New Mexico
GAS COMPANY®
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2019
Energy Efficiency Program
Annual Report

June 29, 2020

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Introduction

New Mexico Gas Company ("NMGC") submits this annual report on the Energy Efficiency Programs for Program Year 2019. This will be NMGC's eleventh annual report and will cover the time period April 1, 2019 through March 31, 2020. Also submitted is the final report prepared by the independent evaluator, Evergreen Economics, Inc. ("Evergreen"), entitled "Evaluation of the 2019 New Mexico Gas Company Energy Efficiency Programs, ("M&V Report"), which was completed on June 14, 2020.

NMGC filed its 2017, 2018 and 2019 Program Plan, New Mexico Public Regulation Commission ("NMPRC" or "Commission") Case No. 16-00100-UT, on August 29, 2016. The Program Plan was approved by the NMPRC on February 15, 2017 and the 2019 Program Year became available to customers on April 1, 2019. This report covers all costs incurred in the implementation of the programs and all customer participation in the programs from April 1, 2019 through March 31, 2020.

The following programs and offerings are included in this annual report:

(1) Water Heating - tankless water heaters, condensing tank water heaters, showerheads, faucet aerators and pipe wrap measures.

(2) Space Heating - furnaces, boilers, insulation and smart thermostat measures.

(3) ThermSmart New Homes – provides incentives to home builders to build high performance homes though several methodologies including high efficiency furnaces, boilers and water heaters, tightening of envelope and ductwork, location of equipment, and increased insulation values.

(4) Income Qualified - multiple natural gas saving measures for individual low-income residences.

(5) Multi-Family - multiple natural gas saving measures for both low-income and market-rate multi-family facilities.

(6) Efficient Buildings - multiple natural gas saving measures for commercial and school facilities including direct install, prescriptive and custom.

This report begins with an executive summary that presents a high-level assessment of program performance from April 1, 2019 through March 31, 2020. 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"). as well as additional program information.

Executive Summary

This is the eleventh annual report on NMGC's Energy Efficiency Program ("Program"), and it presents the detailed results of six programs for Program Year 2019 (NMPRC Case No. 16-00100-UT).

The following table shows the total number of customer participants, savings and program costs for Program Year 2019. The savings for each program are net savings as derived from the final

conclusions in the M&V Report reached by Evergreen's evaluation of NMGC's 2019 Program Year. Program Year 2019 was approved by the NMPRC on February 15, 2017 and became available to customers on April 1, 2019. Program Year 2019 ended March 31, 2020.

Program Savings and UCT Results per M&V

Program	Annual Savings Savings Per Unit (Therms)	Total Number of Rebates Processsed (April 1, 2017 to March 31, 2018)**	Total Annual NET Savings (Therms)*	Lifetime NET Savings (Therms)*	Total Program Costs	UCT	Cost per Therm Saved
Water Heating	.95 - 45	5552	120,825	1,698,174	$534,291	1.82	$0.31
Space Heating	30 - 102	1211	77,551	1,680,678	$593,028	1.51	$0.35
ThermSmart New Homes	377.72 avg.	841	236,854	5,921,360	$1,173,487	2.61	$0.20
Income Qualified	332.47 avg.	705	168,709	2,878,396	$1,312,697	1.47	$0.46
Multi-Family*	43.3 - 1182	1864	202,316	3,000,019	$901,660	2.22	$0.30
Efficient Buildings**	579 - 56542	201	728,732	8,185,314	$1,727,171	2.78	$0.21
Portfolio Costs	N/A	N/A	N/A	N/A	$148,093	N/A	N/A
Total			1,534,987	23,363,941	$6,390,426	2.14	$0.27

**Net savings adjusted for free-ridership and derived from M&V Report*

***Multi-Family are the number of units and Efficient Buildings participation are projects associated with those programs*

Except where otherwise noted, the following table indicates NMGC costs for its energy efficiency portfolio from April 1, 2019 through March 31, 2020 and allocated to Program Year 2019.

Program Year 2019	Total Actual Costs
Administration (Internal and External)	$ 2,605,302
Promotion/Marketing	$ 116,475
Measurement and Verification	$ 84,558
Rebates	$ 3,435,999
Portfolio Costs	$ 148,093
Total	$ 6,390,426

*Program Year 2019 - NMPRC Case No. 16-00100-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 research, development and oversight of the program plan, as well as NMPRC compliance reporting and ongoing interface with NMGC's program administrators and M&V activity. External administration are the costs associated with third-party program administration of NMGC's programs. Administering the Water Heating, Space Heating and ThermSmart New Homes programs is ICF International ("ICF"). Administering the Income Qualified program is New Mexico Mortgage Finance Authority ("MFA") for the Energy$mart program and EnergyWorks for the Native American project. Administering the Multi-Family program is ICAST and administering the Efficient Buildings program is CLEAResult. All five third-party program administrators 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, some direct installation of high efficiency faucet aerators and low flow pre-rinse spray valves, rebate processing and quality control inspections. Review of rebate applications and qualifying of customers by ICF, MFA, EnergyWorks, ICAST 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 expended by NMGC and all other promotional or marketing costs not included in third party contracts.

Measurement and Verification

The measurement and verification costs include final invoices received from Evergreen Economics from April 1, 2019 for performing final M&V activities for Program Year 2018 and their annual independent program evaluation report for Program Year 2018, completed June 2019. Also included in the costs are invoices received and paid through March 31, 2020, from Evergreen for their continued evaluation of NMGC's 2019 Program Year.

Rebates

The rebate cost category includes all rebates paid directly to participating customers or for measures and services provided under the Income Qualified, Multi-Family and Efficient Buildings programs. Labor and materials necessary for some direct-install measures are included in this category.

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 2019, the NMPRC selected Evergreen to provide an M&V Report on all six of the energy efficiency programs offered by NMGC and approved under NMPRC Case No. 16-00100-UT.

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 all six programs was 2.14.
- 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, 2019, when the 2019 Program Year began, NMGC was charging eligible sales service and transportation customers the approved Rider rate of $0.0130/therm (Advice Notice No. 67), for recovery of program costs. The rate remained in effect from April 1, 2019 through July 31, 2019. On June 28, 2019 NMGC submitted Advice Notice No. 76, updating the rate charged by Rate No. 1-15 - Rate Rider No. 15 Energy Efficiency Rider ("Rider 15") in alignment with the annual reconciliation. This Advice Notice was accompanied by supporting testimony and exhibits which included the annual Rider 15 reconciliation report 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 new rate of $0.0116/therm for Rider 15 was approved with an effective date of the first billing cycle for August 2019. Total cost recoveries through Rider 15 from April 1, 2019 to March 31, 2020 were $6,433,089.99. Rider 15 continues at the current rate of $0.0116 as of this filing.

Tariff Reconciliation

The beginning balance in the Energy Efficiency account on April 1, 2019 was an over-collection of $690,694.82. Expenses for the period April 1, 2019, through March 31, 2020 totaled $5,777,340.08. Actual carrying charges of $2,717.75 charged to NMGC for the same period decreases the net expense to $5,774,622.33. Collections for the period totaled $6,433,089.99, resulting in a net over-collection of $658,467.66 for the 2019 Program Year. Collections included $396,220.78 for Incentives. Including the beginning balance of an over-collection of $690,694.82 on April 1, 2019, the total net over-collection on March 31, 2020 was $952,941.70. Expenses associated with the 2019 Program Year were $6,390,426.39 of the $5,777,340.08 actually reported during the period. The difference of $613,086.34 is mostly attributed to invoices received after March 31, 2020 but allocated to the 2019 Program Year.

Based on the above and the NMPRC's approval of NMGC's 2020 Program Year budget of $7,739,720 (Case No. 19-00248-UT), NMGC has calculated that $0.0178 per therm is the amount needed to recover costs through the 2020 Program Year.

Regulatory Proceedings

On February 15, 2017, the Commission unanimously approved NMGC's 2017, 2018 and 2019 Program Plan (NMPRC Case No. 16-00100-UT) and the 2019 Plan became available to NMGC's customers on April 1, 2019.

On March 13, 2018, NMGC submitted an Application for Expedited Variance from Final Order Adopting Recommended Decision for modifications to its 2017, 2018 and 2019 Energy Efficiency Plan (Case No. 16-00100-UT). NMGC requested the modification to add a supplemental administrator for its Income Qualified program in 2018 and 2019 to offer the same services and measures to Native American communities. The modification resulted in an $80,000 increase to NMGC's Income Qualified program budget which increased the Company's total program energy efficiency budget from $5,899,422 to $5,979,422. The Commission approved the request on March 28, 2018.

On June 10, 2019, the Coalition for Clean Affordable Energy (CCAE) filed a Petition to Amend the Energy Efficiency Rule 17.7.2 NMAC to incorporate the 2019 amendments to the Efficient Use of Energy Act (House Bill 291). On June 26, 2019, the Commission issued an Order Opening Docket, Providing Notice, and Requesting Written Comments (NMPRC Case No.19-00168-UT).

NMGC received the final M&V Report for its 2018 Program Year from Evergreen Economics Inc., on June 19, 2019 and submitted both the M&V and NMGC's 2018 Program Year Annual Report to the NMPRC on June 28, 2019.

Also, on June 28, 2019, 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 17.7.2.13(C) NMAC, requiring reconciliation of collections from the prior year, along with proposals to make up under or over-collections. NMGC filed Advice Notice No. 76 to reduce the Energy Efficiency Fee to $0.0116 per therm as of the first billing cycle for August 2019.

On July 24, 2019, NMGC and other stakeholders provided comments on NMPRC Case No. 19-00168-UT in regard to amending the Energy Efficiency Rule 17.7.2 NMAC. Responses to those comments were then sent by the interested parties, including NMGC, on August 7, 2019.

NMGC filed its energy efficiency application for the 2020 – 2022 Program Years on August 30, 2019. It subsequently was assigned NMPRC Case No. 19-00248-UT and Ashley Schannauer was assigned as the Hearing Examiner. An Order reassigning a Hearing Examiner to the case was submitted on January 6, 2020. The Order assigned Robert Lennon to replace Ashley Schannauer as the Hearing Examiner for Case No. 19-00248-UT.

The Hearing for NMPRC Case No. 19-00248-UT was held February 13, 2020. Hearing Examiner Lennon provided a Recommended Decision ("RD") to the Commission and the RD was approved through a Final Order on May 20, 2020.

NMGC received the final M&V Report for its 2019 Program Year from Evergreen Economics Inc., on June 14, 2019 and submitted both the M&V and NMGC's 2019 Program Year Annual Reports to the NMPRC on June 29, 2020.

Also, on June 29, 2020, 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. 80 to increase the Energy Efficiency Fee to $0.0178 per therm as of the first billing cycle for August 2019.

Summary of M&V Report Findings

Background and Purpose of Independent Evaluation

The NMPRC approved Evergreen Economics, Inc. to perform independent evaluation, measurement, and verification of NMGC's Energy Efficiency Programs for Program Year's 2017, 2018, and 2019. NMGC and its program administrators worked with Evergreen to provide the data necessary to complete the 2019 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.

2019 M&V Report

The 2019 program year evaluation consists of an analysis of all six of the offered programs (Please see Appendix B for the complete M&V Report).

Summary of Findings and NMGC Comments

Evergreen concluded that the overall portfolio UCT for the six programs was 2.14 and that each individual program also passed the UCT. NMGC believes that Evergreen has conducted a professional assessment of the six programs offered under Program Year 2019 and agree with most of their findings and recommendations. Below is a summary of their findings and recommendations along with NMGC's comments.

Efficient Buildings Program

- The evaluation team adjusted the savings for two projects which installed efficient water heaters. The evaluation team was not able to recreate *ex ante* savings based on the documentation included in the project files. Therefore, the evaluation team used the savings methodology in the 2018 TRM to calculate the savings for the installation of water heaters in fast food facilities.

- **Recommendation:** For hot water measures, use deemed savings values from the TRM corresponding to the specific building type in which the measures are being installed.
- **NMGC Response:** NMGC's implementer will adjust its averages accounting for more prevalent building types and will share detail in a separate method with the evaluator so the calculation can be reworked for desk review purposes.

- The evaluation team adjusted the savings for the five projects in the sample which installed commercial kitchen equipment: gas fryers and gas conveyor ovens. The evaluation team used the savings documented in the "V3" CLEAResult workpapers for these measures, which do not match the savings reported by NMGC. No additional calculations were available for the evaluation team's review, so the source of these discrepancies is unknown.
    - **Recommendation:** Ensure that cooking equipment savings are being accurately claimed, consistent with documented measure work papers.
    - **Recommendation:** Provide clear references to the current documents used to determine claimed savings so that savings can be traced back to the original sources.
    - **NMGC Response:** NMGC's implementer will update their workpapers to eliminate discrepancies and provide calculations as needed.

- The evaluation team adjusted the savings for the four projects in the sample which installed weather-stripping measures. The evaluation team calculated savings by multiplying the installed linear feet listed on the application by the per-linear foot savings listed on the application. This resulted in savings which differed from the claimed savings.
    - **Recommendation:** Ensure that weather-stripping savings are being accurately claimed, consistent with application documents.
    - **NMGC's Response:** NMGC's implementer will request an updated version from the evaluator to determine if programming changes need to be made or if the discrepancies are in rounding errors.

- The evaluation-adjusted the savings for custom project RBT-2361591, which installed a high-efficiency boiler. The savings calculations provided in the project documentation did not match the savings value listed in the tracking data for this project. The savings calculation that was provided in the project documentation was consistent with the prescriptive savings methodology in the 2018 New Mexico TRM. No additional calculations were provided, so the evaluation team used the prescriptive savings methodology from the 2018 New Mexico TRM. This adjustment increased the savings for the project. A similar issue was found for several boiler projects in the PY2018 evaluation.

- **Recommendation:** Ensure the savings calculations provided to the evaluation team match the savings values listed in the tracking data.
- **NMGC's Response:** NMGC's implementer will request more detail on the building type and boiler selection chosen in the TRM from the evaluator. It is not clear in the appendices how values for the project was determined.

Income Qualified

The following findings and recommendations resulted from the engineering desk reviews:

- The supplied WAP NEAT Recommended Measures reports for 10 projects did not list any savings for the installation of faucet aerators. The evaluation team did not receive project documentation that would aid in verifying the installation of the faucet aerators. Therefore, the evaluation team did not include savings for the installation of faucet aerators in the verified savings for these 10 projects. This adjustment slightly reduced the savings.
  - **Recommendation:** Provide documentation to verify the installation of equipment if the measure is not included in the NEAT Recommended Measures report.
  - **NMGC's Response:** The NEAT audit allows for aerators to be entered as energy savings measures and NMGC's implementer will assure the field is populated.

- For one project in the sample, the evaluation team found that the savings for high efficiency furnace differed between the tracking data and the projects' NEAT report. The evaluation team based the verified savings on the NEAT reports, which increased the savings for this measure.
  - **Recommendation:** Ensure consistency between savings shown in analysis reports and claimed savings as reflected in the program tracking data.
  - **NMGC's Response:** NMGC's implementer strives for accuracy and will work with their service providers to develop a more solid system of checks and balances to be sure what is entered into the tracking data is the same as what is entered into the NEAT reports.

- For one project in the sample, the evaluation team found that the savings for a door replacement differed between the tracking data and the projects' NEAT report. The evaluation team based the verified savings on the NEAT reports, which decreased the savings for this measure.
  - **Recommendation:** Ensure consistency between savings shown in analysis reports and claimed savings as reflected in the program tracking data.

- **NMGC's Response:** NMGC's implementer strives for accuracy and will work with their service providers to develop a more solid system of checks and balances to be sure what is entered into the tracking data is the same as what is entered into the NEAT reports.

Multi-Family

Specific findings from the engineering desk reviews are described below.

- The evaluation team adjusted the savings for six of the sampled projects that included the installation of low-flow faucet aerators; these adjustments made the savings numbers consistent with the 2018 TRM, and the corresponding flow rates found in the tracking data.
  - **Recommendation:** Update program assumptions for low-flow faucet bathroom aerators to align with the 2018 TRM
  - **NMGC's Response:** Agreed – completed.
- Similarly, savings were adjusted for two of the sampled projects that included the installation of low-flow faucet aerators to be consistent with the climate zone water temperatures. The savings were recalculated using the water temperatures and savings methodology in the 2018 TRM.
  - **Recommendation:** Ensure aerator inputs are consistent with New Mexico climate zones where measures are installed
  - **NMGC's Response:** Agreed.
- The evaluation team adjusted the savings for five projects that included the installation of DHW pipe insulation. The *ex ante* calculations appear to use the savings methodology and algorithm from the 2018 TRM. Although no additional calculations were available for the evaluation team's review, it appears that the Albuquerque specific algorithm inputs ($T_{Ambient}$) were used to calculate the savings for two projects that installed insulation in different climate zones. Additionally, the evaluation team adjusted the savings for three of the five projects to align with the with the 2018 TRM methodology for the installation of pipe insulation in an unconditioned space in the Santa Fe climate zone.
  - **Recommendation:** Update program assumptions for DHW pipe insulation accordingly to align with the TRM for conditioned and unconditioned spaces
  - **Recommendation:** Ensure pipe insulation savings inputs are consistent with New Mexico climate zones where measures are installed
  - **NMGC's Response:** Agreed – program assumptions will be updated
- The evaluation team adjusted the savings for one of the sampled projects that included the installation of a kitchen aerator. Based on the *ex ante* savings value, it appears the savings for this measure may have been custom

calculated using the methodology in the 2018 TRM and a *FlowPost* value of 1.0 gpm. The TRM lists a *FlowPost* value of 1.5 gpm for kitchen aerators, and no additional supporting documentation was available. Therefore, the evaluation team defaulted to the 1.5 gpm *FlowPost* value listed in the TRM for this measure.

  - **Recommendation:** Update program assumptions for the installation of kitchen aerators to align with the TRM
  - **Recommendation:** Provide additional supporting documentation, such as specification or photos, for measures which differ from typical measure assumptions, or input assumptions in the TRM
  - **NMGC's Response:** Program assumptions will be updated and additional supporting documentation will be provided as necessary or as requested.

- The evaluation team adjusted the savings for ten of the sampled projects that included the installation of programmable and smart thermostats. The engineering adjustments range from 0.84 to 1.20 depending on the climate zone where the measure is installed. The savings assumptions appear to use consistent unit efficiencies, ages, and capacities for every thermostat installation, when there may be notable differences between buildings. The evaluation team utilized the savings methodology and default algorithm inputs listed in the 2018 TRM to calculate the *ex post* savings.
  - **Recommendation:** Utilize the actual climate zone information from the TRM to determine savings for programmable and smart thermostat measures
  - **Recommendation:** Consider collecting the age, capacity, and efficiency of the existing unit(s) to use in the New Mexico TRM savings algorithms for programmable and smart thermostats to ensure as accurate a representation of savings as possible.
  - **NMGC's Response:** The TRM will be used for climate zones and additional information on existing thermostats will be collected where possible.
- The evaluation team adjusted the savings for one of the five sample projects that included the installation of a high efficiency furnace. The *ex ante* savings did not appropriately account the AFUE of the installed furnace. This adjustment slightly increased the *ex ante* savings for the project.
  - **Recommendation:** Ensure the savings calculations use the correct furnace efficiency when the value is known
  - **NMGC's Response:** Agreed.
- The baseline efficiencies for all of the high efficiency furnace measures were de-rated using the DOE's Building America Performance Analysis Procedures for Existing Homes. The procedure de-rated the baseline AFUE from 80% to 67% for all of the projects, which assumes all of the furnaces at each facility are approximately 18 years old. While the evaluation team agrees with the

derating approach, the approach should be supported with equipment specific information from the facilities to verify this assumption.

- **Recommendation:** Consider collecting the age of the existing furnaces to more accurately adjust the baseline efficiency.
- **NMGC's Response:** The age of the furnace will be collected where possible for more accuracy.

In summary, this is NMGC's eleventh evaluation of its programs and the eleventh 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 2.14. NMGC believes this corroborates the adjustments proposed and taken each year to enhance its portfolio and make the programs more cost-effective. NMGC is pleased that Evergreen reported that NMGC's customers overall are satisfied with NMGC's programs and find them of value and had an influence on their decisions. All the programs in NMGC's portfolio were successful and received high customer satisfaction remarks. It is important to note that under Program Year 2019 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 Water Heating and Multi-Family programs these measures accounted for more than 45,578,210 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 161,711 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.

D(1) Independent Measurement and Verification Report

NMGC contracted with Evergreen to conduct the independent evaluation of its energy efficiency programs. Their report entitled "Evaluation of the 2019 New Mexico Gas Company Energy Efficiency Programs" is submitted with this report (Appendix B) and includes an analysis of the energy savings realized by all six programs.

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

The M&V Report for Program Year 2019 contains an analysis of all six programs. Therefore, all expenditures were included in the M&V Report. The expenditures for all programs for Program Year 2019 were $6,390,426. 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 2019. The information for each program was derived from the final conclusions reached by Evergreen's evaluation of NMGC's 2019 Program Year and documented in the attached 2019 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	2019 Year Estimated Participation	Estimated Annual Therms Saved*	Estimated Lifetime Therms Saved *	Total Program Budget	UCT	Cost per Therm Saved
Water Heating	300 - 3500	148,865	1,297,850	$481,811	1.73	$0.37
Space Heating	100 - 300	61,299	1,291,355	$592,617	1.28	$0.46
ThermSmart New Homes	500	213,200	5,330,000	$987,534	2.87	$0.19
Income Qualified	910	190,190	2,622,520	$1,447,891	1.30	$0.55
Multi-Family**	144 - 960	96,344	1,344,480	$750,871	1.15	$0.56
Efficient Buildings**	112	443,822	5,893,193	$1,576,851	2.21	$0.27
Portfolio Costs	N/A	N/A	N/A	$141,847	N/A	
Total		**1,153,720**	**17,779,398**	**$5,979,422**	**1.79**	$0.34

** Adjusted for free ridership as derived from the M&V report and/or the NMTRM*

***Efficient Buildings participation are projects associated with that program and Multi-Family are units associated with that program*

Actual Program Budget and UCT Results

Program	2019 Year Actual Participation	Actual Annual Therms Saved*	Actual Lifetime Therms Saved *	Total Program Costs	UCT	Cost per Therm Saved
Water Heating	**5552**	**120,825**	**1,698,174**	**$534,291**	**1.82**	**$0.31**
Space Heating	**1211**	**77,551**	**1,680,678**	**$593,028**	**1.51**	**$0.35**
ThermSmart New Homes	**841**	**236,854**	**5,921,360**	**$1,173,487**	**2.61**	**$0.20**
Income Qualified	**705**	**168,709**	**2,878,396**	**$1,312,697**	**1.47**	**$0.46**
Multi-Family**	**1864**	**202,316**	**3,000,019**	**$901,660**	**2.22**	**$0.30**
Efficient Buildings**	**201**	**728,732**	**8,185,314**	**$1,727,171**	**2.78**	**$0.21**
Portfolio Costs	**N/A**	**N/A**	**N/A**	**$148,093**	**N/A**	**N/A**
Total		**1,534,987**	**23,363,941**	**$6,390,426**	**2.14**	**$0.27**

**Net savings adjusted for free-ridership and derived from M&V Report*

***Efficient Buildings participation are projects associated with that program and Multi-Family are units associated with that program*

D(4) Number of Program Participants

Total number of participants for each program for Program Year 2019 is reflected in the table below.

Program	Total Number of Participants for Program Year 2019
Water Heating	5552
Space Heating	1211
ThermSmart New Homes	841
Income Qualified	705
Multi-Family*	1864
Efficient Buildings*	201
**Efficient Buildings participation are projects associated with that program and Multi-Family are units associated with that program*	

D(5) Economic Benefits

The table below reflects the economic benefits from Program Year 2019 and are derived from the M&V Report.

Program	Cost per Therm Saved	2019 Economic Benefits*	NPV of Total Economic Benefits*
Water Heating	$0.31	$69,251	$ 973,304
Space Heating	$0.35	$41,391	$ 897,035
ThermSmart New Homes	$0.20	$122,518	$ 3,062,955
Income Qualified	$0.46	$112,805	$ 1,924,594
Multi-Family**	$0.30	$134,871	$ 1,999,930
Efficient Buildings**	$0.21	$427,298	$ 4,799,528
All Programs	$0.27	$908,134	$ 13,657,346
** 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 2019.

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 2019.

Program	Rebates	Internal Administration	External Administration	Promotion	M&V Expenses	Total Program Costs
Water Heating	$217,530	$59,018	$221,237	$22,412	$14,093	**$534,291**
Space Heating	$252,479	$59,018	$245,026	$22,412	$14,093	**$593,028**
ThermSmart New Homes	$692,982	$74,018	$364,982	$27,412	$14,093	**$1,173,487**
Income Qualified	$1,160,778	$44,018	$87,395	$6,412	$14,093	**$1,312,697**
Multi-Family*	$651,188	$44,018	$185,949	$6,412	$14,093	**$901,660**
Efficient Buildings**	$461,043	$74,018	$1,146,605	$31,412	$14,093	**$1,727,171**
Portfolio Costs	N/A	$148,093	N/A	N/A	N/A	**$148,093**
Total	**$3,435,999**	**$502,202**	**$2,251,193**	**$116,474**	**$84,558**	**$6,390,426**

Internal administration is the labor and administrative costs the NMGC Energy Efficiency Department staff expended on energy efficiency programs. Staff time during Program Year 2019 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, 2020, the NMGC Energy Efficiency Department consisted of three full-time staff members.

External administration are the costs associated with third-party program administration of NMGC's programs. Administering the Water Heating, Space Heating and ThermSmart New Homes programs is ICF. Administering the Income Qualified program is MFA for the Energy$mart program and EnergyWorks for the Native American project. Administering the Multi-Family program is ICAST and administering the Efficient Buildings program is CLEAResult. All five third-party program administrators 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, some direct installation of high efficiency faucet aerators and low flow pre-rinse spray valves, rebate processing and quality control inspections. Review of rebate applications and qualifying of customers by ICF, MFA, EnergyWorks, ICAST 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.

Promotional expenses for 2019 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 2019 Program Year include final invoices received from Evergreen Economics from April 1, 2019 for performing final M&V activities for Program Year 2018 and their annual independent program evaluation report for Program Year 2018, completed June 2019. Also included in the costs are invoices received and paid through March 31, 2020, from Evergreen for their continued evaluation of NMGC's 2019 Program Year.

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 CO_2 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 Water Heating and Multi-Family measures account for more than 45,578,210 gallons of water saved annually. The expected lifetime for those measures is 10 years as determined by New Mexico's Technical Resource Manual.

2019 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	89,797	1,366,791
Water Impact		**Annual Water Saved (gallons)**	**Lifetime Water Saved (gallons)**
Water Savings		45,578,210	455,782,100

* The avoided CO_2 emissions rate for gas combustion was taken from U.S. Department of Energy - Energy Information Administration's Annual Energy Outlook 2018.

Promotional Activities

Most promotional and marketing activities for NMGC's programs are the responsibility of the third-party administrators to work with builders, contractors, distributers, 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 2019 Program, activities included the following:

Mass Media Communications

NMGC began its promotional effort after receiving the Final Order in NMPRC Case No. 16-00100-UT approving the 2019 Program Year. Promotional efforts and program information for Program Year 2019 began in April 2019 updating rebate applications, promoting the continuation of existing programs and marketing the new programs. 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 ads informing and promoting NMGC's energy efficiency programs to the public ran for two weeks in the spring and again in the fall along with internet banner ads and social media.

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 2019. Additional contractors were added throughout the 2019 Program Year and all participating contractors were kept in communications regarding the 2019 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 homeowners 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 2019.

Year	NMGC Projected Avoided Cost (per MMBtu)	Per Therm
2015	$ 5.20	$ 0.52
2016	$ 5.11	$ 0.51
2017	$ 5.60	$ 0.56
2018	$ 6.00	$ 0.60
2019	$ 6.36	$ 0.64
2020	$ 6.56	$ 0.66
2021	$ 6.64	$ 0.66
2022	$ 6.58	$ 0.66
2023	$ 6.57	$ 0.66
2024	$ 6.66	$ 0.67
2025	$ 6.93	$ 0.69
2026	$ 7.12	$ 0.71
2027	$ 7.13	$ 0.71
2028	$ 7.19	$ 0.72
2029	$ 7.23	$ 0.72
2030	$ 7.21	$ 0.72
2031	$ 7.18	$ 0.72
2032	$ 7.18	$ 0.72
2033	$ 7.16	$ 0.72
2034	$ 7.16	$ 0.72
2035	$ 7.20	$ 0.72
2036	$ 7.26	$ 0.73
2037	$ 7.29	$ 0.73
2038	$ 7.29	$ 0.73
2039	$ 7.32	$ 0.73
2040	$ 7.34	$ 0.73
2041	$ 7.33	$ 0.73
2042	$ 7.37	$ 0.74
2043	$ 7.45	$ 0.75
2044	$ 7.55	$ 0.76
2045	$ 7.65	$ 0.77
2046	$ 7.73	$ 0.77
2047	$ 7.82	$ 0.78

Appendix B – Evergreen M&V Report