NMGC Exhibit SLC-2 Page 1 of 77



# 2023 - 2025 Energy Efficiency Program Plan

August 30, 2022

# 2023 - 2025 Energy Efficiency Program Plan

I.	EXECUTIVE SUMMARY	4
II.	OVERVIEW	5
A.	INTRODUCTION	5
B.	EXISTING PROGRAMS	
C.	PROPOSED CHANGES TO EXISTING PROGRAMS	
D.	PROPOSAL TO ADD A MANUFACTURED HOME COMMUNITIES PROGRAM TO THE INCOME	
•	ALIFIED PROGRAM	
E.	PROPOSAL TO ADD A HOME ENERGY REPORTS PROGRAM	
F.	PROGRAM RATIONALE AND SELECTION CRITERIA	
G.	PUBLIC ADVISORY PROCESS	
Н. І.	PROGRAM GOALS PROGRAM BUDGET AND UCT RESULTS	
ı. J.	PROGRAM BUDGET AND UCT RESULTS PROGRAM CHANGES AND BUDGET FOR PROGRAM YEAR 2023	
J. K.	TARIFF RIDER AND CUSTOMER BILL IMPACT	
III.	PROGRAM COST / BENEFIT ANALYSIS	
A.	UCT ANALYSIS –INPUTS AND RESULTS	
В.	PROGRAM UCT RESULTS	
C.	PROGRAM COSTS ALLOCATION	29
IV.	PROMOTIONAL APPROACH	32
A.	RESIDENTIAL PROGRAMS	33
B.	COMMERCIAL PROGRAMS	35
V.	STAFFING	36
VI.	MEASUREMENT AND VERIFICATION AND COMPLIANCE REPORTING	36
A.	M&V	36
В.	REPORTING	
VII.	PROGRAM DETAILS	
VII.		
Α.	WATER HEATING	
B.	SPACE HEATING	
C.	New Homes	
D. E.	INCOME QUALIFIED MULTI-FAMILY	
E. F.	HOME ENERGY REPORTS	
G.	EFFICIENT BUILDINGS	
VIII.	APPENDIX A – AVOIDED COSTS AND FINANCIAL ASSUMPTIONS	
VIII. IX.	APPENDIX B – MEASURES FOR EFFICIENT BUILDINGS	
X.	APPENDIX C – MEASURES FOR INCOME QUALIFIED	
XI.	APPENDIX D – MEASURES FOR MULTI-FAMILY	
XII.	APPENDIX E - MIDSTREAM EQUIPMENT AND INCENTIVES	71

# 2023 - 2025 Energy Efficiency Program Plan

APPE	NDIX F – GLOSSARY7	2
XIII.	APPENDIX G – PROGRAM PERFORMANCE ASSUMPTIONS7	4
XIV.	APPENDIX H – ENERGY EFFICIENCY PROGRAMS UCT ANALYSIS OUTPUT7	7

### 2023 - 2025 Energy Efficiency Program Plan

#### I. Executive Summary

New Mexico Gas Company, Inc. ("NMGC" or the "Company") is submitting its Application to the New Mexico Public Regulation Commission ("NMPRC" or the "Commission") for its Energy Efficiency Program plan for years' 2023, 2024, and 2025 ("Program Year"). This proposal will reference only Program Year 2023 throughout the document since the overall budgets and individual scope of work by NMGC's program implementers are expected to mostly remain the same through Program Years 2024 and 2025. NMGC is proposing changes to its current energy efficiency program plan, pursuant to the Final Order in NMPRC Case No. 19-00248-UT, the Efficient Use of Energy Act ("Act"), and consistent with the Commission's Energy Efficiency Rule 17.7.4 NMAC ("Rule"). These include modifications to the Water Heating, Space Heating, and Efficient Buildings programs, the addition of one program under the Income Qualified Program, and a new Home Energy Reports program.

The projected annual budget for all energy efficiency programs under Program Year 2023 is \$14,993,203. The \$14,993,203 equates to an increase of 91.74% over the current approved budget of \$7,819,720 for Program Year 2022. The proposed overall budget for Program Year 2023, including the proposed Incentive Rate, is \$15,990,251 as compared to Program Year's 2022 approved overall budget of \$8,363,973.

The Utility Cost Test ("UCT") ratio for the portfolio of programs is 1.56. The annual net energy savings associated with these programs for Program Year 2023 is estimated to be 4,531,970 therms which is an increase of 200.24% in savings over Program Year 2022. The average cost per lifetime therm saved is \$0.31 per therm.

NMGC convened meetings on November 16, 2021, and July 26, 2022, with its Public Advisory Group ("Advisory Group") to solicit comments from the public on the Program Year 2023 proposal. Attendance at those meetings included the Commission's Utility Staff, the New Mexico Attorney General's Office, the Energy, Minerals and Natural

# 2023 - 2025 Energy Efficiency Program Plan

Resources Department ("EMNRD"), New Mexico Mortgage Finance Authority ("MFA"), the Southwest Energy Efficiency Project ("SWEEP"), the Coalition of Clean Affordable Energy ("CCAE"), Zia Natural Gas, Raton Natural Gas, Los Alamos County, San Felipe Pueblo, Cochiti Pueblo, EnergyWorks, Public Service Company of New Mexico ("PNM"), El Paso Electric Company ("EPE"), Xcel Energy, Peoples Gas, Tampa Electric Company, ICF International ("ICF"), ICAST, CLEAResult Consulting, Inc. ("CLEAResult"), and individual community activists.

### II. Overview

### A. Introduction

This document contains the description and rationale for proposing modifications to the Water Heating, Space Heating, and Efficient Buildings programs, one new program under the existing Income Qualified Program, and a new Home Energy Reports program. The program descriptions include estimated participation, energy savings, cost-effectiveness testing results by the independent measurement and verification ("M&V") evaluator selected by the Commission, Evergreen Economics ("Evergreen"), and all program assumptions. A Glossary of terms used in this plan can be found under Section XIII Appendix F.

#### **B.** Existing Programs

On May 20, 2020, the Commission issued its Final Order in NMPRC Case No. 19-00248-UT approving a set of energy efficiency programs for NMGC's residential and commercial customers. The following is a list of the programs that are currently available to customers:

### 1. Residential

(1) The ENERGY STAR Water Heating program provides residential home builders with a \$225 incentive and homeowners with a \$300 incentive to install ENERGY STAR tankless or storage tank water heaters. Homeowners and builders can purchase the equipment directly on their own or through a midstream component that was established in

# 2023 - 2025 Energy Efficiency Program Plan

NMGC's rural communities. In addition, NMGC offers a free Energy Efficient Showerhead package. The Energy Efficient Showerhead pack measures include a low flow showerhead, two faucet aerators and one swivel-head kitchen aerator. The measures are offered to customers in two formats. The main format is that NMGC customers can request a pack online and it will be shipped to them free of charge. The other format is to install the measures directly in collaboration with PNM's Home Energy Checkup ("HEC") program. Customers that participate in PNM's HEC program will have PNM Energy Specialists provide an audit and recommend energy saving ideas and educate them on energy efficiency programs offered by the utilities. Included in that audit are Direct Install ("DI") measures. NMGC and PNM agreed that NMGC will pay for the materials and manpower to install these water heating measures in homes that utilize natural gas to heat their water.

(2) The ENERGY STAR Space Heating program provides residential builders and homeowners incentives to install ENERGY STAR furnaces or boilers. The program has three tiers of incentives with increasing incentives for increased efficiencies. Tier I is for 92% Annual Fuel Utilization Efficiency ("AFUE") furnaces and boilers, Tier II is for 95% furnaces and boilers and Tier III is for 97% furnaces. Incentives for home builders are \$200 for Tier I, \$250 for Tier II, and \$300 for Tier III. To help cover additional costs for replacing an existing unit, homeowners receive an additional \$75 for each tier or \$275 for Tier I, \$325 for Tier II, and \$375 for Tier III. An insulation measure is available under this program that provides a rebate of 25% of the cost (up to \$500) to install a minimum of R-19 to the roof or attic of a home that has existing insulation rated R-11 or less and a rebate of 25% of the cost (up to \$300) to bring the insulation value up to R-38 for

# 2023 - 2025 Energy Efficiency Program Plan

homes with existing insulation rated R-11 to R-19. The program also has a Smart Thermostat offering. NMGC provides a \$50 rebate for the installation of an ENERGY STAR rated smart thermostat.

(3) The Income Qualified program offers three programs. The first provides funding for energy efficient natural gas measures for the New Mexico Energy\$mart program or Weatherization Assistance Program ("WAP"), administered by MFA, to weatherize qualifying NMGC customers' residences. The program includes Baseload and Baseload Plus services. The Baseload service provides the home with a standard set of materials to install, pipe wrap, water tank insulation, low flow showerheads and faucet aerators. The Baseload Plus service provides the same service as Baseload. but as determined by the on-site auditor, the home is also eligible to receive one of two measures directly related to natural gas usage: attic insulation up to a minimum of R-38 or furnaces that have a 95% AFUE. Under these two additional services customers benefit from immediate savings while remaining on the Energy\$mart whole house list for measures that typically have a longer waiting period. The second program is the Native American Energy Efficiency Program ("NAEEP") and it offers the same measures as the WAP but is exclusive to Native American communities. NMGC also was granted a variance to NMPRC Case No. 19-00248-UT to offer a third program that provides funding to community service organizations throughout NMGC's service territory that have been successful at securing separate funding for low-income energy efficiency projects. This allowed NMGC to support these projects with supplemental funding for services that reduce natural gas usage. NMGC refers to this program as the Community Energy Efficiency Projects ("CEEP").

# 2023 - 2025 Energy Efficiency Program Plan

- (4) The New Homes program offers home builders incentives who build high performance homes which are verified by a Residential Energy Rating System ("HERS") rater. This whole house approach captures additional benefits such as envelope tightness, duct tightness, location of units and insulation values which affect the performance of the gas units. Incentives are paid based on the reduction of therms when compared to a baseline home (currently a home meeting minimum 2018 International Energy Conservation Code requirements).
- (5) The Multi-Family program offers energy efficient upgrades for all gas end uses using a turn-key whole building approach for both low income and market rate properties. The program is turn-key because the service provider starts with an energy assessment, helps the owner access financing, evaluates all rebates, incentives, and other programs that can be leveraged to help offset costs, and selects and is responsible for all subcontractors installing the measures. NMGC only provides rebates for measures that directly reduce natural gas usage assuring costeffectiveness for each dollar spent. Because the process involves elimination of drafts, hot/cold zones, ensuring carbon monoxide levels meet federal standards, and ensuring there is no excess leakage, the buildings become more comfortable, healthier, safer, and the residents gain financially through reduced energy bills and/or assuring that their rents do not increase.

#### 2. Commercial

(1) The Efficient Buildings program provides commercial customers and school systems with on-site technical assistance and review of their natural gas applications, education on financing energy efficiency projects, and incentives. NMGC offers direct-install applications, rebates on purchasing new energy efficient equipment through

# 2023 - 2025 Energy Efficiency Program Plan

prescriptive measures, and incentives of \$0.60 per therm or \$0.90 per therm, depending on the life of the measure, for the estimated first year savings for implementation of energy efficient custom upgrades.

### C. Proposed Changes to Existing Programs

#### 1. Water Heating Program

NMGC's Water Heating program currently provides incentives for customers to install ENERGY STAR tankless and storage tank water heaters. NMGC is proposing to expand the midstream component of the program. The midstream model is an important evolution of energy efficiency programs as it allows for greater efficiencies in program implementation and extends the reach of the program past what typical downstream program design can deliver. NMGC will work closely with ICF and the existing network of wholesalers, distributors, and participating contractors to help them understand this new delivery channel and how it fits into the portfolio and will benefit their businesses to participate. NMGC proposes a proven program design delivery model that has been developed in collaboration with manufacturers, distributors, and their customers to support the water heating program. The program is designed for both residential and commercial customers offering incentives for ENERGY STAR tankless water heaters and ENERGY STAR storage tank units. NMGC will continue to offer its free High Efficiency Showerhead package that includes a high efficiency showerhead, two faucet aerators and one swivel-head kitchen aerator. In collaboration with PNM, NMGC will also continue to provide the package under PNM's HEC program. Customers that participate in PNM's HEC program will have PNM Energy Specialists provide an audit and recommend energy saving ideas and educate them on energy efficiency programs offered by the utilities. Included in that

# 2023 - 2025 Energy Efficiency Program Plan

audit are Direct Install ("DI") measures. NMGC and PNM agreed that NMGC will pay for the materials and manpower to install these water heating measures in homes that utilize natural gas to heat their water.

### 2. Space Heating Program

The Space Heating program currently provides residential builders and homeowners incentives to install ENERGY STAR furnaces or boilers. Similar to the Water Heating program, NMGC is proposing to expand the midstream component and offer incentives for residential and commercial customers for ENERGY STAR furnaces and boilers. In an effort to encourage the use of even higher efficiency equipment, NMGC is increasing its minimum Annual Fuel Utilization Efficiency ("AFUE") furnaces to 95% and increase its incentives for furnaces with an AFUE of 96% or above. NMGC also plans to offer rebates for a furnace tuneup of \$85 for market rate customers and \$110 for Low to Moderate ("LMI") customers. NMGC will continue to offer its insulation measure that provides a rebate of 25% of the cost (up to \$500) to install a minimum of R-19 to the roof or attic of a home that has existing insulation rated R-11 or less and a rebate of 25% of the cost (up to \$300) to bring the insulation value up to R-38 for homes with existing insulation rated R-11 to R-19. NMGC is also proposing new measures that offer \$200 incentives each for crawl space insulation, duct sealing and air sealing. The program will also continue to provide a \$50 rebate for the installation of an ENERGY STAR rated smart thermostat.

### 3. Efficient Buildings Program

NMGC's Efficient Buildings program has been very successful and NMGC will continue to offer direct-install applications, rebates on purchasing new energy efficient equipment through prescriptive

# 2023 - 2025 Energy Efficiency Program Plan

measures, and incentives of \$0.60 per therm or \$0.90 per therm, depending on the life of the measure, for the estimated first year savings for implementation of energy efficient custom upgrades. Starting in 2023, NMGC is adding a new offering - Strategic Energy Management ("SEM"). The SEM offering recruits participants from school districts and municipalities in addition to industrial and large commercial institutions in New Mexico and uses a heterogeneous cohort model that is designed to elicit participation from across diverse business segments. The cohorts save energy through collaborative group workshops, oneon-one events and energy management coaching. A full modeling of the facility and its gas uses are scanned to identify energy efficiency opportunities and engage employees in energy efficiency. No-cost and low-cost projects include optimization of building management systems, changes to operation set points and employee behavioral changes. During the first year, eight to twelve customers are expected to be brought together to participate in the program. The cohort creates a community of energy efficiency, encourages peer-to-peer learning, and provides intrinsic motivation to make changes and save energy.

# D. Proposal to Add a Manufactured Home Communities Program to the Income Qualified Program

According to the Department of Energy, manufactured homes can consume 50% more energy than site-built homes of equal size and age. Mobile homes built before 1980 consume more energy than all other types of homes. Approximately 28% percent of all mobile homes in use nationally were built before 1980. Because of the high energy consumption and increased energy burden for the resident, manufactured housing deserves a specialized energy efficiency program. NMGC proposes an income-qualified energy efficiency program for manufactured home communities to be implemented

# 2023 - 2025 Energy Efficiency Program Plan

by EnergyWorks. EnergyWorks is licensed in New Mexico as a residential, manufactured home, and commercial contractor. In New Mexico, there are approximately 64,000 manufactured homes that are 17.5% of all housing stock. In many New Mexico Counties, manufactured homes comprise over 30% of the housing stock. EnergyWorks identified 224 communities within the Company's service territory. EnergyWorks will identify eligible manufactured housing communities and work with residents and local management to coordinate a community-based program. Similar to the NAEEP, EnergyWorks will provide comprehensive natural gas energy efficiency services to qualified customers at no cost to the customer. Once customers are identified, EnergyWorks will conduct an energy assessment to determine eligible services. Based on the results of the assessment, EnergyWorks will complete the efficiency services. These include high efficiency showerheads, high efficiency faucet aerators, water heater tank and pipe insulation, air and duct sealing, programmable thermostats, and insulation. EnergyWorks will also install a carbon monoxide detector in homes where one is not present. EnergyWorks will provide the customer with educational materials about energy use, review all services, and provide training for proper use and maintenance of all products installed in the home. The program will be known as the Manufactured Home Communities Program ("MHCP").

### E. Proposal to Add a Home Energy Reports Program

NMGC proposes to add a residential behavior-based program to its portfolio by offering a Home Energy Reports program. NMGC had considered Home Energy Reports in the past and was pleased with the offering proposed by ICF through NMGC's recent RFP process. The Home Energy Reports Program aims to amplify residential energy savings using a costeffective model that delivers relatable interventions to NMGC customers.

# 2023 - 2025 Energy Efficiency Program Plan

The scalability and flexibility in ICF's proposed approach can drive nextgeneration customer engagement that creates connections with NMGC's energy efficiency portfolio and goals. Notable benefits attributed to ICF's Home Energy Reports approach include 1% or higher average annual therms savings, doubling cross-program uptake, up to 48% email open rates, and 52% of customers reporting acting on recommendations. The strategy provides a customer-centric experience with demonstrated high levels of savings, customer satisfaction, and cross-program participation to support NMGC's portfolio and customer service goals. To support the mandate for cost-effectiveness, ICF's design uses scale and flexible infrastructure to reduce overhead and technology costs while delivering high levels of behavioral savings. It will combine digital and print channels to maximize cost-effectiveness, savings, and customer engagement. While digital represents a cost-effective channel, print reports mailed to customers tend to drive higher therm savings, and not all customers can be reached effectively by email. The plan is to target 200,000 residential customers at program launch with half of those customers in a digital-only wave and half in a print report wave. It will be scaled up to 250,000 customers in the second program year with another 50,000 customers in the digital-focused wave. With this design, it is estimated that 3.2 million therms can be saved across the 3-year program.

### F. Program Rationale and Selection Criteria

NMGC continuously considers adding new energy efficiency programs to its portfolio. NMGC researches programs with proven success at other natural gas utilities and receives information from sources such as the Environmental Protection Agency's and Department of Energy's research related to ENERGY STAR, the American Gas Association, and the Consortium for Energy Efficiency. In November 2021, NMGC hired a firm to provide a Program and Technology Assessment to evaluate its current offerings and recommend

# 2023 - 2025 Energy Efficiency Program Plan

potential programs that could be added to NMGC's portfolio. Some of those recommendations were added as proposals in the Company's Application. One measure that was considered were Natural Gas Heat Pumps, although Natural Gas Heat Pumps look extremely promising as a valuable offering, they are not quite yet readily available to the public. Once they cross that threshold NMGC will add that measure to its existing Space Heating Program. In addition, in early January 2022 NMGC submitted a Request for Proposals ("RFP") soliciting ideas and programs to potentially add to its energy efficiency portfolio for its 2023-2025 application. The responses were thorough and ambitious and NMGC selected implementers and programs that were cost-effective and would provide the most benefit to its customers. From the Program and Technology Assessment and responses received from the RFP, NMGC also considered other measures to include in its proposed 2023 Program Year plan but determined they would not be cost-effective in the current market. Among the programs NMGC considered were smart thermostats for water heaters, point-of-use temperature shut-off valves for water heating, residential furnace filter replacement, and wall insulation for homes. The threshold test for program consideration was cost-effectiveness, as measured by the UCT, and NMGC was not able to devise a way of offering these programs that would satisfy the UCT test. Along with cost-effectiveness, NMGC considered the criteria listed below, which are contained in the Rule.

- Cost-effectiveness the portfolio of programs being proposed has a UCT greater than 1.00. The individual programs being proposed also each have a UCT of 1.00 or above.
- 2) Additional selection criteria
  - System benefits All of the programs deliver system benefits through savings in energy. The magnitude of the benefit is related to the total amount of savings which is discussed under item iv. below.
  - ii. Widespread participation potential The programs were selected so that the total portfolio of energy efficiency programs, including the existing, revised

# 2023 - 2025 Energy Efficiency Program Plan

and new programs, will provide the opportunity for broad participation among eligible customer classes. The Residential Water Heating, Space Heating, and New Homes programs are designed to reach residential customers and home builders throughout NMGC's service territory. The Income Qualified program targets NMGC's low-income residential customers, including those in Native American and manufactured home communities, and assists with community energy efficiency projects through its CEEP. The Multi-Family program will reach both low-income and market rate customers. The Efficient Buildings program will be attractive to a wide range of commercial segments including lodging, restaurant, grocery, retail, laundry, medical, office, educational and governmental facilities. These programs are designed for eligible sales service and transportation service customers and end-users, including residential customers receiving service under NMGC Rate Nos. 10 and 70 and small and medium sized commercial customers receiving service under Rate Nos. 54, 56 and 70.

- iii. UCT test results please see Section II. I. Program Budget and UCT Results below.
- iv. Total estimated energy savings Collectively, the programs have the potential to reduce total net energy consumption by 13,595,910 therms in 2025.
- v. Existence of substantial non-energy benefits The Income Qualified and Multi-Family programs provide increased comfort that would not have been achieved without the program. The 1.5 GPM high efficiency showerhead and 1.0 GPM faucet aerators package provides significant non-energy benefits in the form of water savings over standard 2.5 GPM and 2.2 GPM Low Flow models. A savings of 4,481 gallons per year per unit will be realized. The commercial low flow pre-rinse spray valves and faucet aerators also contribute to enormous water savings. Combined with the

# 2023 - 2025 Energy Efficiency Program Plan

Low Flow Showerhead program these measures accounted for more than 24,698,009 gallons of water saved in Program Year 2021 alone. The Efficient Buildings program has the potential of allowing businesses and school systems to allocate money saved from reduced energy costs to retain or add personnel or other resources and, depending upon the specific measures selected, will result in water savings, improved comfort, and other non-energy benefits.

- vi. Administrative ease of program deployment For the most part, NMGC selected programs that have proven track records with NMGC and at other utilities. Additionally, MFA and EnergyWorks are third-party contractors experienced with low-income programs, Native American and manufactured home communities and will implement their respective programs under the Income Qualified program. ICF is a third-party contractor with a history of success with NMGC's Water Heating, and Space Heating programs as well as the ENERGY STAR New Homes programs at NMGC, PNM, EPE, and other utilities. CLEAResult is a thirdparty contractor with proven ongoing success with NMGC's Efficient Buildings program at NMGC and other utilities, including EPE and Southwestern Public Service ("SPS") in New Mexico. ICAST is a thirdparty contractor with success with Multi-Family programs in other states including Colorado and New Mexico
- vii. Overall portfolio development considerations The portfolio of revised and new programs provides incentives for a diverse mix of technologies and customer segments and targets significant residential and commercial enduses. Incentives and/or rebates that are offered depend on the individual facts and circumstances of each program as well as NMGC's experience with them. NMGC looks at incremental costs to customers, successful similar programs in other states and particularly the experience of the M&V evaluators. This is the generally accepted method for determining rebates

# 2023 - 2025 Energy Efficiency Program Plan

and incentives in the industry. Residential space heating use will be reduced through the Space Heating, Income Qualified, and Multi-Family programs. Residential water heating use will be reduced through the Water Heating and Multi-Family programs. The Efficient Buildings program will give commercial, educational, and governmental customers the option of applying energy efficiency measures to any natural gas application used in their operations through custom, direct-install and/or prescriptive measures.

viii. Performance risk of the technologies – All of the programs selected use proven technology.

### G. Public Advisory Process

NMGC solicited input from the Advisory Group at several points during the development of the existing and proposed programs. The Advisory Group members attending meetings in 2021 and 2022 included Commission Staff, the Attorney General's office, EMNRD, CCAE, MFA, SWEEP, Zia Natural Gas, Raton Natural Gas, San Felipe Pueblo, Cochiti Pueblo, EnergyWorks, PNM, EPE, Xcel, Tampa Electric Company, ICF, ICAST, CLEAResult, and individual community activists. During 2021, NMGC convened and held a meeting with the Advisory Group on November 16, 2021. NMGC discussed the results of the 2020 Program Year, progress with the 2021 Program Year, year-end expectations, and ideas for future program proposals, including the 2023 - 2025 Program Years, and solicited comments and ideas on how to create a more dynamic energy efficiency portfolio going forward. On July 26, 2022, NMGC held another meeting with the Advisory Group to provide results of the 2021 Program Year, updates on regulatory matters affecting the energy efficiency programs, to discuss further program developments, and to discuss NMGC's proposals for its 2023 - 2025 Program Year filing in order to solicit comments and feedback.

# 2023 - 2025 Energy Efficiency Program Plan

# H. Program Goals

The primary long-term goal of the portfolio of programs is to induce lasting structural and behavioral changes in the marketplace, which will result in the increased adoption of energy-efficient technologies. This is accomplished by promoting the purchase of energy efficient products and services, increasing customer awareness of energy efficiency measures, and providing incentives to change behaviors. The proposed programs will address these objectives by:

- Implementing promotional campaigns that increase customer awareness of energy efficiency products and benefits
- Using rebates to eliminate the over-emphasis on first cost versus life-cycle costs
- Simplifying the rebate process to make participation easy for customers and other eligible participants
- Providing opportunities for participation to our low-income customers and to enhance customer awareness of energy efficient products

Achieving these long-term goals requires an aggressive promotional effort. Promotions will use multiple channels to increase customers' awareness. Participating vendors and contractors are important partners for a successful program. NMGC will work with its third-party administrators to provide ongoing information and training to vendors, HVAC and plumbing contractors, manufacturer representatives and other affiliates that are involved with the sales and installations of energy efficient equipment to help build awareness and participation in the vendor community. There are many community-based organizations that have an interest in energy efficiency and their support will be solicited to help educate and inform customers.

Providing access to information about cost-effective energy efficiency measures is an important step to help overcome some of the market barriers to improving energy efficiency. These barriers include the cost and effort of searching for information, the

# 2023 - 2025 Energy Efficiency Program Plan

uncertainty of performance, and the initial cost of installing measures. NMGC and NMPRC endorsement gives customers confidence about the effectiveness of the measures they may be willing to consider. Successful programs will result in greater consumer demand for energy efficiency products and services in New Mexico. This in turn should help stimulate the market for energy efficiency products as retailers and contractors respond to the increased consumer demand.

# I. Program Budget and UCT Results

NMGC has established expected customer participation and expected energy savings for each program in the near-term. As summarized in the table below, the proposed first full year budget for the portfolio of programs is \$14,993,203, not including the Incentive Rate, and the projected UCT is 1.55. The table also highlights some of the program assumptions and UCT calculations. Expected participation for each program is in terms of number of measures or projects installed or rebated, not necessarily number of customers. Portfolio Costs are costs associated with the energy efficiency portfolio but are non-program specific. For the entire 2023 Program Plan portfolio, the average cost per therm for the energy saved is only 31 cents per therm, as shown in the following table:

2023 Program Budget and UCT Results					
Program	2023 Year Expected Participation	Lifetime Therms Saved *	Total Program Budget	UCT	Cost per Therm Saved
Water Heating	16,171	2,852,630	\$1,235,791	1.09	\$0.43
Space Heating	2,688	3,731,994	\$1,182,884	1.38	\$0.32
New Homes	1,150	10,018,800	\$1,139,662	3.46	\$0.11
Income Qualified	1,787	8,280,092	\$3,796,699	1.17	\$0.46
Multi-Family	4,000	5,594,535	\$2,266,700	1.27	\$0.41
Efficient Buildings**	269	17,204,937	\$4,405,722	1.85	\$0.26
Home Energy Reports	220,000	1,210,000	\$727,745	1.10	\$0.60
Portfolio Costs	N/A	N/A	\$238,000	N/A	
Total		48,892,988	\$14,993,203	1.55	\$0.31
* Adjusted for free ridership as derived from the M&V r **Efficient Buildings participation are projects associa					

# 2023 - 2025 Energy Efficiency Program Plan

# J. Program Changes and Budget for Program Year 2023

The following paragraphs discuss proposed changes to the approved programs and present the estimated 2023 Program Year budget.

# 1. Changes to Current Portfolio

In this filing, NMGC is proposing changes or enhancements to its portfolio in an effort to simplify the offerings to its customers and to increase the costeffectiveness of its programs. NMGC is proposing modifications to the Water Heating, Space Heating, and Efficient Buildings programs, the addition of the MHCP under the existing Income Qualified Program, and a new Home Energy Reports program. The impact to the 2023 energy efficiency portfolio budget as compared to the 2022 Program Year is an increase of 91.74% but higher savings per dollar spent with an increase in savings of 200.24% over 2022. NMGC's budget is mainly driven by the incentives offered to participate in its programs with 52.99% of the budget allotted for that purpose. The projected 2023 budget is seen in the following tables.

# 2023 - 2025 Energy Efficiency Program Plan

#### 2. Projected Program Year 2023 Budget and Expected Participation

The tables below present the projected energy efficiency participation and budget for Program Year 2023 as well as the overall 2023 Program Year budget that includes the Incentive Rate. The Incentive Rate approved in NMPRC Case 19-00248-UT was based on the Weighted Average Cost of Capital ("WACC") of 6.96% from NMGC's previous rate case. NMGC's most recent rate case had an approved WACC of 6.65%. Therefore, NMGC is lowering the incentive to 6.65% in calculating the incentive for this proposed budget to match the most recently approved WACC.

2023 Program Year Budget	
Budget Category	2023 Projected Budget
Internal Administration	\$1,017,500
External Administration	\$5,347,412
Rebates	\$7,944,291
Promotion	\$195,000
M&V	\$251,000
Portfolio Costs	\$238,000
Total for EE Costs	\$14,993,203
Incentive	\$997,048
Total Budget	\$15,990,251

The energy efficiency budget of \$14,993,203 is approximately 4.2% of NMGC's estimated amount it will bill customers during the program year

# 2023 - 2025 Energy Efficiency Program Plan

based on a three-year average of actual billings from July 1, 2019, through June 31, 2022. This is under the 5% cap as directed under NMSA 1978, Section 62-17-6(A)(2).

This budget reflects a range of estimated participation. All programs have several measures in which a customer can participate. Please see Section III.B.1. of this document for an individualized estimate of measure participation. It is important to note that all programs have a low and high range of estimated expected participation, and a program may still be cost-effective even if it does not reach, or exceeds, the estimated participation. In order to establish a budget, each measure requires NMGC to input a singular expected participation value that falls within that range. The participation figures under the Efficient Buildings program represent *projects* estimated to be achieved under the program. A single participant may have more than one project at its location(s). Participation figures under the Multi-Family program represent estimated *units* that receive energy efficiency measures. The estimated participation value for each program is shown in the table below.

2023 Program Participation and Budget		
Program	2023 Year Expected Participation	Total Program Budget
Water Heating	16,171	\$1,235,791
Space Heating	2,688	\$1,182,884
ThermSmart New Homes	1,150	\$1,139,662
Income Qualified	1,787	\$3,796,699
Multi-Family*	4,000	\$2,266,700
Efficient Buildings*	269	\$4,405,722
Home Energy Reports	220,000	\$727,745
Portfolio Costs	N/A	\$238,000
Total		\$14,993,203

# 2023 - 2025 Energy Efficiency Program Plan

\*Efficient Buildings and Multi-Family participation are projects or units for those programs

# K. Tariff Rider and Customer Bill Impact

NMGC's current Rate No. 1-15 – Rate Rider No. 15 – Energy Efficiency Rider is \$ 0.0185 per therm and will remain in effect through the end of March 2023. The impact of this is to decrease the \$779,134.80 over-collection as of March 31, 2022 (as reported in NMGC's 2021 Annual Report), to an estimated zero net balance as of March 31, 2023. The calculation of a potential surcharge factor will be calculated in or about June 2023 with expected implementation in August 2023. The calculation will be composed of three parts: 1) the 2023 program budget as described in Section II(J)(2) above; 2) reconciliation of the over or under-recovered actual expenses including carrying charges for the period ending March 31, 2023; and actual and/or estimated collections for the April 2023 through July 2023 time period.

Based on the proposed 2023 Program Year budget, and assuming a net zero balance as of the end of March 2023, NMGC estimates that the proposed surcharge factor will be approximately \$0.0358 per therm beginning in August 2023. The surcharge factor of

# 2023 - 2025 Energy Efficiency Program Plan

\$0.0358 would be about 3.6% of a residential customer's bill or approximately \$1.80 per month.

#### III. Program Cost / Benefit Analysis

# A. UCT Analysis – Inputs and Results

The Act establishes the UCT as the standard to be used to determine if efficiency measures are cost-effective. Under the Rule, the UCT compares the present value of the savings to the costs of an efficiency program. Under the Rule, any program that achieves a UCT of 1.00 or greater meets the Act's standard for cost-effectiveness.

NMGC performed the UCT calculations for the efficiency programs using the GDS Associates ("GDS") Screening Tool. This is the same model, with additional updates, that NMGC has used in each of its energy efficiency cases filed with the NMPRC since its inception in 2009. Economic and avoided cost assumptions are provided in Section VIII of this document. The avoided gas costs have been updated since the previous filing in NMPRC Case No. 19-00248-UT. All inputs and calculations have been developed using methods that are generally accepted by energy efficiency experts in the natural gas and electric industries.

The following set of tables presents the program-specific inputs and the program-level results from the energy efficiency UCT analyses. All of the proposed programs pass the UCT test and show gas savings potential. (Please see Section XV for the UCT analysis output table.)

# B. Program UCT Results

The following table presents the summary results of the UCT calculation for each energy efficiency program including annual energy savings, present value of the costs and benefits (savings) over the life of the program, and the UCT.

2023 Program				
Program	Annual Therms Saved	Present Value d* Costs	Present Value Benefits	UCT
Water Heating	228,464	\$1,235,791	\$1,350,021	1.09
Space Heating	220,800	\$1,182,884	\$1,607,432	1.38
New Homes	400,752	\$1,139,662	\$3,944,510	3.46
Income Qualified	528,208	\$3,796,699	\$4,468,410	1.17
Multi-Family	372,969	\$2,266,700	\$2,875,421	1.27
Efficient Buildings	1,570,777	\$4,405,722	\$8,220,358	1.85
Home Energy Reports	1,210,000	\$727,745	\$798,933	1.10
Portfolio Costs	N/A	\$238,000	\$0	N/A
Το	otal 4,531,970	14,993,203	23,265,085	1.55

# 2023 - 2025 Energy Efficiency Program Plan

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

Inputs to the UCT calculation include internal administration costs, program level inputs, benefits, and costs. Internal administration costs include labor to research, select, design, implement, and maintain programs. Program level inputs include the life of the measure, energy savings, incentives, and anticipated participation rates. Benefits include avoided energy and capacity costs. Program costs include the cost of each measure, internal administration, third-party administration, promotional and M&V. The overall portfolio UCT includes all program costs and portfolio costs borne by NMGC.

#### **1. Program Level Inputs**

The following table presents the program level inputs used in the UCT analysis. The inputs include measure life, per unit energy savings, and forecasted participation rates. Measure life, energy savings and incremental participant costs are all based on the previous M&V evaluations and/or the New Mexico Technical Resource Manual ("TRM"), (please see Section XIV

# 2023 - 2025 Energy Efficiency Program Plan

- Program Performance Assumptions), or on industry standards and documentation.

Several factors were considered in estimating expected participation. As previously mentioned, all programs have a low and high range of estimated expected participation and a program may not reach, or it may exceed, the estimated participation and still be cost-effective. In order to establish a budget, each program measure requires NMGC to input a singular expected participation value that falls within that range. Expected participation values for the existing, revised, and new residential programs were based on previous years' experience and discussions with manufacturer representatives, contractors, and ICF's experience implementing programs with other utilities. MFA provided their estimate to NMGC on participants for the Energy\$mart portion of the Income Qualified program through their years of experience and familiarization with NMGC's programs for low-income customers. EnergyWorks provided estimated participation in the Income Qualified NAEEP and MHCP offerings based on their experience administering the NAEEP over the last five years and with their experience providing energy efficiency services to manufactured homes in New Mexico. NMGC expects increased participation in the CEEP due to the recent passage of House Bill 37 ("HB37") and the ability of Community Action Partners to pursue grants for low-income projects in various communities across the state. Additional funding will help support the CEEP and ensure the program will be in a prime position to coordinate with these low-income projects for added benefits as was the intended collaboration from utilities in HB37. For the Multi-Family and Efficient Buildings program, expected participation values were estimated through discussions with ICAST and CLEAResult, their experiences with existing NMGC programs and with other utilities, and the utilization of natural gas by multi-family, commercial and institutional customers in NMGC's

# 2023 - 2025 Energy Efficiency Program Plan

service territory. Participant costs of a particular measure were also a factor in estimating participation levels.

Key inputs for each program are shown in the table below. Many of the programs have multiple measures that have a wide range of various components that affect each of these categories. The life of measures under the Multi-Family, Income Qualified and Efficient Buildings programs are weighted averages of measures within each program. Specific criteria used to set the incentive levels for each program are discussed under Section VII - Program Details.

# 2023 - 2025 Energy Efficiency Program Plan

2023							
Program	Participation	Annual Savings per Unit (therms)	Total Annual Gross Savings (therms)	Total Annual Net Savings (therms)*	Lifetime Savings (therms)*	Free Ridership %	Measure Life
Water Heating	16,171		309,845	228,464	2,852,630		
Midstream Tank - Res	205	86.00	17,630	12,341	185,115	30%	15
Midstream Tankless - Res	344	139.00	47,816	33,471	669,424	30%	20
Midstream Small Storage (40-75 MBH) - Comm	11	194.00	2,134	1,494	22,407	30%	15
Midstream Small Tankless (50-200 MBH) - Comm	21	510.00	10,710	7,497	149,940	30%	20
Midstream Large Storage (75-300							
MBH Et>90) - Comm Midstream Large Storage (75-300	6	510.00	3,060	2,142	32,130	30%	15
MBH Et>95) - Comm Midstream Large Tankless (200-	6	561.00	3,366	2,356	35,343	30%	15
300 MBH Et>90) - Comm Midstream Large Tankless (200-	6	816.00	4,896	3,427	68,544	30%	20
300 MBH Et>95) - Comm	6	1,020.00	6,120	4,284	85,680	30%	20
IQ Kits	10,000	14.58	145,800	116,640	1,166,400	20%	10
Kits - Single Pack	750	9.83	7,373	4,424	44,235	40%	10
Kits - Double Pack	2,250	16.67	37,508	22,505	225,045	40%	1(
WaterSense Shower head POP	1,528	3.79	5,791	3,475	34,747	40%	10
PNM HEC Collaboration	982	21.00	20,622	16,498	164,976	20%	10
Gas Dryer	62	1.28	79	52	774	35%	15
Space Heating	2,688		289,802	220,800	3,731,994		
Midstream 95% AFUE Furnace -		227.00				2004	
Res Midstream 96% AFUE Furnace -	22	327.00	7,194	5,036	90,644	30%	18
Res Midstream 97% AFUE Furnace -	123	396.00	48,708	34,096	613,721	30%	18
Res Midstream 98% AFUE Furnace -	21	433.00	9,093	6,365	114,772	30%	18
Res Midstream 99% AFUE Furnace -	10	512.00	5,120	3,584	64,512	30%	18
Res	10	512.00	5,120	3,584	64,512	30%	18
Midstream 95% AFUE Boiler - Res	85	289.00	24,565	17,196	343,910	30%	20
Midstream 97% AFUE Boiler - Res	3	289.00	867	607	12,138	30%	20
Smart Thermostat POP	185	49.60	9,176	7,341	73,408	20%	10
Smart Thermostat Post Purchase	1,236	49.60	61,306	49,044	490,445	20%	10
Smart Thermostat Greenlite IQ	494	46.00	22,724	18,179	181,792	20%	10
						25%	30
Insulation - Attic	195	166.00	32,370	24,278	728,325		
Insulation - Crawl Space	52	39.90	2,075	1,660	49,795	20%	30
Insulation - Air Sealing	21	32.40	680	544	9,798	20%	18
Duct Sealing	30	21.40	642	514	9,245	20%	18
Furnace Tune Up - Market	62	31.20	1,934	1,548	4,643	20%	3
Furnace Tune Up - LMI Boiler <300 MBH AFUE>85% -	103	31.20	3,214	3,214	9,641	0%	3
Comm	3	160.90	483	386	7,723	20%	20
Boiler <300 MBH AFUE>92% - Comm	5	248.00	1,240	992	19,840	20%	20
Boiler 300-2500 MBH AFUE >83% - Comm	5	1,573.00	7,865	6,292	125,840	20%	20
Boiler 300 - 2500 MBH AFUE>92% - Comm	10	2,696.20	26,962	21,570	431,392	20%	20
Boiler >2500 MBH AFUE>83% - Comm	2	3,370.90	6,742	5,393	107,869	20%	20
Boiler >2500 MBH AFUE>92% -	1						
Comm Furnace >225 MBH AFUE >95% -		5,777.70	5,778	4,622	92,443	20%	20
Comm Furnace >225 MBH AFUE >96% -	5	551.00	2,755	2,204	39,672	20%	18
Comm	5	637.70	3,189	2,551	45,914	20%	18
Home Energy Reports	220,000		1,210,000	1,210,000	1,210,000		
HER's	220,000	5.50	1,210,000	1,210,000	1,210,000	0%	1
New Homes	1,150		500,940	400,752	10,018,800		
BPI New Homes w/ WH & SH	1,150	435.60	500,940	400,752	10,018,800	20%	25
Income Qualified	1,787		528,208	528,208	8,280,092		
Native American	445	299.00	133,055	133,055	1,995,825	-20%	15
Energy\$mart (WAP)	573	311.5	178,490	178,490	3,034,322	-20%	17
		297.7			2,500,680	-20%	15
Manufactured Housing	560		166,712	166,712			
CEEP	209	239	49,951	49,951	749,265	-20%	1
Multi-Family	4,000		396,300	372,969	5,594,535		
Market Rate	1,400	111.1	155,540	132,209	1,983,135	15%	18
Low Income	1,800	92.6	166,680	166,680	2,500,200	-20%	18
Low Income < 5 Units	800	92.6	74,080	74,080	1,111,200	-20%	15
Efficient Buildings	269		1,835,667	1,570,777	17,204,937		
Custom Measures	62	15,900.90	985,856	788,685	11,830,270	20%	15
Prescriptive Measures	45	515.90	23,216	18,572	241,441	20%	1:
Direct-Install Measures	150	2,707.30	406,095	406,095	4,060,950	0%	1(
SEM	12	35,041.70	420,500	357,425	1,072,276	15%	
	12	55,041.10				15 %	
All Programs * Adjusted for free ridership as derived from			5,070,762	4,531,970	48,892,988		

Adjusted for free ridership as derived from the M&V report and/or the NMTRM
Participation under the Efficient Buildings program are projects attributed to those programs.

# 2023 - 2025 Energy Efficiency Program Plan

### 2. Program Costs

The following table presents the detailed components of the program costs including administration, third-party implementation, promotion, M&V and incentives. Please see the discussion below for a description of the allocation methods.

2023 Program Costs						
Program	Total Rebates	Internal Administration	External Administration	Promotion	M&V	Total Cost
Water Heating	\$487,646	\$100,850	\$605,295	\$20,000	\$22,000	\$1,235,791
Space Heating	\$485,965	\$100,850	\$554,069	\$20,000	\$22,000	\$1,182,884
New Homes	\$741,558	\$100,850	\$232,254	\$35,000	\$30,000	\$1,139,662
Income Qualified	\$3,131,666	\$201,700	\$348,333	\$65,000	\$50,000	\$3,796,699
Multi-Family	\$1,700,000	\$201,700	\$300,000	\$15,000	\$50,000	\$2,266,700
Efficient Buildings	\$1,397,456	\$210,700	\$2,707,566	\$35,000	\$55,000	\$4,405,722
Home Energy Reports	\$0	\$100,850	\$599,895	\$5,000	\$22,000	\$727,745
Portfolio Costs	N/A	\$238,000	N/A	N/A	N/A	\$238,000
Total	\$7,944,291	\$1,255,500	\$5,347,412	\$195,000	\$251,000	\$14,993,203

Pursuant to 17.7.2.8.K. NMAC, funding for measures and program costs directed for low-income customers far exceed the required 5% of the overall budget. The Multi-Family program has allocated 65% of its budget (\$1,473,355) to target low-income properties. Combined with the Income Qualified program, which is exclusively for low-income customers, a total of \$5,270,054 of NMGC's portfolio is directed at low-income measures and programs. This equates to over 35% of the overall budget.

# C. Program Costs Allocation

This section explains the methods and rationale used to allocate program costs to the various programs. Rebates are the amounts paid directly to or on behalf of participating

# 2023 - 2025 Energy Efficiency Program Plan

customers and account for 52.99% of the overall budget. The other major cost categories are internal administration, external administration, promotion, and M&V.

#### 1. Internal Administration

Internal administration costs include labor and administrative costs the NMGC Energy Efficiency Department staff expended on energy efficiency programs in research, program development, invoice processing, and oversight of the program plan. Invoice processing for third-party administration, outsourced marketing, and promotional materials were based on the administrative resources required to process and account for monthly invoices. A portion of the labor cost is based on NMGC's estimate of the time that will be needed to administer, track, and report on these programs per NMPRC compliance requirements, and the time necessary to interact and interface with customers, third-party implementers, M&V evaluators, and stakeholders on an on-going basis.

#### 2. External Administration

External administrative costs are the costs of engaging third-party contractors to implement a particular program or programs on behalf of NMGC. The Income Qualified programs will be implemented by MFA and EnergyWorks; ICAST will implement the Multi-Family program; ICF will implement the Water Heating, Space Heating, New Homes, and Home Energy Reports residential programs; and CLEAResult will implement the Efficient Buildings program. External, or 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 DI of high efficiency showerheads, faucet aerators, weatherstripping, and high efficiency pre-rinse spray valves, rebate processing

# 2023 - 2025 Energy Efficiency Program Plan

and quality control inspections. Across the nation, external administration costs for commercial programs, such as NMGC's Efficient Buildings program, are typically much higher on a percent per program than other programs offered by utilities. This is due to much more labor intensive work for audits, discussions with multiple decision makers within a business's organization, back-room engineering of potential applications, pre- and post- inspections of equipment, DI installations, and ongoing interface with M&V evaluators. 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.

#### 3. Promotion/Marketing

NMGC anticipates promoting these programs through the use of walk-in office posters, brochures (including rebate forms), print media, social media, and a small amount of television and radio advertising. Since 2014, NMGC has offered an on-line home energy audit tool (Home Energy Analyzer) for customers to help them identify ways to make their home more energy efficient. The tool provides recommendations and guidance and directs them to energy efficiency programs and rebates for measures that may be identified in the analysis. MFA, EnergyWorks and ICAST are responsible for marketing the programs they administer and conduct extensive outreach programs, but NMGC anticipates including information about the Income Qualified and Multi-Family programs in some of its marketing materials and has allocated a small budget for its promotion. While some programs will have costs assigned for program specific promotions, general energy efficiency promotional costs to NMGC are mostly allocated equally across the programs. The majority of promotional costs are covered in the contracts for the administration of those programs by MFA, EnergyWorks, ICAST, ICF and CLEAResult.

# 2023 - 2025 Energy Efficiency Program Plan

Additionally, NMGC will take advantage of current Company communication channels to promote these programs. Examples include use of the monthly newsletter, bill inserts, the call center, walk-in offices, back-of-the-envelope, social media, and NMGC personnel who meet with customers at their residences and businesses.

### 4. Measurement and Verification

The budget for M&V is an estimate based on the last four years of conducted by the NMPRC's statewide evaluator, Evergreen, and is typically around 2% of a utility's energy efficiency budget.

### 5. Portfolio Costs

Portfolio costs are costs associated with energy efficiency activities but are non-program specific. Legal and travel expenses and internal labor associated with regulatory requirements such as open meetings, reports, educational activities, and NMPRC workshops related to energy efficiency in general would fall into this category.

#### **IV.** Promotional Approach

The success of the energy efficiency programs rests in large part on effective marketing and promotional campaigns. The campaigns will encourage customers to participate in the programs as well as educate customers about the benefits of energy efficiency. The method that will be employed for promotional campaigns of residential programs is often referred to as a Push-Pull Marketing Strategy. The "push" will aim at educating and bringing awareness to residential customers of program offerings, while the "pull" will come from the contractor and affiliates side at the time the customer is requesting information or services from them. Developing these affiliates as trade allies will be crucial and is one of the most important components of the third-party administrator's work. The creation and alignment of common goals between the trade allies and NMGC will be the crux to delivering the greatest value to the budget and marketing campaigns.

# 2023 - 2025 Energy Efficiency Program Plan

The promotional approach to commercial programs will vary significantly from that of residential programs, primarily due to the differences in the size and nature of the target markets and the utilization of NMGC personnel that work closely and understand the needs of medium to large commercial customers. However, many of the same contractors, trade allies and affiliates work in both the residential and commercial markets. The proposed third-party implementers will work cooperatively in their outreach to these affiliates through ongoing meetings and various means of communication to leverage the opportunity to create additional synergies and expand the outreach of NMGC's programs.

In addition, NMGC will continue to collaborate as much as possible with the electric utilities, EPE, SPS, and especially PNM, to promote each of our programs and to provide the best opportunity for customers to increase energy efficiency in their homes and businesses.

#### A. Residential Programs

NMGC has gained valuable experience about the relative effectiveness of various promotional tactics since beginning the process on January 30, 2009. To date, NMGC's main focus for promoting its energy efficiency programs has been to market its programs to the end-use customer through various means. NMGC will continue to reach out to the end-use customer but will continue to emphasize a more robust promotional strategy. NMGC will continue to work with ICF to identify all HVAC and plumbing distributors, wholesalers, contractors, trade associations, and midstream channels that conduct business within NMGC's service territory. ICF will contact each of them directly to explain the programs and provide each with a contractor information packet. Ongoing outreach and group recruitment meetings will leverage the ENERGY STAR brand and how it aligns with the business practices of these affiliates. ICF will provide education on how the rebate application and process works not only for their own applications, but so that they can also assist customers that replace existing water heaters and furnaces. The downstream value

# 2023 - 2025 Energy Efficiency Program Plan

will be in having an expanded, knowledgeable resource base able to educate end-use customers on the benefits of NMGC's programs and installing energy efficient equipment.

Outreach to the end-use customer will continue. The newly proposed Home Energy Reports program will initially engage 200,000 customers the first year and ramp up to 250,000, contacting them five to six times annually promoting energy efficiency. The Company's monthly bill insert, back-of-the-envelope, and customer newsletter, "Natural Gas Pipeline", are among the most cost-effective communication vehicles, particularly if they are accompanied by simultaneous media advertising. These vehicles will continue to be a major source of information on the programs for our residential customers. All promotional materials will encourage customers to visit NMGC's Energy Efficiency Program website at www.nmgco.com/Energy\_Efficiency, or to call the Company's Customer Service Center at 888-NM-GAS-CO (888-664-2726) for more information. Because customers will be drawn to different benefits of energy efficiency (i.e., one person likes the money savings while another enjoys the feeling of doing something good for the environment), NMGC will use its website and social media to highlight a broad spectrum of program benefits in order to appeal to different customers' needs and interests, which is intended to drive participation.

The residential market is very large, so a variety of approaches must be used to assure sufficient reach. NMGC intends to employ print advertising, direct mail, radio and television advertising, the NMGC website, and social media, as well as third-party communication channels including contractor, community and professional organizations. NMGC personnel who interface with customers while providing services at their residences or businesses, will also provide brochures of programs that they determine can benefit the customer. The use of many communication channels increases the reach of the message and the level of customer awareness, which will be crucial in the success of these programs. NMGC will be able to take advantage of the promotional materials created for energy efficiency programs by the third-party program administrators by incorporating

# 2023 - 2025 Energy Efficiency Program Plan

information in bill inserts and targeted mailings, which will further enhance the public's awareness and participation.

The Income Qualified and Multi-Family programs will be administered by MFA, EnergyWorks and ICAST respectively. Although MFA, EnergyWorks and ICAST, through their network of sub-contractors, will be responsible for qualifying participants and advertising the programs, NMGC will continue to educate its call center representatives to refer customers to MFA, EnergyWorks and/or ICAST as appropriate.

NMGC will continue to work cooperatively with builders and retailers in the promotional effort for both residential and commercial programs. Participating building contractors, vendors, and affiliates will receive rebate materials and training materials regarding NMGC's energy savings programs and will periodically be sent follow-up mailings.

#### **B.** Commercial Programs

For the most part, marketing and promotional efforts aimed at commercial customers will not use mass-market channels. Instead, efforts will be focused as described above. CLEAResult has established relationships with many of the same organizations that ICF will be engaging and in fact has held mutual promotions for contractors, vendors and manufacturer representatives that provide both residential and commercial services. Program information will also be provided to business associations, architects, engineers, facility managers' groups, trade associations, contractor groups, retailer organizations, midstream channels and at trade shows. NMGC will also utilize its staff to promote the programs and assist in identifying potential businesses that could benefit from its programs. In addition, as with the residential multi-family facilities, ICAST will provide the same services for commercial multi-family properties that are master-metered.

# 2023 - 2025 Energy Efficiency Program Plan

### V. Staffing

NMGC Energy Efficiency Program staff will be responsible for the continual monitoring and oversight of the energy efficiency portfolio, reporting and assisting third-party implementers with promotional efforts, customer interface, recruitment of trade allies, rebate submissions, and annual NMPRC reporting. This group will also be responsible for program revisions and designing future energy efficiency programs. NMGC will be adding full time employees to its staff to accommodate the increased oversight of the programs and outreach to customers to augment participation. Outsourcing the rebate processing function has been a cost-effective solution for existing programs and NMGC intends to continue to work with the implementers to streamline the process further and increase the customer's satisfaction with the experience. Therefore, ICF will handle the Residential programs and CLEAResult will handle the Commercial programs. Incorporating the rebate processing function into ICF and CLEAResult's scope of work provides economic benefits by eliminating the need for an independent rebate processor. MFA and EnergyWorks personnel will implement the Income Qualified program and ICAST will implement the Multi-Family program.

#### VI. Measurement and Verification and Compliance Reporting

### $A. \qquad M\&V$

In compliance with the Act and the Rule, an independent program evaluator, will be used to perform M&V for these programs. Evergreen, the independent evaluator, as selected by the NMPRC, has prepared annual reports over the last four years that include documentation, at both the total portfolio and individual program levels, of expenditures, measured and verified savings, and cost-effectiveness of utility programs, including selfdirect programs. The reports include deemed savings assumptions and all other assumptions used by the evaluator. Objectives of the M&V process include confirming that measures were actually installed, that the installation meets reasonable quality standards, and that the measures are operating correctly and are expected to generate the predicted savings. For a particular program year, M&V may be performed only on specific

# 2023 - 2025 Energy Efficiency Program Plan

programs that are high cost, new, or have low UCT's for cost-effectiveness, but it is the intent to have the entire portfolio of programs evaluated at intervals of no more than three years.

# B. Reporting

NMGC will make annual compliance filings that will cover program evaluation and the Company's Rate Rider No. 1-15 ("Rider") reconciliation. The filing will include the M&V report of the independent evaluator. NMGC will request any needed reconciliation of the Rider to reflect actual revenues and expenditures made in implementation of the programs through an advice notice filing in accordance with 17.7.2.13 NMAC. NMGC will make its next annual compliance filing on or before July 1, 2023.

## VII. Program Details

The following section provides detailed information on the programs being proposed for Program Year 2023. Information on the following topics is provided for the program:

- Background
- Description/Objectives
- Implementation
- Conditions
- Incentive Structure
- Documentation and Inspections
- Contractor and Retailer Responsibilities
- Target Market
- Marketing and Outreach
- Relation to Existing Programs
- Energy Savings
- Measurement and Verification

# 2023 - 2025 Energy Efficiency Program Plan

Unless otherwise noted, the participant assumptions and energy savings are all derived from previous M&V results and recommendations, the NMTRM, two Potential Studies, and the Program and Technology Assessment. Please see Section XIV for more details.

## A. Water Heating

#### 1. Background

The current Water Heating program provides residential home builders with a \$225 incentive and homeowners with a \$300 incentive to install ENERGY STAR tankless water heaters and \$100 to home builders and \$115 to homeowners to install ENERGY STAR storage tank water heaters. NMGC is proposing to enhance the midstream component for both residential and commercial customers. The midstream model is an important evolution of energy efficiency programs as it allows for greater efficiencies in program implementation and extends the reach of the program past what typical downstream program design can deliver. NMGC will work closely with ICF and the existing network of wholesalers, distributors and participating contractors to help them understand this new delivery channel and how it fits into the portfolio and how it can benefit their businesses. In addition, NMGC will continue to offer a free High Efficiency Showerhead package to customers who request them on-line and also provides them under a DI method and through collaboration with PNM's HEC program. More than 80% of residential customers in NMGC's service territory use natural gas to heat their water. It is vital that NMGC offer programs that directly impact residential customers the most and offer measures that help reduce space heating and water heating usage since 95% of the average NMGC customer's bills are for those two basic needs.

# 2023 - 2025 Energy Efficiency Program Plan

## 2. Description and Objectives

NMGC will offer the program as described above and enhance the midstream component. The engagement strategy for customers in a midstream program is different from the traditional downstream program strategies. Because midstream program designs deal directly with the HVAC distributors and not directly with customers, it can present challenges to customer engagement. To deliver high customer satisfaction and strong engagement with NMGC customers, the proposed program design provides approximately 60% of the incentives offered to the customer and 40% to the distributer/contractor. The customer portion of the incentive remains what is currently offered to customers as an incentive to purchase higher efficiency equipment. The consumer would receive NMGC branded, customer facing marketing materials that communicate the value proposition to install high efficiency water heating equipment. The customer would also receive a receipt detailing portion of the incentive rebated to the customer on the the distributor/contractor invoice. A full listing of Midstream equipment and associated incentives is provided in Section XII, Appendix E.

## **3.** Implementation

NMGC and ICF have determined that the contractor network is a critical resource in improving participation and customer knowledge about energy efficient equipment. NMGC will work with ICF to identify all HVAC and plumbing distributors, wholesalers, contractors and trade associations that conduct business within NMGC's service territory. ICF will contact each of the identified parties directly to explain the program and provide each with a contractor information packet. Ongoing outreach and group recruitment meetings will leverage the ENERGY STAR brand and how it aligns with the business practices of those in the field of water heating sales and installations. ICF will educate these affiliates on how the rebate application process works

# 2023 - 2025 Energy Efficiency Program Plan

not only for their own applications, but to assist customers that replace existing water heaters. For the midstream component, NMGC will work closely with ICF and the existing network of wholesalers, distributors, and participating contractors to help them better understand this delivery channel and how it fits into the portfolio and will benefit their businesses to participate. NMGC proposes providing a proven program design delivery model that has been developed in collaboration with manufacturers, distributors and their customers to support the water heating program. Incentives will be provided for both tankless water heaters and ENERGY STAR storage tank units. NMGC's approach to introducing the enhanced midstream model into the portfolio allows the program to scale at a reasonable pace and will contribute to the program's long-term success.

## 4. Conditions

This program is available to homebuilders that construct homes in NMGC's service territory and to all NMGC residential and applicable commercial customers.

#### 5. Incentive Structure

Homebuilders will continue to receive a \$225 incentive to install an ENERGY STAR UEF 0.87 or above tankless water heater and a \$100 rebate for an ENERGY STAR UEF 0.64 or above storage tank model.

Homeowners will continue to receive a \$300 incentive to replace their existing water heater with an ENERGY STAR UEF 0.87 or above tankless water heater or \$115 for an ENERGY STAR UEF 0.64 or above storage tank model. The additional \$75 and \$15 offered in the rebate for replacement water heaters is intended to help offset the additional incremental costs of such installations.

# 2023 - 2025 Energy Efficiency Program Plan

Under the midstream proposal rebates will be split approximately 60% going to the end-use customer and 40% to the distributer/contractor. A full listing of Midstream equipment and associated incentives is provided in Section XII, Appendix E.

The showerhead measures will be free of charge for customers who order the packs online or have them directly installed under PNM's HEC program.

## 6. Documentation and Inspections

ICF will observe, inspect, and document all aspects of the program to assure the identified energy efficiency measures were installed and applied as designed. All documentation will be provided to the independent evaluator chosen by the Commission for M&V evaluation.

## 7. Contractor and Retailer Responsibilities

ICF will be responsible for assuring that all energy efficiency measures are well documented and meet the program requirements.

## 8. Target Market

The target market is homebuilders that construct homes in NMGC's service territory and all NMGC residential and applicable commercial customers.

## 9. Marketing and Outreach

NMGC will utilize the Company's marketing vehicles such as bill inserts, flyers/brochures, social media, and its website www.nmgco.com/Energy\_Efficiency to promote the program, but the primary marketing and outreach will be ICF's responsibility to utilize the strategies as described under Implementation.

# 2023 - 2025 Energy Efficiency Program Plan

## 10. Relation to Existing Programs

The program offerings remain the same as the existing program with the exception of enhancing the midstream component as it is an important evolution of energy efficiency programs and allows for greater efficiencies in program implementation and extends the reach of the program past what typical downstream program design can deliver.

#### **11.** Energy Savings

The estimated annual savings are 139 therms for the ENERGY STAR UEF 0.87 tankless model and 86 therms for an ENERGY STAR storage tank for residential water heating. The showerhead measures save 9.83 therms per pack that include a showerhead, two faucet aerators and a swivel-head kitchen aerator. Specific energy savings for all measures can be found in this document under Section III.B.1. Taking into consideration free-ridership, NMGC estimates the program will have a total net savings of 228,464 therms annually.

### 12. Measurement and Verification

The independent evaluator will review assumptions used and other established methodologies on the performance of measures undertaken. The independent evaluator also will conduct on-site and phone surveys to determine proper installation.

#### B. Space Heating

#### 1. Background

As with water heating, more than 80% of residential customers in NMGC's service territory use natural gas to heat their homes. NMGC currently offers a tiered program with increasing rebates for increasing efficiencies. An Annual Fuel Utilization Efficiency ("AFUE") rating of at least 92% is required to get

# 2023 - 2025 Energy Efficiency Program Plan

a residential furnace or boiler system the ENERGY STAR rating. NMGC has previously offered homebuilders a \$200 rebate for the installation of an ENERGY STAR furnace or boiler with a 92% AFUE (Tier I). The rebate was increased to \$250 for an ENERGY STAR furnace or boiler with a 95% AFUE (Tier II) and to \$300 for a 97% AFUE furnace (Tier III) installation. Since the cost to replace an existing furnace with a high efficient ENERGY STAR furnace is higher than the cost of a new installation, NMGC offers an additional \$75 to homeowners for each tier. NMGC is proposing to discontinue the incentive for 92% AFUE to encourage customers to select an even higher efficient system and the 95% AFUE will now be the minimum for customers to receive a rebate. In addition, a furnace tune-up measure will be offered with an incentive of \$85 to market rate customers and \$110 to low-income customers. In addition, similar to the Water Heating program, a midstream component will become the primary source for furnace and boiler replacement for residential and commercial customers. The Space Heating program also offers insulation measures for residential customers. The measures require a home to have existing insulation of R-11 or less and that a minimum of R-19 be added to the roof or attic over the conditioned area of the home in order to be eligible to receive a rebate of 25% of the cost up to \$500 (Tier I). NMGC determined that a large number of existing homes have existing insulation with a value between R-11 and R-19 and Tier II was added in Program Year 2013 offering an incentive to homeowners to bring their home up to an R-38. While there is a cost/benefit from the savings under Tier II, it is not as great as Tier I therefore the cap is \$300 rather than \$500. NMGC is proposing the addition of crawl space insulation, air sealing, and duct sealing with a \$200 incentive to the customer. NMGC will continue to off a \$50 rebate for the installation of a Smart Thermostat. The thermostat must be an ENERGY STAR rated model. Although it is recommended the thermostats be installed by a licensed contractor, the devices can be self-installed with pre- and post-installation

# 2023 - 2025 Energy Efficiency Program Plan

photo documentation. NMGC is offers a \$50 rebate to customers who participate in the program.

## 2. Description and Objectives

NMGC is proposing to continue with the current offerings under its Space Heating program with the enhanced midstream component, and rebates for crawl space insulation, air sealing, and duct sealing.

#### **3.** Implementation

NMGC and ICF have determined that businesses that offer services and equipment associated with the residential and commercial space heating industry are a critical resource to improving participation and customer knowledge about energy efficient equipment. NMGC will work with ICF to identify HVAC and plumbing distributers, wholesalers, contractors and trade associations that conduct business within NMGC's service territory. ICF will contact each of the identified parties directly to explain the program and provide each with a contractor information packet. Ongoing outreach and group recruitment meetings will leverage the ENERGY STAR brand and how it aligns with the business practices of each affiliate. ICF will educate businesses in the industry on how the rebate application process works not only for their own applications, but also so that they can assist customers who replace existing furnaces. The downstream value will be in having an expanded knowledgeable resource base able to educate end-use customers on the benefits of installing energy efficient equipment and NMGC's programs.

## 4. Conditions

This program is available to homebuilders that construct homes in NMGC's service territory and to all NMGC residential and applicable commercial customers.

# 2023 - 2025 Energy Efficiency Program Plan

#### 5. Incentive Structure

Homebuilders will continue to receive a \$250 incentive to install a 95% AFUE furnace or boiler, and a \$300 incentive to install a 97% AFUE furnace.

Homeowners will continue to receive a \$325 for a 95% or 96% AFUE furnace or boiler and \$375 for a 97% or above AFUE furnace. The additional \$75 offered in the rebate to replace existing furnaces is intended to help offset the additional incremental costs to a homeowner of such installations.

Under the midstream proposal rebates will be split approximately 60% going to the end-use customer and 40% to the distributer/contractor. A full listing of Midstream equipment and associated incentives is provided in Section XII, Appendix E.

For the insulation measures, NMGC will continue its current offerings. Tier I, customers with existing roofing insulation rated at R-11 or less will be rebated 25% (up to \$500) of the cost to add an additional R-19 or better of insulation to their roof. For Tier II, customers with existing insulation of R-11 to R-19 will be rebated 25% (up to \$300) to bring their insulation value up to R-38. A \$200 incentive will be offered to customers for crawl space insulation, air sealing, and duct sealing and \$85 for a furnace tune-up. The customer will receive the rebate once the required rebate form is properly completed and submitted to the third-party rebate processing company for verification.

The Smart Thermostat measure will continue to offer customers a \$50 rebate on the installation of ENERGY STAR smart thermostats.

# 2023 - 2025 Energy Efficiency Program Plan

#### 6. Documentation and Inspections

ICF will observe, inspect, and document all aspects of the program to assure the identified energy efficiency measures were installed and applied as designed. All documentation will be provided to the independent evaluator chosen by the Commission for M&V evaluation.

#### 7. Contractor and Retailer Responsibilities

ICF will be responsible for assuring that all energy efficiency measures are well documented and meet the program requirements.

#### 8. Target Market

The target market is homebuilders that construct homes in NMGC's service territory and all NMGC residential and commercial customers.

#### 9. Marketing and Outreach

NMGC will utilize marketing vehicles such as bill inserts, flyers/brochures, social media, and its website <u>www.nmgco.com/Energy\_Efficiency</u> to promote the program, but the primary marketing and outreach will be ICF's responsibility to use the strategies as described under Implementation.

## **10.** Relation to Existing Programs

The existing furnace, boiler, smart thermostat and insulation measures remain the same as currently offered and are intended to decrease the energy associated with heating a home.

#### **11.** Energy Savings

The estimated annual savings for residential customers are 327 therms for the 95% AFUE furnace and 289 for the boiler, and 433 therms for the 97% AFUE furnace, depending on climate location.

# 2023 - 2025 Energy Efficiency Program Plan

For the insulation measures, under Tier I, adding a minimum of R-19 insulation to a home that currently has R-11 or less insulation is expected to save an estimated 195 therms annually for the average home in NMGC's service territory. Under Tier II, bringing a home up to R-38 that has existing insulation of R-19 would save an estimated 84 therms annually, again, depending on climate location.

The Smart Thermostat measure is estimated to save an average of 32 therms annually.

Specific energy savings for all measures can be found in this document under III.B.1.

Taking into consideration free-ridership, NMGC estimates the program will have a total net savings of 220,800 therms annually.

# 12. Measurement and Verification

The independent evaluator will review assumptions used and other established methodologies on the performance of measures undertaken. The independent evaluator will also conduct on-site and phone surveys to determine proper installation.

### C. New Homes

#### 1. Background

The New Homes program addresses home builders and encourages them to build high performance homes. The primary benefit for a whole house approach as opposed to a straight prescriptive approach is straight forward. The whole house approach captures additional benefits such as envelope

# 2023 - 2025 Energy Efficiency Program Plan

tightness, duct tightness, location of units and insulation values which affect the performance of the gas units. These additional measures lead to increased therm savings beyond what would be captured by the prescriptive measures alone. NMGC worked with ICF to develop a program to meet this objective and created the New Homes program in 2017. The New Homes program is designed to align with EPE's and PNM's New Homes program. The New Homes program provides rebates to home builders who build high performance homes which are verified by a RESNET accredited HERS Rater. Rebates will be paid based on the reduction of therms when compared against a baseline home (currently a home meeting minimum 2018 IECC energy code requirements). The average rebate per home is \$645. NMGC's New Homes program in conjunction with PNM and EPE's New Homes program has a significant impact on influencing home builders to build high performance homes.

# 2. Description and Objectives

NMGC is proposing to continue with the current offerings under its New Homes program.

#### **3.** Implementation

ICF will continue to administer the program. ICF has several years of experience, knowledge and working relationships with home builders in New Mexico.

#### 4. Conditions

This program is available to all home builders constructing homes within NMGC's service territory and they must meet the criteria set forth in the program.

# 2023 - 2025 Energy Efficiency Program Plan

## 5. Incentive Structure

NMGC will provide an average of \$645 per home under the New Homes program.

#### 6. Documentation and Inspections

ICF will be responsible for tracking and verifying energy service provider activities including documentation of measures installed and expected natural gas savings for each measure.

# 7. Contractor Responsibilities

ICF will be responsible for assuring that all energy efficiency measures are well documented and meet the program requirements.

## 8. Target Market

The target market includes all home builders constructing homes in NMGC's service territory.

# 9. Marketing and Outreach

NMGC will utilize Company marketing vehicles such as bill inserts, flyers/brochures, multi-media, and its website www.nmgco.com/Energy Efficiency to promote the New Homes program, but the primary marketing and outreach will be through ICF resources in order to identify qualified builders that would benefit the most from the program.

# **10.** Relation to Existing Programs

The New Homes program criteria and offerings will remain the same as those currently in place.

# 2023 - 2025 Energy Efficiency Program Plan

## 11. Energy Savings

The savings vary depending on the total number of measures applied and the location of the new home but are estimated to average 348 therms per home built. NMGC estimates the program will have a net savings of 400,752 therms annually.

#### 12. Measurement and Verification

The independent evaluator will review assumptions used and other established methodologies on the performance of measures undertaken. The independent evaluator also will also conduct on-site and phone surveys to determine proper installation.

# D. Income Qualified

## 1. Background

The Income Qualified Program currently has three offerings. The first provides funding for energy efficient natural gas measures for the New Mexico Energy\$mart (WAP) program, administered by MFA, to weatherize qualifying NMGC customers' residences. NMGC provides funding to weatherization providers to install specified energy efficient natural gas measures for NMGC's low-income customers. Low-income customers are defined as households whose income is less than 200% of the federal poverty level. The program provides NMGC's low-income customers with energy efficiency measures, at no cost to the customer, that help reduce natural gas consumption and costs. The program offers three services: whole house weatherization (leverage) through MFA's Energy\$mart program; Baseload service; and Baseload Plus services, to customers while they are on the waiting list for the whole house service. The Baseload service gives the customer contact with MFA and allows them to realize immediate savings while they wait for the full Energy\$mart weatherization. Under the Baseload program, the service

# 2023 - 2025 Energy Efficiency Program Plan

provider sends an energy auditor to the home with a standard set of materials to install pipe wrap, water tank insulation, low flow showerheads and faucet These materials are installed by the energy auditor, who also aerators. performs a walkthrough to determine the eligibility and need of the home to receive upgraded service. The Baseload Plus service provides the same service as Baseload but, as determined by the on-site auditor, the home is also eligible to receive one of two measures directly related to natural gas usage: 1) attic insulation up to a minimum of R-38 or 2) furnaces that have a minimum 95% AFUE. Under these two additional services customers benefit from immediate savings while remaining on the Energy\$mart whole house list for measures that typically have a longer waiting period. The second offering is the NAEEP, which has been very successful since being added into NMGC's portfolio in 2020. It offers the same measures as the WAP but is exclusive to Native American communities. NMGC also was granted a variance to NMPRC Case No. 19-00248-UT introducing a third offering, the CEEP, that provides funding to community service organizations throughout NMGC's service territory that have been successful at securing separate funding for low-income energy efficiency projects. This allowed NMGC to support these projects with supplemental funding for services that reduce natural gas usage.

NMGC is proposing to add a fourth offering to the Income Qualified program. The Manufactured Home Communities Program ("MHCP"). The MHCP will be implemented by EnergyWorks. EnergyWorks is licensed in New Mexico as a residential, manufactured home, and commercial contractor. In New Mexico, there are approximately 64,000 manufactured homes that are 17.5 % of all housing stock. In many New Mexico counties, manufactured homes comprise over 30% of the housing stock. EnergyWorks identified 224 communities within NMGC's service territory. EnergyWorks will identify eligible manufactured housing communities and work with residents and local

# 2023 - 2025 Energy Efficiency Program Plan

management to coordinate a community-based program. According to the Department of Energy, manufactured homes can consume 50 percent more energy than site-built homes of equal size and age. Mobile homes built before 1980 consume more energy than all other types of homes. Approximately 28% percent of all mobile homes in use nationally were built before 1980. HUD introduced additional energy conservation code requirements in 1994, but approximately 52% of manufactured homes in use nationally were built before 1980. Because of the high energy consumption and increased energy burden for the resident, manufactured housing deserves a specialized energy efficiency program.

#### 2. Description and Objectives

NMGC intends to continue the three current offerings and provide increased funding to all three - the New Mexico Energy\$mart program, the NAEEP, and the CEEP. NMGC is proposing that the new MHCP will be of high value to customers that reside in manufactured housing. Similar to the NAEEP, EnergyWorks will provide comprehensive natural gas energy efficiency services to qualified customers at no cost to the customer. Once customers are identified, EnergyWorks will conduct an energy assessment to determine eligible services. Based on the results of the assessment, EnergyWorks will complete the efficiency services. These include high efficiency showerheads, high efficiency faucet aerators, water heater tank and pipe insulation, air and duct sealing, programmable thermostats, and insulation. EnergyWorks will also install a carbon monoxide detector in homes where one is not present. EnergyWorks will provide the customer with educational materials about energy use, review all services, and provide training for proper use and maintenance of all products installed in the home. The annual budget for the MHCP will be \$1,000,000

# 2023 - 2025 Energy Efficiency Program Plan

## 3. Implementation

MFA will continue to implement the Energy\$mart program. MFA has the resources and means to identify low-income customers who are eligible for the program. MFA will use energy service providers with trained technicians using field tested protocols and advanced diagnostic equipment to determine the most cost-effective natural gas savings measures appropriate for each home. EnergyWorks will implement the NAEEP and the MHCP leveraging their experience with Native American communities and weatherizing manufactured homes throughout New Mexico. EnergyWorks will also utilize trained technicians using field tested protocols and advanced diagnostic equipment to determine the most cost-effective natural gas savings measures appropriate for each home. NMGC will work with Community Action Partners or other organizations to implement the CEEP as those community energy efficiency projects come to fruition through grants that target income qualified communities.

# 4. Conditions

This program is available to all low-income customers and Native American communities within NMGC's service territory. Low-income customers are defined as those whose household income is less than 200% of the federal poverty level.

## 5. Incentive Structure

NMGC will provide an average of \$2,245 per home for the WAP program, \$1,618 for the NAEEP, \$1,607 for the MHCP, and \$1,077 for the CEEP to implement measures that directly impact natural gas consumption in low-income homes.

# 2023 - 2025 Energy Efficiency Program Plan

## 6. Documentation and Inspections

MFA and EnergyWorks will be responsible respectively for tracking and verifying energy service provider activities including documentation of measures installed and expected natural gas savings for each measure. NMGC will work with the primary Community Action Partners for documenting work on community energy efficiency projects under the CEEP.

## 7. Contractor Responsibilities

MFA and EnergyWorks will be responsible for assuring that all energy efficiency measures are well documented and meet the program requirements.

## 8. Target Market

The target market includes all NMGC low-income residential customers and homes located in Native American and income qualified communities.

## 9. Marketing and Outreach

NMGC will utilize its marketing vehicles such as bill inserts, flyers/brochures, multi-media, and its website www.<u>nmgco.com/Energy\_Efficiency</u> to promote the Income Qualified program, but the primary marketing and outreach will be through MFA and EnergyWorks resources in order to identify qualified customers that would benefit the most from the program.

## **10.** Relation to Existing Programs

The program will offer the same services and measures as those offered in the existing Income Qualified program but will now include a focus on the Manufactured Home Communities.

# 2023 - 2025 Energy Efficiency Program Plan

#### **11.** Energy Savings

The savings vary with each natural gas related measure that may be installed, as well as the size and condition of the home. However, based upon previous M&V findings and those of MFA and EnergyWorks, savings are expected to average approximately 239 to 312 therms per household. NMGC estimates the program will save a total of 528,208 therms annually.

#### 12. Measurement and Verification

The independent evaluator will review assumptions used and other secondary research on the performance of the Income Qualified program. The independent evaluator also will conduct on-site and phone surveys to determine proper installation.

# E. Multi-Family

#### 1. Background

In 2017, NMGC began offering services for both low-income and market rate multi-family properties. Over 15% of the housing units in New Mexico are multi-family housing. The service offers energy efficiency upgrades for all gas end uses using a turn-key, whole building approach. The service is turn-key because the service provider starts with energy assessment, helps the owner access financing, evaluates all rebates, incentives, and other programs that can be leveraged to help offset costs, and selects, and is responsible for, all subcontractors installing the measures. NMGC will only provide rebates for measures that directly reduce natural gas usage assuring cost-effectiveness for each dollar spent. Because the process involves elimination of drafts, hot/cold zones, ensuring carbon monoxide levels meet federal standards and there is no leakage, the buildings become more comfortable, healthier, safer, and the residents gain financially through reduced utility bills and/or assuring that their rents do not increase.

# 2023 - 2025 Energy Efficiency Program Plan

## 2. Description and Objectives

NMGC is proposing to continue the existing Multi-Family program and for ICAST to implement the program. NMGC will target an estimated 4,000 units across NMGC's service territory for its 2023 Program Year, of which approximately 65% will be low-income residents living in affordable housing, while the rest will be targeted at market rate multi-family properties. The program will offer the same energy efficiency upgrades for all gas end uses using a turn-key, whole building approach as are currently offered. Over the last three years, ICAST has created a backlog of potential participants. Due to expected increased participation and property manager interest, NMGC will be increasing the budget for the program by approximately 66% to cover the costs of expected rebates.

#### **3.** Implementation

ICAST will continue to administer the Multi-Family program. ICAST will use energy service providers with trained technicians using field tested protocols and advanced diagnostic equipment to determine the most cost-effective natural gas savings measures appropriate for each multi-family unit.

## 4. Conditions

This program is available to all NMGC residential and commercial lowincome or market rate multi-family properties in NMGC's service territory.

## 5. Incentive Structure

NMGC will provide an average of \$425 per unit to be applied towards measures that directly impact natural gas consumption.

# 2023 - 2025 Energy Efficiency Program Plan

#### 6. Documentation and Inspections

ICAST will be responsible for tracking and verifying energy service provider activities including documentation of measures installed and expected natural gas savings for each measure.

## 7. Contractor Responsibilities

ICAST will be responsible for assuring that all energy efficiency measures are well documented and meet the program requirements.

## 8. Target Market

The targeted market includes all NMGC low-income and market rate multifamily properties.

## 9. Marketing and Outreach

NMGC will utilize its own marketing vehicles such as bill inserts, flyers/brochures, multi-media, and its website www.nmgco.com/Energy\_Efficiency to promote the Multi-Family program, but the primary marketing and outreach will be through ICAST resources in order to identify qualified customers that would benefit the most from the program.

#### **10.** Relation to Existing Programs

The Multi-Family program criteria and offerings will remain the same as those currently in place. However, the Multi-Family program has increased its allocation to 65% of its budget (\$1,473,355) to target low-income properties.

## 11. Energy Savings

The savings vary with each natural gas related measure that may be installed, as well as the size and condition of the property. However, based upon

# 2023 - 2025 Energy Efficiency Program Plan

previous M&V findings and those of ICAST, savings are expected to average approximately 93 therms per unit. NMGC estimates the program will save a net total of 372,969 therms annually.

#### 12. Measurement and Verification

The independent evaluator will review assumptions used and other secondary research on the performance of the Multi-Family program. The independent evaluator also will conduct on-site and phone surveys to determine proper installation.

# F. Home Energy Reports

#### 1. Background

NMGC has been considering a behavioral-based program for several years. In its recent RFP, NMGC received a proposal from ICF for a Home Energy Reports program that it believes will be cost-effective and will be of a benefit to a wide range of customers. The Home Energy Reports Program aims to amplify residential energy savings using a cost-effective model that delivers relatable interventions to NMGC customers. The scalability and flexibility in ICF's proposed approach can drive next-generation customer engagement that creates connections with NMGC's EE portfolio and goals. The program provides a customer-centric experience with demonstrated high levels of savings, customer satisfaction, and cross-program participation to support NMGC's EE portfolio and customer service goals.

### 2. Description and Objectives

The Home Energy Reports will use data-driven, hyper-personalized communication to customers. This technology empowers savings and adoption by increasing energy literacy, offering low-to no-cost tips, promotions for additional EE and low-income programs, and strategic-message framing. The Home Energy Reports program will provide an opportunity to have a dialogue

# 2023 - 2025 Energy Efficiency Program Plan

with a large group of NMGC customers about their energy costs and build trust through personalized outreach and recommendations to save. Notable benefits attributed to this approach include 1% or higher average annual therms savings, doubling cross-program uptake, up to 48% email open rates, and 52% of customers reporting acting on recommendations.

#### 3. Implementation

To support the mandate for cost-effectiveness, the design uses scale and flexible infrastructure to reduce overhead and technology costs while delivering high levels of behavioral savings. It will combine digital and print channels to maximize cost-effectiveness, savings, and customer engagement. While digital represents a cost-effective channel, print reports mailed to customers tend to drive higher therm savings, and not all customers can be reached effectively by email. The proposal is to target 200,000 residential customers five to six times per year at program launch with half of those customers in a digital-only wave and half in a print report wave. It will then scale that up to 250,000 customers in the second program year with another 50,000 customers in the digital-focused wave.

#### 4. Conditions

This program will be available to NMGC residential customers.

#### 5. Incentive Structure

This is a behavior-based program that informs customers on the best ways to reduce natural gas consumption in their home. There are no monetary incentives under this program.

# 2023 - 2025 Energy Efficiency Program Plan

## 6. Documentation and Inspections

ICF will be responsible for tracking and verifying outreach including documentation of expected natural gas savings. All documentation will be provided to the independent evaluator chosen by the Commission for M&V evaluation.

## 7. Contractor Responsibilities

ICF will be responsible for assuring that the savings achieved through the program meet the M&V standards and requirements.

## 8. Target Market

The target market will be residential NMGC customers. NMGC will work with ICF to identify the targeted market that would benefit the most from the program.

#### 9. Marketing and Outreach

The primary marketing and outreach will be through ICF as this is a direct mail and email-based program.

## **10.** Relation to Existing Programs

This is a new program that NMGC has not previously offered.

## **11.** Energy Savings

The savings vary with each individual customer. However, based upon ICF's experience with similar programs in other jurisdictions, savings are expected to average approximately 4 - 5 therms per household. NMGC estimates the program will save a net total of 1,210,000 therms annually.

# 2023 - 2025 Energy Efficiency Program Plan

## 12. Measurement and Verification

The independent evaluator will review assumptions used and other secondary research on the performance of the Home Energy Reports program. The independent evaluator also will conduct phone surveys to determine the effectiveness of the program.

#### G. Efficient Buildings

#### 1. Background

The Efficient Buildings program provides technical support for the implementation of energy efficiency upgrades and identifying cost-effective The programs provide commercial customers and educational projects. facilities three measure offerings: custom, prescriptive, and DI. The custom measures are any measures that do not fall under the prescriptive or DI measures and apply to any equipment that uses natural gas in their process but can be utilized more efficiently. Depending on the life of the measure, custom measures pay incentives of \$0.60 per therm or \$0.90 per therm for the estimated first year savings upon implementation of energy efficiency measures. All custom measures are pre-qualified and vetted before they are implemented. The prescriptive measures are an efficient and convenient way for participating customers to take action on opportunities identified by either CLEAResult or internal engineers and are offered with predetermined deemed savings and rebates. DI measures such as low flow pre-rinse valves, showerheads and faucet aerators are easily installed by either CLEAResult or the customer and provide immediate savings. NMGC is proposing the addition of the SEM program. The SEM offering recruits participants from school districts and municipalities in addition to industrial and large commercial institutions in New Mexico and uses a heterogeneous cohort model that is designed to elicit participation from across diverse business segments.

## 2023 - 2025 Energy Efficiency Program Plan

## 2. Description and Objectives

For the 2023 Program Year, NMGC is proposing to continue offering all measures that the existing Efficient Buildings program provides. NMGC has been working with CLEAResult over the years enhancing the different methods of outreach including working with kitchen equipment suppliers and adding a midstream component. CLEAResult has implemented more thorough audits of larger use customers and increased their targeting of small and medium sized businesses for DI measures while simultaneously educating them on NMGC's programs. Typically, commercial programs have a long lead time for customer participation due the nature of businesses and their budgeting process. The long lead time is especially true for the SEM program. The program is designed to save energy through collaborative group workshops, one-on-one events and energy management coaching. A full modeling of the facilities and its gas uses are scanned to identify energy efficiency opportunities and engage employees in energy efficiency. No-cost and low-cost projects include optimization of building management systems, changes to operation set points and employee behavioral changes. During the first year, eight to twelve customers are expected to be brought together to participate in the program. The cohort creates a community of energy efficiency, encourages peer-to-peer learning, and provides intrinsic motivation to make changes and save energy. Combined with the enhanced outreach by CLEAResult, NMGC expects the program to have many more participants and much more savings. Therefore, the budget for the program will increase as participants and rebates multiply and administration of the program will need additional resources. NMGC is budgeting an increase for this program of approximately 200%. A full listing of DI, prescriptive and potential custom measures, their deemed savings, and associated incentives is provided in Section IX, Appendix B.

# 2023 - 2025 Energy Efficiency Program Plan

## 3. Implementation

NMGC will continue to work with CLEAResult to implement and administer the program. Implementation strategy will remain the same as for the existing Efficient Buildings program. CLEAResult will handle all aspects of the rebate process.

## 4. Conditions

The program will continue to be available to all NMGC commercial and educational customers as well as governmental facilities.

# 5. Incentive Structure

Incentives will remain as currently offered. Depending on the life of the measure, custom measures pay incentives of \$0.60 per therm or \$0.90 per therm for the estimated first year savings upon implementation of energy efficiency measures. Prescriptive measure incentives are shown in Section IX, Appendix B. Dl measures are typically provided free of charge.

## 6. Documentation and Inspections

CLEAResult will observe, inspect, and document all aspects of the program to assure the identified energy efficiency measures were installed and applied as designed. All documentation will be provided to the independent evaluator chosen by the Commission for M&V evaluation.

## 7. Contractor and Retailer Responsibilities

CLEAResult will be responsible for assuring that all energy efficiency measures are well documented and meet the program requirements.

## 8. Target Market

The target market includes all NMGC commercial customers receiving sales service under NMGC Rate Nos. 54 (Small Volume) and 56 (Medium Volume)

# 2023 - 2025 Energy Efficiency Program Plan

and all NMGC customers and end-users in the corresponding rate classifications receiving transportation service under NMGC's Rate No. 70.

## 9. Marketing and Outreach

NMGC will utilize its own marketing vehicles such as bill inserts, flyers/brochures, and its website <u>www.nmgco.com/Energy\_Efficiency\_to</u> promote the program, but the primary marketing and outreach will be to have CLEAResult use the strategies as described under Implementation.

## **10.** Relation to Existing Programs

The 2023 Efficient Buildings program under direct install, prescriptive, and custom measures are identical to the offerings in the existing program with updates to rebates based on deemed savings in the NMTRM and incremental costs. The SEM offering will be a new addition for commercial customers to participate.

## 11. Energy Savings

The estimated annual savings can range from 516 therms to over 30,000 therms depending on which measure or project is implemented. However, the estimated annual savings are expected to average 15,901 therms per custom project, 516 therms per prescriptive project, 2,707 therms per direct-install projects, and 35,041 under SEM. NMGC estimates the program will save a net total of 1,570,777 therms annually.

#### 12. Measurement and Verification

The independent evaluator will review assumptions used and other established methodologies on the performance of measures undertaken. The independent evaluator also will also conduct on-site and phone surveys to determine proper installation.

# 2023 - 2025 Energy Efficiency Program Plan

# VIII. Appendix A – Avoided Costs and Financial Assumptions

The benefits of energy efficiency are evaluated in the UCT model using NMGC's avoided costs of energy. Avoided costs are those costs avoided by the utility due to energy efficiency program therm savings and include gross receipts tax and franchise fees and are related to the period during which the savings occur and to the gas purchase contracts which will be implemented.

The following tables provide the avoided costs used in the UCT analysis. Costs shown are in net terms.

# 2023 - 2025 Energy Efficiency Program Plan

# 1. Natural Gas Avoided Costs

	Pro	MGC jected led Cost		
Year	(per l	MMBtu)		Per Therm
2021	\$	6.60	\$	0.66
2022	ŝ	6.42	\$	0.64
2023	ŝ	6.08	\$	0.61
2024	ŝ	5.71	\$	0.57
2025	Ŝ	5.51	Ŝ	0.55
2026	\$	5.48	\$	0.55
2027	\$	5.59	S	0.56
2028	\$	5.77	\$	0.58
2029	\$	5.92	\$	0.59
2030	\$	6.03	\$	0.60
2031	\$	6.12	\$	0.61
2032	\$	6.14	\$	0.61
2033	\$	6.21	\$	0.62
2034	\$	6.21	\$	0.62
2035	\$	6.19	\$	0.62
2036	\$	6.19	\$	0.62
2037	\$	6.20	\$	0.62
2038	\$	6.21	\$	0.62
2039	\$	6.21	\$	0.62
2040	\$	6.25	\$	0.62
2041	\$	6.25	\$	0.63
2042	\$	6.23	\$	0.62
2043	\$	6.23	\$	0.62
2044	\$	6.19	\$	0.62
2045	\$	6.16	\$	0.62
2046	\$	6.16	\$	0.62
2047	\$	6.15	\$	0.62
2048	\$	6.17	\$	0.62
2049	\$	6.15	\$	0.62
2050	\$	6.15	\$	0.61

# 2023 - 2025 Energy Efficiency Program Plan

# 2. Financial Assumptions

The discount rate is used in the determination of the cost effectiveness of NMGC's programs. The discount rate, used by NMGC in the calculations of the Present Value of Energy Efficiency Program benefits, is 4.00%. A discount rate equal to the average 30-year fixed mortgage rate over the 52-week period ending August 4, 2022 is used to reflect the opportunity cost of NMGC's customers when making long-term decisions. The mortgage interest rate is considered a Ratepayer Discount Rate because it is the discount rate used by NMGC's ratepayers in making home buying decisions. Since NMGC is using a 30-year fixed mortgage rate, an inflation rate is not applicable.

Ratepayer Discount Rate	4.00%
Inflation Rate	0.00%
Real Discount Rate	4.00%
Base Year for Discounting	2022

# 2023 - 2025 Energy Efficiency Program Plan

# IX. Appendix B – Measures for Efficient Buildings

Destratification Fan 2	▼ 100HP Compressor 24ft Diameter fan	<b>*</b>	(per unit)	(\$/unit)	
Destratification Fan 2				-	_
Destratification Fan 2		20		\$ 2,873.70	\$ 8,000.00
		10	2673	\$ 2,405.70	\$ 6,850.00
Rotary Drum insulation	Project	20		\$ 98,978.40	Ş 0,850.00
Linkageless Controls F	1	20		\$ 24,271.20	\$ 76.933.00
-	Project per 1MBTUH	20	20508	\$ 1,273.50	Ş 70,555.00
	per 10/BTOH	20	709	\$ 1,273.50 \$ 638.10	
		14	2044	•	Ś 200.00
, , , , ,	per 120lb capacity dryer Per Site	14	2044	\$ 1,839.60 \$ 1,031.40	\$ 200.00 \$ 1,000.00
	500KBTUH Boiler	2		\$ 1,031.40 \$ 75.33	\$ 1,000.00 \$ 415.00
	1MMbtuh boiler	15	524.38	\$ 75.33 \$ 471.94	\$ 413.00 \$ 612.00
		15			
	Average project from historical data		1633		\$ 2,080.00
-	Average project from historical data	15	11706	\$ 10,535.40	*
	Average project from historical data	10	8797	\$ 7,917.30	\$ 13,534.00
	300lb capactiy washer	10	6701	\$ 6,030.90	\$ 23,952.00
	Avg project from NM	6	173	\$ 155.70	\$ 77.00
	Building	10		\$ 1,279.58	
-	Per project	20	14366	\$ 12,929.40	\$ 30,873.00
	kBtu/hr	2	1.65	\$ 1.49	\$ 0.85
	Building	7	45053	\$ 40,547.70	
Flash Steam*				\$ -	
Indoor Ag Gas Chillers*				\$ -	
Special Projects Incentive Bonus			0	\$ 30,000.00	
Furnace 2	250,000Btuh furnace	19	138	\$ 500.00	\$ 1,752.75
Smart Thermostats T	Thermostat	11	67	\$ 150.00	\$ 175.00
Storage Water Heaters 1	100kBtuh Storage WH	15	248	\$ 450.00	\$ 797.00
Automatic Vent Damper F	Per 500kbtuh boiler	12	292.940881	\$ 1,387.50	\$ 2,775.00
Gas Radiant Heater F	Per 100 kbtu heater	20	203.3	\$ 1,099.50	\$ 2,199.00
Water Heater (Tankless) 1	100kBtuh tankless WH	15	294	\$ 400.00	\$ 344.00
Commercial Fryers S	Standard open deep-fat fryer	12	508	\$ 600.00	\$ -
Steam Cookers S	Steam cooker in average building	12	910	\$ 1,400.00	\$ 2,270.00
Griddles 0	Gas fired griddle	12	131	\$ 300.00	\$ 360.00
Pool cover (outdoor) p	per 392sqft pool	6	396	\$ 672.30	\$ 1,344.60
Pool cover (indoor) p	per 392sqft pool	6	1023	\$ 638.95	\$ 1,277.90
Boiler Replacement A	Average project from historical data	20	5163	\$ 500.00	\$ 120,591.00
Water Heaters 1	100kBtuh Storage WH	15	248	\$ 515.00	\$ 797.00
Water Heater (Tankless) 1	100kBtuh tankless WH	15	294	\$ 490.00	\$ 344.00
Furnace 2	250,000Btuh furnace	19	138	\$ 400.00	\$ 1,752.75
Gas Radiant Heater F	Per 100 kbtu heater	20	203.3	\$ 500.00	\$ 2,199.00
Commerical Kitchen Demand Ventilation Control 2	2.5HP Exhaust Fan	15	649.375	\$ 600.00	\$ 23,830.00
Combination Oven	MEMD 2022	12	403	\$ 800.00	\$ 21,797.00
Commercial Fryers S	Standard open deep-fat fryer	12	508	\$ 600.00	\$ -
Steam Cookers S	Steam cooker in average building	12	910	\$ 1,425.00	\$ 2,270.00
	Gas fired griddle	12	131	\$ 300.00	\$ 360.00
	Average project from historical data	10	414	\$ 139.64	\$ 200.00
	Average project from historical data	10	538	\$ 383.84	\$ 500.00
	Average project from historical data	5	133	\$ 165.85	\$ 130.00
	Average project from historical data	11	811	\$ 862.21	\$ 9.03
	therm	5	1	\$ 0.25	\$ -

# 2023 - 2025 **Energy Efficiency Program Plan**

# X. Appendix C – Measures for Income Qualified

X. Appendix C – Measures for Income Qualified											
Measure	Measure Lifespan		verage of Rebate Amount	Average of Total Lifetime Savings Therms	Average of First Year Therms						
Attic Insulation	25	\$	1,487.86	4,202.14	168.33						
Belly Insulation	20	\$	1,152.00	2,880.00	144.00						
DHW Pipe Insulation	10	\$	43.21	108.02	10.80						
DHW Tank Insulation	10	\$	139.84	349.61	34.96						
Door Replacement	25	\$	312.41	781.03	31.24						
Duct Insulation	18	\$	464.40	1,161.00	64.50						
Duct Sealing	18	\$	500.99	1,252.49	69.58						
DWH Low Flow Shower H	10	\$	85.32	213.31	21.33						
Faucet Aerator	7	\$	49.18	122.95	17.56						
Floor Insulation	20	\$	1,085.33	2,713.33	135.67						
Furnace Replacement	18	\$	1,718.50	4,296.24	238.68						
Furnace Tuneup	5	\$	88.43	221.07	44.21						
General air sealing	11	\$	246.40	616.00	56.00						
Infiltration	11	\$	287.64	719.10	65.37						
Low Flow Shower Heads	10	\$	100.95	252.38	25.24						
Replacement Heater	18	\$	1,792.08	4,480.20	248.90						
Seal Ducts	18	\$	134.67	336.67	18.70						
Smart Thermostat	10	\$	104.00	260.00	26.00						
Wall Insulation	25	\$	1,864.00	4,660.00	186.40						
Window Replacement	25	\$	1,736.49	4,341.22	173.65						
Attic Insulation B+	10 to 18	\$	2,500.00	6,250.00	250.00						
Attic Insulation Deemed	25	\$	1,200.00	4,200.00	206.00						
Furnace Replacement B+	10 to 25	\$	2,500.00	2,478.00	167.00						
Baseload Kit	10	\$	150.00	440.00	44.00						

# 2023 - 2025 Energy Efficiency Program Plan

# XI. Appendix D – Measures for Multi-Family

The estimated savings by measure shown in this table do not include free-ridership.

2023-2025 Program Years Estimated Measure Units											
		Market Rate (1	,400 households)	Low Income MF (1	,800 households)	Low Income SF (800 households)					
	Therm Savings/ install	Quantity of installs	Therm Savings/Year	Quantity of installs	Therm Savings/Year	Quantity of installs	Therm Savings/Year				
Pipe Wrap	1	154	154	155	155	80	80				
Thermostat	100	956	95638	711	71085	600	60009				
Shower Head	10	926	9255	777	7775	410	4100				
Bath Aerators	2	694	1388	555	1111	298	596				
Kitchen Aerator	1	694	694	555	555	298	298				
Air Sealing	15	15	231	13	200	7	112				
Duct Sealing	15	15	231	13	200	7	112				
Weather Stripping	5	15	77	13	67	11	56				
DHW Tank Wrap	20	77	1543	78	1555	41	820				
Insulation	35	309	10798	22	777	11	391				
Furnace	184	40	7380	444	81747	37	6858				
Central Boiler	17000	2	26223	0	0	0	0				
DHW Replacement	26	15	401	18	462	7	194				
Window Replacemer	20	77	1543	49	977	22	447				
		DI Total	109,212	DI Total	82,703	DI Total	66,183				
		DR Total	46,344	DR Total	83,964	DR Total	7,891				
		Total/Yr.	155,556	Total/Yr.	166,667	Total/Yr.	74,074				

# 2023 - 2025 Energy Efficiency Program Plan

# XII. Appendix E - Midstream Equipment and Incentives

Midstream Incentive Splits										
Measure		Total Incentive		Customer Incentive		Distributor & ontractor Incentive	% to Customer			
Residential Water Heating										
Tank WH UEF>=0.64 Replacement Market	\$	190	\$	115	\$	75	61%			
Tank WH UEF>=0.64 Replacement IQ	\$	290	\$	215	\$	75	74%			
Tankless WH UEF>=0.87 Replacement	\$	500	\$	300	\$	200	60%			
Residential Space Heating										
Furnace - 95% AFUE Replacement	\$	540	\$	325	\$	215	60%			
Furnace - 96% AFUE Replacement	\$	540	\$	325	\$	215	60%			
Furnace - 97% AFUE Replacement	\$	625	\$	375	\$	250	60%			
Furnace - 98% AFUE Replacement	\$	625	\$	375	\$	250	60%			
Furnace - 99% AFUE Replacement	\$	625	\$	375	\$	250	60%			
Boilers - 95% AFUE Replacement	\$	540	\$	325	\$	215	60%			
Boilers - 97% AFUE Replacement	\$	625	\$	375	\$	250	60%			
Smart Thermostat	\$	50	\$	40	\$	10	80%			
Commercial Water Heating										
Small Storage Water Heater (40-75 MBH, EF ≥ 0.80)	\$	190	\$		\$	75	61%			
Small Tankless Water Heater (50-200 MBH, EF ≥ 0.87)	\$	500	\$		\$	200	60%			
Large Storage Water Heater (75-300 MBH, Et ≥ 0.90)	\$	500	\$		\$	200	60%			
Large Storage Water Heater (75-300 MBH, Et ≥ 0.95)	\$	550	\$		\$	220	60%			
Large Tankless Water Heater (200-300 MBH, Et ≥ 0.90)	\$	800	\$		\$	320	60%			
Large Tankless Water Heater (200-300 MBH, Et ≥ 0.94)	\$	1,000	\$	600	\$	400	60%			
Commercial Space Heating										
Hot Water Boiler (up to 300 MBH, AFUE ≥ 85%) per boiler	\$	150	\$		\$	60	60%			
Condensing Boiler (up to 300 MBH, AFUE ≥ 92%) per boiler	\$	400	\$		\$	160	60%			
Hot Water Boiler (300-2500 MBH, AFUE ≥ 83%) per boiler	\$	1,050	\$		\$	420	60%			
Condensing Boiler (300-2500 MBH, AFUE ≥ 92%) per boiler	\$	2,800	\$		\$	1,120	60%			
Hot Water Boiler (> than 2500 MBH, AFUE ≥ 83%) per boiler	\$	2,250	\$	-	\$	900	60%			
Condensing Boiler (> than 2500 MBH, AFUE ≥ 92%) per boiler	-	6,000	\$		\$	2,400	60%			
Furnaces (up to 225 MBH, AFUE ≥ 95%)	\$	540	\$		\$	216	60%			
Furnaces (up to 225 MBH, AFUE ≥ 96%)	\$	625	\$		\$	250	60%			
Furnaces (up to 225 MBH, AFUE ≥ 97%)	\$	625	\$		\$	250	60%			
Furnaces (up to 225 MBH, AFUE ≥ 98%)	\$	625	\$		\$	250	60%			
Furnaces (up to 225 MBH, AFUE ≥ 99%)	\$	625	\$	375	\$	250	60%			

# 2023 - 2025 Energy Efficiency Program Plan

# **Appendix F – Glossary**

**A.F.U.E.** – Annual Fuel Utilization Efficiency; thermal efficiency measure of combustion equipment.

**Custom** – A complex measure that requires both pre and post engineering analysis to measure or quantify the efficacy of the measure.

**Deemed Savings** – Means expected energy savings attributed to well-known or commercially available energy efficiency and load management devices, such as the New Mexico Technical Resource Manual, M&V reports, or measures based on standard engineering, calculations, ratings, simulation models or field measurement studies, periodically adjusted as appropriate for New Mexico specific data, including building and household characteristics, and climate conditions in pertinent region(s) within the state.

**Direct Install** – Measures that are components of a NMGC residential or commercial program that are installed by NMGC or its third party contractor while evaluating the facility in anticipation of the customers' participation in additional custom or prescriptive measures.

**E.F.** – Energy Factor; is a metric used to compare energy conversion efficiencies of appliances or equipment. For water heaters, the energy factor is the ratio of useful energy output to the total amount of energy delivered. The higher the energy factor the greater energy efficiency.

**Measure** – An individual energy efficiency action or step that, either alone or along with other measures of different types, will comprise a cost-effective program.

**Net Present Cost** – Sum of the present value of all costs over the period of interest, including residual values such as negative costs.

**Net Present Value** – The difference between the present value of cash in-flows and the present value of cash out-flows.

**Prescriptive Measure** – Any standardized energy efficiency initiative with a deemed savings and a set rebate or incentive amount.

# 2023 - 2025 Energy Efficiency Program Plan

**Program** – Consists of at least one cost-effective energy efficiency measure, has its own budget, and UCT.

**Projects** – is a metric used to quantify different energy efficiency measures that a participant of a NMGC commercial program may undertake. One participant may have one or multiple "projects" completed at a facility or many facilities.

**UEF** – Uniform Energy Factor. The UEF is DOE's relatively new metric for communicating the energy efficiency of water heaters. The UEF calculation is based off of how much energy the water heater uses and how much energy is used to power the water heater itself, with higher number denoting more efficient units.

# 2023 - 2025 Energy Efficiency Program Plan

#### XIII. Appendix G – Program Performance Assumptions

The following describes the sources of the key program performance inputs used in the UCT model. Inputs are primarily from the reports titled "Energy Efficiency Potential Study for the State of New Mexico: Natural Gas Energy Efficiency Analysis", Global Energy Partners, June 2011, "DSM Portfolio Evaluation, New Mexico Gas Company, Program Year 2009," ADM Associates, Inc., June 2010, "DSM Portfolio Evaluation, New Mexico Gas Company, Program Year 2010," ADM Associates, Inc., June 2011, "Evaluation of 2011 DSM Portfolio, New Mexico Gas Company," ADM Associates, Inc., June 2012, "Evaluation of 2012 DSM Portfolio, New Mexico Gas Company," ADM Associates, Inc., "Evaluation of 2013 DSM Portfolio: New Mexico Gas Company," ADM Associates, Inc., "Evaluation of 2014 DSM Portfolio, New Mexico Gas Company," ADM Associates, Inc., "Evaluation of 2015 DSM Portfolio: New Mexico Gas Company," ADM Associates, Inc., "Evaluation of the 2017 New Mexico Gas Company Energy Efficiency Programs," Evergreen Economics, "Evaluation of the 2018 New Mexico Gas Company Energy Efficiency Programs," Evergreen Economics, the NMTRM adopted January 1, 2014 and update April 10, 2019. "Evaluation of the 2019 New Mexico Gas Company Energy Efficiency Programs," Evergreen Economics, "Evaluation of the 2020 New Mexico Gas Company Energy Efficiency Programs," Evergreen Economics, and "Evaluation of the 2021 New Mexico Gas Company Energy Efficiency Programs," Evergreen Economics,

# 2023 - 2025 Energy Efficiency Program Plan

	Residential Water	Heater Heating	
		1st Yr Target	
Unit Therm Savings <sup>1</sup>	Free Rider Factor <sup>2</sup>	Participation <sup>3</sup>	Measure Life Yrs <sup>4</sup>
9 - 1020	20% - 40%	16,171	10 to 20
	Residential Sp	ace Heating	
		1st Yr Target	
Unit Therm Savings <sup>5</sup>	Free Rider Factor 6	Participation 7	Measure Life Yrs <sup>8</sup>
21 - 512	20% - 25%	2688	3 to 30
	New Ho	omes	
		1st Yr Target	
Unit Therm Savings <sup>9</sup>	Free Rider Factor <sup>10</sup>	Participation <sup>11</sup>	Measure Life Yrs <sup>12</sup>
425	25%	1150	25
	Income Q		
		1st Yr Target	
Unit Therm Savings 13	Free Rider Factor <sup>14</sup>	Participation <sup>15</sup>	Measure Life Yrs <sup>16</sup>
239 - 311	0%	1787	10 to 30
	Multi-F	,	
		1st Yr Target	
Unit Therm Savings 17	Free Rider Factor <sup>18</sup>	Participation <sup>19</sup>	Measure Life Yrs <sup>20</sup>
92 - 111	0% - 15%	4000	10 to 30
	Efficient B		-
		1st Yr Target	
Unit Therm Savings <sup>21</sup>	Free Rider Factor 22	Participation <sup>23</sup>	Measure Life Yrs <sup>24</sup>
515 - 35,041	0% - 20%	269	3 to 15
	Home Energ		
		1st Yr Target	
Unit Therm Savings 25	Free Rider Factor <sup>26</sup>	Participation 27	Measure Life Yrs <sup>28</sup>
4 to 5	20%	200,000	1

# 2023 - 2025 Energy Efficiency Program Plan

otes	
1	Unit Therm Savings is derived from the New Mexico Technical Resource Manual (TRM) For The Calculation of Energy Efficiency Savings - Updated March 2021 by Evergreen Economics
2	Free Ridership Factor Derived from the most recent NMGC Measurement and Verification (M&V) Report - by Evergreen Economics
3	NMGC estimate based on discussions with Third Party Implementers, Plumbing contractors, home builders, and gas utilities with similar size programs, as well as experience in previous NMGC water heating programs.
4	Measure Life is derived from The New Mexico Technical Resourse Manual For The Calculation of Energy Efficiency Savings - Evergreen Economics March 2021
5	Unit Therm Savings is derived from the New Mexico Technical Resource Manual (TRM) For The Calculation of Energy Efficiency Savings - Updated March 2021 by Evergreen Economics
6	Free Ridership Factor Derived from the most recent NMGC Measurement and Verification (M&V) Report - by Evergreen Economics
7	NMGC estimate based on discussions with Third Party Implementers, HVAC contractors, home builders, and gas utilities with similar size programs, as well as experience in previous NMGC space heating programs.
8	Measure Life is derived from The New Mexico Technical Resourse Manual For The Calculation of Energy Efficiency Savings - Evergreen Economics March 2021
9	Unit Therm Savings is derived from M&V analysis for previous NMGC new homes programs.
	Free Ridership Factor Derived from the most recent NMGC Measurement and Verification (M&V) Report - by Evergreen Economics
11	NMGC estimate based on discussions with ICF, home builders, and previous experience with the existing new homes program.
12	Measure Life is derived from M&V analysis for previous new homes programs.
13	Unit Therm Savings is derived from the New Mexico Technical Resource Manual (TRM) For The Calculation of Energy Efficiency Savings - Updated March 2021 by Evergreen Economics
14	Free Ridership Factor Derived from the most recent NMGC Measurement and Verification (M&V) Report - by Evergreen Economics
15	NMGC estimate based on discussions with MFA and EnergyWorks with their previous years expreience with program participation and administration
16	Measure Life is derived from The New Mexico Technical Resourse Manual For The Calculation of Energy Efficiency Savings - Evergreen Economics March 2021
17	Unit Therm Savings is derived from the New Mexico Technical Resource Manual (TRM) For The Calculation of Energy Efficiency Savings - Updated March 2021 by Evergreen Economics
18	Free Ridership Factor Derived from the most recent NMGC Measurement and Verification (M&V) Report - by Evergreen Economics
19	Expected Participation is derived from discussions with ICAST, their experience with low income and market rate multi-family properties in New Mexico and other states.
20	Measure Life is derived from The New Mexico Technical Resourse Manual For The Calculation of Energy Efficiency Savings - Evergreen Economics March 2021
21	Unit Therm Savings is derived from the New Mexico Technical Resource Manual (TRM) For The Calculation of Energy Efficiency Savings - Updated March 2021 by Evergreen Economics
22	Free Ridership Factor Derived from the most recent NMGC Measurement and Verification (M&V) Report - by Evergreen Economics
23	NMGC estimate based on discussions with CLEAResult and gas utilities with similar size programs, as well as experience in previous NMGC Efficient Building programs.
24	Measure Life is derived from The New Mexico Technical Resourse Manual For The Calculation of Energy Efficiency Savings - Evergreen Economics March 2021
25	Unit Therm Savings is derived from ICF's experience with HEC programs in other utility jurisdictions
26	Free Ridership Factor Derived from ICF's experience with HEC program in other utility jurisdictions
27	NMGC estimate based on discussions with ICF and the expected first year outreach
28	Measure Life is derived from discussions with Evergreen Economics

# 2023 - 2025 Energy Efficiency Program Plan

# XIV. Appendix H – Energy Efficiency Programs UCT Analysis Output

				NPV o	F BENEFITS		NPV of COSTS					Ratio: Direct
	PROGRAMS	Sector	Electric Energy	Electric Capacity	Non Electric Energy	Program Total	Administrative	Rebates			Program Total	Utility
#1	Water Heating	Residential	\$0	<b>S</b> 0	\$1,342,859	\$1,342,859	\$743,645	\$487,438	\$0	\$0	\$1,231,083	1.09
#2	Space Heating	Residential	\$0	<b>S</b> 0	\$1,595,654	\$1,595,654	\$692,419	\$459,910	\$0	\$0	\$1,152,329	1.38
#3	Income Qualified	Low-Income	\$0	<b>S</b> 0	\$4,440,702	\$4,440,702	\$665,033	\$3,131,595	\$0	\$0	\$3,796,628	1.17
#4	Efficient Buildings	C/I	\$0	<b>S</b> 0	\$8,178,839	\$8,178,839	\$2,994,266	\$1,432,498	\$0	\$0	\$4,426,764	1.85
#5	Portfolio Costs	Low-Income	\$0	<b>S</b> 0	\$0	\$0	\$238,000	\$0	\$0	\$0	\$238,000	-
#6	New Homes	Residential	\$0	<b>S</b> 0	\$3,906,290	\$3,906,290	\$388,104	\$741,555	\$0	\$0	\$1,129,658	3.46
#7	Multifamily	Residential	\$0	<b>S</b> 0	\$2,858,378	\$2,858,378	\$556,700	\$1,700,000	\$0	\$0	\$2,256,700	1.27
#8	Home Energy Reports	Residential	\$0	<b>S</b> 0	\$798,933	\$798,933	\$725,745	\$0	\$0	\$0	\$725,745	1.10
	Residential Sector Subtotals:	(NPV \$)*	\$0	<b>S</b> 0	\$10,502,113	\$10,502,113	\$3,106,613	\$3,388,903	\$0	\$0	\$6,495,515	1.62
	Low Income Sector Subtotals:	(NPV \$)*	\$0	<b>S</b> 0	\$4,440,702	\$4,440,702	\$903,033	\$3,131,595	\$0	\$0	\$4,034,628	1.10
-	C/I Sector Subtotals:	(NPV \$)*	\$0	<b>S</b> 0	\$8,178,839	\$8,178,839	\$2,994,266	\$1,432,498	\$0	\$0	\$4,426,764	1.85
	Totals:	(NPV \$)*	<b>\$</b> 0	\$0	\$23,121,654	\$23,121,654	\$7,003,911	\$7,952,995	\$0	\$0	\$14,956,906	1.55
* Sec	tor-level subtotals and grand total NPVs include assoc	iated shareholder	incentives (if any)									