



2016 Energy Efficiency Program Annual Report

June 26, 2017

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Introduction

New Mexico Gas Company (“NMGC”) submits this annual report on the Energy Efficiency Programs for Program Year 2016. This will be NMGC’s eighth annual report and will cover the time period April 1, 2016 through March 31, 2017. Also submitted is the final report prepared by the independent evaluator, ADM Associates, Inc. (“ADM”), entitled “Evaluation of 2016 DSM Portfolio: New Mexico Gas Company, Prepared for: New Mexico Gas Company, June 2017” (“M&V Report”), which was completed on June 13, 2017.

NMGC filed its 2016 Program Plan, New Mexico Public Regulation Commission (“NMPRC” or “Commission”) Case No. 15-00295-UT, on September 14, 2015. The Program Plan was approved by the NMPRC on February 4, 2016 and the 2016 Program Year became available to customers on April 1, 2016. This report covers all costs incurred in the implementation of the programs and all customer participation in the programs from April 1, 2016 through March 31, 2017.

The following programs are included in this annual report:

- (1) The Low Flow Showerhead program package, which is available free to NMGC customers through an on-line request and includes a 1.5 gallons per minute (“GPM”) showerhead, two low flow faucet aerators, one low flow swivel-head kitchen aerator and Teflon tape to ease the installation process.
- (2) The ENERGY STAR® Water Heating program, which provides incentives for homebuilders and existing home owners who install ENERGY STAR tankless water heaters and Condensing Storage tank models.
- (3) The ENERGY STAR Space Heating program, which provides incentives for homebuilders and existing home owners who install ENERGY STAR furnaces or boilers with an AFUE rating of 92% or higher. It also includes a Residential Insulation measure which provides a 25% rebate up to \$500 on the installation of roof or attic insulation by a qualified contractor.
- (4) The Income Qualified program, which provides additional funding to the existing EnergySmart Program and funding for low income Multi-Family units both administered by the New Mexico Mortgage Finance Authority (“MFA”)
- (5) The Efficient Buildings program, which provides business customers with assistance and incentives for energy efficiency measures. Customers may choose from direct-install, prescriptive or custom measures. The program also targets educational facilities and provides benchmarking and master plans along with assistance and incentives for energy efficiency measures.

This report begins with an executive summary that presents a high-level assessment of program performance from April 1, 2016 through March 31, 2017. This is followed by a summary of the findings of the M&V Report and the impacts on the future of the programs. This report also includes specific program information as required in the NMPRC Energy Efficiency Rule (17.7.2 NMAC) (“Rule”) that went into effect on January 1, 2015 (2015 Rule), as well as additional program information.

Executive Summary

This is the eighth annual report on NMGC’s Energy Efficiency Program (“Program”), and it presents the detailed results of five programs for Program Year 2016 (NMPRC Case No. 15-00295-UT).

The following table shows the total number of customer participants, savings and program costs for Program Year 2016. The savings for each program are net savings as derived from the final conclusions in the M&V Report reached by ADM’s evaluation of NMGC’s 2016 Program Year. Program Year 2016 was approved by the NMPRC on February 4, 2016 and became available to customers on April 1, 2016. Program Year 2016 ended March 31, 2017.

Program	Annual Savings Savings Per Unit (Therms)	Total Number of Rebates Processed (April 1, 2016 to March 31, 2017)	Total Annual Savings (Therms)*	Lifetime Savings (Therms)*	Total Program Costs
Low Flow Showerhead	40	4298	107,926	783,505	\$278,241
ENERGY STAR Water Heating	45 - 70	1189	42,444	848,880	\$466,313
ENERGY STAR Space Heating	35 - 120	1667	88,012	1,731,377	\$800,071
Income Qualified	57 - 339	1072	184,503	3,383,824	\$1,677,950
Efficient Buildings**	3794 - 122,790	84	362,837	5,157,223	\$1,016,268
Portfolio Costs	N/A	N/A	N/A	N/A	\$132,713
Total			785,722	11,904,809	\$4,371,557
<i>*Net savings adjusted for free-ridership and derived from M&V Report</i>					
<i>**Efficient Buildings participation are projects associated with the program</i>					

Except where otherwise noted, the following table indicates NMGC costs for its energy efficiency portfolio from April 1, 2016 through March 31, 2017, and allocated to Program Year 2016.

Program Year 2016	Total Actual Costs
Administration (Internal and External)	\$1,477,543
Promotion/Marketing	\$150,100
Measurement and Verification	\$22,795
Rebates	\$1,010,518
Income Qualified (Low Income)	\$1,577,888
Portfolio Costs	\$132,713
Total	\$4,371,557

*Program Year 2016 - NMPRC Case No. 15-00295-UT

Administration

The figures in this category include both internal and external administration of the programs. Internal administration is the labor and administrative costs the NMGC Energy Efficiency Department staff expended on energy efficiency programs in development, implementation and oversight of the program plan, as well as NMPRC compliance reporting and ongoing interface with NMGC’s program administrators and M&V activity. With the exception of the Income Qualified program, which are accounted for in its own category, external administration are the costs associated with third party program administration of NMGC’s programs. Administering the ENERGY STAR Water Heating and Space Heating programs and the Low Flow Showerhead program is ICF International and administering the Efficient Buildings program is CLEAResult, both under contract with NMGC. Third party administration costs include labor and other direct expenses related to program implementation planning, program marketing and website materials development and management, outreach and marketing of the programs to eligible participants, energy efficiency opportunity identification and assessment, energy engineering and energy savings validation, rebate processing and quality control inspections. Review of rebate applications by ICF and CLEAResult for their respective programs is also included. To the extent that these contracts require the third-parties to conduct promotional activities acceptable to NMGC, those promotional costs are considered third-party administrative costs.

Promotion/Marketing

This cost category contains all promotional costs expended on the Program including brochures, direct mail costs, newspaper, radio, television, media design and production and all other promotional costs not included in third party contracts.

Measurement and Verification

The measurement and verification cost is the total of all invoices from ADM, for performing M&V activities for their annual independent program evaluation report for Program Year 2015, completed June 2016, and for ongoing M&V of Program Year 2016.

Rebates

The rebate cost category includes all rebates paid directly to participating customers with the exception of rebates paid within the Income Qualified program which is accounted for in its own category. Labor and materials necessary for some direct-install measures are included in this category.

Income Qualified (Low Income)

The cost in this category consists of the total of all invoices received from April 1, 2016 through March 31, 2017, by NMGC from MFA for Program Year 2016. Expenses paid to MFA for administration of the program totaled \$86,604. All other expenses are directly attributed to performance of weatherization measures and services from MFA's services providers to the low-income participants.

Portfolio Costs

This cost category includes all costs related to the energy efficiency portfolio but not directly associated to an individual program such as legal expenses, training, research and development, and general education activities.

The Rule requires that an independent evaluator conduct measurement and verification assessments of all energy efficiency programs.

For Program Year 2016, the NMPRC selected ADM to provide an M&V Report on three specific programs and an overall evaluation on all five of the energy efficiency programs offered by NMGC and approved under NMPRC Case No. 15-00295-UT. The three specific programs were the Space Heating program, the Low Flow Showerhead program and the Efficient Buildings program.

The M&V Report contains important findings and recommendations. A more complete summary of these findings and recommendations along with NMGC's comments is provided in the next section. These findings include the following:

- The overall Utility Cost Test ("UCT") for the four residential and one commercial program was 1.67.
- All individual programs passed the UCT.
- Program recommendations that have either already been implemented or will be implemented in the next filing.

Tariff Collections

As of April 1, 2016, when the 2016 Program Year began, NMGC was charging eligible sales service and transportation customers the approved Rider rate of \$0.0087/therm (Advice Notice

No. 49), for recovery of program costs. The rate, Rate No. 1-15 - Rate Rider No. 15 Energy Efficiency Rider (“Rider 15”), remained in effect through the entire 2016 Program Year from April 1, 2016 through March 31, 2017. Total cost recoveries through Rider 15 from April 1, 2016 to March 31, 2017 were \$3,996,678.56. Rider 15 continues at the current rate of \$0.0087 as of this filing.

Tariff Reconciliation

The beginning balance in the Energy Efficiency account at April 1, 2016 was an over-collection of \$741,379.90. Expenses for the period April 1, 2016, through March 31, 2017 totaled \$3,996,067.34. Actual carrying charges of \$28,240.20 charged to NMGC for the same period decreases the net expense to \$3,967,827.14. Collections for the period totaled \$3,996,678.56, resulting in a net over-collection of \$28,851.42 for the 2016 Program Year. Including the beginning balance of an over-collection of \$741,379.90 at April 1, 2016, the total net over-collection at March 31, 2017 was \$770,231.29. Expenses associated with the 2016 Program Year were \$4,371,556.94 of the \$3,996,067.34 actually expended during the period. The difference of \$375,489.60 is mostly attributed to invoices received after March 31, 2015 but allocated to the 2015 Program Year.

Based on the above and the NMPRC’s approval of NMGC’s 2017 Program Year budget of \$6,312,382 (Case No. 16-00100-UT), NMGC has calculated that \$0.0146 per therm is the amount needed to recover costs through the 2017 Program Year.

Regulatory Proceedings

On February 24, 2016, the Commission unanimously approved NMGC’s 2016 Program Plan (NMPRC Case No. 15-00295-UT) and the Plan became available to NMGC’s customers on April 1, 2016.

On April 19, 2017, NMGC filed a variance to have the filing of its annual application be moved from January 1, 2017 to on or before August 31, 2016. The Commission approved the variance on June 8, 2016 (NMPRC Case No. 16-00100-UT).

NMGC received the Measurement and Verification (“M&V”) report for its 2015 Program Year from ADM Associates, Inc. (“ADM”) on June 10, 2016 and submitted both the M&V and NMGC’s 2015 Program Year Annual Report to the NMPRC on June 30, 2016. Both reports were posted to the NMGC website.

NMGC also submitted a report on the rate charged by Rate No. 1-15 - Rate Rider No. 15 Energy Efficiency Rider (“Rider 15”). The Rider 15 reconciliation report is pursuant to 17.7.2.13C NMAC, requiring reconciliation of collections from the prior year, along with proposals to make up under or over-collections. The reconciliation calculation concluded that the current tariff of \$0.0087/therm should continue throughout the 2016 Program Year.

On August 29, 2016, NMGC filed an application with the Commission for its 2017 Energy Efficiency Program Plan (Case No. 16-00100-UT). Ashley Schannauer was assigned as the Hearing Examiner and a prehearing meeting was scheduled for October 4, 2016.

On December 19, 2016, the hearing for NMGC's 2017 Energy Efficiency Program Plan (Case No. 16-00100-UT) was held and on February 15, 2017, the plan was unanimously approved by the NMPRC.

On January 25, 2017, the NMPRC issued a Notice of Proposed Rulemaking in the matter of amending the Energy Efficiency Rule 17.7.2 NMAC (Case No. 17-00010-UT). The public comment hearing was held on March 31, 2017, with Chairman Sandy Jones presiding. After the hearing it was ordered that supplemental comments shall be filed by the Joint Movants on or before April 28, 2017, with the record scheduled to be closed May, 5, 2017.

NMGC's 2016 Program Plan ended on March 31, 2017, and the 2017 Program Plan went into effect on April 1, 2017 in accordance with NMPRC Case No. 16-00100-UT.

NMGC received the final M&V Report for its 2016 Program Year from ADM on June 13, 2017 and submitted both the M&V and NMGC's 2016 Program Year Annual Reports to the NMPRC on June 30, 2017.

Also on June 26, 2017, NMGC submitted a report on the rate charged by Rate No. 1-15 - Rate Rider No. 15 Energy Efficiency Rider ("Rider 15"). The Rider 15 reconciliation report is pursuant to 17.7.2.13C NMAC, requiring reconciliation of collections from the prior year, along with proposals to make up under or over-collections. NMGC filed Advice Notice No. 67 to adjust the Energy Efficiency Fee to \$0.0146 per therm as of August 1, 2017.

Summary of M&V Report Findings

Background and Purpose of Independent Evaluation

The NMPRC appointed energy efficiency evaluation committee recommended, and the NMPRC approved, ADM to perform independent evaluation, measurement, and verification of NMGC's Energy Efficiency Programs for Program Year's 2012, 2013, and 2014. After the 2015 Rule went in to effect, the NMPRC requested that ADM extend their M&V evaluation of NMGC through the 2015 and 2016 Program Years. NMGC worked with ADM to provide the data necessary to complete the 2016 M&V Report. This included providing rebate processing files, budget data by program, net and gross savings assumptions, and avoided cost information.

The primary purpose of the independent evaluation is to assess the cost effectiveness of the programs using the UCT Test. A second purpose of the evaluation is to perform a basic process evaluation of the program to determine customer satisfaction with how the programs operated. As of July 1, 2013, the cost-effectiveness measure for all utility energy efficiency programs became the UCT rather than the TRC. NMGC's 2014 Program Year was the last year that the TRC was required to determine cost-effectiveness. The 2016 Program Year required passing the UCT for cost-effectiveness

2016 M&V Report

The 2016 program year evaluation consists of an analysis of three specific programs and an overall analysis of all five of the offered programs (Please see Appendix B for the complete M&V Report).

Summary of Findings and NMGC Comments

ADM concluded that the overall portfolio UCT for the four residential and one commercial program was 1.67 and that each individual program passed the UCT and test. NMGC believes that ADM has conducted a professional assessment of the five programs offered under Program Year 2016 and agree with most of their findings and recommendations. Below is a summary of their findings and recommendations along with NMGC's comments.

- 1) **For the Efficient Buildings Program, ADM concluded that approaches for boiler retrofit projects in Efficient Buildings were inconsistent. Boiler retrofit projects displayed inconsistency in approaches by implementation staff; not all projects completed appropriate weather normalization, and it was not apparent when a project was using an early retirement baseline. ADM also commented that participant tracking information was often not populated and the Evaluators needed to submit a supplementary request to implementation staff to receive contact names and phone numbers for completed projects.**

NMGC RESPONSE:

NMGC agrees that using consistent approaches by implementation staff and providing the Evaluators with all information necessary to provide an accurate evaluation is crucial to the process. Although CLEAResult was able to work through these issues with ADM, they will make sure to meet with the new M&V evaluator, Evergreen Economics, Inc. ("Evergreen"), early in the process to assure they are providing them with all information required by Evergreen to conduct a thorough evaluation for the 2017 Program Year. CLEAResult will also be adding a checkbox on all reports to address the early retirement issue.

- 2) **For the Water Heating Program, ADM concluded that the insulation measure had a significant share of low income participation. 9.23% of survey respondents from the insulation program channel gave answers for income and household occupants that would put the household below 200% of the federal poverty limit. These customers would potentially be eligible for higher service levels through NMGC's Low Income Weatherization Program.**

NMGC RESPONSE:

NMGC agrees with ADM's assessment that the low-income customers that participated in the insulation measure could benefit from additional measures offered in its Income Qualified (Low-Income Weatherization Program) program administered by MFA.

However, funding by NMGC and other agencies for MFA is not enough to provide every low-income household with services that are provided by MFA. All customers that meet the low-income criteria are encouraged to contact MFA to see if they are qualified for their services. NMGC will reach out to insulation contractors and request that they provide information to eligible households for additional services that may be provided by MFA.

3) ADM also found that NMGC has successfully engaged in cross-fuel promotion and implementation with PNM. Examples of this have included:

- **Co-funding showerhead kits delivered through PNM’s Low Income Easy Savings Program for homes with natural gas water heating;**
- **Co-funding the direct install activities in PNM’s Home Energy Checkup Program for homes with natural gas water heating;**
- **Using PNM’s Home Energy Check-up Program to facilitate participation in NMGC’s prescriptive insulation incentives when the home has gas space heating. 5.5% of NMGC insulation participants were referrals from PNM’s program (this constituted 70% of PNM’s insulation participants).**

ADM recommended that NMGC expand co-funding efforts with Xcel’s Energy Kit.

NMGC RESPONSE:

NMGC appreciates and agrees with ADM’s conclusions. NMGC’s adjustments to its programs and collaboration with PNM has proven to be successful. NMGC has reached out to other electric utilities in the state to collaborate on programs and will follow-up with Xcel on ADM’s recommendation to work with them on their kit program or other potential opportunities.

In summary, this is NMGC’s eighth evaluation of its programs and the eighth time that M&V has concluded that its program portfolio is cost-effective. The program portfolio cost/benefit analysis was determined to have a UCT of 1.67. NMGC believes this corroborates the adjustments proposed and taken each year to enhance its portfolio and make the programs more cost-effective. Adjustments made for the 2017 Program Year included moving the Low Flow Showerhead program to a measure under the Water Heating program and creating a stand-alone Multi-Family program that serves both low-income and market rate properties. All the programs in NMGC’s portfolio were successful and received high customer satisfaction remarks. It is important to note that under Program Year 2016 a portion of the savings under the Efficient Buildings program were through direct-install measures. These direct-install measures are low flow pre-rinse valves and faucet aerators that reduce water usage. Combined with the Low Flow Showerhead program these measures accounted for more than 33,567,680 gallons of water saved annually. Based on the City of Albuquerque’s previously calculated savings of 3.548 kWh per 1000 gallons pumped, these measures provide an additional 119,098 kWh savings in pumping costs. Although NMGC maintains that the reduction in water usage from low flow showerheads, faucet aerators, and low flow pre-rinse spray valves does directly affect energy usage by reducing the quantity of water pumped by the water utility or municipality, NMGC does not

include these savings in calculating the UCT for its programs. Electric savings for NMGC's programs are not allowed under the UCT but the water savings will continue to be documented as non-energy benefits for future programs.

Energy Efficiency Rule Reporting Requirements

This section of the annual report follows the reporting requirements and section headings as specified in the NMPRC Energy Efficiency Rule Section 17.7.2.14.D. As previously noted, the Rule that applies to the 2016 Program Year is the 2015 Rule that went into effect January 1, 2015.

D(1) Independent Measurement and Verification Report

NMGC contracted with ADM to conduct the independent evaluation of its energy efficiency programs. Their report entitled "Evaluation of 2016 DSM Portfolio: New Mexico Gas Company, Prepared for: New Mexico Gas Company, June 2017" is submitted with this report (Appendix B), and includes an analysis of the energy savings realized by all five programs.

D(2) Program Expenditures Not Included in the M&V Report

The M&V Report for Program Year 2016 contains an analysis of all five programs. Therefore, all expenditures were included in the M&V Report. The expenditures for all programs for Program Year 2016 were \$4,371,557. These expenditures include all expenses incurred by NMGC to develop and implement the programs.

D(3) Material Variances in Program Costs

The table below provides comparisons on estimated savings and monetary costs to actual savings and costs for each program for Program Year 2016. The information for each program was derived from the final conclusions reached by ADM's evaluation of NMGC's 2016 Program Year and documented in the attached 2016 M&V report (see Appendix B) Avoided costs used to calculate savings can be found in Appendix A of this document.

Estimated Program Budget and UCT Results						
Program	2016 Year Estimated Participation	Estimated Annual Therms Saved*	Estimated Lifetime Therms Saved *	Total Program Budget	UCT	Cost per Therm Saved
Low Flow Showerhead	4500	109,080	841,050	\$318,645	1.61	\$0.38
ENERGY STAR Water Heating	490	17,634	370,260	\$201,385	1.12	\$0.54
ENERGY STAR Space Heating	1550	108,388	2,107,485	\$803,128	1.60	\$0.38
Income Qualified	1331	220,454	4,144,606	\$1,712,888	1.48	\$0.41
Efficient Buildings**	112	301,753	4,082,530	\$1,221,783	2.01	\$0.30
Portfolio Costs	N/A	N/A	N/A	\$144,749	N/A	
Total		757,309	11,545,931	\$4,402,578	1.59	\$0.38
<i>* Adjusted for free ridership as derived from the M&V report and/or the NMTRM</i>						
<i>**Efficient Buildings participation are projects associated with those programs</i>						
Actual Program Budget and UCT Results						
Program	2016 Year Actual Participation	Actual Annual Therms Saved*	Actual Lifetime Therms Saved *	Total Program Costs	UCT	Cost per Therm Saved
Low Flow Showerhead	4298	107,926	783,505	\$278,241	1.71	\$0.36
ENERGY STAR Water Heating	1189	42,444	848,880	\$466,313	1.04	\$0.55
ENERGY STAR Space Heating	1667	88,012	1,731,377	\$800,071	1.24	\$0.46
Income Qualified	1072	184,503	3,383,824	\$1,677,950	1.39	\$0.50
Efficient Buildings**	84	362,837	5,157,223	\$1,016,268	2.95	\$0.20
Portfolio Costs	N/A	N/A	N/A	\$132,713	N/A	
Total		785,722	11,904,809	\$4,371,557	1.67	\$0.37
<i>*Net savings adjusted for free-ridership and derived from M&V Report</i>						
<i>**Efficient Buildings participation are projects associated with those programs</i>						

D(4) Number of Program Participants

Total number of participants for each program for Program Year 2016 is reflected in the table below.

Program	Total Number of Participants for Program Year 2016
Low Flow Showerhead	4298
ENERGY STAR Water Heating	1189
ENERGY STAR Space Heating	1667
Income Qualified	1072
Efficient Buildings*	84

**Efficient Buildings participation are projects associated with the program*

D(5) Economic Benefits

The table below reflects the economic benefits from Program Year 2016 and are derived from the M&V Report.

Program	Cost per Therm Saved	2016 Economic Benefits*	NPV of Total Economic Benefits*
Low Flow Showerhead	\$ 0.36	\$ 84,398	\$ 474,710
ENERGY STAR Water Heating	\$ 0.55	\$ 33,191	\$ 484,809
ENERGY STAR Space Heating	\$ 0.46	\$ 68,825	\$ 989,512
Income Qualified	\$ 0.50	\$ 144,281	\$ 2,327,993
Efficient Buildings	\$ 0.26	\$ 283,739	\$ 3,002,024
All Programs	\$ 0.41	\$ 614,435	\$ 7,279,048

** Economic Benefits and NPV of Total Economic Benefits are derived from the M&V Report.*

D(6) Self-Direct Programs

There were no customer applications for the self-direct program in Program Year 2016.

D(7) Other Information of Interest to the Commission

Cost Allocation and Expenses by Program

All energy efficiency expenses are tracked through a unique set of account numbers. The following table shows the allocation of costs to the various programs for Program Year 2016.

Program	Rebates	Internal Administration	External Administration	Promotion	M&V Expenses	Total Program Costs
Low Flow Showerhead	\$56,594	\$65,483	\$121,586	\$30,020	\$4,559	278,241
ENERGY STAR Water Heating	\$289,800	\$65,483	\$76,451	\$30,020	\$4,559	466,313
ENERGY STAR Space Heating	\$441,306	\$65,483	\$258,704	\$30,020	\$4,559	800,071
Income Qualified	\$1,491,284	\$65,483	\$86,604	\$30,020	\$4,559	1,677,950
Efficient Buildings	\$222,819	\$65,483	\$693,387	\$30,020	\$4,559	1,016,268
Portfolio Costs	N/A	\$132,713	N/A	N/A	N/A	132,713
Total	\$2,501,803	\$460,128	\$1,236,731	\$150,100	\$22,795	\$4,371,557

Internal administration is the labor and administrative costs the NMGC Energy Efficiency Department staff expended on energy efficiency programs. Staff time during Program Year 2016 was spent on oversight of the existing energy efficiency programs, vetting programs and measures for potential future filings, preparing and submitting NMPRC compliance reporting, ongoing interface with NMGC’s program administrators and M&V activity. As of March 31, 2017, the NMGC Energy Efficiency Department consisted of three full-time staff members.

External administration expenses are costs associated with third party program administration of NMGC’s programs. Administering the ENERGY STAR Water Heating and Space Heating programs and the Low Flow Showerhead program is ICF International. Administering the Income Qualified program is MFA. Administering the Efficient Buildings program is CLEAResult. All three are under contract with NMGC. Third party administration costs include labor and other direct expenses related to program implementation planning, program marketing and website materials development and management, outreach and marketing of the programs to eligible participants, energy efficiency opportunity identification and assessment, energy engineering and energy savings validation, rebate processing and quality control inspections. Review of rebate applications by ICF and CLEAResult for their respective programs to assure their validity is also included. To the extent that these contracts require the third-parties to conduct promotional activities acceptable to NMGC, those promotional costs are considered third-party administrative costs.

Promotional expenses for 2016 were used primarily for raising awareness on all programs through brochures and advertising campaigns and were allocated equally among the energy efficiency programs except those costs specific to individual programs. (Please see the Promotional Activities section below for more details on specific promotional activities).

M&V Expenses for the 2016 Program Year is the total of all invoices from ADM, for performing M&V activities for their annual independent program evaluation report for Program Year 2015, completed June 2016, and for ongoing M&V of Program Year 2016.

Portfolio costs includes all costs related to the energy efficiency portfolio but not directly associated to an individual program such as legal, training, research and development, and general education activities.

Non-Energy Benefits

The following table shows the CO₂ emission reductions associated with the portfolio of programs. The annual and lifetime avoided emissions are determined by multiplying the emissions rates times the annual and lifetime therms saved by the portfolio of programs.¹ In addition, three of NMGC's energy efficiency measures contribute directly to water savings. The Efficient Buildings program direct-install measures of low flow pre-rinse valves and faucet aerators combined with the Residential Low Flow Showerhead program account for more than 33,567,680 gallons of water saved annually. The expected lifetime for those measures is 10 years as determined by New Mexico's Technical Resource Manual.

2016 Program Year			
Emission Impact	Annual Avoided Gas Emissions Rate (lbs/therm)*	Annual Avoided Gas Emissions Rate (Metric tons)	Lifetime Avoided Emissions (Metric tons)
CO ₂	117	45,965	696,431
Water Impact		Annual Water Saved (gallons)	Lifetime Water Saved (gallons)
Water Savings		33,567,680	335,676,800

Promotional Activities

Most promotional and marketing activities for NMGC's programs are the responsibility of the third-party administrators to work with builders, contractors, distributors, manufacturers, architects and other trade allies to educate and make them aware of NMGC's programs. Outreach directly to NMGC's customers is a joint effort with shared budgets. For NMGC's 2016 Program, activities included the following:

Mass Media Communications

NMGC began its promotional effort after receiving the Final Order in NMPRC Case No. 15-00295-UT approving the 2016 Program Year. Promotional efforts and program information for Program Year 2016 began in April 2016 updating rebate applications and reminding customers that the programs offered in 2015 remained in effect for the 2016 Program Year. A brochure that outlines all of the approved programs continued to be distributed throughout the state at NMGC offices and were offered at various events throughout the year including, but not limited to, the Albuquerque Home & Garden Show, the Albuquerque Home & Lifestyle Show, the New Mexico Municipal League Annual Conference and the Albuquerque Home & Remodeling Show. Radio and television ads informing and promoting NMGC's energy efficiency programs to the

* The avoided CO₂ emissions rate for gas combustion was taken from U.S. Department of Energy - Energy Information Administration's Annual Energy Outlook 2016.

public ran for two weeks in May and again in November along with internet banner ads and Pandora digital ads.

Targeted Communications

In conjunction with ICF and CLEAResult, NMGC held meetings throughout the state with contractors, vendors, and suppliers to inform them of the programs and began signing them up as participating contractors in April 2016. Additional contractors were added throughout the 2016 Program Year and all participating contractors were kept in communications regarding the 2016 Program Year and to solicit continued participation. To participate, contractors are required to have a license and insurance and understand the program criteria. They are then listed on NMGC's website including the areas they serve. NMGC also ran social media campaigns and bill messages promoting its programs and the Home Energy Analyzer that helps home owners determine the most effective measures to make their home more energy efficient.

NMGC understands the value of promotion and education of its energy efficiency programs and the importance of expanding the outreach. The Energy Efficiency staff has continued to communicate with NMGC offices throughout the state to better educate NMGC employees about its energy efficiency programs. The intent is to have more employees understand the background of the energy efficiency programs and be able to transfer that knowledge to customers in their region of the state.

Appendix A – NMGC Avoided Costs

Natural Gas Avoided Costs

The following tables provide the avoided energy costs (in real terms) used in the UCT model for Program Year 2016.

Year	NMGC Projected Avoided Cost (per MMBtu)	Per Therm
2014	\$ 7.42	\$ 0.74
2015	\$ 6.03	\$ 0.60
2016	\$ 5.75	\$ 0.57
2017	\$ 6.00	\$ 0.60
2018	\$ 6.37	\$ 0.64
2019	\$ 6.45	\$ 0.65
2020	\$ 6.61	\$ 0.66
2021	\$ 6.69	\$ 0.67
2022	\$ 6.80	\$ 0.68
2023	\$ 6.99	\$ 0.70
2024	\$ 7.17	\$ 0.72
2025	\$ 7.40	\$ 0.74
2026	\$ 7.42	\$ 0.74
2027	\$ 7.34	\$ 0.73
2028	\$ 7.24	\$ 0.72
2029	\$ 7.29	\$ 0.73
2030	\$ 7.27	\$ 0.73
2031	\$ 7.19	\$ 0.72
2032	\$ 7.26	\$ 0.73
2033	\$ 7.28	\$ 0.73
2034	\$ 7.30	\$ 0.73
2035	\$ 7.28	\$ 0.73
2036	\$ 7.30	\$ 0.73
2037	\$ 7.30	\$ 0.73
2038	\$ 7.35	\$ 0.73
2039	\$ 7.40	\$ 0.74
2040	\$ 7.40	\$ 0.74

Appendix B – ADM M&V Report