =	N/A		

Cost Summary	2023	Test Results	Triennial NPV	Triennial B/C
Utility Cost per Participant =	\$4,225.36	Ratepayer Impact Measure Test	(\$53,603)	0.22
Cost per Participant per MCF =	\$457.53	Utility Cost Test	(\$31,726)	0.32
Lifetime Energy Reduction (MCF)	3,420	Societal Test	(\$20,397)	0.56
Societal Cost per MCF	\$13.51	Participant Test	\$28,490	2.10

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

Input Data		2023	
1) Retail Rate (\$/MCF) =	\$6.7358	16 Utility Project Costs	
Escalation Rate =	4.69%	16 a) Administrative & Operating Costs =	\$2,980
2) Non-Gas Fuel Retail Rate (\$/Fuel Unit) =	\$0.000	16 b) Incentive Costs =	\$3,872
Escalation Rate =	3.59%	16 c) Total Utility Project Costs =	\$6,852
Non-Gas Fuel Units (ie. kWh,Gallons, etc) =	kWh	17) Direct Participant Costs (\$/Part.) =	\$3,500
3) Commodity Cost (\$/MCF) =	\$3.25	18) Participant Non-Energy Costs (Annual \$/Part.) =	\$0
Escalation Rate =	4.69%	Escalation Rate =	2.30%
4) Demand Cost (\$/Unit/Yr) =	\$126.03	19) Participant Non-Energy Savings (Annual \$/Part) =	\$0
Escalation Rate =	4.69%	Escalation Rate =	2.30%
5) Peak Reduction Factor =	1.00%	20) Project Life (Years) =	20
6) Variable O&M (\$/MCF) =	\$0.0320	21) Avg. MCF/Part. Saved =	19.0
Escalation Rate =	4.69%	22) Avg Non-Gas Fuel Units/Part. Saved =	720 kWh
7) Non-Gas Fuel Cost (\$/Fuel Unit) =	\$0.02657	22a) Avg Additional Non-Gas Fuel Units/ Part. Used =	0 kWh
Escalation Rate =	3.59%	23) Number of Participants =	1
8) Non-Gas Fuel Loss Factor	7.70%	24) Total Annual MCF Saved =	20
9) Gas Environmental Damage Factor =	\$2.0700	25) Incentive/Participant =	\$3,872.00
Escalation Rate =	2.30%		
10) Non Gas Fuel Enviro. Damage Factor (\$/Unit) =	\$0.0198		
Escalation Rate =	2.30%		
11) Participant Discount Rate =	3.02%		
12) Utility Discount Rate =	5.79%		
13) Societal Discount Rate =	3.02%		
14) General Input Data Year =	2022		
15a) Project Analysis Year 1 =	2023		
15b) Project Analysis Year 2 =	N/A		
15c) Project Analysis Year 3 =	N/A		

Cost Summary	2023	Test Results	Triennial NPV	Triennial B/C
Utility Cost per Participant =	\$6,852.00	Ratepayer Impact Measure Test	(\$7,685)	0.18
Cost per Participant per MCF =	\$544.84	Utility Cost Test	(\$5,127)	0.25
Lifetime Energy Reduction (MCF)	400	Societal Test	(\$2,712)	0.58
Societal Cost per MCF	\$16.20	Participant Test	\$3,672	2.05

Company: **Great Plains Natural Gas Co.**
 Project: **Low Income Furnace and Boiler Tune-up Program**

Input Data		2023	
1) Retail Rate (\$/MCF) =	\$6.7358	16 Utility Project Costs	
Escalation Rate =	4.69%	16 a) Administrative & Operating Costs =	\$0
2) Non-Gas Fuel Retail Rate (\$/Fuel Unit) =	\$0.000	16 b) Incentive Costs =	\$0
Escalation Rate =	3.59%	16 c) Total Utility Project Costs =	\$0
Non-Gas Fuel Units (ie. kWh,Gallons, etc) =	kWh	17) Direct Participant Costs (\$/Part.) =	\$175
3) Commodity Cost (\$/MCF) =	\$3.25	18) Participant Non-Energy Costs (Annual \$/Part.) =	\$0
Escalation Rate =	4.69%	Escalation Rate =	2.30%
4) Demand Cost (\$/Unit/Yr) =	\$126.03	19) Participant Non-Energy Savings (Annual \$/Part) =	\$0
Escalation Rate =	4.69%	Escalation Rate =	2.30%
5) Peak Reduction Factor =	1.00%	20) Project Life (Years) =	2
6) Variable O&M (\$/MCF) =	\$0.0320	21) Avg. MCF/Part. Saved =	3.7
Escalation Rate =	4.69%	22) Avg Non-Gas Fuel Units/Part. Saved =	0 kWh
7) Non-Gas Fuel Cost (\$/Fuel Unit) =	\$0.02657	22a) Avg Additional Non-Gas Fuel Units/ Part. Used =	0 kWh
Escalation Rate =	3.59%	23) Number of Participants =	-
8) Non-Gas Fuel Loss Factor	7.70%	24) Total Annual MCF Saved =	0
9) Gas Environmental Damage Factor =	\$2.0700	25) Incentive/Participant =	#DIV/0!
Escalation Rate =	2.30%		
10) Non Gas Fuel Enviro. Damage Factor (\$/Unit) =	\$0.0198		
Escalation Rate =	2.30%		
11) Participant Discount Rate =	3.02%		
12) Utility Discount Rate =	5.79%		
13) Societal Discount Rate =	3.02%		
14) General Input Data Year =	2022		
15a) Project Analysis Year 1 =	2023		
15b) Project Analysis Year 2 =	N/A		
15c) Project Analysis Year 3 =	N/A		

Cost Summary	2023	Test Results	Triennial NPV	Triennial B/C
Utility Cost per Participant =	#DIV/0!	Ratepayer Impact Measure Test	\$0	#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: **Low Income Water Heater with Temperature Setback**

Input Data		2023	
1) Retail Rate (\$/MCF) =	\$6.7358	16 Utility Project Costs	
Escalation Rate =	4.69%	16 a) Administrative & Operating Costs =	\$0
2) Non-Gas Fuel Retail Rate (\$/Fuel Unit) =	\$0.000	16 b) Incentive Costs =	\$0
Escalation Rate =	3.59%	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) =	\$3.25	18) Participant Non-Energy Costs (Annual \$/Part.) =	\$0
Escalation Rate =	4.69%	Escalation Rate =	2.30%
4) Demand Cost (\$/Unit/Yr) =	\$126.03	19) Participant Non-Energy Savings (Annual \$/Part) =	\$0
Escalation Rate =	4.69%	Escalation Rate =	2.30%
5) Peak Reduction Factor =	1.00%	20) Project Life (Years) =	2
6) Variable O&M (\$/MCF) =	\$0.0320	21) Avg. MCF/Part. Saved =	0.9
Escalation Rate =	4.69%	22) Avg Non-Gas Fuel Units/Part. Saved =	0 kWh
7) Non-Gas Fuel Cost (\$/Fuel Unit) =	\$0.02657	22a) Avg Additional Non-Gas Fuel Units/ Part. Used =	0 kWh
Escalation Rate =	3.59%	23) Number of Participants =	3
8) Non-Gas Fuel Loss Factor	7.70%	24) Total Annual MCF Saved =	3
9) Gas Environmental Damage Factor =	\$2.0700	25) Incentive/Participant =	\$0.00
Escalation Rate =	2.30%		
10) Non Gas Fuel Enviro. Damage Factor (\$/Unit) =	\$0.0198		
Escalation Rate =	2.30%		
11) Participant Discount Rate =	3.02%		
12) Utility Discount Rate =	5.79%		
13) Societal Discount Rate =	3.02%		
14) General Input Data Year =	2022		
15a) Project Analysis Year 1 =	2023		
15b) Project Analysis Year 2 =	N/A		
15c) Project Analysis Year 3 =	N/A		

Cost Summary	2023	Test Results	Triennial NPV	Triennial B/C
Utility Cost per Participant =	\$0.00	Ratepayer Impact Measure Test	(\$14)	0.67
Cost per Participant per MCF =	\$0.00	Utility Cost Test	\$28	#DIV/0!
Lifetime Energy Reduction (MCF)	6	Societal Test	\$41	#DIV/0!
Societal Cost per MCF	\$0.00	Participant Test	\$43	#DIV/0!

Company: **Great Plains Natural Gas Co.**
 Project: **Low Income Multi Family Building Efficiency**

Input Data		2023	
1) Retail Rate (\$/MCF) =	\$6.7358		
Escalation Rate =	4.69%		
2) Non-Gas Fuel Retail Rate (\$/Fuel Unit) =	\$0.000		
Escalation Rate =	3.59%		
Non-Gas Fuel Units (ie. kWh,Gallons, etc) =	kWh		
3) Commodity Cost (\$/MCF) =	\$3.25		
Escalation Rate =	4.69%		
4) Demand Cost (\$/Unit/Yr) =	\$126.03		
Escalation Rate =	4.69%		
5) Peak Reduction Factor =	1.00%		
6) Variable O&M (\$/MCF) =	\$0.0320		
Escalation Rate =	4.69%		
7) Non-Gas Fuel Cost (\$/Fuel Unit) =	\$0.02657		
Escalation Rate =	3.59%		
8) Non-Gas Fuel Loss Factor	7.70%		
9) Gas Environmental Damage Factor =	\$2.0700		
Escalation Rate =	2.30%		
10) Non Gas Fuel Enviro. Damage Factor (\$/Unit) =	\$0.0198		
Escalation Rate =	2.30%		
11) Participant Discount Rate =	3.02%		
12) Utility Discount Rate =	5.79%		
13) Societal Discount Rate =	3.02%		
14) General Input Data Year =	2022		
15a) Project Analysis Year 1 =	2023		
15b) Project Analysis Year 2 =	N/A		
15c) Project Analysis Year 3 =	N/A		
		16 Utility Project Costs	
		16 a) Administrative & Operating Costs =	\$2,054
		16 b) Incentive Costs =	\$2,669
		16 c) Total Utility Project Costs =	\$4,723
		17) Direct Participant Costs (\$/Part.) =	\$4,030
		18) Participant Non-Energy Costs (Annual \$/Part.) =	\$0
		Escalation Rate =	2.30%
		19) Participant Non-Energy Savings (Annual \$/Part) =	\$0
		Escalation Rate =	2.30%
		20) Project Life (Years) =	11
		21) Avg. MCF/Part. Saved =	100.0
		22) Avg Non-Gas Fuel Units/Part. Saved =	0 kWh
		22a) Avg Additional Non-Gas Fuel Units/ Part. Used =	0 kWh
		23) Number of Participants =	1
		24) Total Annual MCF Saved =	90
		25) Incentive/Participant =	\$2,669.00

Cost Summary	2023	Test Results	Triennial	Triennial
			NPV	B/C
Utility Cost per Participant =	\$4,723.00	Ratepayer Impact Measure Test	(\$6,882)	0.39
Cost per Participant per MCF =	\$87.53	Utility Cost Test	(\$252)	0.95
Lifetime Energy Reduction (MCF)	990	Societal Test	\$1,049	1.17
Societal Cost per MCF	\$6.15	Participant Test	\$6,214	2.54

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

Input Data		2023	
1) Retail Rate (\$/MCF) =	\$5.1485	16 Utility Project Costs	
Escalation Rate =	4.69%	16 a) Administrative & Operating Costs =	\$120,270
2) Non-Gas Fuel Retail Rate (\$/Fuel Unit) =	\$0.00	16 b) Incentive Costs =	\$456,437
Escalation Rate =	3.59%	16 c) Total Utility Project Costs =	\$576,707
Non-Gas Fuel Units (ie. kWh,Gallons, etc) =	kWh	17) Direct Participant Costs (\$/Part.) =	\$10,038
3) Commodity Cost (\$/MCF) =	\$3.25	18) Participant Non-Energy Costs (Annual \$/Part.) =	\$0
Escalation Rate =	4.69%	Escalation Rate =	2.30%
4) Demand Cost (\$/Unit/Yr) =	\$126.03	19) Participant Non-Energy Savings (Annual \$/Part) =	\$0
Escalation Rate =	4.69%	Escalation Rate =	2.30%
5) Peak Reduction Factor =	0.09%	20) Project Life (Years) =	18
6) Variable O&M (\$/MCF) =	\$0.0320	21) Avg. MCF/Part. Saved =	1,449.8
Escalation Rate =	4.69%	22) Avg Non-Gas Fuel Units/Part. Saved =	30 kWh
7) Non-Gas Fuel Cost (\$/Fuel Unit) =	\$0.02657	22a) Avg Additional Non-Gas Fuel Units/ Part. Used =	0 kWh
Escalation Rate =	3.59%	23) Number of Participants =	54
8) Non-Gas Fuel Loss Factor	7.70%	24) Total Annual MCF Saved =	78,287
9) Gas Environmental Damage Factor =	\$2.0700	25) Incentive/Participant =	\$8,452.54
Escalation Rate =	2.30%		
10) Non Gas Fuel Enviro. Damage Factor (\$/Unit) =	\$0.01984		
Escalation Rate =	2.30%		
11) Participant Discount Rate =	5.79%		
12) Utility Discount Rate =	5.79%		
13) Societal Discount Rate =	3.02%		
14) General Input Data Year =	2022		
15a) Project Analysis Year 1 =	2023		
15b) Project Analysis Year 2 =	N/A		
15c) Project Analysis Year 3 =	N/A		

Cost Summary	2023	Test Results	Triennial NPV	Triennial B/C
Utility Cost per Participant =	\$10,679.76	Ratepayer Impact Measure Test	(\$2,946,556)	0.61
Cost per Participant per MCF =	\$14.29	Utility Cost Test	\$4,013,318	7.96
Lifetime Energy Reduction (MCF)	1,409,166	Societal Test	\$7,915,219	12.95
Societal Cost per MCF	\$0.47	Participant Test	\$6,874,259	13.68

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

Input Data		2023	
1) Retail Rate (\$/MCF) =	\$6.2857	16 Utility Project Costs	
Escalation Rate =	4.69%	16 a) Administrative & Operating Costs =	\$6,233
2) Non-Gas Fuel Retail Rate (\$/Fuel Unit) =	\$0.000	16 b) Incentive Costs =	\$23,656
Escalation Rate =	3.59%	16 c) Total Utility Project Costs =	\$29,889
Non-Gas Fuel Units (ie. kWh,Gallons, etc) =	kWh	17) Direct Participant Costs (\$/Part.) =	\$2,390
3) Commodity Cost (\$/MCF) =	\$3.25	18) Participant Non-Energy Costs (Annual \$/Part.) =	\$0
Escalation Rate =	4.69%	Escalation Rate =	2.30%
4) Demand Cost (\$/Unit/Yr) =	\$126.03	19) Participant Non-Energy Savings (Annual \$/Part) =	\$0
Escalation Rate =	4.69%	Escalation Rate =	2.30%
5) Peak Reduction Factor =	1.00%	20) Project Life (Years) =	20
6) Variable O&M (\$/MCF) =	\$0.0320	21) Avg. MCF/Part. Saved =	40.8
Escalation Rate =	4.69%	22) Avg Non-Gas Fuel Units/Part. Saved =	0 kWh
7) Non-Gas Fuel Cost (\$/Fuel Unit) =	\$0.02657	22a) Avg Additional Non-Gas Fuel Units/ Part. Used =	0 kWh
Escalation Rate =	3.59%	23) Number of Participants =	36
8) Non-Gas Fuel Loss Factor	7.70%	24) Total Annual MCF Saved =	1,469
9) Gas Environmental Damage Factor =	\$2.0700	25) Incentive/Participant =	\$657.11
Escalation Rate =	2.30%		
10) Non Gas Fuel Enviro. Damage Factor (\$/Unit) =	\$0.01984		
Escalation Rate =	2.30%		
11) Participant Discount Rate =	5.79%		
12) Utility Discount Rate =	5.79%		
13) Societal Discount Rate =	3.02%		
14) General Input Data Year =	2022		
15a) Project Analysis Year 1 =	2023		
15b) Project Analysis Year 2 =	N/A		
15c) Project Analysis Year 3 =	N/A		

Cost Summary	2023	Test Results	Triennial NPV	Triennial B/C
Utility Cost per Participant =	\$830.25	Ratepayer Impact Measure Test	(\$78,532)	0.62
Cost per Participant per MCF =	\$78.93	Utility Cost Test	\$96,846	4.24
Lifetime Energy Reduction (MCF)	29,380	Societal Test	\$129,452	2.40
Societal Cost per MCF	\$3.14	Participant Test	\$112,994	2.31

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

Input Data		2023	
1) Retail Rate (\$/MCF) =	\$6.2857	16 Utility Project Costs	
Escalation Rate =	4.69%	16 a) Administrative & Operating Costs =	\$500
2) Non-Gas Fuel Retail Rate (\$/Fuel Unit) =	\$0.000	16 b) Incentive Costs =	\$1,896
Escalation Rate =	3.59%	16 c) Total Utility Project Costs =	\$2,396
Non-Gas Fuel Units (ie. kWh,Gallons, etc) =	kWh	17) Direct Participant Costs (\$/Part.) =	\$1,178
3) Commodity Cost (\$/MCF) =	\$3.25	18) Participant Non-Energy Costs (Annual \$/Part.) =	\$0
Escalation Rate =	4.69%	Escalation Rate =	2.30%
4) Demand Cost (\$/Unit/Yr) =	\$126.03	19) Participant Non-Energy Savings (Annual \$/Part) =	\$0
Escalation Rate =	4.69%	Escalation Rate =	2.30%
5) Peak Reduction Factor =	1.00%	20) Project Life (Years) =	18
6) Variable O&M (\$/MCF) =	\$0.0320	21) Avg. MCF/Part. Saved =	137.3
Escalation Rate =	4.69%	22) Avg Non-Gas Fuel Units/Part. Saved =	0 kWh
7) Non-Gas Fuel Cost (\$/Fuel Unit) =	\$0.02657	22a) Avg Additional Non-Gas Fuel Units/ Part. Used =	0 kWh
Escalation Rate =	3.59%	23) Number of Participants =	9
8) Non-Gas Fuel Loss Factor	7.70%	24) Total Annual MCF Saved =	1,236
9) Gas Environmental Damage Factor =	\$2.0700	25) Incentive/Participant =	\$210.67
Escalation Rate =	2.30%		
10) Non Gas Fuel Enviro. Damage Factor (\$/Unit) =	\$0.01984		
Escalation Rate =	2.30%		
11) Participant Discount Rate =	5.79%		
12) Utility Discount Rate =	5.79%		
13) Societal Discount Rate =	3.02%		
14) General Input Data Year =	2022		
15a) Project Analysis Year 1 =	2023		
15b) Project Analysis Year 2 =	N/A		
15c) Project Analysis Year 3 =	N/A		

Cost Summary	2023	Test Results	Triennial NPV	Triennial B/C
Utility Cost per Participant =	\$266.22	Ratepayer Impact Measure Test	(\$39,605)	0.71
Cost per Participant per MCF =	\$10.52	Utility Cost Test	\$94,549	40.46
Lifetime Energy Reduction (MCF)	22,248	Societal Test	\$155,028	14.96
Societal Cost per MCF	\$0.50	Participant Test	\$125,448	12.83

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

Input Data		2023	
1) Retail Rate (\$/MCF) =	\$6.2857	16 Utility Project Costs	
Escalation Rate =	4.69%	16 a) Administrative & Operating Costs =	\$316
2) Non-Gas Fuel Retail Rate (\$/Fuel Unit) =	\$0.000	16 b) Incentive Costs =	\$1,200
Escalation Rate =	3.59%	16 c) Total Utility Project Costs =	\$1,516
Non-Gas Fuel Units (ie. kWh,Gallons, etc) =	kWh	17) Direct Participant Costs (\$/Part.) =	\$2,905
3) Commodity Cost (\$/MCF) =	\$3.25	18) Participant Non-Energy Costs (Annual \$/Part.) =	\$0
Escalation Rate =	4.69%	Escalation Rate =	2.30%
4) Demand Cost (\$/Unit/Yr) =	\$126.03	19) Participant Non-Energy Savings (Annual \$/Part) =	\$0
Escalation Rate =	4.69%	Escalation Rate =	2.30%
5) Peak Reduction Factor =	1.00%	20) Project Life (Years) =	2
6) Variable O&M (\$/MCF) =	\$0.0320	21) Avg. MCF/Part. Saved =	6,399.5
Escalation Rate =	4.69%	22) Avg Non-Gas Fuel Units/Part. Saved =	0 kWh
7) Non-Gas Fuel Cost (\$/Fuel Unit) =	\$0.02657	22a) Avg Additional Non-Gas Fuel Units/ Part. Used =	0 kWh
Escalation Rate =	3.59%	23) Number of Participants =	4
8) Non-Gas Fuel Loss Factor	7.70%	24) Total Annual MCF Saved =	25,598
9) Gas Environmental Damage Factor =	\$2.0700	25) Incentive/Participant =	\$300.00
Escalation Rate =	2.30%		
10) Non Gas Fuel Enviro. Damage Factor (\$/Unit) =	\$0.01984		
Escalation Rate =	2.30%		
11) Participant Discount Rate =	5.79%		
12) Utility Discount Rate =	5.79%		
13) Societal Discount Rate =	3.02%		
14) General Input Data Year =	2022		
15a) Project Analysis Year 1 =	2023		
15b) Project Analysis Year 2 =	N/A		
15c) Project Analysis Year 3 =	N/A		

Cost Summary	2023	Test Results	Triennial NPV	Triennial B/C
Utility Cost per Participant =	\$379.00	Ratepayer Impact Measure Test	(\$94,471)	0.72
Cost per Participant per MCF =	\$0.51	Utility Cost Test	\$240,672	159.75
Lifetime Energy Reduction (MCF)	51,196	Societal Test	\$341,526	29.61
Societal Cost per MCF	\$0.23	Participant Test	\$324,724	28.95

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

Input Data		2023	
1) Retail Rate (\$/MCF) =	\$6.2857	16 Utility Project Costs	
Escalation Rate =	4.69%	16 a) Administrative & Operating Costs =	\$132
2) Non-Gas Fuel Retail Rate (\$/Fuel Unit) =	\$0.000	16 b) Incentive Costs =	\$500
Escalation Rate =	3.59%	16 c) Total Utility Project Costs =	\$632
Non-Gas Fuel Units (ie. kWh,Gallons, etc) =	kWh	17) Direct Participant Costs (\$/Part.) =	\$1,781
3) Commodity Cost (\$/MCF) =	\$3.25	18) Participant Non-Energy Costs (Annual \$/Part.) =	\$0
Escalation Rate =	4.69%	Escalation Rate =	2.30%
4) Demand Cost (\$/Unit/Yr) =	\$126.03	19) Participant Non-Energy Savings (Annual \$/Part) =	\$0
Escalation Rate =	4.69%	Escalation Rate =	2.30%
5) Peak Reduction Factor =	1.00%	20) Project Life (Years) =	12
6) Variable O&M (\$/MCF) =	\$0.0320	21) Avg. MCF/Part. Saved =	40.0
Escalation Rate =	4.69%	22) Avg Non-Gas Fuel Units/Part. Saved =	1,637 kWh
7) Non-Gas Fuel Cost (\$/Fuel Unit) =	\$0.02657	22a) Avg Additional Non-Gas Fuel Units/ Part. Used =	0 kWh
Escalation Rate =	3.59%	23) Number of Participants =	1
8) Non-Gas Fuel Loss Factor	7.70%	24) Total Annual MCF Saved =	40
9) Gas Environmental Damage Factor =	\$2.0700	25) Incentive/Participant =	\$500.00
Escalation Rate =	2.30%		
10) Non Gas Fuel Enviro. Damage Factor (\$/Unit) =	\$0.01984		
Escalation Rate =	2.30%		
11) Participant Discount Rate =	5.79%		
12) Utility Discount Rate =	5.79%		
13) Societal Discount Rate =	3.02%		
14) General Input Data Year =	2022		
15a) Project Analysis Year 1 =	2023		
15b) Project Analysis Year 2 =	N/A		
15c) Project Analysis Year 3 =	N/A		

Cost Summary	2023	Test Results	Triennial NPV	Triennial B/C
Utility Cost per Participant =	\$632.00	Ratepayer Impact Measure Test	(\$1,460)	0.60
Cost per Participant per MCF =	\$60.33	Utility Cost Test	\$1,524	3.41
Lifetime Energy Reduction (MCF)	480	Societal Test	\$2,582	2.35
Societal Cost per MCF	\$3.99	Participant Test	\$1,703	1.96

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

Input Data		2023	
1) Retail Rate (\$/MCF) =	\$5.0575	16 Utility Project Costs	
Escalation Rate =	4.69%	16 a) Administrative & Operating Costs =	\$113,089
2) Non-Gas Fuel Retail Rate (\$/Fuel Unit) =	\$0.000	16 b) Incentive Costs =	\$429,185
Escalation Rate =	3.59%	16 c) Total Utility Project Costs =	\$542,274
Non-Gas Fuel Units (ie. kWh,Gallons, etc) =	kWh	17) Direct Participant Costs (\$/Part.) =	\$108,000
3) Commodity Cost (\$/MCF) =	\$3.25	18) Participant Non-Energy Costs (Annual \$/Part.) =	\$0
Escalation Rate =	4.69%	Escalation Rate =	2.30%
4) Demand Cost (\$/Unit/Yr) =	\$126.03	19) Participant Non-Energy Savings (Annual \$/Part) =	\$0
Escalation Rate =	4.69%	Escalation Rate =	2.30%
5) Peak Reduction Factor =	0.00%	20) Project Life (Years) =	15
6) Variable O&M (\$/MCF) =	\$0.0320	21) Avg. MCF/Part. Saved =	4,000.0
Escalation Rate =	4.69%	22) Avg Non-Gas Fuel Units/Part. Saved =	0 kWh
7) Non-Gas Fuel Cost (\$/Fuel Unit) =	\$0.02657	22a) Avg Additional Non-Gas Fuel Units/ Part. Used =	0 kWh
Escalation Rate =	3.59%	23) Number of Participants =	4
8) Non-Gas Fuel Loss Factor	7.70%	24) Total Annual MCF Saved =	49,944
9) Gas Environmental Damage Factor =	\$2.0700	25) Incentive/Participant =	\$107,296.25
Escalation Rate =	2.30%		
10) Non Gas Fuel Enviro. Damage Factor (\$/Unit) =	\$0.01984		
Escalation Rate =	2.30%		
11) Participant Discount Rate =	5.79%		
12) Utility Discount Rate =	5.79%		
13) Societal Discount Rate =	3.02%		
14) General Input Data Year =	2022		
15a) Project Analysis Year 1 =	2023		
15b) Project Analysis Year 2 =	N/A		
15c) Project Analysis Year 3 =	N/A		

Cost Summary	2023	Test Results	Triennial NPV	Triennial B/C
Utility Cost per Participant =	\$135,568.50	Ratepayer Impact Measure Test	(\$1,837,863)	0.57
Cost per Participant per MCF =	\$60.89	Utility Cost Test	\$1,852,614	4.42
Lifetime Energy Reduction (MCF)	749,160	Societal Test	\$3,853,726	8.07
Societal Cost per MCF	\$0.73	Participant Test	\$3,687,662	9.54

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

Input Data		2023
1) Retail Rate (\$/MCF) =	\$5.0575	
Escalation Rate =	4.69%	
2) Non-Gas Fuel Retail Rate (\$/Fuel Unit) =	\$0.000	
Escalation Rate =	3.59%	
Non-Gas Fuel Units (ie. kWh,Gallons, etc) =	kWh	
3) Commodity Cost (\$/MCF) =	\$3.25	
Escalation Rate =	4.69%	
4) Demand Cost (\$/Unit/Yr) =	\$126.03	
Escalation Rate =	4.69%	
5) Peak Reduction Factor =	0.00%	
6) Variable O&M (\$/MCF) =	\$0.0320	
Escalation Rate =	4.69%	
7) Non-Gas Fuel Cost (\$/Fuel Unit) =	\$0.02657	
Escalation Rate =	3.59%	
8) Non-Gas Fuel Loss Factor	7.70%	
9) Gas Environmental Damage Factor =	\$2.0700	
Escalation Rate =	2.30%	
10) Non Gas Fuel Enviro. Damage Factor (\$/Unit) =	\$0.01984	
Escalation Rate =	2.30%	
11) Participant Discount Rate =	5.79%	
12) Utility Discount Rate =	5.79%	
13) Societal Discount Rate =	3.02%	
14) General Input Data Year =	2022	
15a) Project Analysis Year 1 =	2023	
15b) Project Analysis Year 2 =	N/A	
15c) Project Analysis Year 3 =	N/A	
16 Utility Project Costs		
16 a) Administrative & Operating Costs =		\$0
16 b) Incentive Costs =		\$0
16 c) Total Utility Project Costs =		\$0
17) Direct Participant Costs (\$/Part.) =		\$8,000
18) Participant Non-Energy Costs (Annual \$/Part.) =		\$0
Escalation Rate =		2.30%
19) Participant Non-Energy Savings (Annual \$/Part) =		\$0
Escalation Rate =		2.30%
20) Project Life (Years) =		-
21) Avg. MCF/Part. Saved =		-
22) Avg Non-Gas Fuel Units/Part. Saved =		0 kWh
22a) Avg Additional Non-Gas Fuel Units/ Part. Used =		0 kWh
23) Number of Participants =		-
24) Total Annual MCF Saved =		0
25) Incentive/Participant =		#DIV/0!

Cost Summary	2023	Test Results	Triennial NPV	Triennial B/C
Utility Cost per Participant =	#DIV/0!	Ratepayer Impact Measure Test	\$0	#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: **Commercial Energy Assessment Program**

Input Data		2023	
1) Retail Rate (\$/MCF) =	\$5.0575	16 Utility Project Costs	
Escalation Rate =	4.69%	16 a) Administrative & Operating Costs =	\$0
2) Non-Gas Fuel Retail Rate (\$/Fuel Unit) =	\$0.000	16 b) Incentive Costs =	\$0
Escalation Rate =	3.59%	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) =	\$3.25	18) Participant Non-Energy Costs (Annual \$/Part.) =	\$0
Escalation Rate =	4.69%	Escalation Rate =	2.30%
4) Demand Cost (\$/Unit/Yr) =	\$126.03	19) Participant Non-Energy Savings (Annual \$/Part) =	\$0
Escalation Rate =	4.69%	Escalation Rate =	2.30%
5) Peak Reduction Factor =	0.00%	20) Project Life (Years) =	-
6) Variable O&M (\$/MCF) =	\$0.0320	21) Avg. MCF/Part. Saved =	-
Escalation Rate =	4.69%	22) Avg Non-Gas Fuel Units/Part. Saved =	0 kWh
7) Non-Gas Fuel Cost (\$/Fuel Unit) =	\$0.02657	22a) Avg Additional Non-Gas Fuel Units/ Part. Used =	0 kWh
Escalation Rate =	3.59%	23) Number of Participants =	-
8) Non-Gas Fuel Loss Factor	7.70%	24) Total Annual MCF Saved =	0
9) Gas Environmental Damage Factor =	\$2.0700	25) Incentive/Participant =	#DIV/0!
Escalation Rate =	2.30%		
10) Non Gas Fuel Enviro. Damage Factor (\$/Unit) =	\$0.01984		
Escalation Rate =	2.30%		
11) Participant Discount Rate =	5.79%		
12) Utility Discount Rate =	5.79%		
13) Societal Discount Rate =	3.02%		
14) General Input Data Year =	2022		
15a) Project Analysis Year 1 =	2023		
15b) Project Analysis Year 2 =	N/A		
15c) Project Analysis Year 3 =	N/A		

Cost Summary	2023	Test Results	Triennial NPV	Triennial B/C
Utility Cost per Participant =	#DIV/0!	Ratepayer Impact Measure Test	\$0	#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	2023	
1) Retail Rate (\$/MCF) =	\$5.0575	16 Utility Project Costs
Escalation Rate =	4.69%	16 a) Administrative & Operating Costs =
		16 b) Incentive Costs =
2) Non-Gas Fuel Retail Rate (\$/Fuel Unit) =	\$0.000	16 c) Total Utility Project Costs =
Escalation Rate =	3.59%	
Non-Gas Fuel Units (ie. kWh,Gallons, etc) =	kWh	17) Direct Participant Costs (\$/Part.) =
3) Commodity Cost (\$/MCF) =	\$3.25	18) Participant Non-Energy Costs (Annual \$/Part.) =
Escalation Rate =	4.69%	Escalation Rate =
4) Demand Cost (\$/Unit/Yr) =	\$126.03	19) Participant Non-Energy Savings (Annual \$/Part) =
Escalation Rate =	4.69%	Escalation Rate =
5) Peak Reduction Factor =	0.00%	20) Project Life (Years) =
6) Variable O&M (\$/MCF) =	\$0.0320	21) Avg. MCF/Part. Saved =
Escalation Rate =	4.69%	
		22) Avg Non-Gas Fuel Units/Part. Saved =
7) Non-Gas Fuel Cost (\$/Fuel Unit) =	\$0.02657	22a) Avg Additional Non-Gas Fuel Units/ Part. Used =
Escalation Rate =	3.59%	
		23) Number of Participants =
8) Non-Gas Fuel Loss Factor	7.70%	
		24) Total Annual MCF Saved =
9) Gas Environmental Damage Factor =	\$2.0700	
Escalation Rate =	2.30%	25) Incentive/Participant =
10) Non Gas Fuel Enviro. Damage Factor (\$/Unit) =	\$0.01984	
Escalation Rate =	2.30%	
11) Participant Discount Rate =	5.79%	
12) Utility Discount Rate =	5.79%	
13) Societal Discount Rate =	3.02%	
14) General Input Data Year =	2022	
15a) Project Analysis Year 1 =	2023	
15b) Project Analysis Year 2 =	N/A	
15c) Project Analysis Year 3 =	N/A	

Cost Summary	2023	Test Results	Triennial NPV	Triennial B/C
Utility Cost per Participant =	#DIV/0!	Ratepayer Impact Measure Test	\$0	#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!

**GREAT PLAINS NATURAL GAS CO.
GAS UTILITY - MINNESOTA
CONSERVATION COST RECOVERY ADJUSTMENT
CIP RATE TRUE-UP FILING
DOCKET NO. G004/CIP-20-477**

	Projected Dk 1/	Volumetric Allocation	Total Under/(Over) Recovery	Proposed CCRA	Current CCRA 2/	Change
Residential	1,483,765	25.1391%	\$29,984	\$0.0202	(\$0.0096)	\$0.0298
Firm General	1,315,063	22.2808%	26,575	0.0202	(0.0096)	0.0298
Grain Drying	85,676	1.4516%	1,731	0.0202	(0.0096)	0.0298
Interruptible	605,791	10.2638%	12,242	0.0202	(0.0096)	0.0298
Transportation	2,411,919	40.8647%	48,739	0.0202	(0.0096)	0.0298
Total	5,902,214	100.0000%	\$119,271			

Rate change for the average residential customer using 75.9 Dk per year.

	Dk 3/	CCRC	CCRA	Total	Total CIP Cost
Current Rate	75.9	\$0.0818 4/	(\$0.0096) 2/	\$0.0722	\$5.48
Proposed Rate	75.9	0.0818	0.0202	0.1020	7.74
Change		\$0.0000	\$0.0298	\$0.0298	

The average residential customer will pay an annual CIP cost of \$7.74 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 2024 through August 2025.

2/ Authorized in Docket No. G004/M-23-186, effective October 1, 2023.

3/ Reflects average normalized 2023 residential Dk per customer.

4/ Authorized in Docket No. G004/GR-19-511, effective April 1, 2021.

**GREAT PLAINS NATURAL GAS CO.
GAS UTILITY - MINNESOTA
CONSERVATION COST RECOVERY ADJUSTMENT
CCRA FILING AND DEMAND INCENTIVE**

	<u>Beginning Balance</u>	<u>Expenses</u>	<u>Carrying Charges</u>	<u>Billed Recovery</u>	<u>Net Activity</u>	<u>Ending Balance</u>
<u>2023 Activity</u>						
Actuals: January - December	(\$347,656)	\$876,653	(\$26,512)	\$903,657	(\$53,516)	(\$401,172)
<u>2024 Activity</u>						
Actuals: January - March	(\$401,172)	\$93,230	(\$3,956)	\$165,730	(\$76,456)	
Projected: April - August		164,117	(7,066)	89,378	67,673	
	<u>(\$401,172)</u>	<u>\$257,347</u>	<u>(\$11,022)</u>	<u>\$255,108</u>	<u>(\$8,783)</u>	(\$409,955)
<u>2025 Activity</u>						
Projected: September 2024 - August 2025	(\$409,955)	\$1,016,307	(\$4,279)	\$482,802 1/	\$529,226	\$119,271
Projected Balance September 1, 2025	<u>(\$401,172)</u>	<u>\$1,273,654</u>	<u>(\$15,301)</u>	<u>\$737,910</u>	<u>\$520,443</u>	<u>\$119,271</u>
Total projected Under/(Over) Recovery to be recovered through CCRA from September 2024 - August 2025						<u>\$119,271</u>

1/ Projected CCRC recovery from September 2024 through August 2025.

**GREAT PLAINS NATURAL GAS CO.
GAS UTILITY - MINNESOTA
CONSERVATION COST RECOVERY ADJUSTMENT
SUMMARY OF BALANCE
2024-2025**

	Beginning Balance	Carrying Charge 1/	Current Month Expense	Billed Recovery			Ending Balance
				CCRC 2/	CCRA 2/	Total	
Balance at December 31, 2023							(\$401,172)
January 2024	(\$401,172)	(\$1,235)	\$30,428	\$65,188	(\$7,649)	\$57,539	(\$429,518)
February	(429,518)	(1,322)	34,451	65,766	(7,718)	58,048	(454,437)
March	(454,437)	(1,399)	28,351	56,809	(6,666)	50,143	(477,628)
Total		<u>(\$3,956)</u>	<u>\$93,230</u>	<u>\$187,763</u>	<u>(\$22,033)</u>	<u>\$165,730</u>	
<u>Estimate</u>							
April 2024	(\$477,628)	(\$1,471)	\$36,399	\$38,976	(\$4,574)	\$34,402	(\$477,102)
May	(477,102)	(1,469)	37,044	21,800	(2,558)	19,242	(460,769)
June	(460,769)	(1,419)	31,054	13,846	(1,625)	12,221	(443,355)
July	(443,355)	(1,366)	19,351	11,411	(1,339)	10,072	(435,442)
August	(435,442)	(1,341)	40,269	15,228	(1,787)	13,441	(409,955)
Total		<u>(\$7,066)</u>	<u>\$164,117</u>	<u>\$101,261</u>	<u>(\$11,883)</u>	<u>\$89,378</u>	
<u>Estimate</u>							
September 2024	(\$409,955)	(\$1,263)	\$45,245	\$23,257	\$5,743	\$29,000	(\$394,973)
October	(394,973)	(1,217)	171,581	42,475	10,489	52,964	(277,573)
November	(277,573)	(855)	50,221	52,257	12,905	65,162	(293,369)
December	(293,369)	(904)	490,325	67,591	16,691	84,282	111,770
January 2025	111,770	344	30,631	75,120	18,550	93,670	49,075
February	49,075	151	34,613	64,342	15,889	80,231	3,608
March	3,608	11	28,487	56,381	13,923	70,304	(38,198)
April	(38,198)	(118)	36,655	39,037	9,640	48,677	(50,338)
May	(50,338)	(155)	37,268	21,823	5,389	27,212	(40,437)
June	(40,437)	(125)	31,244	13,857	3,422	17,279	(26,597)
July	(26,597)	(82)	19,502	11,423	2,821	14,244	(21,421)
August	(21,421)	(66)	40,535	15,239	3,763	19,002	46
Total		<u>(\$4,279)</u>	<u>\$1,016,307</u>	<u>\$482,802</u>	<u>\$119,225</u>	<u>\$602,027</u>	

1/ Reflects the cost of short-term debt of 3.693% authorized in Docket No. G004/GR-19-511.

2/ Rates effective with service rendered on and after:

<u>Effective October 1, 2023</u>	CCRC	CCRA
	Docket No. G004/GR-19-511	Docket No. G-004/M-23-186
	\$0.0818	(\$0.0096)
<u>Proposed Rates: September 1, 2024</u>	CCRC	CCRA
	Docket No. G004/GR-19-511	Docket No. G-004/M-24-
	\$0.0818	\$0.0202

**GREAT PLAINS NATURAL GAS CO.
GAS UTILITY - MINNESOTA
CONSERVATION COST RECOVERY ADJUSTMENT
SUMMARY OF BALANCE
2023**

	Beginning Balance	Carrying Charge 1/	Current Month Expense	Billed Recovery			Ending Balance
				CCRC 2/	CCRA 2/	Total	
Balance at December 31, 2022							(\$347,656)
January 2023	(\$347,656)	(\$1,070)	\$37,259	\$77,560	\$76,323	\$153,883	(\$465,350)
February	(465,350)	(1,432)	27,111	69,786	68,674	138,460	(578,131)
March	(578,131)	(1,780)	26,613	68,177	67,091	135,268	(688,566)
April	(688,566)	(2,119)	31,011	55,693	54,805	110,498	(770,172)
May	(770,172)	(2,370)	31,565	42,046	41,374	83,420	(824,397)
June	(824,397)	(2,537)	26,510	19,981	19,659	39,640	(840,064)
July	(840,064)	(2,585)	16,505	13,488	13,268	26,756	(852,900)
August	(852,900)	(2,625)	34,335	18,182	17,887	36,069	(857,259)
September	(857,259)	(2,638)	38,576	19,075	18,765	37,840	(859,161)
October	(859,161)	(2,644)	146,273	26,635	22,504	49,139	(764,671)
November	(764,671)	(2,353)	42,789	47,432	(5,249)	42,183	(766,418)
December	(766,418)	(2,359)	418,106	57,215	(6,714)	50,501	(401,172)
		(\$26,512)	\$876,653	\$515,270	\$388,387	\$903,657	
Balance at December 31, 2023							(\$401,172)

1/ Effective April 1, 2021, authorized in Docket No. G004/GR-19-511, reflects the cost of short-term debt of 3.693%.

2/ Rates effective with service rendered on and after:

<u>Effective October 1, 2022</u>	CCRC Docket No. G004/GR-19-511 \$0.0818	CCRA Docket No. G004/M-22-217 \$0.0805
<u>Effective October 1, 2023</u>	CCRC Docket No. G004/GR-19-511 \$0.0818	CCRA Docket No. G004/M-23-186 (\$0.0096)

GREAT PLAINS NATURAL GAS CO. PERFORMANCE INCENTIVE MODEL

Inputs	
3-year Weather-Normalized Sales Average (Dth)	6,089,861
1.0% Energy Savings	60,899
Size of steps in Energy Savings	6,090
Approved CIP Budget	\$1,014,096
Approved CIP Energy Goal	61,551
Estimated Net Benefits at Approved Goal	\$1,612,239
Energy savings at 1.5%	91,348

Incentive Calibration	
Maximum Percent of Benefits Awarded	10.00%
Earning Threshold	0.70%
Maximum Achievement Level	1.20%
Increment	7.5 % Points

Estimated Incentive Levels

Achievement Level (% of sales)	Energy Saved	Percent of Benefits Awarded	Estimated Benefits Achieved	Incentive Award	Average Incentive per unit Saved	Incremental Incentive Units Saved
0.0%	0	0.00%	\$0	\$0	\$0.00	-
0.1%	6,090	0.00%	\$159,515	\$0	\$0.00	\$0.00
0.2%	12,180	0.00%	\$319,030	\$0	\$0.00	\$0.00
0.3%	18,270	0.00%	\$478,545	\$0	\$0.00	\$0.00
0.4%	24,359	0.00%	\$638,060	\$0	\$0.00	\$0.00
0.5%	30,449	0.00%	\$797,575	\$0	\$0.00	\$0.00
0.6%	36,539	0.00%	\$957,090	\$0	\$0.00	\$0.00
0.7%	42,629	6.25%	\$1,116,605	\$69,788	\$1.64	\$11.46
0.8%	48,719	7.00%	\$1,276,120	\$89,328	\$1.83	\$3.21
0.9%	54,809	7.75%	\$1,435,636	\$111,262	\$2.03	\$3.60
1.0%	60,899	8.50%	\$1,595,151	\$135,588	\$2.23	\$3.99
1.1%	66,988	9.25%	\$1,754,666	\$162,307	\$2.42	\$4.39
1.2%	73,078	10.00%	\$1,914,181	\$191,418	\$2.62	\$4.78
1.3%	79,168	10.00%	\$2,073,696	\$207,370	\$2.62	\$2.62
1.4%	85,258	10.00%	\$2,233,211	\$223,321	\$2.62	\$2.62
1.5%	91,348	10.00%	\$2,392,726	\$239,273	\$2.62	\$2.62
1.6%	97,438	10.00%	\$2,552,241	\$255,224	\$2.62	\$2.62
1.7%	103,528	10.00%	\$2,711,756	\$271,176	\$2.62	\$2.62
1.8%	109,617	10.00%	\$2,871,271	\$287,127	\$2.62	\$2.62
1.9%	115,707	10.00%	\$3,030,786	\$303,079	\$2.62	\$2.62
2.0%	121,797	10.00%	\$3,190,301	\$319,030	\$2.62	\$2.62

2023 Great Plains

Projected Gas CIP Incentive Results	
Spending	\$877,986
Energy Saved (Dth)	85,711
Net Benefits Achieved	\$2,782,406
Resulting Incentive	
Achievement Level	1.41%
Percent of Net Benefits Awarded	10.0000%
Financial Incentive Award	
	\$278,241
Incentive/First Year Dth Saved \$	\$3.2463
Incentive/Net Benefits	10.00%
Incentive/CIP Expenditures	31.69%