



705 West Fir Ave.

Mailing Address:

P.O. Box 176

Fergus Falls, MN 56538-0176

1-877-267-4764

May 2, 2016

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

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

Re: Docket No. G004/M-16-\_\_\_\_\_  
CIP Tracker and Demand Side  
Management Incentive

Docket No. G004/CIP-12-573  
2015 Conservation Improvement Program  
Status Report

Dear Mr. Wolf and Mr. Grant:

Great Plains Natural Gas Co. (Great Plains), a Division of MDU Resources Group, Inc., herewith electronically files its 2015 Conservation Improvement Program (CIP) Status Report for the period of January 1, 2015 through December 31, 2015, its 2015 Conservation Improvement Program (CIP) Tracker filing (CCRA), and the Demand Side Management (DSM) Incentive for the period of January 1, 2015 through December 31, 2015.

The 2015 CIP expenditures were \$724,644, which exceeds the minimum spending requirement of \$151,847 and was approximately 28 percent less than the authorized budget for 2015, as modified by Order of the Deputy Commissioner, Department of Commerce on November 20, 2015. Great Plains' programs provided total annual energy savings of 69,393 dk, which was 12,914 dk or 22.9 percent more than the authorized level. The total lifetime energy reduction related to the 2015 CIP projects is 832,716 dk.

During 2015, Great Plains' program expenses exceeded its collections and its 2015 incentive is significantly higher than in past years resulting in an unusually high unrecovered balance at the end of 2015. In addition, Great Plains expects to spend a majority of its budgeted expenses during 2016. For these reasons, Great Plains is proposing to spread the collection of the under-recovered balance, including the incentive, over two years rather than one year. This proposal was discussed with the Department Staff and with Commission Staff.

The CIP Tracker filing reflects a proposed CCRA of \$0.0954 per dk, which is an increase of \$0.1033 per dk from the current CCRA. For a typical residential customer using 74 dk per year, this reflects an increase of \$7.65 annually or \$0.64 per month. Great Plains requests that the proposed CCRA be implemented September 1, 2016. Attachment A provides the Conservation Improvement Program Adjustment Clause tariff, 8<sup>th</sup> Revised Sheet No. 5-112.

Great Plains DSM Financial Incentive meets the four considerations required pursuant to Minnesota Statute, Section 216B.16. The net benefit derived from Great Plains' 2015 CIP program is \$3,048,866 which qualifies the Company to receive an incentive of \$477,077 for the 2015 CIP program year.

This filing includes the 2015 CIP Status Report, CIP Tracker filing, and CIP Demand-Side Management Incentive filing with all supporting attachments.

Please refer all inquiries regarding this filing to:

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

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

Sincerely,

*/s/ Tamie A. Aberle*

Tamie A. Aberle  
Director of Regulatory Affairs

cc: Brian M. Meloy



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**GREAT PLAINS NATURAL GAS CO.  
2015 CONSERVATION INCENTIVE PROGRAMS (CIP) STATUS REPORT**

Pursuant to Minnesota Statute 7690.0550 and the Minnesota Department of Commerce, Division of Energy Resources (Department) October 19, 2012 Decision, the May 13, 2013 Decision and the November 20, 2015 Decision on the modification to the 2015 CIP budget in Docket G004/CIP-12-573, Great Plains submits this status report on its Conservation Improvement Program (CIP). This report covers the 2015 CIP year: January 1, 2015 through December 31, 2015.

**I. Overall Summary:**

The approved, modified 2015 budget for the CIP was \$1,012,597, while Great Plains' actual expenditures for the twelve month period ending December 31, 2015 were \$724,644, which exceeds the minimum spending requirement of \$151,847. The low income expenditures of \$70,389 exceeded the minimum spending requirement of \$54,997 established in the 2013 legislation. Please see Attachment B for a summary of the details of the expenditures, participants and decatherm (dk) savings for 2015.

Great Plains achieved 71.6 percent of its total expenditure goal and 42.0 percent of its Low Income expenditure goal, as demonstrated below:

	Expenditures			% of Authorized
	Authorized	Actual	Difference	
<b>Residential and Small Commercial</b>				
Space Heating Equipment	\$160,628	\$146,292	(\$14,336)	91.1%
Water Heating Equipment	14,557	11,796	(2,761)	81.0%
Attic Insulation and Bypass	8,336	138	(8,198)	1.7%
Pilotless Fireplace	2,084	98	(1,986)	4.7%
Residential Energy Assessment	22,575	1,312	(21,263)	5.8%
Residential Low Income Programs	167,542	70,389	(97,153)	42.0%
Total Residential	\$375,722	\$230,025	(\$145,697)	61.2%
<b>Commercial &amp; Industrial</b>				
Space Heating Equipment	\$40,021	\$70,040	\$30,019	175.0%
Water Heating Equipment	2,641	1,663	(978)	63.0%
Commercial Boiler Equipment	25,538	0	(25,538)	0.0%
Foodservice Equipment	4,202	581	(3,621)	13.8%
Custom	504,255	403,234	(101,021)	80.0%
Building Certification Program	4,803	0	(4,803)	0.0%
Commercial Energy Assessment	11,406	0	(11,406)	0.0%
Industrial Energy Assessment	18,009	0	(18,009)	0.0%
Total Commercial	\$610,875	\$475,518	(\$135,357)	77.8%
CIP Assessments	26,000	19,101	(6,899)	73.5%
Total CIP Program	<u>\$1,012,597</u>	<u>\$724,644</u>	<u>(\$287,953)</u>	<u>71.6%</u>



Great Plains achieved 122.9 percent of its 2015 authorized dk savings target.

	Dk Savings			% of Authorized
	Authorized	Actual	Difference	
<b>Residential and Small Commercial</b>				
Space Heating Equipment	10,019	9,547	(472)	95.3%
Water Heating Equipment	3,120	2,059	(1,061)	66.0%
Attic Insulation and Bypass	372	0	(372)	0.0%
Pilotless Fireplace	88	4	(84)	4.5%
Residential Energy Assessment	0	0	0	0.0%
Residential Low Income Programs	1,649	649	(1,000)	39.4%
Total Residential	15,248	12,259	(2,989)	80.4%
<b>Commercial &amp; Industrial</b>				
Space Heating Equipment	3,295	5,918	2,623	179.6%
Water Heating Equipment	151	125	(26)	82.8%
Commercial Boiler Equipment	5,320	0	(5,320)	0.0%
Foodservice Equipment	465	23	(442)	4.9%
Custom	32,000	51,068	19,068	159.6%
Building Certification Program	0	0	0	0.0%
Commercial Energy Assessment	0	0	0	0.0%
Industrial Energy Assessment	0	0	0	0.0%
Total Commercial	41,231	57,134	15,903	138.6%
CIP Assessments				
Total CIP Program	56,479	69,393	12,914	122.9%

The overall dk savings achieved was 69,393 dk, which is more than the authorized goal of 56,479 dk for the year and is a 251 percent increase in dk savings over the 2014 program. In summary, Great Plains achieved:

- The Residential Space Heating Equipment program provided additional savings of 514 dk over last year, with the cost per dk decreasing from \$15.74 in 2014 to \$15.32 in 2015.
- The Residential Low Income program provided additional savings of 88 dk over last year, decreasing the cost per dk from \$124.61 in 2014 to \$108.46 in 2015.
- Renter participation achieved 307.9 percent of the dk savings goal with 246.8 percent of the expenditure goal.
- The Commercial and Industrial Space Heating Equipment program provided additional savings of 2,382 dk, with \$11,262 less expenditure than 2014, decreasing the cost per dk from \$22.99 in 2014 to \$11.84 in 2015.
- The Custom Program provided savings of 51,068 dk, at a cost of \$7.90 per dk, or \$7.86 per dk less than authorized.
- 190 fewer customers participated in the Conservation Improvement Program in 2015 as compared to 2014.
- The total portfolio cost per dk decreased from \$16.54 in 2014 to \$10.44 in 2015.



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

The cost per dk saved for both the Residential sector and the Commercial & Industrial sector is below the authorized cost per dk. The cost per dk for the total portfolio is \$10.44 per dk or \$7.49 per dk below the authorized level, as shown in the table below. The lower cost per dk for the residential portfolio is primarily due to the low participation in the attic insulation and bypass program. The lower cost per dk for the commercial and industrial portfolio is primarily due to custom projects and the low level of participation in the commercial and industrial water heating and commercial boiler programs.

The authorized and actual cost per dk saved are:

	Cost per Dk			% of Authorized
	Authorized 2/	Actual	Difference	
<b>Residential</b>				
Space Heating Equipment	\$16.03	\$15.32	(\$0.71)	95.57%
Water Heating Equipment	4.67	5.73	1.06	122.70%
Attic Insulation and Bypass	22.41	0.00	(22.41)	0.00%
Pilotless Fireplace	23.68	24.50	0.82	103.46%
Residential Energy Assessment	0.00	0.00	0.00	0.00%
Residential Low Income Programs	101.60	108.46	6.86	106.75%
<b>Total Residential</b>	<b>\$24.64</b>	<b>\$18.76</b>	<b>(\$5.88)</b>	<b>76.14%</b>
<b>Commercial &amp; Industrial</b>				
Space Heating Equipment	\$12.15	\$11.84	(\$0.31)	97.45%
Water Heating Equipment	17.49	13.30	(4.19)	76.04%
Commercial Boiler Equipment	4.80	0.00	(4.80)	0.00%
Foodservice Equipment	9.04	25.26	16.22	279.42%
Custom	15.76	7.90	(7.86)	50.13%
Building Certification Program	0.00	0.00	0.00	0.00%
Commercial Energy Assessment	0.00	0.00	0.00	0.00%
Industrial Energy Assessment	0.00	0.00	0.00	0.00%
<b>Total Commercial</b>	<b>\$14.82</b>	<b>\$8.32</b>	<b>(\$6.50)</b>	<b>56.14%</b>
<b>Total CIP Program 1/</b>	<b>\$17.93</b>	<b>\$10.44</b>	<b>(\$7.49)</b>	<b>58.23%</b>

1/ Includes indirect assessment.

2/ Budget modification to the CIP Triennial Filing, Docket No. G004/CIP-12-573.  
Approved by the MN DOC on November 20, 2015.

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



	<u>RIM</u>	<u>Utility</u>	<u>Societal</u>	<u>Participant</u>
<b>Residential</b>				
Space Heating Equipment	0.69	5.36	3.15	3.94
Water Heating Equipment	0.74	11.09	14.51	20.66
Attic Insulation and Bypass	0.00	0.00	0.00	N/A
Pilotless Fireplace	0.65	3.52	2.48	3.76
Residential Energy Assessment	0.00	0.00	0.00	0.83
Residential Low Income Programs	0.41	0.87	1.54	3.45
Total Residential Portfolio	0.66	3.90	2.80	3.80
<b>Commercial</b>				
Space Heating Equipment	0.76	8.25	9.84	8.16
Water Heating Equipment	0.74	6.48	17.95	20.49
Commercial Boiler Equipment	N/A	N/A	N/A	N/A
Foodservice Equipment	0.64	2.71	2.42	1.19
Custom Program	0.73	7.07	7.45	7.14
Building Certification Program	N/A	N/A	N/A	N/A
Commercial Energy Assessment	N/A	N/A	N/A	N/A
Industrial Energy Assessment	N/A	N/A	N/A	N/A
Total Commercial Portfolio	0.74	8.05	9.26	8.03
Total Portfolio	0.70	5.32	4.60	6.27

The BENCOST Summary for Great Plains' overall CIP program for 2015, as well as the summary for each program is provided as Attachment C. The Project Information Sheets are provided as Attachment D.

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

### **Program Modifications**

On March 14, 2013 in Docket No. G004/CIP-12-573, Great Plains submitted a modification to its 2013–2015 Triennial Plan to comply with the Sustainable Building 2030 (SB 2030) provisions set forth in Minnesota Statute §216B.241, subd. 9(e), which was approved in a Decision dated May 13, 2013. The Company offered a SB 2030 program as a component of its existing Commercial Building Certification program. The SB 2030 program is designed to offer qualified customers design assistance and modeling, financial incentives, and verification of proper installation of energy efficient design components.

On September 10, 2015, Great Plains submitted a modification to the CIP Triennial Filing, Docket No. G004/CIP-12-573 in which Great Plains requested authorization to exceed the approved budget for the Commercial/Industrial Segment Custom program by more than 25 percent. The request was approved by the MN DOC by a Decision dated November 20, 2015 resulting in an increase for the Commercial and Industrial sector of \$185,500.



## **II. Status Report by Project:**

### **Residential and Small Commercial Programs**

#### **1. Residential Space Heating Program**

Great Plains offers a \$25 rebate for a programmable thermostat, available in conjunction with the installation of a high efficiency furnace, 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 77.3 percent of the participant goal and achieved 95.3 percent of its energy savings goal. The rebates for replacement of higher efficiency furnaces (96 percent AFUE or greater) exceeded the authorized level, which indicates that customers are interested in the higher efficiency appliances.

Great Plains tracked the number of rebates provided for installation in new homes versus for replacement equipment and type of dwelling information. Replacement equipment accounted for 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 96 percent of participants, duplexes represented 1 percent, town house and condos 1 percent and all other the remaining 2 percent of participants.

#### **2. Water Heating Equipment Upgrade Incentive Program**

Great Plains provides an \$85 rebate for the installation of a .64 EF or greater natural gas water heater, a \$100 rebate for the installation of a .67 EF or greater natural gas water heater, and a \$250 rebate for a .82 EF tankless natural gas water heater. This program also includes a free low-flow shower head kit upon request to customers that have natural gas water heating.

Great Plains achieved 66.0 percent of authorized dk savings with 81.0 percent of authorized expenditures and 62.0 percent of authorized participation levels in 2015. The .67 EF or greater program and tankless water heaters met or exceeded the authorized dk savings in 2015, while there were no participants in the .64 EF water heater program.



### **3. Residential Attic Insulation and Bypass**

The Residential Attic Insulation Program provides a dollar per square foot rebate to customers for the installation or replacement of attic insulation and a cash rebate for sealing attic bypasses not previously sealed. In 2015, Great Plains did not have any participants in these programs. As a result, it did not meet its authorized participation and dk savings levels.

### **4. Pilotless Fireplace**

The Residential Pilotless Fireplace Program is a program that offers residential customers a \$75 rebate for the installation of a qualifying pilotless natural gas fireplace. Participation, expenditures and dk savings were 5.0 percent, 4.7 percent and 4.5 percent of authorized, respectively.

### **5. Residential Energy Assessment**

Great Plains offers residential customers, whose primary heat source is natural gas, a comprehensive energy assessment, which includes analyses and recommendations on ways to increase energy efficiency in existing residential homes. Customers are charged a co-pay of \$50, while low-income customers are not charged for an audit. In addition to the audit, customers receive weatherization materials valued at approximately \$25 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 a decrease in participants in its Residential Energy Assessment program in 2015. Participation was 6.2 percent of authorized and expenditures were at 5.8 percent of authorized.

### **6. Low-Income Programs**

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



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

The Low-Income program participation was 29.9 percent of authorized while dk savings represents 39.4 percent of authorized. A summary of projects and dk savings is provided in Attachment B, pages 8-9.

## **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.

Overall, the participation was 116.7 percent of authorized with dk savings at 179.6 percent of authorized. There was an increase in participation from 50 participants in 2014 to 56 participants in 2015.

### **8. Commercial and Industrial Water Heating Equipment Program**

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

Overall participation was 57.1 percent of authorized. The corresponding dk savings was 82.8 percent of authorized due to the high efficiency of the installed equipment.

### **9. Commercial and Industrial Boiler Equipment Program**

The Commercial Boiler Equipment program provides commercial and industrial customers a cash incentive for the repair or upgrade of boiler equipment with qualifying energy efficiency boiler equipment. The program includes boiler O2 controls, modulating burners, boiler stack dampers, boiler turbulators, boiler outdoor air resets, boiler cut-out controls, boiler tune-ups and steam traps, with the rebate based on the type of equipment and kBTUH levels.



The Commercial and Industrial Boiler Equipment program did not have any participants in 2015.

## **10. Foodservice Equipment Program**

The Foodservice program provides the restaurant industry and public facilities, such as schools and hospitals, cash incentives for the installation of natural gas foodservice cooking equipment. There are separate rebates for two groups of food service equipment. The first tier provides a \$500 rebate for the following equipment types: Convection Ovens, Fryers, Pasta Cookers, Charbroilers, Salamander Broilers, and Rotisserie Ovens. The second tier provides a \$1,000 rebate for the following equipment types: Conveyor Ovens, Combi-Ovens, Upright Broilers, Rotating Rack Ovens, and Griddles.

There was one Foodservice program participant in 2015. This participant was in Tier 1. The Foodservice Equipment Program achieved 20.0 percent participation with an associated 4.9 percent dk savings.

## **11. Commercial and Industrial Custom Program**

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

There were five Commercial and Industrial Custom Program participants in 2015, which was 62.5 percent of the authorized participation. The program achieved energy savings of 51,068 dk, or 159.6 percent of the authorized savings level. The cost per dk for the program also came in below the authorized cost of \$15.76 per dk with an actual cost per dk of \$7.90. The interest in this program caused Great Plains to request a modification to the 2015 budget for the Commercial/Industrial segment. The budget modification was approved by Order of the Deputy Commissioner, Department of Commerce on November 20, 2015.

A brief summary of the custom projects follows:

- Project #1: A boiler burner retrofit project for an industrial processing facility.
- Project #2: A boiler exhaust economizer project or a large industrial agricultural processing facility.
- Project #3: A re-commissioning project for a hospital.
- Project #4: An energy recovery ventilator project for a hospital.



- Project #5: A boiler economizer project for a large industrial agricultural processing facility.

## **12. Building Certification Program**

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

### Energy Star Labeled Buildings Program

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

### 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.

Great Plains did not have any participation in the building certification program in 2015.

## **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 2015.

#### **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 2015.

#### **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 2015, CIP assessments amounted to \$19,101, which is below the \$26,000 authorized.

## 16. Employee Expenses

Pursuant to Minnesota Statutes 2008, Section 216B.16, Great Plains recorded total employee expenses for travel of \$1,299. Great Plains has not exceeded the 0.5 percent of total annual CIP expense limit.

	Employee Expenses		
	Residential and Commercial	Residential Attic	Total
Vehicles	\$0	\$0	\$0
Commercial Air	1,122	0	1,122
Personal Vehicle Use	0	131	131
Meals	30	7	37
Other Reimbursable Expenses	9	0	9
Total	<u>\$1,161</u>	<u>\$138</u>	<u>\$1,299</u>



**GREAT PLAINS NATURAL GAS CO.  
CONSERVATION IMPROVEMENT PROGRAM  
TRACKER REPORT**

**III: Conservation Improvement Tracker Program:**

Pursuant to the Order issued in Docket No. E,G-999/CI-08-133, Great Plains submits for approval its report on collections and expenditures from the Conservation Improvement Program (CIP) and the calculation of a proposed Conservation Improvement Resource Adjustment (CCRA) proposed to be effective September 1, 2016.

Attachment E, page 1 is the calculation of the proposed CCRA using estimated volumes excluding CIP-exempt customer volumes, as authorized in Docket No. G004/M-12-439. The proposed CCRA is \$0.0954 per dk for all non CIP-Exempt customers, an increase of \$0.1033 from the current CCRA (established in Docket No. G-004/GR-15-879, where the Base Charge was set to \$0.0563). Great Plains is proposing to calculate the CCRA rate over 24 months to minimize the CCRA rate impact to its customers. This proposal was discussed with the Department Staff and with Commission Staff. For a typical residential customer using 74 dk per year, this reflects an increase of \$7.65 annually or \$0.64 per month.

If the CCRA under-recovery is amortized over 12 months, the rate would be \$0.1914 per dk for all non CIP-Exempt customers, an increase of \$0.1993 from the current CCRA. For a typical residential customer using 74 dk per year, this reflects an increase of \$14.75 annually or \$1.23 per month.

The CIP True-up on page 2 includes the balance in the CIP account at December 31, 2014, the activity for 2015, the activity for January-March 2016 and the projected activity for April – August 2016 to arrive at a projected balance in the CIP account as of September 1, 2016. The Company qualifies to receive a DSM incentive of \$477,077 for the 2015 CIP program year.

The detailed activity by month is shown on pages 3 and 4. The calculated DSM incentive for 2015 is included in the balance and is shown on Attachment E, page 2.

Attachment A is the CCRA tariff sheet (Sheet No. 5-112) with the proposed rate per dk.



## **2014 DEMAND-SIDE MANAGEMENT (DSM) INCENTIVE**

### **IV: Demand-Side Management Incentive:**

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

Attachment F shows the calculation of the DSM Incentive for 2015 based on the results of the 2015 CIP program. Great Plains earned an incentive in the amount of \$477,077. As shown in Attachment B, Great Plains total energy savings in 2015 were 69,393 dk, or 122.9 percent of goal. This level of achievement is above the 1.2% of revenue threshold, which results in the financial incentive award being calculated on dk savings of 69,393 multiplied by the Incentive Cap of \$6.875 per dk for an award of \$477,077.

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

# Attachment A





# GREAT PLAINS NATURAL GAS CO.

A Division of MDU Resources Group, Inc.

## State of Minnesota Gas Rate Schedule – MNPUC Volume 2

Section No. 5

8<sup>th</sup> Revised Sheet No. 5-112

Canceling 7<sup>th</sup> Revised Sheet No. 5-112

### CONSERVATION IMPROVEMENT PROGRAM ADJUSTMENT CLAUSE

of the distribution delivery charge authorized in Docket No. G004/GR-04-1487. 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
\$0.0563	\$0.0954

#### 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 1<sup>st</sup> 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 2, 2016

Effective Date: Service rendered on and after September 1, 2016

Issued By: Tamie A. Aberle  
Director – Regulatory Affairs

Docket No.:



## Tariffs Reflecting Proposed Changes



# GREAT PLAINS NATURAL GAS CO.

A Division of MDU Resources Group, Inc.

## State of Minnesota Gas Rate Schedule – MNPUC Volume 2

Section No. 5

7<sup>th</sup> Revised Sheet No. 5-112

Canceling 6<sup>th</sup> Revised Sheet No. 5-112

### CONSERVATION IMPROVEMENT PROGRAM ADJUSTMENT CLAUSE

of the distribution delivery charge authorized in Docket No. G004/GR-04-1487. 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>\$0.0563</u>	<u>(\$0.0079)\$0.0954</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 1<sup>st</sup> of the year following the Commissioner's decision.

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

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

Date Filed:	September 30, 2015	Effective Date:	Service rendered on and after January 1, 2016
Issued By:	Tamie A. Aberle Director – Regulatory Affairs	Docket No.:	G004/GR-15-879



**GREAT PLAINS NATURAL GAS CO.  
SUMMARY OF 2015 CIP  
AUTHORIZED VS. ACTUAL EXPENDITURES, PARTICIPANTS AND DK SAVINGS**

	Expenditures			% of Authorized	Participants			% of Authorized	Dk Savings			% of Authorized
	Authorized 1/	Actual	Difference		Authorized	Actual	Difference		Authorized	Actual	Difference	
<b>Residential and Small Commercial</b>												
Space Heating Equipment	\$160,628	\$146,292	(\$14,336)	91.1%	651	503	(148)	77.3%	10,019	9,547	(472)	95.3%
Water Heating Equipment	14,557	11,796	(2,761)	81.0%	836	518	(318)	62.0%	3,120	2,059	(1,061)	66.0%
Attic Insulation and Bypass	8,336	138	(8,198)	1.7%	30	0	(30)	0.0%	372	0	(372)	0.0%
Pilotless Fireplace	2,084	98	(1,986)	4.7%	20	1	(19)	5.0%	88	4	(84)	4.5%
Residential Energy Assessment	22,575	1,312	(21,263)	5.8%	65	4	(61)	6.2%	0	0	0	0.0%
Residential Low Income Programs	167,542	70,389	(97,153)	42.0%	97	29	(68)	29.9%	1,649	649	(1,000)	39.4%
<b>Total Residential</b>	<b>\$375,722</b>	<b>\$230,025</b>	<b>(\$145,697)</b>	<b>61.2%</b>	<b>1,699</b>	<b>1,055</b>	<b>(644)</b>	<b>62.1%</b>	<b>15,248</b>	<b>12,259</b>	<b>(2,989)</b>	<b>80.4%</b>
<b>Commercial &amp; Industrial</b>												
Space Heating Equipment	40,021	70,040	30,019	175.0%	48	56	8	116.7%	3,295	5,918	2,623	179.6%
Water Heating Equipment	2,641	1,663	(\$978)	63.0%	7	4	(3)	57.1%	151	125	(26)	82.8%
Commercial Boiler Equipment	25,538	0	(25,538)	0.0%	58	0	(58)	0.0%	5,320	0	(5,320)	0.0%
Foodservice Equipment	4,202	581	(3,621)	13.8%	5	1	(4)	20.0%	465	23	(442)	4.9%
Custom	504,255	403,234	(101,021)	80.0%	8	5	(3)	62.5%	32,000	51,068	19,068	159.6%
Building Certification Program	4,803	0	(4,803)	0.0%	1	0	(1)	0.0%	0	0	0	0.0%
Commercial Energy Assessment	11,406	0	(11,406)	0.0%	10	0	(10)	0.0%	0	0	0	0.0%
Industrial Energy Assessment	18,009	0	(18,009)	0.0%	5	0	(5)	0.0%	0	0	0	0.0%
<b>Total Commercial</b>	<b>\$610,875</b>	<b>\$475,518</b>	<b>(\$135,357)</b>	<b>77.8%</b>	<b>142</b>	<b>66</b>	<b>(76)</b>	<b>46.5%</b>	<b>41,231</b>	<b>57,134</b>	<b>15,903</b>	<b>138.6%</b>
CIP Assessments	26,000	19,101	(6,899)	73.5%								
<b>Total CIP Program</b>	<b>\$1,012,597</b>	<b>\$724,644</b>	<b>(\$287,953)</b>	<b>71.6%</b>	<b>1,841</b>	<b>1,121</b>	<b>(720)</b>	<b>60.9%</b>	<b>56,479</b>	<b>69,393</b>	<b>12,914</b>	<b>122.9%</b>

1/ Budget modification to the CIP Triennial Filing, Docket No. G004/CIP-12-573. Approved by the MN DOC on November 20, 2015.

**GREAT PLAINS NATURAL GAS CO.  
SUMMARY OF 2015 CIP  
LOW-INCOME AND RENTER PARTICIPANTS**

	Expenditures			% of Authorized	Participants			% of Authorized	Dk Savings			% of Authorized
	Authorized 3/	Actual	Difference		Authorized	Actual	Difference		Authorized	Actual	Difference	
<b>Low-Income Participants</b>												
Weatherization	\$94,717	\$37,036	(\$57,681)	39.1%	60	17	(43)	28.3%	1,050	302	(748)	28.8%
Furnace Replacement	68,088	32,259	(35,829)	47.4%	17	8	(9)	47.1%	525	325	(200)	61.9%
Furnace/Boiler Tune-up	4,737	1,094	(3,643)	23.1%	20	4	(16)	20.0%	74	22	(52)	29.7%
<b>Total Low-Income</b>	<b>\$167,542</b>	<b>\$70,389</b>	<b>(\$97,153)</b>	<b>42.0%</b>	<b>97</b>	<b>29</b>	<b>(68)</b>	<b>29.9%</b>	<b>1,649</b>	<b>649</b>	<b>(1,000)</b>	<b>39.4%</b>
<b>Renter Participants</b>												
Space Heating Equipment 1/	\$6,909	\$17,697	\$10,788	256.1%	28	55	27	196.4%	431	1,163	732	269.8%
Water Heating Equipment 2/	52	1,026	974	1973.1%	3	59	56	1966.7%	11	235	224	2136.4%
Attic Insulation - Retrofit	278	0	(278)	0.0%	1	0	(1)	0.0%	12	0	(12)	0.0%
Pilotless Fireplace	0	0	0	0.0%	0	0	0	0.0%	0	0	0	0.0%
Residential Energy Assessment	347	0	(347)	0.0%	1	0	(1)	0.0%	0	0	0	0.0%
<b>Total Renters</b>	<b>\$7,586</b>	<b>\$18,723</b>	<b>\$11,137</b>	<b>246.8%</b>	<b>33</b>	<b>114</b>	<b>81</b>	<b>345.5%</b>	<b>454</b>	<b>1,398</b>	<b>944</b>	<b>307.9%</b>

1/ Includes rental property from the Furnace, Boiler, Furnace Tune-up and Programmable Thermostat programs.

2/ Includes rental property from the Water Heating Equipment and Low Flow Showerhead programs.

3/ Budget modification to the CIP Triennial Filing, Docket No. G004/CIP-12-573. Approved by the MN DOC on November 20, 2015.



**GREAT PLAINS NATURAL GAS CO.  
SUMMARY OF 2015 CIP  
PROGRAM RESULTS**

Program	Expenditures			% of Authorized	Participants			% of Authorized	Dk Savings			% of Authorized
	Authorized 1/	Actual	Difference		Authorized	Actual	Difference		Authorized	Actual	Difference	
<b>Residential and Small Commercial</b>												
<b>Space Heating Equip.</b>												
Programmable Thermostat	\$2,604	\$2,822	\$218	108.4%	75	86	11	114.7%	300	344	44	114.7%
Furnace 94%+ AFUE - New	2,084	2,362	278	113.3%	5	6	1	120.0%	37	47	10	127.0%
Furnace 94%+ AFUE - Repl.	87,522	59,441	(28,081)	67.9%	210	151	(59)	71.9%	6,090	4,358	(1,732)	71.6%
Furnace 96%+ AFUE - New	1,111	2,625	1,514	236.3%	2	5	3	250.0%	18	51	33	283.3%
Furnace 96%+ AFUE - Repl.	36,120	56,160	20,040	155.5%	65	107	42	164.6%	2,002	3,462	1,460	172.9%
Furnace and Boiler Tune-up	19,101	8,054	(11,047)	42.2%	275	123	(152)	44.7%	1,018	453	(565)	44.5%
Boiler 84%+ AFUE	1,667	2,362	695	141.7%	4	6	2	150.0%	45	87	42	193.3%
Boiler 91%+ AFUE	10,419	12,466	2,047	119.6%	15	19	4	126.7%	509	745	236	146.4%
<b>Total</b>	<b>\$160,628</b>	<b>\$146,292</b>	<b>(\$14,336)</b>	<b>91.1%</b>	<b>651</b>	<b>503</b>	<b>(148)</b>	<b>77.3%</b>	<b>10,019</b>	<b>9,547</b>	<b>(472)</b>	<b>95.3%</b>
<b>Water Heat Equip. Upgrade</b>												
Water Heating (.64 EF)	\$2,362	\$0	(\$2,362)	0.0%	20	0	(20)	0.0%	26	0	(26)	0.0%
Water Heating (.67 EF)	1,251	1,837	586	146.8%	9	14	5	155.6%	20	37	17	185.0%
Tankless Water Heating (.82 EF)	2,431	2,296	(135)	94.4%	7	7	0	100.0%	34	34	0	100.0%
Low Flow Showerheads	8,513	7,663	(850)	90.0%	800	497	(303)	62.1%	3,040	1,988	(1,052)	65.4%
<b>Total</b>	<b>\$14,557</b>	<b>\$11,796</b>	<b>(\$2,761)</b>	<b>81.0%</b>	<b>836</b>	<b>518</b>	<b>(318)</b>	<b>62.0%</b>	<b>3,120</b>	<b>2,059</b>	<b>(1,061)</b>	<b>66.0%</b>
<b>Attic Insulation and Bypass</b>												
Attic Insulation	\$3,126	\$138	(\$2,988)	4.4%	15	0	(15)	0.0%	240	0	(240)	0.0%
Attic Bypass	5,210	0	(5,210)	0.0%	15	0	(15)	0.0%	132	0	(132)	0.0%
<b>Total Attic Insulation and Bypass</b>	<b>\$8,336</b>	<b>\$138</b>	<b>(\$8,198)</b>	<b>1.7%</b>	<b>30</b>	<b>0</b>	<b>(30)</b>	<b>0.0%</b>	<b>372</b>	<b>0</b>	<b>(372)</b>	<b>0.0%</b>
<b>Pilotless Fireplace</b>	<b>\$2,084</b>	<b>\$98</b>	<b>(\$1,986)</b>	<b>4.7%</b>	<b>20</b>	<b>1</b>	<b>(19)</b>	<b>5.0%</b>	<b>88</b>	<b>4</b>	<b>(84)</b>	<b>4.5%</b>
<b>Residential Energy Assessment</b>	<b>\$22,575</b>	<b>\$1,312</b>	<b>(\$21,263)</b>	<b>5.8%</b>	<b>65</b>	<b>4</b>	<b>(61)</b>	<b>6.2%</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0.0%</b>
<b>Residential Low Income Programs</b>												
Weatherization	\$94,717	\$37,036	(\$57,681)	39.1%	60	17	(43)	28.3%	1,050	302	(748)	28.8%
Furnace Replacement	68,088	32,259	(35,829)	47.4%	17	8	(9)	47.1%	525	325	(200)	61.9%
Furnace/Boiler Tune-up	4,737	1,094	(3,643)	23.1%	20	4	(16)	20.0%	74	22	(52)	29.7%
<b>Total Low Income Programs</b>	<b>\$167,542</b>	<b>\$70,389</b>	<b>(\$97,153)</b>	<b>42.0%</b>	<b>97</b>	<b>29</b>	<b>(68)</b>	<b>29.9%</b>	<b>1,649</b>	<b>649</b>	<b>(1,000)</b>	<b>39.4%</b>
<b>Total Residential Portfolio</b>	<b>\$375,722</b>	<b>\$230,025</b>	<b>(\$145,697)</b>	<b>61.2%</b>	<b>1,699</b>	<b>1,055</b>	<b>(644)</b>	<b>62.1%</b>	<b>15,248</b>	<b>12,259</b>	<b>(2,989)</b>	<b>80.4%</b>
<b>Total Residential Excluding Low Income</b>	<b>\$208,180</b>	<b>\$159,636</b>	<b>(\$48,544)</b>	<b>76.7%</b>	<b>1,602</b>	<b>1,026</b>	<b>(576)</b>	<b>64.0%</b>	<b>13,599</b>	<b>11,610</b>	<b>(1,989)</b>	<b>85.4%</b>

**GREAT PLAINS NATURAL GAS CO.  
SUMMARY OF 2015 CIP  
PROGRAM RESULTS**

Program	Expenditures			% of Authorized	Participants			% of Authorized	Dk Savings			% of Authorized
	Authorized 1/	Actual	Difference		Authorized	Actual	Difference		Authorized	Actual	Difference	
<b>Commercial and Industrial</b>												
<b>Space Heating Equip.</b>												
Space Heating Equipment												
Furnace 94%+ AFUE - Repl.	\$6,483	\$11,503	\$5,020	177.4%	18	33	15	183.3%	934	1,423	489	152.4%
Furnace 96%+ AFUE - New	1,921	0	(1,921)	0.0%	4	0	(4)	0.0%	64	0	(64)	0.0%
Furnace 96%+ AFUE - Repl.	3,361	6,043	2,682	179.8%	7	13	6	185.7%	384	506	122	131.8%
Commercial Hot Water Boiler												
Tier 1 (85%+ AFUE)	5,715	0	(5,715)	0.0%	7	0	(7)	0.0%	333	0	(333)	0.0%
Tier 2 (88%+ AFUE)	19,690	52,494	32,804	266.6%	10	10	0	100.0%	1,428	3,989	2,561	279.3%
Commercial LP & HP Steam Boilers												
Tier 1 (<300,000 BTUH)	1,350	0	(\$1,350)	0.0%	1	0	(1)	0.0%	57	0	(57)	0.0%
Tier 2 (≥300,000 BTUH)	1,501	0	(1,501)	0.0%	1	0	(1)	0.0%	95	0	(95)	0.0%
<b>Total Space Heating</b>	<b>\$40,021</b>	<b>\$70,040</b>	<b>\$30,019</b>	<b>175.0%</b>	<b>48</b>	<b>56</b>	<b>8</b>	<b>116.7%</b>	<b>3,295</b>	<b>5,918</b>	<b>2,623</b>	<b>179.6%</b>
<b>Water Heating Equip.</b>												
Water Heater .64 EF+ (≥40 Gallons)	\$240	\$117	(\$123)	48.8%	2	1	(1)	50.0%	30	1	(29)	3.3%
Water Heater Storage 88% cond	2,401	1,546	(855)	64.4%	5	3	(2)	60.0%	121	124	3	102.5%
<b>Total Water Heating</b>	<b>\$2,641</b>	<b>\$1,663</b>	<b>(\$978)</b>	<b>63.0%</b>	<b>7</b>	<b>4</b>	<b>(3)</b>	<b>57.1%</b>	<b>151</b>	<b>125</b>	<b>(26)</b>	<b>82.8%</b>
<b>Commercial Boiler Equipment</b>												
O2 Control	\$7,204	\$0	(\$7,204)	0.0%	2	0	(2)	0.0%	378	0	(378)	0.0%
Modulating Burners												
Tier 1 (<2,500 kBTUH)	4,503	0	(4,503)	0.0%	3	0	(3)	0.0%	341	0	(341)	0.0%
Tier 2 (>2,500 kBTUH)	3,001	0	(3,001)	0.0%	1	0	(1)	0.0%	856	0	(856)	0.0%
Stack Dampers	1,801	0	(1,801)	0.0%	3	0	(3)	0.0%	1,035	0	(1,035)	0.0%
Turbulators	1,801	0	(1,801)	0.0%	3	0	(3)	0.0%	621	0	(621)	0.0%
Outdoor Air Reset	1,081	0	(1,081)	0.0%	3	0	(3)	0.0%	787	0	(787)	0.0%
Cut-Out Control	360	0	(360)	0.0%	3	0	(3)	0.0%	352	0	(352)	0.0%
Commercial Boiler Tune-Up												
Tier 1 (<2,500 kBTUH)	1,681	0	(1,681)	0.0%	7	0	(7)	0.0%	162	0	(162)	0.0%
Tier 2 (≥2,500 kBTUH)	1,081	0	(1,081)	0.0%	3	0	(3)	0.0%	485	0	(485)	0.0%
Commercial Steam Traps	3,025	0	(3,025)	0.0%	30	0	(30)	0.0%	303	0	(303)	0.0%
<b>Total Commercial Boiler</b>	<b>\$25,538</b>	<b>\$0</b>	<b>(\$25,538)</b>	<b>0.0%</b>	<b>58</b>	<b>0</b>	<b>(58)</b>	<b>0.0%</b>	<b>5,320</b>	<b>0</b>	<b>(5,320)</b>	<b>0.0%</b>



**GREAT PLAINS NATURAL GAS CO.  
SUMMARY OF 2015 CIP  
PROGRAM RESULTS**

Program	Expenditures			% of Authorized	Participants			% of Authorized	Dk Savings			% of Authorized
	Authorized 1/	Actual	Difference		Authorized	Actual	Difference		Authorized	Actual	Difference	
<b>Food Service Equip.</b>												
Tier 1 (\$500 Incentive)	\$1,801	\$581	(\$1,220)	32.3%	3	1	(2)	33.3%	240	23	(217)	9.6%
Tier 2 (\$1,000 Incentive)	2,401	0	(2,401)	0.0%	2	0	(2)	0.0%	225	0	(225)	0.0%
Total	<u>\$4,202</u>	<u>\$581</u>	<u>(\$3,621)</u>	13.8%	<u>5</u>	<u>1</u>	<u>(4)</u>	20.0%	<u>465</u>	<u>23</u>	<u>(442)</u>	4.9%
Custom Projects	\$504,255	\$403,234	(\$101,021)	80.0%	8	5	(3)	62.5%	32,000	51,068	19,068	159.6%
Building Certification	4,803	0	(4,803)	0.0%	1	0	(1)	0.0%	0	0	0	0.0%
Comm. Energy Assessment	11,406	0	(11,406)	0.0%	10	0	(10)	0.0%	0	0	0	0.0%
Industrial Energy Assessment	18,009	0	(18,009)	0.0%	5	0	(5)	0.0%	0	0	0	0.0%
<b>Total Commercial</b>	<u>\$610,875</u>	<u>\$475,518</u>	<u>(\$135,357)</u>	77.8%	<u>142</u>	<u>66</u>	<u>(76)</u>	46.5%	<u>41,231</u>	<u>57,134</u>	<u>15,903</u>	138.6%
<b>Total</b>	<u>\$986,597</u>	<u>\$705,543</u>	<u>(\$281,054)</u>	<u>71.5%</u>	<u>1,841</u>	<u>1,121</u>	<u>(720)</u>	<u>60.9%</u>	<u>56,479</u>	<u>69,393</u>	<u>12,914</u>	<u>122.9%</u>
Direct Assessment	<u>\$26,000</u>	<u>\$19,101</u>	<u>(\$6,899)</u>									
<b>Total Portfolio</b>	<u>\$1,012,597</u>	<u>\$724,644</u>	<u>(\$287,953)</u>									

1/ Budget modification to the CIP Triennial Filing, Docket No. G004/CIP-12-573. Approved by the MN DOC on November 20, 2015.

**GREAT PLAINS NATURAL GAS CO.  
COST PER DK SAVED  
2015 ACTUAL TO AUTHORIZED**

	Actual Participants	Cost per Dk			% of Authorized
		Authorized 2/	Actual	Difference	
<b><u>Residential and Small Commercial</u></b>					
Space Heating Equipment					
Programmable Thermostats	86	\$8.68	\$8.20	(\$0.48)	94.47%
Furnace 94%+ AFUE - New	6	56.32	50.26	(6.06)	89.24%
Furnace 94%+ AFUE - Repl.	151	14.37	13.64	(0.73)	94.92%
Furnace 96%+ AFUE - New	5	61.72	51.47	(10.25)	83.39%
Furnace 96%+ AFUE - Repl.	107	18.04	16.22	(1.82)	89.91%
Furnace and Boiler Tune-up	123	18.76	17.78	(0.98)	94.78%
Boiler 84%+ AFUE	6	37.04	27.15	(9.89)	73.30%
Boiler 91%+ AFUE	19	20.47	16.73	(3.74)	81.73%
<b>Total Space Heating</b>	<b>503</b>	<b>\$16.03</b>	<b>\$15.32</b>	<b>(\$0.71)</b>	<b>95.57%</b>
Water Heating Equipment					
Water Heating (.64 EF)	0	\$90.85	\$0.00	(\$90.85)	0.00%
Water Heating (.67 EF)	14	62.55	49.65	(12.90)	79.38%
Tankless Water Heating (.82 EF)	7	71.50	67.53	(3.97)	94.45%
Low Flow Showerheads	497	2.80	3.85	1.05	137.50%
<b>Total Water Heating</b>	<b>518</b>	<b>\$4.67</b>	<b>\$5.73</b>	<b>\$1.06</b>	<b>122.70%</b>
Attic Insulation and Bypass					
Attic Insulation	0	\$13.03	\$0.00	(\$13.03)	0.00%
Attic Bypass	0	39.47	0.00	(39.47)	0.00%
<b>Total Attic Insulation and Bypass</b>	<b>0</b>	<b>\$22.41</b>	<b>\$0.00</b>	<b>(\$22.41)</b>	<b>0.00%</b>
Pilotless Fireplace	1	\$23.68	\$24.50	\$0.82	103.46%
Residential Energy Assessment	4	\$0.00	\$0.00	\$0.00	0.00%
Residential Low Income Programs					
Weatherization	17	\$90.21	\$122.64	\$32.43	135.95%
Furnace Replacement	8	129.69	99.26	(30.43)	76.54%
Furnace/Boiler Tune-up	4	64.01	49.73	(14.28)	77.69%
<b>Total Low Income Programs</b>	<b>29</b>	<b>\$101.60</b>	<b>\$108.46</b>	<b>\$6.86</b>	<b>106.75%</b>
<b>Total Residential Portfolio</b>	<b>1,055</b>	<b>\$24.64</b>	<b>\$18.76</b>	<b>(\$5.88)</b>	<b>76.14%</b>
<b><u>Commercial and Industrial</u></b>					
Space Heating Equipment					
Furnace 94%+ AFUE - Repl. & New	33	\$6.94	\$8.08	\$1.14	116.43%
Furnace 96%+ AFUE - New	0	30.02	0.00	(30.02)	0.00%
Furnace 96%+ AFUE - Repl.	13	8.75	11.94	3.19	136.46%
Commercial Hot Water Boiler					
Tier 1 (85%+ AFUE)	0	17.16	0.00	(17.16)	0.00%
Tier 2 (88%+ AFUE)	10	13.79	13.16	(0.63)	95.43%
Commercial LP & HP Steam Boilers					
Tier 1 (<300,000 BTUH)	0	23.68	0.00	(23.68)	0.00%
Tier 2 (≥300,000 BTUH)	0	15.80	0.00	(15.80)	0.00%
<b>Total Space Heating</b>	<b>56</b>	<b>\$12.15</b>	<b>\$11.84</b>	<b>(\$0.31)</b>	<b>97.45%</b>



**GREAT PLAINS NATURAL GAS CO.  
COST PER DK SAVED  
2015 ACTUAL TO AUTHORIZED**

	Actual Participants	Cost per Dk			% of Authorized
		Authorized 2/	Actual	Difference	
<b>Water Heating Equipment</b>					
Water Heater .64 EF+ (≥40 Gallons)	1	\$8.00	\$117.00	\$109.00	1462.50%
Water Heater Storage 88% cond	3	19.84	12.47	(7.37)	62.85%
<b>Total Water Heating</b>	<b>4</b>	<b>\$17.49</b>	<b>\$13.30</b>	<b>(\$4.19)</b>	<b>76.04%</b>
<b>Commercial Boiler Equipment</b>					
O2 Control	0	\$19.06	\$0.00	(\$19.06)	0.00%
<b>Modulating Burners</b>					
Tier 1 (<2,500 kBTUH)	0	13.21	0.00	(13.21)	0.00%
Tier 2 (>2,500 kBTUH)	0	3.51	0.00	(3.51)	0.00%
Stack Dampers	0	1.74	0.00	(1.74)	0.00%
Turbulators	0	2.90	0.00	(2.90)	0.00%
Outdoor Air Reset	0	1.37	0.00	(1.37)	0.00%
Cut-Out Control	0	1.02	0.00	(1.02)	0.00%
<b>Commercial Boiler Tune-Up</b>					
Tier 1 (<2,500 kBTUH)	0	10.38	0.00	(10.38)	0.00%
Tier 2 (≥2,500 kBTUH)	0	2.23	0.00	(2.23)	0.00%
Commercial Steam Traps	0	9.98	0.00	(9.98)	0.00%
<b>Total Commercial Boiler</b>	<b>0</b>	<b>\$4.80</b>	<b>\$0.00</b>	<b>(\$4.80)</b>	<b>0.00%</b>
<b>Foodservice Equipment</b>					
Tier 1 (\$500 Incentive)	1	\$7.50	\$25.26	\$17.76	336.80%
Tier 2 (\$1,000 Incentive)	0	10.67	0.00	(10.67)	0.00%
<b>Total Foodservice</b>	<b>1</b>	<b>\$9.04</b>	<b>\$25.26</b>	<b>\$16.22</b>	<b>279.42%</b>
Custom Program	5	\$15.76	\$7.90	(\$7.86)	50.13%
Building Certification Program	0	0.00	0.00	0.00	0.00%
Commercial Energy Assessment	0	0.00	0.00	0.00	0.00%
Industrial Energy Assessment	0	0.00	0.00	0.00	0.00%
<b>Total Commercial Portfolio</b>	<b>66</b>	<b>\$14.82</b>	<b>\$8.32</b>	<b>(\$6.50)</b>	<b>56.14%</b>
<b>Total Portfolio 1/</b>	<b>1,121</b>	<b>\$17.93</b>	<b>\$10.44</b>	<b>(\$7.49)</b>	<b>58.23%</b>

1/ Includes indirect assessment.

2/ Budget modification to the CIP Triennial Filing, Docket No. G004/CIP-12-573.  
Approved by the MN DOC on November 20, 2015.

**GREAT PLAINS NATURAL GAS CO.  
SUMMARY OF LOW INCOME PROGRAMS  
2015**

Agency/ Customer Number	Weatherization			Furnace/Boiler Replacement			Furnace/Boiler Tune-up			Total Low Income		
	Incentive Expense	Dk Savings	\$/Dk	Incentive Expense	Dk Savings	\$/Dk	Incentive Expense	Dk Savings	\$/Dk	Incentive Expense	Dk Savings	\$/Dk
<b><u>Mahube</u></b>												
1	\$1,759	9.5	\$185.16							\$1,759	9.5	\$185.16
2	1,944	32.7	59.45							1,944	32.7	59.45
	<u>\$3,703</u>	<u>42.2</u>	<u>\$87.75</u>	<u>\$0</u>	<u>0.0</u>	<u>\$0.00</u>	<u>\$0</u>	<u>0.0</u>	<u>\$0.00</u>	<u>\$3,703</u>	<u>42.2</u>	<u>\$87.75</u>
<b><u>Prairie V Community Action Council, Inc.</u></b>												
3	\$1,775	14.6	\$121.58	\$2,750	50.2	\$54.78				\$4,525	64.8	\$69.83
4	1,769	23.7	74.64	2,750	84.1	32.70				4,519	107.8	41.92
5	387	6.3	61.43				\$233	5.8	\$40.17	620	12.1	51.24
6	1,745	13.4	130.22	2,750	46.0	59.78				4,495	59.4	75.67
7	1,769	13.6	130.07							1,769	13.6	130.07
8	1,742	15.0	116.13	2,750	21.6	127.31				4,492	36.6	122.73
9	1,793	15.7	114.20				220	0.0	0.00	2,013	15.7	128.22
10	1,797	12.4	144.92				220	4.9	44.90	2,017	17.3	116.59
11	1,219	10.3	118.35	2,739	23.0	119.09				3,958	33.3	118.86
	<u>\$13,996</u>	<u>125.0</u>	<u>\$111.97</u>	<u>\$13,739</u>	<u>224.9</u>	<u>\$61.09</u>	<u>\$673</u>	<u>10.7</u>	<u>\$62.90</u>	<u>\$28,408</u>	<u>360.6</u>	<u>\$78.78</u>



GREAT PLAINS NATURAL GAS CO.  
SUMMARY OF LOW INCOME PROGRAMS  
2015

Agency/ Customer Number	Weatherization			Furnace/Boiler Replacement			Furnace/Boiler Tune-up			Total Low Income		
	Incentive Expense	Dk Savings	\$/Dk	Incentive Expense	Dk Savings	\$/Dk	Incentive Expense	Dk Savings	\$/Dk	Incentive Expense	Dk Savings	\$/Dk
<u>West Central MN Communities Action, Inc.</u>												
12	\$1,757	40.8	\$43.06				\$147	11.8	\$12.46	\$1,904	52.6	\$36.20
	<u>\$1,757</u>	<u>40.8</u>	<u>\$43.06</u>	<u>\$0</u>	<u>0.0</u>	<u>\$0.00</u>	<u>\$147</u>	<u>11.8</u>	<u>\$12.46</u>	<u>\$1,904</u>	<u>52.6</u>	<u>\$36.20</u>
<u>Western Community</u>												
13	\$1,454	10.3	\$141.17	\$2,750	28.4	\$96.83				\$4,204	38.7	\$108.63
14	1,577	12.4	127.18							1,577	12.4	127.18
15	1,746	16.5	105.82							1,746	16.5	105.82
16	1,791	21.9	81.78	2,750	34.2	80.41				4,541	56.1	80.94
17	1,747	32.4	53.92	4,950	37.6	131.65				6,697	70.0	95.67
	<u>\$8,315</u>	<u>93.5</u>	<u>\$88.93</u>	<u>\$10,450</u>	<u>100.2</u>	<u>\$104.29</u>	<u>\$0</u>	<u>0.0</u>	<u>\$0.00</u>	<u>\$18,765</u>	<u>193.7</u>	<u>\$96.88</u>
Total Low Income	<u>\$27,771</u>	<u>301.5</u>	<u>\$92.11</u>	<u>\$24,189</u>	<u>325.1</u>	<u>\$74.40</u>	<u>\$820</u>	<u>22.5</u>	<u>\$36.44</u>	<u>\$52,780</u>	<u>649.1</u>	<u>\$81.31</u>
Total Participants											17	
Average Dk/Participant Saved											38.2	

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

Input Data		2015	
1) Retail Rate (\$/MCF) =	\$6.20	16 Utility Project Costs	
Escalation Rate =	4.28%	16 a) Administrative & Operating Costs =	\$130,813
2) Non-Gas Fuel Retail Rate (\$/Fuel Unit) =	\$0.000	16 b) Incentive Costs =	\$574,730
Escalation Rate =	2.80%	16 c) Total Utility Project Costs =	\$705,543
Non-Gas Fuel Units (ie. kWh,Gallons, etc) =	kWh	17) Direct Participant Costs (\$/Part.) =	\$972
3) Commodity Cost (\$/MCF) =	\$4.34	18) Participant Non-Energy Costs (Annual \$/Part.) =	\$0
Escalation Rate =	4.28%	Escalation Rate =	1.73%
4) Demand Cost (\$/Unit/Yr) =	\$239.13	19) Participant Non-Energy Savings (Annual \$/Part)	\$0
Escalation Rate =	4.28%	Escalation Rate =	1.73%
5) Peak Reduction Factor =	0.26%	20) Project Life (Years) =	12
6) Variable O&M (\$/MCF) =	\$0.0424	21) Avg. MCF/Part. Saved =	61.9
Escalation Rate =	4.28%	22) Avg Non-Gas Fuel Units/Part. Saved =	229 kWh
7) Non-Gas Fuel Cost (\$/Fuel Unit) =	\$0.027	22a) Avg Additional Non-Gas Fuel Units/ Part. Used	0 kWh
Escalation Rate =	2.80%	23) Number of Participants =	1,121
8) Non-Gas Fuel Loss Factor	5.80%	24) Total Annual MCF Saved =	69,393
9) Gas Environmental Damage Factor =	\$0.3500	25) Incentive/Participant =	\$512.69
Escalation Rate =	1.73%		
10) Non Gas Fuel Enviro. Damage Factor (\$/Unit) =	\$0.0213		
Escalation Rate =	1.73%		
11) Participant Discount Rate =	3.04%		
12) Utility Discount Rate =	8.96%		
13) Societal Discount Rate =	2.67%		
14) General Input Data Year =	2012		
15a) Project Analysis Year 1 =	2015		
15b) Project Analysis Year 2 =			
15c) Project Analysis Year 3 =			

Cost Summary	2015	Test Results	Triennial NPV	Triennial B/C
Utility Cost per Participant =	5629.39	Ratepayer Impact Measure Test	(\$1,604,575)	0.70
Cost per Participant per MCF =	25.87055177	Utility Cost Test	\$3,048,866	5.32
Lifetime Energy Reduction (MCF)	832,716	Societal Test	\$4,392,040	4.60
Societal Cost per MCF	1.465595713	Participant Test	\$5,745,568	6.27



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

Input Data		2015	
1) Retail Rate (\$/MCF) =	\$8.55	16 Utility Project Costs	
Escalation Rate =	4.28%	16 a) Administrative & Operating Costs =	\$54,208
2) Non-Gas Fuel Retail Rate (\$/Fuel Unit) =	\$0.000	16 b) Incentive Costs =	\$175,817
Escalation Rate =	2.80%	16 c) Total Utility Project Costs =	\$230,025
Non-Gas Fuel Units (ie. kWh,Gallons, etc) =	kWh	17) Direct Participant Costs (\$/Part.) =	\$432
3) Commodity Cost (\$/MCF) =	\$4.34	18) Participant Non-Energy Costs (Annual \$/Part.) =	\$0
Escalation Rate =	4.28%	Escalation Rate =	1.73%
4) Demand Cost (\$/Unit/Yr) =	\$239.13	19) Participant Non-Energy Savings (Annual \$/Part)	\$0
Escalation Rate =	4.28%	Escalation Rate =	1.73%
5) Peak Reduction Factor =	1.00%	20) Project Life (Years) =	12
6) Variable O&M (\$/MCF) =	\$0.0424	21) Avg. MCF/Part. Saved =	11.6
Escalation Rate =	4.28%	22) Avg Non-Gas Fuel Units/Part. Saved =	209 kWh
7) Non-Gas Fuel Cost (\$/Fuel Unit) =	\$0.027	22a) Avg Additional Non-Gas Fuel Units/ Part. Used	0 kWh
Escalation Rate =	2.80%	23) Number of Participants =	1,055
8) Non-Gas Fuel Loss Factor	5.80%	24) Total Annual MCF Saved =	12,259
9) Gas Environmental Damage Factor =	\$0.3500	25) Incentive/Participant =	\$166.65
Escalation Rate =	1.73%		
10) Non Gas Fuel Enviro. Damage Factor (\$/Unit) =	\$0.0213		
Escalation Rate =	1.73%		
11) Participant Discount Rate =	2.67%		
12) Utility Discount Rate =	8.95%		
13) Societal Discount Rate =	2.67%		
14) General Input Data Year =	2012		
15a) Project Analysis Year 1 =	2015		
15b) Project Analysis Year 2 =			
15c) Project Analysis Year 3 =			

Cost Summary	2015	Test Results	Triennial NPV	Triennial B/C
Utility Cost per Participant =	\$218.03	Ratepayer Impact Measure Test	(\$464,902)	0.66
Cost per Participant per MCF =	56.0373427	Utility Cost Test	\$667,771	3.90
Lifetime Energy Reduction (MCF)	147,108	Societal Test	\$916,615	2.80
Societal Cost per MCF	3.466623161	Participant Test	\$1,275,251	3.80

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

Input Data		2015	
1) Retail Rate (\$/MCF) =	\$8.55	16 Utility Project Costs	
Escalation Rate =	4.28%	16 a) Administrative & Operating Costs =	\$34,804
2) Non-Gas Fuel Retail Rate (\$/Fuel Unit) =	\$0.000	16 b) Incentive Costs =	\$111,488
Escalation Rate =	2.80%	16 c) Total Utility Project Costs =	\$146,292
Non-Gas Fuel Units (ie. kWh,Gallons, etc) =	kWh	17) Direct Participant Costs (\$/Part.) =	\$780
3) Commodity Cost (\$/MCF) =	\$4.34	18) Participant Non-Energy Costs (Annual \$/Part.) =	\$0
Escalation Rate =	4.28%	Escalation Rate =	1.73%
4) Demand Cost (\$/Unit/Yr) =	\$239.13	19) Participant Non-Energy Savings (Annual \$/Part)	\$0
Escalation Rate =	4.28%	Escalation Rate =	1.73%
5) Peak Reduction Factor =	1.00%	20) Project Life (Years) =	14
6) Variable O&M (\$/MCF) =	\$0.0424	21) Avg. MCF/Part. Saved =	19.0
Escalation Rate =	4.28%	22) Avg Non-Gas Fuel Units/Part. Saved =	428 kWh
7) Non-Gas Fuel Cost (\$/Fuel Unit) =	\$0.027	22a) Avg Additional Non-Gas Fuel Units/ Part. Used	0 kWh
Escalation Rate =	2.80%	23) Number of Participants =	503
8) Non-Gas Fuel Loss Factor	5.80%	24) Total Annual MCF Saved =	9,547
9) Gas Environmental Damage Factor =	\$0.3500	25) Incentive/Participant =	\$221.65
Escalation Rate =	1.73%		
10) Non Gas Fuel Enviro. Damage Factor (\$/Unit) =	\$0.0213		
Escalation Rate =	1.73%		
11) Participant Discount Rate =	2.67%		
12) Utility Discount Rate =	8.96%		
13) Societal Discount Rate =	2.67%		
14) General Input Data Year =	2012		
15a) Project Analysis Year 1 =	2015		
15b) Project Analysis Year 2 =			
15c) Project Analysis Year 3 =			

Cost Summary	2015	Test Results	Triennial NPV	Triennial B/C
Utility Cost per Participant =	\$290.84	Ratepayer Impact Measure Test	(\$351,378)	0.69
Cost per Participant per MCF =	56.35994559	Utility Cost Test	\$637,632	5.36
Lifetime Energy Reduction (MCF)	133,658	Societal Test	\$919,062	3.15
Societal Cost per MCF	3.195798231	Participant Test	\$1,155,061	3.94



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

Input Data		2015	
1) Retail Rate (\$/MCF) =	\$8.55	16 Utility Project Costs	
Escalation Rate =	4.28%	16 a) Administrative & Operating Costs =	\$1,322
2) Non-Gas Fuel Retail Rate (\$/Fuel Unit) =	\$0.000	16 b) Incentive Costs =	\$10,474
Escalation Rate =	2.80%	16 c) Total Utility Project Costs =	\$11,796
Non-Gas Fuel Units (ie. kWh,Gallons, etc) =	kWh	17) Direct Participant Costs (\$/Part.) =	\$21
3) Commodity Cost (\$/MCF) =	\$4.34	18) Participant Non-Energy Costs (Annual \$/Part.) =	\$0
Escalation Rate =	4.28%	Escalation Rate =	1.73%
4) Demand Cost (\$/Unit/Yr) =	\$239.13	19) Participant Non-Energy Savings (Annual \$/Part.) =	\$0
Escalation Rate =	4.28%	Escalation Rate =	1.73%
5) Peak Reduction Factor =	1.00%	20) Project Life (Years) =	10
6) Variable O&M (\$/MCF) =	\$0.0424	21) Avg. MCF/Part. Saved =	4.0
Escalation Rate =	4.28%	22) Avg Non-Gas Fuel Units/Part. Saved =	0 kWh
7) Non-Gas Fuel Cost (\$/Fuel Unit) =	\$0.027	22a) Avg Additional Non-Gas Fuel Units/ Part. Used	0 kWh
Escalation Rate =	2.80%	23) Number of Participants =	518
8) Non-Gas Fuel Loss Factor	5.80%	24) Total Annual MCF Saved =	2,059
9) Gas Environmental Damage Factor =	\$0.3500	25) Incentive/Participant =	\$20.22
Escalation Rate =	1.73%		
10) Non Gas Fuel Enviro. Damage Factor (\$/Unit) =	\$0.0213		
Escalation Rate =	1.73%		
11) Participant Discount Rate =	2.67%		
12) Utility Discount Rate =	8.96%		
13) Societal Discount Rate =	2.67%		
14) General Input Data Year =	2012		
15a) Project Analysis Year 1 =	2015		
15b) Project Analysis Year 2 =			
15c) Project Analysis Year 3 =			

Cost Summary	2015	Test Results	Triennial NPV	Triennial B/C
Utility Cost per Participant =	\$22.77	Ratepayer Impact Measure Test	(\$46,025)	0.74
Cost per Participant per MCF =	10.94305019	Utility Cost Test	\$119,042	11.09
Lifetime Energy Reduction (MCF)	20,590	Societal Test	\$164,878	14.51
Societal Cost per MCF	0.592520641	Participant Test	\$213,813	20.66

Company: Great Plains Natural Gas Co.  
 Project: Total Attic Insulation and Bypass Programs

Input Data		2015	
1) Retail Rate (\$/MCF) =	\$8.55	16 Utility Project Costs	
Escalation Rate =	4.28%	16 a) Administrative & Operating Costs =	\$138
2) Non-Gas Fuel Retail Rate (\$/Fuel Unit) =	\$0.000	16 b) Incentive Costs =	\$0
Escalation Rate =	2.80%	16 c) Total Utility Project Costs =	\$138
Non-Gas Fuel Units (ie. kWh,Gallons, etc) =	kWh	17) Direct Participant Costs (\$/Part.) =	\$0
3) Commodity Cost (\$/MCF) =	\$4.34	18) Participant Non-Energy Costs (Annual \$/Part.) =	\$0
Escalation Rate =	4.28%	Escalation Rate =	1.73%
4) Demand Cost (\$/Unit/Yr) =	\$239.13	19) Participant Non-Energy Savings (Annual \$/Part.) =	\$0
Escalation Rate =	4.28%	Escalation Rate =	1.73%
5) Peak Reduction Factor =	1.00%	20) Project Life (Years) =	-
6) Variable O&M (\$/MCF) =	\$0.0424	21) Avg. MCF/Part. Saved =	-
Escalation Rate =	4.28%	22) Avg Non-Gas Fuel Units/Part. Saved =	0 kWh
7) Non-Gas Fuel Cost (\$/Fuel Unit) =	\$0.027	22a) Avg Additional Non-Gas Fuel Units/ Part. Used	0 kWh
Escalation Rate =	2.80%	23) Number of Participants =	-
8) Non-Gas Fuel Loss Factor	5.80%	24) Total Annual MCF Saved =	0
9) Gas Environmental Damage Factor =	\$0.3500	25) Incentive/Participant =	#DIV/0!
Escalation Rate =	1.73%		
10) Non Gas Fuel Enviro. Damage Factor (\$/Unit) =	\$0.0213		
Escalation Rate =	1.73%		
11) Participant Discount Rate =	2.67%		
12) Utility Discount Rate =	8.96%		
13) Societal Discount Rate =	2.67%		
14) General Input Data Year =	2012		
15a) Project Analysis Year 1 =	2015		
15b) Project Analysis Year 2 =			
15c) Project Analysis Year 3 =			

Cost Summary	2015	Test Results	Triennial	Triennial
			NPV	B/C
Utility Cost per Participant =	#DIV/0!	Ratepayer Impact Measure Test	(\$138)	0.00
Cost per Participant per MCF =	#DIV/0!	Utility Cost Test	(\$138)	0.00
Lifetime Energy Reduction (MCF)	0	Societal Test	(\$138)	0.00
Societal Cost per MCF	#DIV/0!	Participant Test	\$0	#DIV/0!

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

Input Data		2015	
1) Retail Rate (\$/MCF) =	\$8.55	16 Utility Project Costs	
Escalation Rate =	4.28%	16 a) Administrative & Operating Costs =	\$23
		16 b) Incentive Costs =	\$75
2) Non-Gas Fuel Retail Rate (\$/Fuel Unit) =	\$0.000	16 c) Total Utility Project Costs =	\$98
Escalation Rate =	2.80%		
Non-Gas Fuel Units (ie. kWh,Gallons, etc) =	kWh	17) Direct Participant Costs (\$/Part.) =	\$193
3) Commodity Cost (\$/MCF) =	\$4.34	18) Participant Non-Energy Costs (Annual \$/Part.) =	\$0
Escalation Rate =	4.28%	Escalation Rate =	1.73%
4) Demand Cost (\$/Unit/Yr) =	\$239.13	19) Participant Non-Energy Savings (Annual \$/Part)	\$0
Escalation Rate =	4.28%	Escalation Rate =	1.73%
5) Peak Reduction Factor =	1.00%	20) Project Life (Years) =	15
6) Variable O&M (\$/MCF) =	\$0.0424	21) Avg. MCF/Part. Saved =	4.0
Escalation Rate =	4.28%		
		22) Avg Non-Gas Fuel Units/Part. Saved =	0 kWh
7) Non-Gas Fuel Cost (\$/Fuel Unit) =	\$0.027	22a) Avg Additional Non-Gas Fuel Units/ Part. Used	0 kWh
Escalation Rate =	2.80%		
		23) Number of Participants =	1
8) Non-Gas Fuel Loss Factor	5.80%		
		24) Total Annual MCF Saved =	4
9) Gas Environmental Damage Factor =	\$0.3500		
Escalation Rate =	1.73%	25) Incentive/Participant =	\$75.00
10) Non Gas Fuel Enviro. Damage Factor (\$/Unit) =	\$0.0213		
Escalation Rate =	1.73%		
11) Participant Discount Rate =	2.67%		
12) Utility Discount Rate =	8.96%		
13) Societal Discount Rate =	2.67%		
14) General Input Data Year =	2012		
15a) Project Analysis Year 1 =	2015		
15b) Project Analysis Year 2 =			
15c) Project Analysis Year 3 =			

Cost Summary	2015	Test Results	Triennial NPV	Triennial B/C
Utility Cost per Participant =	\$98.00	Ratepayer Impact Measure Test	(\$188)	0.65
Cost per Participant per MCF =	72.75	Utility Cost Test	\$247	3.52
Lifetime Energy Reduction (MCF)	60	Societal Test	\$320	2.48
Societal Cost per MCF	3.6	Participant Test	\$532	3.76



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

Input Data		2015	
1) Retail Rate (\$/MCF) =	\$8.55	16 Utility Project Costs	
Escalation Rate =	4.28%	16 a) Administrative & Operating Costs =	\$312
2) Non-Gas Fuel Retail Rate (\$/Fuel Unit) =	\$0.000	16 b) Incentive Costs =	\$1,000
Escalation Rate =	2.80%	16 c) Total Utility Project Costs =	\$1,312
Non-Gas Fuel Units (ie. kWh,Gallons, etc) =	kWh	17) Direct Participant Costs (\$/Part.) =	\$300
3) Commodity Cost (\$/MCF) =	\$4.34	18) Participant Non-Energy Costs (Annual \$/Part.) =	\$0
Escalation Rate =	4.28%	Escalation Rate =	1.73%
4) Demand Cost (\$/Unit/Yr) =	\$239.13	19) Participant Non-Energy Savings (Annual \$/Part)	\$0
Escalation Rate =	4.28%	Escalation Rate =	1.73%
5) Peak Reduction Factor =	1.00%	20) Project Life (Years) =	10
6) Variable O&M (\$/MCF) =	\$0.0424	21) Avg. MCF/Part. Saved =	-
Escalation Rate =	4.28%	22) Avg Non-Gas Fuel Units/Part. Saved =	0 kWh
7) Non-Gas Fuel Cost (\$/Fuel Unit) =	\$0.027	22a) Avg Additional Non-Gas Fuel Units/ Part. Used	0 kWh
Escalation Rate =	2.80%	23) Number of Participants =	4
8) Non-Gas Fuel Loss Factor	5.80%	24) Total Annual MCF Saved =	0
9) Gas Environmental Damage Factor =	\$0.3500	25) Incentive/Participant =	\$250.00
Escalation Rate =	1.73%		
10) Non Gas Fuel Enviro. Damage Factor (\$/Unit) =	\$0.0213		
Escalation Rate =	1.73%		
11) Participant Discount Rate =	2.67%		
12) Utility Discount Rate =	8.96%		
13) Societal Discount Rate =	2.67%		
14) General Input Data Year =	2012		
15a) Project Analysis Year 1 =	2015		
15b) Project Analysis Year 2 =			
15c) Project Analysis Year 3 =			

Cost Summary	2015	Test Results	Triennial	Triennial
			NPV	B/C
Utility Cost per Participant =	\$328.00	Ratepayer Impact Measure Test	(\$1,312)	0.00
Cost per Participant per MCF =	#DIV/0!	Utility Cost Test	(\$1,312)	0.00
Lifetime Energy Reduction (MCF)	0	Societal Test	(\$1,512)	0.00
Societal Cost per MCF	#DIV/0!	Participant Test	(\$200)	0.83

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

Input Data		2015	
1) Retail Rate (\$/MCF) =	\$8.55	16 Utility Project Costs	
Escalation Rate =	4.28%	16 a) Administrative & Operating Costs =	\$17,609
2) Non-Gas Fuel Retail Rate (\$/Fuel Unit) =	\$0.000	16 b) Incentive Costs =	\$52,780
Escalation Rate =	2.80%	16 c) Total Utility Project Costs =	\$70,389
Non-Gas Fuel Units (ie. kWh,Gallons, etc) =	kWh	17) Direct Participant Costs (\$/Part.) =	\$1,742
3) Commodity Cost (\$/MCF) =	\$4.34	18) Participant Non-Energy Costs (Annual \$/Part.) =	\$0
Escalation Rate =	4.28%	Escalation Rate =	1.73%
4) Demand Cost (\$/Unit/Yr) =	\$239.13	19) Participant Non-Energy Savings (Annual \$/Part)	\$0
Escalation Rate =	4.28%	Escalation Rate =	1.73%
5) Peak Reduction Factor =	1.00%	20) Project Life (Years) =	17
6) Variable O&M (\$/MCF) =	\$0.0424	21) Avg. MCF/Part. Saved =	22.4
Escalation Rate =	4.28%	22) Avg Non-Gas Fuel Units/Part. Saved =	185 kWh
7) Non-Gas Fuel Cost (\$/Fuel Unit) =	\$0.027	22a) Avg Additional Non-Gas Fuel Units/ Part. Used	0 kWh
Escalation Rate =	2.80%	23) Number of Participants =	29
8) Non-Gas Fuel Loss Factor	5.80%	24) Total Annual MCF Saved =	649
9) Gas Environmental Damage Factor =	\$0.3500	25) Incentive/Participant =	\$1,820.00
Escalation Rate =	1.73%		
10) Non Gas Fuel Enviro. Damage Factor (\$/Unit) =	\$0.0213		
Escalation Rate =	1.73%		
11) Participant Discount Rate =	2.67%		
12) Utility Discount Rate =	8.96%		
13) Societal Discount Rate =	2.67%		
14) General Input Data Year =	2012		
15a) Project Analysis Year 1 =	2015		
15b) Project Analysis Year 2 =			
15c) Project Analysis Year 3 =			

Cost Summary	2015	Test Results	Triennial NPV	Triennial B/C
Utility Cost per Participant =	\$2,427.21	Ratepayer Impact Measure Test	(\$86,357)	0.41
Cost per Participant per MCF =	186.1253079	Utility Cost Test	(\$9,352)	0.87
Lifetime Energy Reduction (MCF)	11,033	Societal Test	\$36,782	1.54
Societal Cost per MCF	6.174839119	Participant Test	\$123,704	3.45

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

Input Data		2015	
1) Retail Rate (\$/MCF) =	\$5.70	16 Utility Project Costs	
Escalation Rate =	4.28%	16 a) Administrative & Operating Costs =	\$76,605
2) Non-Gas Fuel Retail Rate (\$/Fuel Unit) =	\$0.000	16 b) Incentive Costs =	\$398,913
Escalation Rate =	2.80%	16 c) Total Utility Project Costs =	\$475,518
Non-Gas Fuel Units (ie. kWh,Gallons, etc) =	kWh	17) Direct Participant Costs (\$/Part.) =	\$9,619
3) Commodity Cost (\$/MCF) =	\$4.34	18) Participant Non-Energy Costs (Annual \$/Part.) =	\$0
Escalation Rate =	4.28%	Escalation Rate =	1.73%
4) Demand Cost (\$/Unit/Yr) =	\$239.13	19) Participant Non-Energy Savings (Annual \$/Part)	\$0
Escalation Rate =	4.28%	Escalation Rate =	1.73%
5) Peak Reduction Factor =	0.11%	20) Project Life (Years) =	18
6) Variable O&M (\$/MCF) =	\$0.0424	21) Avg. MCF/Part. Saved =	865.7
Escalation Rate =	4.28%	22) Avg Non-Gas Fuel Units/Part. Saved =	540 kWh
7) Non-Gas Fuel Cost (\$/Fuel Unit) =	\$0.027	22a) Avg Additional Non-Gas Fuel Units/ Part. Used	0 kWh
Escalation Rate =	2.80%	23) Number of Participants =	66
8) Non-Gas Fuel Loss Factor	5.80%	24) Total Annual MCF Saved =	57,134
9) Gas Environmental Damage Factor =	\$0.3500	25) Incentive/Participant =	\$6,044.14
Escalation Rate =	1.73%		
10) Non Gas Fuel Enviro. Damage Factor (\$/Unit) =	\$0.0213		
Escalation Rate =	1.73%		
11) Participant Discount Rate =	8.96%		
12) Utility Discount Rate =	8.96%		
13) Societal Discount Rate =	2.67%		
14) General Input Data Year =	2012		
15a) Project Analysis Year 1 =	2015		
15b) Project Analysis Year 2 =			
15c) Project Analysis Year 3 =			

Cost Summary	2015	Test Results	Triennial NPV	Triennial B/C
Utility Cost per Participant =	\$7,204.82	Ratepayer Impact Measure Test	(\$1,344,136)	0.74
Cost per Participant per MCF =	19.43377403	Utility Cost Test	\$3,352,222	8.05
Lifetime Energy Reduction (MCF)	1,028,412	Societal Test	\$5,877,276	9.26
Societal Cost per MCF	0.69180348	Participant Test	\$4,460,417	8.03



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

Input Data		2015	
1) Retail Rate (\$/MCF) =	\$8.11	16 Utility Project Costs	
Escalation Rate =	4.28%	16 a) Administrative & Operating Costs =	\$9,763
2) Non-Gas Fuel Retail Rate (\$/Fuel Unit) =	\$0.000	16 b) Incentive Costs =	\$60,277
Escalation Rate =	2.80%	16 c) Total Utility Project Costs =	\$70,040
Non-Gas Fuel Units (ie. kWh,Gallons, etc) =	kWh	17) Direct Participant Costs (\$/Part.) =	\$1,646
3) Commodity Cost (\$/MCF) =	\$4.34	18) Participant Non-Energy Costs (Annual \$/Part.) =	\$0
Escalation Rate =	4.28%	Escalation Rate =	1.73%
4) Demand Cost (\$/Unit/Yr) =	\$239.13	19) Participant Non-Energy Savings (Annual \$/Part)	\$0
Escalation Rate =	4.28%	Escalation Rate =	1.73%
5) Peak Reduction Factor =	1.00%	20) Project Life (Years) =	18
6) Variable O&M (\$/MCF) =	\$0.0424	21) Avg. MCF/Part. Saved =	105.7
Escalation Rate =	4.28%	22) Avg Non-Gas Fuel Units/Part. Saved =	550 kWh
7) Non-Gas Fuel Cost (\$/Fuel Unit) =	\$0.027	22a) Avg Additional Non-Gas Fuel Units/ Part. Used	0 kWh
Escalation Rate =	2.80%	23) Number of Participants =	56
8) Non-Gas Fuel Loss Factor	5.80%	24) Total Annual MCF Saved =	5,918
9) Gas Environmental Damage Factor =	\$0.3500	25) Incentive/Participant =	\$1,076.38
Escalation Rate =	1.73%		
10) Non Gas Fuel Enviro. Damage Factor (\$/Unit) =	\$0.0213		
Escalation Rate =	1.73%		
11) Participant Discount Rate =	8.96%		
12) Utility Discount Rate =	8.96%		
13) Societal Discount Rate =	2.67%		
14) General Input Data Year =	2012		
15a) Project Analysis Year 1 =	2015		
15b) Project Analysis Year 2 =			
15c) Project Analysis Year 3 =			

Cost Summary	2015	Test Results	Triennial NPV	Triennial B/C
Utility Cost per Participant =	\$1,250.71	Ratepayer Impact Measure Test	(\$184,091)	0.76
Cost per Participant per MCF =	27.40505474	Utility Cost Test	\$508,085	8.25
Lifetime Energy Reduction (MCF)	106,524	Societal Test	\$900,933	9.84
Societal Cost per MCF	0.956958056	Participant Test	\$660,277	8.16

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

Input Data		2015	
1) Retail Rate (\$/MCF) =	\$8.11	16 Utility Project Costs	
Escalation Rate =	4.28%	16 a) Administrative & Operating Costs =	\$233
2) Non-Gas Fuel Retail Rate (\$/Fuel Unit) =	\$0.000	16 b) Incentive Costs =	\$1,430
Escalation Rate =	2.80%	16 c) Total Utility Project Costs =	\$1,663
Non-Gas Fuel Units (ie. kWh,Gallons, etc) =	kWh	17) Direct Participant Costs (\$/Part.) =	\$175
3) Commodity Cost (\$/MCF) =	\$4.34	18) Participant Non-Energy Costs (Annual \$/Part.) =	\$0
Escalation Rate =	4.28%	Escalation Rate =	1.73%
4) Demand Cost (\$/Unit/Yr) =	\$239.13	19) Participant Non-Energy Savings (Annual \$/Part)	\$0
Escalation Rate =	4.28%	Escalation Rate =	1.73%
5) Peak Reduction Factor =	1.00%	20) Project Life (Years) =	15
6) Variable O&M (\$/MCF) =	\$0.0424	21) Avg. MCF/Part. Saved =	31.3
Escalation Rate =	4.28%	22) Avg Non-Gas Fuel Units/Part. Saved =	0 kWh
7) Non-Gas Fuel Cost (\$/Fuel Unit) =	\$0.027	22a) Avg Additional Non-Gas Fuel Units/ Part. Used	0 kWh
Escalation Rate =	2.80%	23) Number of Participants =	4
8) Non-Gas Fuel Loss Factor	5.80%	24) Total Annual MCF Saved =	125
9) Gas Environmental Damage Factor =	\$0.3500	25) Incentive/Participant =	\$357.50
Escalation Rate =	1.73%		
10) Non Gas Fuel Enviro. Damage Factor (\$/Unit) =	\$0.0213		
Escalation Rate =	1.73%		
11) Participant Discount Rate =	8.96%		
12) Utility Discount Rate =	8.96%		
13) Societal Discount Rate =	2.67%		
14) General Input Data Year =	2012		
15a) Project Analysis Year 1 =	2015		
15b) Project Analysis Year 2 =			
15c) Project Analysis Year 3 =			

Cost Summary	2015	Test Results	Triennial NPV	Triennial B/C
Utility Cost per Participant =	\$415.75	Ratepayer impact Measure Test	(\$3,790)	0.74
Cost per Participant per MCF =	18.87380192	Utility Cost Test	\$9,120	6.48
Lifetime Energy Reduction (MCF)	1,875	Societal Test	\$15,811	17.95
Societal Cost per MCF	0.4976	Participant Test	\$13,641	20.49

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

Input Data		2015	
1) Retail Rate (\$/MCF) =	\$8.11	16 Utility Project Costs	
Escalation Rate =	4.28%	16 a) Administrative & Operating Costs =	\$81
2) Non-Gas Fuel Retail Rate (\$/Fuel Unit) =	\$0.000	16 b) Incentive Costs =	\$500
Escalation Rate =	2.80%	16 c) Total Utility Project Costs =	\$581
Non-Gas Fuel Units (ie. kWh,Gallons, etc) =	kWh	17) Direct Participant Costs (\$/Part.) =	\$2,013
3) Commodity Cost (\$/MCF) =	\$4.34	18) Participant Non-Energy Costs (Annual \$/Part.) =	\$0
Escalation Rate =	4.28%	Escalation Rate =	1.73%
4) Demand Cost (\$/Unit/Yr) =	\$239.13	19) Participant Non-Energy Savings (Annual \$/Part) :	\$0
Escalation Rate =	4.28%	Escalation Rate =	1.73%
5) Peak Reduction Factor =	1.00%	20) Project Life (Years) =	11
6) Variable O&M (\$/MCF) =	\$0.0424	21) Avg. MCF/Part. Saved =	23.0
Escalation Rate =	4.28%	22) Avg Non-Gas Fuel Units/Part. Saved =	4,855 kWh
7) Non-Gas Fuel Cost (\$/Fuel Unit) =	\$0.027	22a) Avg Additional Non-Gas Fuel Units/ Part. Used	0 kWh
Escalation Rate =	2.80%	23) Number of Participants =	1
8) Non-Gas Fuel Loss Factor	5.80%	24) Total Annual MCF Saved =	23
9) Gas Environmental Damage Factor =	\$0.3500	25) Incentive/Participant =	\$500.00
Escalation Rate =	1.73%		
10) Non Gas Fuel Enviro. Damage Factor (\$/Unit) =	\$0.0213		
Escalation Rate =	1.73%		
11) Participant Discount Rate =	8.96%		
12) Utility Discount Rate =	8.96%		
13) Societal Discount Rate =	2.67%		
14) General Input Data Year =	2012		
15a) Project Analysis Year 1 =	2015		
15b) Project Analysis Year 2 =			
15c) Project Analysis Year 3 =			

Cost Summary	2015	Test Results	Triennial NPV	Triennial B/C
Utility Cost per Participant =	\$581.00	Ratepayer Impact Measure Test	(\$892)	0.64
Cost per Participant per MCF =	112.7826087	Utility Cost Test	\$994	2.71
Lifetime Energy Reduction (MCF)	253	Societal Test	\$2,975	2.42
Societal Cost per MCF	8.276679842	Participant Test	\$373	1.19



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

Input Data		2015	
1) Retail Rate (\$/MCF) =	\$5.41	16 Utility Project Costs	
Escalation Rate =	4.28%	16 a) Administrative & Operating Costs =	\$66,528
2) Non-Gas Fuel Retail Rate (\$/Fuel Unit) =	\$0.000	16 b) Incentive Costs =	\$336,706
Escalation Rate =	2.80%	16 c) Total Utility Project Costs =	\$403,234
Non-Gas Fuel Units (ie. kWh,Gallons, etc) =	kWh	17) Direct Participant Costs (\$/Part.) =	\$108,000
3) Commodity Cost (\$/MCF) =	\$4.34	18) Participant Non-Energy Costs (Annual \$/Part.) =	\$0
Escalation Rate =	4.28%	Escalation Rate =	1.73%
4) Demand Cost (\$/Unit/Yr) =	\$239.13	19) Participant Non-Energy Savings (Annual \$/Part) :	\$0
Escalation Rate =	4.28%	Escalation Rate =	1.73%
5) Peak Reduction Factor =	0.00%	20) Project Life (Years) =	15
6) Variable O&M (\$/MCF) =	\$0.0424	21) Avg. MCF/Part. Saved =	10,213.6
Escalation Rate =	4.28%	22) Avg Non-Gas Fuel Units/Part. Saved =	0 kWh
7) Non-Gas Fuel Cost (\$/Fuel Unit) =	\$0.027	22a) Avg Additional Non-Gas Fuel Units/ Part. Used	0 kWh
Escalation Rate =	2.80%	23) Number of Participants =	5
8) Non-Gas Fuel Loss Factor	5.80%	24) Total Annual MCF Saved =	51,068
9) Gas Environmental Damage Factor =	\$0.3500	25) Incentive/Participant =	\$67,341.20
Escalation Rate =	1.73%		
10) Non Gas Fuel Enviro. Damage Factor (\$/Unit) =	\$0.0213		
Escalation Rate =	1.73%		
11) Participant Discount Rate =	8.96%		
12) Utility Discount Rate =	8.96%		
13) Societal Discount Rate =	2.67%		
14) General Input Data Year =	2012		
15a) Project Analysis Year 1 =	2015		
15b) Project Analysis Year 2 =			
15c) Project Analysis Year 3 =			

Cost Summary	2015	Test Results	Triennial NPV	Triennial B/C
Utility Cost per Participant =	\$80,646.80	Ratepayer Impact Measure Test	(\$1,073,707)	0.73
Cost per Participant per MCF =	18.47015744	Utility Cost Test	\$2,446,975	7.07
Lifetime Energy Reduction (MCF)	766,020	Societal Test	\$3,912,744	7.45
Societal Cost per MCF	0.791791337	Participant Test	\$3,317,388	7.14

Program Name: Building Certification Program  
 Program Design Manager: Great Plains Natural Gas  
 Category: Other - Indirect

	2008 Actual	2009 Actual	2010 Actual	2011 Actual	2012 Actual	2013 Actual	2014 Actual	2015 Plan	2015 Actual	2016 Plan	2017 Plan
	Inactive	Inactive	Inactive	Inactive	Inactive	Active	Active	Active	Active	Active	Active
<b>Utility Cost Components</b>											
Delivery and Administration (2008-2010)											
Delivery (2011-present)						\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
Administration (2011-present)						\$3,677.00	\$0.01	\$803.00	\$0.01	\$1,176.00	
Evaluation, Measurement & Verification						\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
Advertising & Promotion						\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
Incentives						\$3,000.00	\$0.00	\$4,000.00	\$0.00	\$4,000.00	
Other						\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
<b>Total Utility Costs</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$6,677.00</b>	<b>\$0.01</b>	<b>\$4,803.00</b>	<b>\$0.01</b>	<b>\$5,176.00</b>	<b>\$0.00</b>
<b>Program Participants</b>											
Total Participants						1	0	1	0	1	
<b>% of Spending by Customer Segments</b>											
Residential						0%	0%	0%	0%	0%	
Commerical						100%	100%	100%	100%	100%	
Industrial						0%	0%	0%	0%	0%	
Farm						0%	0%	0%	0%	0%	
Other						0%	0%	0%	0%	0%	
<b>Total % of Spending</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>0%</b>
<b>Low-Income Participation</b>											
Participant % (% of Total Participants)						0.0%	0.0%	0.0%	0.0%	0.0%	
Budget % (% of Total Utility Costs)						0.0%	0.0%	0.0%	0.0%	0.0%	
<b>Energy Savings</b>											
Annual MCF Saved						0	0	0	0	0	
Cost per Annual MCF Saved	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000
<b>Benefit/Cost Ratios</b>											
Utility Ratio						0.00	0.00	0.00	0.00	0.00	
Utility NPV						\$0	\$0	\$0	\$0	\$0	
Ratepayer Ratio						0.00	0.00	0.00	0.00	0.00	
Ratepayer NPV						\$0	\$0	\$0	\$0	\$0	
Participant Ratio						0.00	0.00	0.00	0.00	0.00	
Participant NPV						\$0	\$0	\$0	\$0	\$0	
Societal Ratio						0.00	0.00	0.00	0.00	0.00	
Societal NPV						\$0	\$0	\$0	\$0	\$0	
<b>Narrative</b>											



Program Name: C/I Boiler Upgrades  
 Program Design Manager: Great Plains Natural Gas  
 Category: Non-Residential Space Heating (Non-Heat Pumps)

	2008 Actual	2009 Actual	2010 Actual	2011 Actual	2012 Actual	2013 Actual	2014 Actual	2015 Plan	2015 Actual	2016 Plan	2017 Plan
	Inactive	Inactive	Active	Active	Active	Active	Active	Active	Active	Active	Active
<b>Utility Cost Components</b>											
Delivery and Administration (2008-2010)			\$6,894.00								
Delivery (2011-present)				\$885.00	\$3,147.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
Administration (2011-present)				\$0.00	\$0.00	\$5,562.00	\$3,763.00	\$4,268.00	\$0.01	\$6,252.00	
Evaluation, Measurement & Verification			\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
Advertising & Promotion			\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
Incentives			\$24,152.00	\$868.00	\$4,620.00	\$4,538.00	\$3,200.00	\$21,270.00	\$0.00	\$21,270.00	
Other			\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
<b>Total Utility Costs</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$31,046.00</b>	<b>\$1,753.00</b>	<b>\$7,767.00</b>	<b>\$10,100.00</b>	<b>\$6,963.00</b>	<b>\$25,538.00</b>	<b>\$0.01</b>	<b>\$27,522.00</b>	<b>\$0.00</b>
<b>Program Participants</b>											
Total Participants			30	5	8	17	11	58	0	58	
<b>% of Spending by Customer Segments</b>											
Residential			0%	0%	0%	0%	0%	0%	0%	0%	
Commerical			100%	100%	100%	100%	100%	100%	100%	100%	
Industrial			0%	0%	0%	0%	0%	0%	0%	0%	
Farm			0%	0%	0%	0%	0%	0%	0%	0%	
Other			0%	0%	0%	0%	0%	0%	0%	0%	
<b>Total % of Spending</b>	<b>0%</b>	<b>0%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>0%</b>
<b>Low-Income Participation</b>											
Participant % (% of Total Participants)			0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
Budget % (% of Total Utility Costs)			0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
<b>Energy Savings</b>											
Annual MCF Saved			3,083	129	1,044	951	3,471	5,320	0	5,320	
Cost per Annual MCF Saved	\$0.0000	\$0.0000	\$10.0701	\$13.5891	\$7.4397	\$10.6204	\$2.0061	\$4.8004	\$0.0000	\$5.1733	\$0.0000
<b>Benefit/Cost Ratios</b>											
Utility Ratio						1.13	4.70	10.15	0.00	11.09	
Utility NPV						\$1,321	\$25,758	\$661,789	\$0	\$277,827	
Ratepayer Ratio						0.48	0.69	0.77	0.00	0.78	
Ratepayer NPV						(\$12,487)	(\$14,631)	(\$217,146)	\$0	(\$87,761)	
Participant Ratio						3.60	13.21	4.35	0.00	4.49	
Participant NPV						\$13,246	\$40,289	\$720,932	\$0	\$300,728	
Societal Ratio						1.17	5.13	4.09	0.00	4.23	
Societal NPV						\$1,775	\$29,141	\$758,004	\$0	\$298,413	
<b>Narrative</b>											



Program Name: C/I Space Heating  
 Program Design Manager: Great Plains Natural Gas  
 Category: Non-Residential Space Heating (Non-Heat Pumps)

	2008 Actual	2009 Actual	2010 Actual	2011 Actual	2012 Actual	2013 Actual	2014 Actual	2015 Plan	2015 Actual	2016 Plan	2017 Plan
	Inactive	Inactive	Active	Active	Active	Active	Active	Active	Active	Active	Active
<b>Utility Cost Components</b>											
Delivery and Administration (2008-2010)			\$72,116.00								
Delivery (2011-present)				\$6,168.00	\$11,268.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
Administration (2011-present)				\$0.00	\$0.00	\$22,650.00	\$43,937.00	\$6,686.00	\$9,763.00	\$9,796.00	
Evaluation, Measurement & Verification			\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
Advertising & Promotion			\$0.00	\$0.00	\$16,550.00	\$18,479.00	\$0.00	\$0.00	\$0.00	\$0.00	
Incentives			\$13,850.00	\$6,050.00	\$0.00	\$0.00	\$37,365.00	\$33,335.00	\$60,277.00	\$33,335.00	
Other			\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
<b>Total Utility Costs</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$85,966.00</b>	<b>\$12,218.00</b>	<b>\$27,818.00</b>	<b>\$41,129.00</b>	<b>\$81,302.00</b>	<b>\$40,021.00</b>	<b>\$70,040.00</b>	<b>\$43,131.00</b>	<b>\$0.00</b>
<b>Program Participants</b>											
Total Participants			32	21	33	30	50	48	56	48	
<b>% of Spending by Customer Segments</b>											
Residential			0%	0%	0%	0%	0%	0%	0%	0%	
Commerical			100%	100%	100%	100%	100%	100%	100%	100%	
Industrial			0%	0%	0%	0%	0%	0%	0%	0%	
Farm			0%	0%	0%	0%	0%	0%	0%	0%	
Other			0%	0%	0%	0%	0%	0%	0%	0%	
<b>Total % of Spending</b>	<b>0%</b>	<b>0%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>0%</b>
<b>Low-Income Participation</b>											
Participant % (% of Total Participants)			0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
Budget % (% of Total Utility Costs)			0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
<b>Energy Savings</b>											
Annual MCF Saved			2,328	966	3,244	1,891	3,536	3,295	5,918	3,295	
Cost per Annual MCF Saved	\$0.0000	\$0.0000	\$36.9270	\$12.6480	\$8.5752	\$21.7499	\$22.9926	\$12.1460	\$11.8351	\$13.0898	\$0.0000
<b>Benefit/Cost Ratios</b>											
Utility Ratio						3.81	4.07	7.60	8.25	7.72	
Utility NPV						\$115,472	\$249,856	\$764,295	\$508,085	\$290,016	
Ratepayer Ratio						0.75	0.69	0.75	0.76	0.75	
Ratepayer NPV						(\$73,442)	(\$146,632)	(\$289,518)	(\$184,091)	(\$108,854)	
Participant Ratio						4.16	6.26	3.98	8.16	4.14	
Participant NPV						\$157,533	\$364,553	\$857,801	\$660,277	\$327,853	
Societal Ratio						3.96	5.17	5.06	9.84	5.19	
Societal NPV						\$214,289	\$472,423	\$1,341,635	\$900,933	\$477,736	
<b>Narrative</b>											



Program Name: C/I Water Heating  
 Program Design Manager: Great Plains Natural Gas  
 Category: Non-Residential Service Water Heating

	2008 Actual	2009 Actual	2010 Actual	2011 Actual	2012 Actual	2013 Actual	2014 Actual	2015 Plan	2015 Actual	2016 Plan	2017 Plan
	Inactive	Inactive	Active	Active	Active	Active	Active	Active	Active	Active	Active
<b>Utility Cost Components</b>											
Delivery and Administration (2008-2010)			\$1,059.00								
Delivery (2011-present)				\$1,713.00	\$1,212.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
Administration (2011-present)				\$0.00	\$0.00	\$343.00	\$940.00	\$441.00	\$233.00	\$646.00	
Evaluation, Measurement & Verification			\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
Advertising & Promotion			\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
Incentives			\$3,710.00	\$1,680.00	\$1,780.00	\$280.00	\$799.00	\$2,200.00	\$1,430.00	\$2,200.00	
Other			\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
<b>Total Utility Costs</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$4,769.00</b>	<b>\$3,393.00</b>	<b>\$2,992.00</b>	<b>\$623.00</b>	<b>\$1,739.00</b>	<b>\$2,641.00</b>	<b>\$1,663.00</b>	<b>\$2,846.00</b>	<b>\$0.00</b>
<b>Program Participants</b>											
Total Participants			9	3	4	1	3	7	4	7	
<b>% of Spending by Customer Segments</b>											
Residential			0%	0%	0%	0%	0%	0%	0%	0%	
Commerical			100%	100%	100%	100%	100%	100%	100%	100%	
Industrial			0%	0%	0%	0%	0%	0%	0%	0%	
Farm			0%	0%	0%	0%	0%	0%	0%	0%	
Other			0%	0%	0%	0%	0%	0%	0%	0%	
<b>Total % of Spending</b>	<b>0%</b>	<b>0%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>0%</b>
<b>Low-Income Participation</b>											
Participant % (% of Total Participants)			0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
Budget % (% of Total Utility Costs)			0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
<b>Energy Savings</b>											
Annual MCF Saved			2,017	94	299	303	469	151	125	151	
Cost per Annual MCF Saved	\$0.0000	\$0.0000	\$2.3644	\$36.0957	\$10.0067	\$2.0561	\$3.7079	\$17.4901	\$13.3040	\$18.8477	\$0.0000
<b>Benefit/Cost Ratios</b>											
Utility Ratio						38.58	22.32	4.51	6.48	4.58	
Utility NPV						\$23,414	\$37,076	\$26,814	\$9,120	\$10,197	
Ratepayer Ratio						0.82	0.81	0.70	0.74	0.71	
Ratepayer NPV						(\$5,365)	(\$9,396)	(\$14,445)	(\$3,790)	(\$5,419)	
Participant Ratio						166.05	90.04	14.00	20.49	14.54	
Participant NPV						\$28,884	\$46,746	\$43,950	\$13,641	\$16,592	
Societal Ratio						72.20	41.18	10.85	17.95	10.83	
Societal NPV						\$36,880	\$58,865	\$51,574	\$15,811	\$18,383	
<b>Narrative</b>											



Program Name: CIP Assessment Charges  
 Program Design Manager: Great Plains Natural Gas  
 Category: Regulatory Charges

	2008 Actual	2009 Actual	2010 Actual	2011 Actual	2012 Actual	2013 Actual	2014 Actual	2015 Plan	2015 Actual	2016 Plan	2017 Plan
	Inactive	Active	Active	Active	Active	Active	Active	Active	Active	Active	Active
<b>Utility Cost Components</b>											
Delivery and Administration (2008-2010)	\$0.00	\$0.00	\$0.00								
Delivery (2011-present)				\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
Administration (2011-present)				\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
Evaluation, Measurement & Verification	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
Advertising & Promotion	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
Incentives	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
Other	\$0.00	\$17,323.00	\$31,641.00	\$26,178.00	\$15,000.00	\$22,575.00	\$3,878.00	\$26,000.00	\$19,101.00	\$26,000.00	
<b>Total Utility Costs</b>	<b>\$0.00</b>	<b>\$17,323.00</b>	<b>\$31,641.00</b>	<b>\$26,178.00</b>	<b>\$15,000.00</b>	<b>\$22,575.00</b>	<b>\$3,878.00</b>	<b>\$26,000.00</b>	<b>\$19,101.00</b>	<b>\$26,000.00</b>	<b>\$0.00</b>
<b>Program Participants</b>											
Total Participants	0	0	0	0	0	0	0	0	0	0	
<b>% of Spending by Customer Segments</b>											
Residential	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Commerical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Industrial	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Farm	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Other	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
<b>Total % of Spending</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>0%</b>
<b>Low-Income Participation</b>											
Participant % (% of Total Participants)	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
Budget % (% of Total Utility Costs)	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
<b>Energy Savings</b>											
Annual MCF Saved	0	0	0	0	0	0	0	0	0	0	
Cost per Annual MCF Saved	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000
<b>Benefit/Cost Ratios</b>											
Utility Ratio						0.00	0.00	0.00	0.00	0.00	
Utility NPV						\$0	\$0	\$0	\$0	\$0	
Ratepayer Ratio						0.00	0.00	0.00	0.00	0.00	
Ratepayer NPV						\$0	\$0	\$0	\$0	\$0	
Participant Ratio						0.00	0.00	0.00	0.00	0.00	
Participant NPV						\$0	\$0	\$0	\$0	\$0	
Societal Ratio						0.00	0.00	0.00	0.00	0.00	
Societal NPV						\$0	\$0	\$0	\$0	\$0	
<b>Narrative</b>											



Program Name: CIP Direct Charges  
 Program Design Manager: Great Plains Natural Gas  
 Category: Regulatory Charges

	2008 Actual	2009 Actual	2010 Actual	2011 Actual	2012 Actual	2013 Actual	2014 Actual	2015 Plan	2015 Actual	2016 Plan	2017 Plan
	Active	Active	Inactive	Inactive	Inactive	Inactive	Active	Active	Active	Active	Active
<b>Utility Cost Components</b>											
Delivery and Administration (2008-2010)	\$0.00	\$0.00									
Delivery (2011-present)						\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
Administration (2011-present)						\$0.00	\$0.01	\$0.01	\$0.01	\$0.01	
Evaluation, Measurement & Verification	\$0.00	\$0.00				\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
Advertising & Promotion	\$0.00	\$0.00				\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
Incentives	\$0.00	\$0.00				\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
Other	\$30,551.00	\$6,535.00				\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
<b>Total Utility Costs</b>	<b>\$30,551.00</b>	<b>\$6,535.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.01</b>	<b>\$0.01</b>	<b>\$0.01</b>	<b>\$0.01</b>	<b>\$0.00</b>
<b>Program Participants</b>											
Total Participants	0	0				0	0	0	0	0	
<b>% of Spending by Customer Segments</b>											
Residential	0%	0%				0%	0%	0%	0%	0%	
Commerical	0%	0%				0%	0%	0%	0%	0%	
Industrial	0%	0%				0%	0%	0%	0%	0%	
Farm	0%	0%				0%	0%	0%	0%	0%	
Other	100%	100%				100%	100%	100%	100%	100%	
<b>Total % of Spending</b>	<b>100%</b>	<b>100%</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>0%</b>
<b>Low-Income Participation</b>											
Participant % (% of Total Participants)	0.0%	0.0%				0.0%	0.0%	0.0%	0.0%	0.0%	
Budget % (% of Total Utility Costs)	0.0%	0.0%				0.0%	0.0%	0.0%	0.0%	0.0%	
<b>Energy Savings</b>											
Annual MCF Saved	0	0				0	0	0	0	0	
Cost per Annual MCF Saved	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000
<b>Benefit/Cost Ratios</b>											
Utility Ratio						0.00	0.00	0.00	0.00	0.00	
Utility NPV						\$0	\$0	\$0	\$0	\$0	
Ratepayer Ratio						0.00	0.00	0.00	0.00	0.00	
Ratepayer NPV						\$0	\$0	\$0	\$0	\$0	
Participant Ratio						0.00	0.00	0.00	0.00	0.00	
Participant NPV						\$0	\$0	\$0	\$0	\$0	
Societal Ratio						0.00	0.00	0.00	0.00	0.00	
Societal NPV						\$0	\$0	\$0	\$0	\$0	
<b>Narrative</b>											



Program Name: Commercial Energy Assessment  
 Program Design Manager: Great Plains Natural Gas  
 Category: Non-Residential Building Energy Audits / Analysis

	2008 Actual	2009 Actual	2010 Actual	2011 Actual	2012 Actual	2013 Actual	2014 Actual	2015 Plan	2015 Actual	2016 Plan	2017 Plan
	Inactive	Inactive	Inactive	Inactive	Inactive	Active	Active	Active	Active	Active	Active
<b>Utility Cost Components</b>											
Delivery and Administration (2008-2010)											
Delivery (2011-present)						\$4,284.00	\$1,814.00	\$0.00	\$0.00	\$0.00	
Administration (2011-present)						\$5,251.00	\$2,133.00	\$11,406.00	\$0.01	\$12,291.00	
Evaluation, Measurement & Verification						\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
Advertising & Promotion						\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
Incentives						\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
Other						\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
<b>Total Utility Costs</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$9,535.00</b>	<b>\$3,947.00</b>	<b>\$11,406.00</b>	<b>\$0.01</b>	<b>\$12,291.00</b>	<b>\$0.00</b>
<b>Program Participants</b>											
Total Participants						5	2	10	0	10	
<b>% of Spending by Customer Segments</b>											
Residential						0%	0%	0%	0%	0%	
Commerical						100%	100%	100%	100%	100%	
Industrial						0%	0%	0%	0%	0%	
Farm						0%	0%	0%	0%	0%	
Other						0%	0%	0%	0%	0%	
<b>Total % of Spending</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>0%</b>
<b>Low-Income Participation</b>											
Participant % (% of Total Participants)						0.0%	0.0%	0.0%	0.0%	0.0%	
Budget % (% of Total Utility Costs)						0.0%	0.0%	0.0%	0.0%	0.0%	
<b>Energy Savings</b>											
Annual MCF Saved						0	0	0	0	0	
Cost per Annual MCF Saved	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000
<b>Benefit/Cost Ratios</b>											
Utility Ratio						0.00	0.00	0.00	0.00	0.00	
Utility NPV						\$0	\$0	\$0	\$0	\$0	
Ratepayer Ratio						0.00	0.00	0.00	0.00	0.00	
Ratepayer NPV						\$0	\$0	\$0	\$0	\$0	
Participant Ratio						0.00	0.00	0.00	0.00	0.00	
Participant NPV						\$0	\$0	\$0	\$0	\$0	
Societal Ratio						0.00	0.00	0.00	0.00	0.00	
Societal NPV						\$0	\$0	\$0	\$0	\$0	
<b>Narrative</b>											



Program Name: Custom Program  
 Program Design Manager: Great Plains Natural Gas  
 Category: Non-Residential Custom Efficiency

	2008 Actual	2009 Actual	2010 Actual	2011 Actual	2012 Actual	2013 Actual	2014 Actual	2015 Plan	2015 Actual	2016 Plan	2017 Plan
	Inactive	Inactive	Inactive	Active	Active	Active	Active	Active	Active	Active	Active
<b>Utility Cost Components</b>											
Delivery and Administration (2008-2010)											
Delivery (2011-present)				\$64,095.00	\$45,403.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
Administration (2011-present)				\$0.00	\$0.00	\$2,126.00	\$0.01	\$84,254.00	\$66,528.00	\$70,531.00	
Evaluation, Measurement & Verification				\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
Advertising & Promotion				\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
Incentives				\$62,868.00	\$66,680.00	\$1,735.00	\$0.00	\$420,000.00	\$336,706.00	\$240,000.00	
Other				\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
<b>Total Utility Costs</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$126,963.00</b>	<b>\$112,083.00</b>	<b>\$3,861.00</b>	<b>\$0.01</b>	<b>\$504,254.00</b>	<b>\$403,234.00</b>	<b>\$310,531.00</b>	<b>\$0.00</b>
<b>Program Participants</b>											
Total Participants				4	6	1	0	8	5	8	
<b>% of Spending by Customer Segments</b>											
Residential				0%	0%	0%	0%	0%	0%	0%	
Commerical				100%	100%	100%	100%	100%	100%	100%	
Industrial				0%	0%	0%	0%	0%	0%	0%	
Farm				0%	0%	0%	0%	0%	0%	0%	
Other				0%	0%	0%	0%	0%	0%	0%	
<b>Total % of Spending</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>0%</b>
<b>Low-Income Participation</b>											
Participant % (% of Total Participants)				0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
Budget % (% of Total Utility Costs)				0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
<b>Energy Savings</b>											
Annual MCF Saved				15,272	28,749	181	0	32,000	51,068	32,000	
Cost per Annual MCF Saved	\$0.0000	\$0.0000	\$0.0000	\$8.3134	\$3.8987	\$21.3315	\$0.0000	\$15.7579	\$7.8960	\$9.7041	\$0.0000
<b>Benefit/Cost Ratios</b>											
Utility Ratio						2.41	0.00	4.64	7.07	5.75	
Utility NPV						\$5,429	\$0	\$3,702,254	\$2,446,975	\$1,475,454	
Ratepayer Ratio						0.61	0.00	0.69	0.73	0.71	
Ratepayer NPV						(\$6,046)	\$0	(\$2,126,290)	(\$1,073,707)	(\$730,660)	
Participant Ratio						3.81	0.00	2.79	7.14	2.83	
Participant NPV						\$9,739	\$0	\$4,257,876	\$3,317,388	\$1,582,114	
Societal Ratio						2.64	0.00	2.90	7.45	3.03	
Societal NPV						\$9,177	\$0	\$5,206,956	\$3,912,744	\$1,897,315	
<b>Narrative</b>											



Program Name: Foodservice Equipment  
 Program Design Manager: Great Plains Natural Gas  
 Category: Food Service

	2008 Actual	2009 Actual	2010 Actual	2011 Actual	2012 Actual	2013 Actual	2014 Actual	2015 Plan	2015 Actual	2016 Plan	2017 Plan
	Inactive	Inactive	Inactive	Active	Active	Active	Active	Active	Active	Active	Active
<b>Utility Cost Components</b>											
Delivery and Administration (2008-2010)											
Delivery (2011-present)				\$1,223.00	\$1,021.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
Administration (2011-present)				\$0.00	\$0.00	\$4,902.00	\$0.01	\$702.00	\$81.00	\$1,029.00	
Evaluation, Measurement & Verification				\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
Advertising & Promotion				\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
Incentives				\$1,200.00	\$1,500.00	\$4,000.00	\$0.00	\$3,500.00	\$500.00	\$3,500.00	
Other				\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
<b>Total Utility Costs</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$2,423.00</b>	<b>\$2,521.00</b>	<b>\$8,902.00</b>	<b>\$0.01</b>	<b>\$4,202.00</b>	<b>\$581.00</b>	<b>\$4,529.00</b>	<b>\$0.00</b>
<b>Program Participants</b>											
Total Participants				4	2	3	0	5	1	5	
<b>% of Spending by Customer Segments</b>											
Residential				0%	0%	0%	0%	0%	0%	0%	
Commerical				100%	100%	100%	100%	100%	100%	100%	
Industrial				0%	0%	0%	0%	0%	0%	0%	
Farm				0%	0%	0%	0%	0%	0%	0%	
Other				0%	0%	0%	0%	0%	0%	0%	
<b>Total % of Spending</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>0%</b>
<b>Low-Income Participation</b>											
Participant % (% of Total Participants)				0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
Budget % (% of Total Utility Costs)				0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
<b>Energy Savings</b>											
Annual MCF Saved				553	185	560	0	465	23	465	
Cost per Annual MCF Saved	\$0.0000	\$0.0000	\$0.0000	\$4.3816	\$13.6270	\$15.8964	\$0.0000	\$9.0366	\$25.2609	\$9.7398	\$0.0000
<b>Benefit/Cost Ratios</b>											
Utility Ratio						3.96	0.00	6.92	2.71	7.03	
Utility NPV						\$26,378	\$0	\$71,984	\$994	\$27,322	
Ratepayer Ratio						0.69	0.00	0.75	0.64	0.75	
Ratepayer NPV						(\$15,862)	\$0	(\$28,767)	(\$892)	(\$10,812)	
Participant Ratio						4.87	0.00	2.36	1.19	2.45	
Participant NPV						\$36,748	\$0	\$63,559	\$373	\$24,659	
Societal Ratio						3.89	0.00	2.99	2.42	3.10	
Societal NPV						\$41,529	\$0	\$104,111	\$2,975	\$37,719	
<b>Narrative</b>											



Program Name: Industrial Energy Assessment  
 Program Design Manager: Great Plains Natural Gas  
 Category: Non-Residential Building Energy Audits / Analysis

	2008 Actual	2009 Actual	2010 Actual	2011 Actual	2012 Actual	2013 Actual	2014 Actual	2015 Plan	2015 Actual	2016 Plan	2017 Plan
	Inactive	Inactive	Inactive	Inactive	Inactive	Active	Active	Active	Active	Active	Active
<b>Utility Cost Components</b>											
Delivery and Administration (2008-2010)											
Delivery (2011-present)						\$5,413.00	\$0.00	\$0.00	\$0.00	\$0.00	
Administration (2011-present)						\$6,635.00	\$0.01	\$18,009.00	\$0.01	\$19,408.00	
Evaluation, Measurement & Verification						\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
Advertising & Promotion						\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
Incentives						\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
Other						\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
<b>Total Utility Costs</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$12,048.00</b>	<b>\$0.01</b>	<b>\$18,009.00</b>	<b>\$0.01</b>	<b>\$19,408.00</b>	<b>\$0.00</b>
<b>Program Participants</b>											
Total Participants						3	0	5	0	5	
<b>% of Spending by Customer Segments</b>											
Residential						0%	0%	0%	0%	0%	
Commerical						0%	0%	0%	0%	0%	
Industrial						100%	100%	100%	100%	100%	
Farm						0%	0%	0%	0%	0%	
Other						0%	0%	0%	0%	0%	
<b>Total % of Spending</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>0%</b>
<b>Low-Income Participation</b>											
Participant % (% of Total Participants)						0.0%	0.0%	0.0%	0.0%	0.0%	
Budget % (% of Total Utility Costs)						0.0%	0.0%	0.0%	0.0%	0.0%	
<b>Energy Savings</b>											
Annual MCF Saved						0	0	0	0	0	
Cost per Annual MCF Saved	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000
<b>Benefit/Cost Ratios</b>											
Utility Ratio						0.00	0.00	0.00	0.00	0.00	
Utility NPV						\$0	\$0	\$0	\$0	\$0	
Ratepayer Ratio						0.00	0.00	0.00	0.00	0.00	
Ratepayer NPV						\$0	\$0	\$0	\$0	\$0	
Participant Ratio						0.00	0.00	0.00	0.00	0.00	
Participant NPV						\$0	\$0	\$0	\$0	\$0	
Societal Ratio						0.00	0.00	0.00	0.00	0.00	
Societal NPV						\$0	\$0	\$0	\$0	\$0	
<b>Narrative</b>											



Program Name: Low-Income Weatherization  
 Program Design Manager: Great Plains Natural Gas  
 Category: Low Income Weatherization

	2008 Actual	2009 Actual	2010 Actual	2011 Actual	2012 Actual	2013 Actual	2014 Actual	2015 Plan	2015 Actual	2016 Plan	2017 Plan
	Active	Active	Active	Active	Active	Active	Active	Active	Active	Active	Active
<b>Utility Cost Components</b>											
Delivery and Administration (2008-2010)	\$95,584.00	\$90,736.00	\$105,292.00								
Delivery (2011-present)				\$53,308.00	\$18,240.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
Administration (2011-present)				\$0.00	\$0.00	\$25,518.00	\$19,803.00	\$26,068.00	\$17,609.00	\$28,691.00	
Evaluation, Measurement & Verification	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
Advertising & Promotion	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
Incentives	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$73,925.00	\$50,102.00	\$141,474.00	\$52,780.00	\$141,474.00	
Other	\$0.00	\$0.00	\$0.00	\$0.00	\$72,226.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
<b>Total Utility Costs</b>	<b>\$95,584.00</b>	<b>\$90,736.00</b>	<b>\$105,292.00</b>	<b>\$53,308.00</b>	<b>\$90,466.00</b>	<b>\$99,443.00</b>	<b>\$69,905.00</b>	<b>\$167,542.00</b>	<b>\$70,389.00</b>	<b>\$170,165.00</b>	<b>\$0.00</b>
<b>Program Participants</b>											
Total Participants	55	49	55	33	38	44	28	97	29	97	
<b>% of Spending by Customer Segments</b>											
Residential	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
Commerical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Industrial	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Farm	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Other	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
<b>Total % of Spending</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>0%</b>
<b>Low-Income Participation</b>											
Participant % (% of Total Participants)	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	
Budget % (% of Total Utility Costs)	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	
<b>Energy Savings</b>											
Annual MCF Saved	1,096	931	1,045	827	1,090	1,073	561	1,649	649	1,649	
Cost per Annual MCF Saved	\$87.2117	\$97.4608	\$100.7579	\$64.4595	\$82.9963	\$92.6775	\$124.6078	\$101.6022	\$108.4576	\$103.1928	\$0.0000
<b>Benefit/Cost Ratios</b>											
Utility Ratio						0.97	0.78	0.84	0.87	0.87	
Utility NPV						(\$2,996)	(\$15,572)	(\$72,951)	(\$9,352)	(\$21,355)	
Ratepayer Ratio						0.44	0.39	0.41	0.41	0.42	
Ratepayer NPV						(\$124,675)	(\$84,119)	(\$568,960)	(\$86,357)	(\$209,096)	
Participant Ratio						3.63	3.12	2.95	3.45	3.04	
Participant NPV						\$196,508	\$111,671	\$807,386	\$123,704	\$288,115	
Societal Ratio						1.69	1.37	1.41	1.54	1.45	
Societal NPV						\$68,667	\$26,931	\$200,327	\$36,782	\$76,561	
<b>Narrative</b>											



Program Name: Residential Attic Insulation and Bypass Program  
 Program Design Manager: Great Plains Natural Gas  
 Category: Residential Building Envelope

	2008 Actual	2009 Actual	2010 Actual	2011 Actual	2012 Actual	2013 Actual	2014 Actual	2015 Plan	2015 Actual	2016 Plan	2017 Plan
	Inactive	Inactive	Active	Active	Active	Active	Active	Active	Active	Active	Active
<b>Utility Cost Components</b>											
Delivery and Administration (2008-2010)			\$1,726.00								
Delivery (2011-present)				\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
Administration (2011-present)				\$3,966.00	\$1,192.00	\$523.00	\$359.00	\$2,336.00	\$138.00	\$2,446.00	
Evaluation, Measurement & Verification			\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
Advertising & Promotion			\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
Incentives			\$6,047.00	\$4,746.00	\$1,009.00	\$700.00	\$150.00	\$6,000.00	\$0.00	\$6,000.00	
Other			\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
<b>Total Utility Costs</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$7,773.00</b>	<b>\$8,712.00</b>	<b>\$2,201.00</b>	<b>\$1,223.00</b>	<b>\$509.00</b>	<b>\$8,336.00</b>	<b>\$138.00</b>	<b>\$8,446.00</b>	<b>\$0.00</b>
<b>Program Participants</b>											
Total Participants			14	11	2	4	1	30	0	30	
<b>% of Spending by Customer Segments</b>											
Residential			100%	100%	100%	100%	100%	100%	100%	100%	
Commerical			0%	0%	0%	0%	0%	0%	0%	0%	
Industrial			0%	0%	0%	0%	0%	0%	0%	0%	
Farm			0%	0%	0%	0%	0%	0%	0%	0%	
Other			0%	0%	0%	0%	0%	0%	0%	0%	
<b>Total % of Spending</b>	<b>0%</b>	<b>0%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>0%</b>
<b>Low-Income Participation</b>											
Participant % (% of Total Participants)			14.3%	0.0%	0.0%	0.0%	100.0%	3.3%	0.0%	3.3%	
Budget % (% of Total Utility Costs)			0.3%	0.0%	0.0%	0.0%	100.0%	3.3%	0.0%	3.3%	
<b>Energy Savings</b>											
Annual MCF Saved			232	175	35	41	6	372	0	372	
Cost per Annual MCF Saved	\$0.0000	\$0.0000	\$33.5043	\$49.7829	\$62.8857	\$29.8293	\$84.8333	\$22.4086	\$0.0000	\$22.7043	\$0.0000
<b>Benefit/Cost Ratios</b>											
Utility Ratio						3.24	1.18	4.45	0.00	4.60	
Utility NPV						\$2,737	\$92	\$79,618	(\$138)	\$30,432	
Ratepayer Ratio						0.64	0.47	0.67	0.00	0.68	
Ratepayer NPV						(\$2,259)	(\$666)	(\$49,969)	(\$138)	(\$18,617)	
Participant Ratio						2.05	1.05	3.31	#NULL!	3.44	
Participant NPV						\$4,743	\$68	\$176,250	\$0	\$63,761	
Societal Ratio						1.48	0.69	2.39	0.00	2.47	
Societal NPV						\$2,403	(\$539)	\$115,988	(\$138)	\$41,971	
<b>Narrative</b>											



Program Name: Residential Energy Assessment  
 Program Design Manager: Great Plains Natural Gas  
 Category: Residential Energy Audits / Analysis

	2008 Actual	2009 Actual	2010 Actual	2011 Actual	2012 Actual	2013 Actual	2014 Actual	2015 Plan	2015 Actual	2016 Plan	2017 Plan
	Active	Active	Inactive	Active	Active	Active	Active	Active	Active	Active	Active
<b>Utility Cost Components</b>											
Delivery and Administration (2008-2010)	\$10,021.00	\$9,058.00	\$0.00								
Delivery (2011-present)				\$0.00	\$0.00	\$7,430.00	\$3,141.00	\$0.00	\$0.00	\$0.00	
Administration (2011-present)				\$6,154.00	\$924.00	\$2,920.00	\$1,102.00	\$22,575.00	\$312.00	\$22,877.00	
Evaluation, Measurement & Verification	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
Advertising & Promotion	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
Incentives	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$1,000.00	\$0.00	
Other	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
<b>Total Utility Costs</b>	<b>\$10,021.00</b>	<b>\$9,058.00</b>	<b>\$0.00</b>	<b>\$6,154.00</b>	<b>\$924.00</b>	<b>\$10,350.00</b>	<b>\$4,243.00</b>	<b>\$22,575.00</b>	<b>\$1,312.00</b>	<b>\$22,877.00</b>	<b>\$0.00</b>
<b>Program Participants</b>											
Total Participants	52	49	0	11	2	40	11	65	4	65	
<b>% of Spending by Customer Segments</b>											
Residential	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
Commerical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Industrial	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Farm	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Other	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
<b>Total % of Spending</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>0%</b>
<b>Low-Income Participation</b>											
Participant % (% of Total Participants)	3.8%	6.1%	0.0%	0.0%	0.0%	0.0%	0.0%	1.5%	0.0%	1.5%	
Budget % (% of Total Utility Costs)	3.8%	6.1%	0.0%	0.0%	0.0%	0.0%	0.0%	1.5%	0.0%	1.5%	
<b>Energy Savings</b>											
Annual MCF Saved	0	0	0	0	0	0	0	0	0	0	
Cost per Annual MCF Saved	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000
<b>Benefit/Cost Ratios</b>											
Utility Ratio						0.00	0.00	0.00	0.00	0.00	
Utility NPV						\$0	\$0	\$0	(\$1,312)	\$0	
Ratepayer Ratio						0.00	0.00	0.00	0.00	0.00	
Ratepayer NPV						\$0	\$0	\$0	(\$1,312)	\$0	
Participant Ratio						0.00	0.00	0.00	0.83	0.00	
Participant NPV						\$0	\$0	\$0	(\$200)	\$0	
Societal Ratio						0.00	0.00	0.00	0.00	0.00	
Societal NPV						\$0	\$0	\$0	(\$1,512)	\$0	
<b>Narrative</b>											



Program Name: Residential Pilotless Fireplace  
 Program Design Manager: Great Plains Natural Gas  
 Category: Specialty Residential

	2008 Actual	2009 Actual	2010 Actual	2011 Actual	2012 Actual	2013 Actual	2014 Actual	2015 Plan	2015 Actual	2016 Plan	2017 Plan
	Inactive	Inactive	Inactive	Inactive	Inactive	Active	Active	Active	Active	Active	Active
<b>Utility Cost Components</b>											
Delivery and Administration (2008-2010)											
Delivery (2011-present)						\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
Administration (2011-present)						\$88.00	\$59.00	\$584.00	\$23.00	\$612.00	
Evaluation, Measurement & Verification						\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
Advertising & Promotion						\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
Incentives						\$225.00	\$150.00	\$1,500.00	\$75.00	\$1,500.00	
Other						\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
<b>Total Utility Costs</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$313.00</b>	<b>\$209.00</b>	<b>\$2,084.00</b>	<b>\$98.00</b>	<b>\$2,112.00</b>	<b>\$0.00</b>
<b>Program Participants</b>											
Total Participants						3	2	20	1	20	
<b>% of Spending by Customer Segments</b>											
Residential						100%	100%	100%	100%	100%	
Commerical						0%	0%	0%	0%	0%	
Industrial						0%	0%	0%	0%	0%	
Farm						0%	0%	0%	0%	0%	
Other						0%	0%	0%	0%	0%	
<b>Total % of Spending</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>0%</b>
<b>Low-Income Participation</b>											
Participant % (% of Total Participants)						0.0%	0.0%	0.0%	0.0%	0.0%	
Budget % (% of Total Utility Costs)						0.0%	0.0%	0.0%	0.0%	0.0%	
<b>Energy Savings</b>											
Annual MCF Saved						13	9	88	4	88	
Cost per Annual MCF Saved	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$24.0769	\$23.2222	\$23.6818	\$24.5000	\$24.0000	\$0.0000
<b>Benefit/Cost Ratios</b>											
Utility Ratio						3.27	3.56	3.49	3.52	3.58	
Utility NPV						\$710	\$536	\$10,582	\$247	\$5,445	
Ratepayer Ratio						0.64	0.65	0.65	0.65	0.65	
Ratepayer NPV						(\$581)	(\$404)	(\$8,125)	(\$188)	(\$4,089)	
Participant Ratio						3.72	4.02	3.96	3.76	4.08	
Participant NPV						\$1,573	\$1,166	\$24,870	\$532	\$11,871	
Societal Ratio						2.39	2.60	2.55	2.48	2.62	
Societal NPV						\$925	\$712	\$15,067	\$320	\$7,262	
<b>Narrative</b>											



Program Name: Residential Space Heating  
 Program Design Manager: Great Plains Natural Gas  
 Category: Residential Space Heating (non-Heat Pumps)

	2008 Actual	2009 Actual	2010 Actual	2011 Actual	2012 Actual	2013 Actual	2014 Actual	2015 Plan	2015 Actual	2016 Plan	2017 Plan
	Active	Active	Active	Active	Active	Active	Active	Active	Active	Active	Active
<b>Utility Cost Components</b>											
Delivery and Administration (2008-2010)	\$17,138.00	\$6,248.00	\$63,810.00								
Delivery (2011-present)				\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
Administration (2011-present)				\$42,800.00	\$52,526.00	\$45,911.00	\$40,531.00	\$45,004.00	\$34,804.00	\$47,152.00	
Evaluation, Measurement & Verification	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
Advertising & Promotion	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
Incentives	\$78,700.00	\$39,400.00	\$86,770.00	\$78,880.00	\$77,140.00	\$99,935.00	\$101,650.00	\$115,625.00	\$111,488.00	\$115,625.00	
Other	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
<b>Total Utility Costs</b>	<b>\$95,838.00</b>	<b>\$45,648.00</b>	<b>\$150,580.00</b>	<b>\$121,680.00</b>	<b>\$129,666.00</b>	<b>\$145,846.00</b>	<b>\$142,181.00</b>	<b>\$160,629.00</b>	<b>\$146,292.00</b>	<b>\$162,777.00</b>	<b>\$0.00</b>
<b>Program Participants</b>											
Total Participants	357	208	677	579	558	533	491	651	503	651	
<b>% of Spending by Customer Segments</b>											
Residential	96%	97%	100%	100%	100%	100%	100%	100%	100%	100%	
Commerical	4%	3%	0%	0%	0%	0%	0%	0%	0%	0%	
Industrial	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Farm	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Other	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
<b>Total % of Spending</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>0%</b>
<b>Low-Income Participation</b>											
Participant % (% of Total Participants)	6.7%	5.6%	6.2%	5.5%	6.1%	11.4%	13.0%	4.3%	10.9%	4.3%	
Budget % (% of Total Utility Costs)	6.7%	5.6%	2.2%	1.9%	2.0%	10.2%	14.6%	4.3%	12.1%	4.3%	
<b>Energy Savings</b>											
Annual MCF Saved	4,155	2,503	5,642	4,946	4,856	8,675	9,033	10,019	9,547	10,019	
Cost per Annual MCF Saved	\$23.0657	\$18.2373	\$26.6891	\$24.6017	\$26.7022	\$16.8122	\$15.7402	\$16.0324	\$15.3233	\$16.2468	\$0.0000
<b>Benefit/Cost Ratios</b>											
Utility Ratio						4.06	4.74	4.08	5.36	4.22	
Utility NPV						\$1,367,354	\$531,598	\$1,369,163	\$637,632	\$523,928	
Ratepayer Ratio						0.66	0.68	0.66	0.69	0.67	
Ratepayer NPV						(\$298,919)	(\$318,452)	(\$919,748)	(\$351,378)	(\$342,429)	
Participant Ratio						3.08	3.32	2.85	3.94	2.96	
Participant NPV						\$752,104	\$909,608	\$2,323,151	\$1,155,061	\$842,511	
Societal Ratio						2.35	2.60	2.19	3.15	2.00	
Societal NPV						\$549,633	\$693,129	\$1,659,184	\$919,062	\$478,733	
<b>Narrative</b>											



Program Name: Residential Water Heating  
 Program Design Manager: Great Plains Natural Gas  
 Category: Residential Domestic Hot Water

	2008 Actual	2009 Actual	2010 Actual	2011 Actual	2012 Actual	2013 Actual	2014 Actual	2015 Plan	2015 Actual	2016 Plan	2017 Plan
	Active	Active	Active	Active	Active	Active	Active	Active	Active	Active	Active
<b>Utility Cost Components</b>											
Delivery and Administration (2008-2010)	\$784.00	\$345.00	\$2,394.00								
Delivery (2011-present)				\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
Administration (2011-present)				\$1,750.00	\$4,154.00	\$1,360.00	\$1,967.00	\$2,207.00	\$1,322.00	\$2,436.00	
Evaluation, Measurement & Verification	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
Advertising & Promotion	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
Incentives	\$3,600.00	\$2,175.00	\$3,075.00	\$6,038.00	\$2,425.00	\$4,808.00	\$10,537.00	\$12,350.00	\$10,474.00	\$12,350.00	
Other	\$0.00	\$0.00	\$5,311.00	\$0.00	\$3,677.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
<b>Total Utility Costs</b>	<b>\$4,384.00</b>	<b>\$2,520.00</b>	<b>\$10,780.00</b>	<b>\$7,788.00</b>	<b>\$10,256.00</b>	<b>\$6,168.00</b>	<b>\$12,504.00</b>	<b>\$14,557.00</b>	<b>\$11,796.00</b>	<b>\$14,786.00</b>	<b>\$0.00</b>
<b>Program Participants</b>											
Total Participants	41	19	797	424	523	338	712	836	518	836	
<b>% of Spending by Customer Segments</b>											
Residential	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
Commerical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Industrial	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Farm	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Other	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
<b>Total % of Spending</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>0%</b>
<b>Low-Income Participation</b>											
Participant % (% of Total Participants)	14.6%	0.0%	0.5%	0.0%	7.5%	4.4%	7.6%	0.4%	11.4%	0.4%	
Budget % (% of Total Utility Costs)	14.6%	0.0%	0.0%	0.0%	0.2%	1.6%	8.2%	0.4%	8.7%	0.4%	
<b>Energy Savings</b>											
Annual MCF Saved	58	44	3,079	1,642	2,007	1,281	2,703	3,120	2,059	3,120	
Cost per Annual MCF Saved	\$75.5862	\$57.2727	\$3.5011	\$4.7430	\$5.1101	\$4.8150	\$4.6260	\$4.6657	\$5.7290	\$4.7391	\$0.0000
<b>Benefit/Cost Ratios</b>											
Utility Ratio						12.17	13.19	13.92	11.09	13.65	
Utility NPV						\$68,887	\$152,366	\$490,755	\$119,042	\$187,083	
Ratepayer Ratio						0.74	0.75	0.75	0.74	0.75	
Ratepayer NPV						(\$25,803)	(\$55,636)	(\$176,310)	(\$46,025)	(\$67,598)	
Participant Ratio						13.99	21.88	23.13	20.66	24.12	
Participant NPV						\$118,566	\$267,657	\$911,567	\$213,813	\$328,650	
Societal Ratio						9.71	15.11	16.08	14.51	16.41	
Societal NPV						\$91,306	\$208,584	\$712,787	\$164,878	\$256,563	
<b>Narrative</b>											

**GREAT PLAINS NATURAL GAS CO.  
CIP RATE TRUE-UP FILING  
DOCKET NO. G004/M-16-\_\_\_\_\_**

	Projected Dk 1/	Volumetric Allocation	CCRA Recovery	Proposed CCRA	Current CCRA 2/	Change
Residential	2,852,600	25.0070%	\$272,107	\$0.0954	(\$0.0079)	\$0.1033
Firm General	2,467,500	21.6311%	235,373	0.0954	(0.0079)	0.1033
Interruptible	1,904,800	16.6982%	181,697	0.0954	(0.0079)	0.1033
Transportation	4,182,300	36.6637%	398,946	0.0954	(0.0079)	0.1033
Total	<u>11,407,200</u>	<u>100.0000%</u>	<u>\$1,088,122</u>			

Rate change for the average customer using 74 Dk per year.

	Dk 3/	CCRC	CCRA	Total	Total CIP Cost
Current Rate	74	\$0.0563	(\$0.0079)	\$0.0484	\$3.58
Proposed Rate	74	0.0563	0.0954	0.1517	11.23
Change		\$0.0000	\$0.1033	\$0.1033	

The average residential customer will pay an annual CIP cost of \$11.23 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 24 months running from September 2016 - August 2018.

2/ Authorized in Docket No. G004/GR-15-879, effective January 1, 2016.

3/ Reflects average normalized 2015 residential dk per customer.



**GREAT PLAINS NATURAL GAS CO.  
CCRA FILING AND DEMAND INCENTIVE  
DOCKET NO. G004/M-16-\_\_\_\_**

<u>CIP True-Up</u>	<u>Beginning Balance</u>	<u>Expenses</u>	<u>Carrying Charges</u>	<u>Billed Recovery</u>	<u>Net Activity</u>	<u>Ending Balance</u>
2015 Activity	(\$49,755)	\$790,961	(\$717)	\$499,061	\$291,183	\$241,428
2016 Activity						
January - March Actual	241,428	\$104,517	\$285	\$119,159	(14,357)	
April - August 2016 Projected		442,822	513	59,361	383,974	
	<u>241,428</u>	<u>547,339</u>	<u>798</u>	<u>178,520</u>	<u>369,617</u>	
Projected Balance September 1, 2016	<u>\$241,428</u>	<u>\$547,339</u>	<u>\$798</u>	<u>\$178,520</u>	<u>\$369,617</u>	<u>\$611,045</u>
DSM Incentive						<u>477,077</u> 1/
Total Under/(Over) Recovered Balance						<u>\$1,088,122</u>

1/ Reflects 2015 savings achieved of 69,393 dk multiplied by the Incentive Cap of \$6.875 per dk.

**GREAT PLAINS NATURAL GAS CO.  
CIP PROGRAM  
2015**

Month	Beginning Balance	Carrying Charge 1/	Current Month Charges	Billed Recovery			Ending Balance
				CCRC	CCRA	Total	
December 2014							(\$49,755)
January 2015	(\$49,755)	(\$21)	\$58,481 2/	\$20,214	\$73,864	\$94,078	(85,373)
February	(85,373)	(35)	17,861	18,377	53,059	71,436	(138,983)
March	(138,983)	(59)	33,108	21,234	61,239	82,473	(188,407)
April	(188,407)	(76)	31,401	13,701	39,517	53,218	(210,300)
May	(210,300)	(85)	18,336	8,593	24,775	33,368	(225,417)
June	(225,417)	(91)	24,140	6,429	18,523	24,952	(226,320)
July	(226,320)	(91)	26,250	3,571	10,283	13,854	(214,015)
August	(214,015)	(88)	89,360 3/	4,163	11,995	16,158	(140,901)
September	(140,901)	(57)	23,676	5,605	16,149	21,754	(139,036)
October	(139,036)	(57)	16,674	7,960	20,614	28,574	(150,993)
November	(150,993)	(62)	189,334	11,185	9,760	20,945	17,334
December 2015	17,334	5	262,340	18,866	19,385	38,251	241,428
Total 2015		<u>(\$717)</u>	<u>\$790,961</u>	<u>\$139,898</u>	<u>\$359,163</u>	<u>\$499,061</u>	

1/ Reflects the authorized interest at the two-year U.S. Treasury Bond rate as of October 29, 2014 of 0.48%, divided over 12 months, per Order No. G004/M-14-358, issued December 17, 2014.

2/ Includes DSM incentive amount of \$24,137 authorized in Docket No. G004/M-14-358.

3/ Includes DSM incentive amount of \$42,180 authorized in Docket No. G004/M-15-422.



**GREAT PLAINS NATURAL GAS CO.  
CIP PROGRAM  
2016**

Month	Beginning Balance	Carrying Charge 1/	Current Month Charges	Billed Recovery			Ending Balance
				CCRC	CCRA	Total	
December 2015							\$241,428
January 2016	\$241,428	\$97	\$40,622	\$27,301	\$13,070	\$40,371	241,776
February	241,776	97	27,163	48,243	(6,614)	41,629	227,407
March	227,407	91	36,732	43,072	(5,913)	37,159	227,071
April - est.	227,071	91	35,749	23,432	(3,288)	20,144	242,767
May - est.	242,767	97	20,896	14,739	(2,068)	12,671	251,089
June - est.	251,089	100	27,521	9,931	(1,394)	8,537	270,173
July - est.	270,173	108	29,924	10,213	(1,433)	8,780	291,425
Aug. - est.	291,425	117	328,732 2/	10,736	(1,507)	9,229	611,045
Total 2016 YTD		<u>\$798</u>	<u>\$547,339</u>	<u>\$187,667</u>	<u>(\$9,147)</u>	<u>\$178,520</u>	

1/ Reflects the authorized interest at the two-year U.S. Treasury Bond rate as of October 29, 2014 of 0.48%, divided over 12 months, per Order No. G004/M-14-358, issued December 17, 2014.

2/ Includes estimated costs of \$275,000 for large custom projects to be completed in 2016.

**GREAT PLAINS NATURAL GAS CO.  
PERFORMANCE INCENTIVE MODEL  
2015 Shared Savings Model Calibrated to \$9.00 with a Cap of 1.25 Times Base**

**Inputs:**

Average Sales:	5,570,068 1/
1.0% Energy Savings:	55,701
Historic Average Savings:	0.36%
Earning Threshold:	0.10% plus one unit of energy
Earning Threshold in Energy Savings:	5,570
Award zero point:	0.00%
Award zero point in Energy Savings:	0
Steps from zero point to 1.5%	15.0
Size of steps in Energy Savings:	5,570

**Incentive Calibration:**

Average Incentive per unit at 1.5%:	\$9.00
Incentive Cap (\$5.50 Incentive Base)	\$6.875
Energy savings at 1.5%:	83,551
Targeted incentive at 1.5%:	\$751,959
Multiplier:	0.0136562 Percent of Net Benefits received for every 0.1% of sales saved
Actual Expense	\$724,644
Annual Savings Achieved	69,393
Net Benefits @ Authorized Goal	\$3,048,866
Number of steps above award zero point:	12.45835
Percent of Benefits Awarded	17.01337%
Incentive	\$477,077

Achievement Level	Dk	Percent of Benefits	Estimated Benefits	Correction Factor	Adjusted Benefits	With Cap	
						Award With Cap	Average Incentive per Dk Saved
0.0% of Sales	0	0.00000%	\$0	1.00	\$0	\$0	\$0.00
0.1% of Sales	5,570	0.00000%	244,728	1.00	244,728	0	0.00
0.2% of Sales	11,140	2.73127%	489,455	1.00	489,455	13,368	1.20
0.3% of Sales	16,710	4.09691%	734,183	1.00	734,183	30,079	1.80
0.4% of Sales	22,280	5.46255%	978,911	1.00	978,911	53,473	2.40
0.5% of Sales	27,850	6.82818%	1,223,639	1.00	1,223,639	83,552	3.00
0.6% of Sales	33,420	8.19382%	1,468,366	1.00	1,468,366	120,315	3.60
0.7% of Sales	38,990	9.55946%	1,713,094	1.00	1,713,094	163,762	4.20
0.8% of Sales	44,561	10.92509%	1,957,822	1.00	1,957,822	213,894	4.80
0.9% of Sales	50,131	12.29073%	2,202,549	1.00	2,202,549	270,709	5.40
1.0% of Sales	55,701	13.65637%	2,447,277	1.00	2,447,277	334,209	6.00
1.1% of Sales	61,271	15.02200%	2,692,005	1.00	2,692,005	404,393	6.60
1.2% of Sales	66,841	16.38764%	2,936,733	1.00	2,936,733	459,531	6.88
1.3% of Sales	72,411	17.75328%	3,181,460	1.00	3,181,460	497,825	6.88
1.4% of Sales	77,981	19.11891%	3,426,188	1.00	3,426,188	536,119	6.88
1.5% of Sales	83,551	20.00000%	3,670,916	1.00	3,670,916	574,413	6.88
1.6% of Sales	89,121	20.00000%	3,915,643	1.00	3,915,643	612,707	6.88
1.7% of Sales	94,691	20.00000%	4,160,371	1.00	4,160,371	651,002	6.88
1.8% of Sales	100,261	20.00000%	4,405,099	1.00	4,405,099	689,296	6.88
1.9% of Sales	105,831	20.00000%	4,649,827	1.00	4,649,827	727,590	6.88
2.0% of Sales	111,401	20.00000%	4,894,554	1.00	4,894,554	765,884	6.88
2.1% of Sales	116,971	20.00000%	5,139,282	1.00	5,139,282	804,179	6.88

1/ Excludes exempt customer dk throughput.