

# ZIA NATURAL GAS COMPANY



## Energy Efficiency Program Annual Report for Plan Year 2024

June 30, 2025

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## I. Introduction

Zia Natural Gas Company, a division of Natural Gas Processing Company (“Zia”) submits to the New Mexico Public Regulation Commission (“PRC” or “Commission”) this Energy Efficiency Program Annual Report for Plan Year 2024 (“Annual Report”). Plan Year 2024 covers the period from April 1, 2024, through March 31, 2025. The final Measurement and Verification Report prepared by the Commission’s independent energy efficiency evaluator, EcoMetric Consulting LLC (“EcoMetric”), entitled “PY2024 Zia Natural Gas EE Program Evaluation,” which was completed on June 20, 2025 (“M&V Report”) is attached as Appendix A.

Zia’s 2024 Energy Efficiency Program Plan is the third year of the 2022-2024 Energy Efficiency Program Plan approved in Case No. 21-00222-UT on March 23, 2022 (“Program Plan”). This Annual Report covers all costs incurred in the implementation of the 2024 Energy Efficiency Program and all customer participation in the Program from April 1, 2024 through March 31, 2025.

The following Measures are included in Zia’s 2024 Energy Efficiency Program:

(1) The Space Heating Measure provides incentives for residential customers to have an annual furnace inspection, upgrade their low efficiency furnaces or hydronic or radiant heating systems to high efficiency natural gas furnaces or hydronic heating systems, install or improve ceiling insulation through increased R factors or the Blown-In-Blanket (“BIBS”) high-density insulation system, or install a programmable or smart thermostat.

(2) The Water Heating Measure provides incentives for residential customers to upgrade their low efficiency water heating appliances to high efficiency natural gas water heating appliances or install water heater tank insulation. This Measure also offers customers free water conservation packages that reduce hot water consumption. The packages include a low flow showerhead, a kitchen faucet aerator, and a bathroom faucet aerator, as well as installation instructions and pipe thread tape to ease installation.

(3) The New Construction Measure provides incentives for homebuilders to build with high R-value insulation along with installing high efficiency natural gas appliances and a smart thermostat.

(4) The Income Qualified Measure (renamed from Low Income) provides Zia customers who have an annual income at or below 200% of the federal poverty level the opportunity to receive free, directly installed energy saving components like a low-flow showerhead, faucet aerators, weather-stripping, programmable thermostat, hot water pipe wrap, water heater tank insulations, and air sealing, and to possibly qualify for available funding and assistance for larger energy efficiency upgrade projects such as insulation, space heating, and water heating upgrades.

(5) The Commercial Measure provides commercial customers a free energy audit or assessment, and the opportunity to receive directly installed components or a rebate for custom programs.

This Annual Report begins with an Executive Summary that presents a high-level assessment of Zia’s 2024 Energy Efficiency Program performance in the 2024 Plan Year, followed by a summary of the findings of the M&V Report and recommendations for future programs. This Report also includes specific Energy Efficiency Measure information as required in the Energy Efficiency Rule (17.7.2.14 NMAC) that went into effect on September 26, 2017, as well as additional Program information.

## II. Executive Summary

The Energy Efficiency Program Annual Report presents the detailed results of five Measures for Plan Year 2024 (as approved in NMPRC Case No. 21-00222-UT): Space Heating, Water Heating, New Construction, Income Qualified, and Commercial.

EcoMetric concluded “[t]he portfolio was cost effective with a UCT ratio of 1.14.” M&V Report, Section E.4.2.1. The Plan Year 2024 program covered the 12-month period from April 1, 2024 to March 31, 2025. In Plan Year 2024, Zia experienced decreases in the Space Heating, Water Heating, New Construction, and Income Qualified Measures. Zia’s Commercial Measure resulted in higher participation and a majority of the energy savings. Zia attributes success of the Commercial Measure to the efforts by its contractor, CLEARResult.

The following table shows the total number of customer participants, savings, and Measure costs for Plan Year 2024. The savings for each Measure are net savings as derived from the final conclusions in the M&V Report reached by EcoMetric’s evaluation of Zia’s 2024 Program.

**Table 1: 2024 Energy Efficiency Program Performance**

Measure	Projected Annual Savings Per Unit (Therms) per Case No. 21-00222-UT	Total Number of Rebates Processed (April 1, 2024 to March 31, 2025)	Total Annual Net Savings (Therms)*	Lifetime Net Savings (Therms)*	Total Program Expenditures
Space Heating	27.6 - 174.8	178	6,184	114,066	\$ 52,813
Water Heating	13.1 - 158.8	278	2,331	25,598	\$ 33,080
New Construction	189.1 - 200.8	0	-	-	\$ 27,738
Income Qualified	202.5	329	3,164	45,788	\$ 84,193
Commercial	872	19	54,181	543,524	\$ 154,241
<b>Total</b>		<b>804</b>	<b>65,860</b>	<b>728,976</b>	<b>\$ 352,065</b>

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

Zia’s 2022-2024 Energy Efficiency Program Plan approved in Case No. 21-00222-UT on March 23, 2022 used energy savings values as recorded in the 2021 New Mexico Technical Resource Manual (“2021 NM TRM”) and used Net-to Gross (“NTG”) values consistent with the values utilized by New Mexico Gas Company (“NMGC”). Zia has since updated the savings values consistent with the 2023 New Mexico Technical Resource Manual (“2023 NM TRM”) released on March 27, 2023. EcoMetric verified the saving assumptions as noted throughout Section E.2 of the M&V report, and used NTG value based on New Mexico Gas Company’s PY2024 evaluation results. (Section E.1.3.1, M&V Report)

**Table 2: NTG Ratio**

Measure	Net - to - Gross (NTG) Ratio per Case No. 21-00222-UT	Net - to - Gross (NTG) Ratio, Plan Year 2024 *
Space Heating	0.7200	0.7406
Water Heating	0.5700	0.5854
New Construction	0.7300	0.00
Income Qualified	1.0000	1.0000
Commercial	1.0000	1.0000

*\* Weighted average value using NMGC PY 2024 NTG results and based on actual participation.*

The 2024 Plan Year is CLEAResult’s third year to implement the Income Qualified and Commercial Measures. CLEAResult did not meet the rebate budget and therm savings goals for the Income Qualified Measure. CLEAResult exceeded goals in the Commercial Measure providing Zia customers with successful, cost-effective energy savings. Contractors in Zia’s service area took advantage of Zia’s energy efficiency program by applying for rebates included in the Space Heating and Water Heating Measures, but did not apply for the overall New Construction Measure rebates.

Zia also failed to give away all of the available Water Conservation Packages in Plan Year 2024, which had a direct impact on the results of the Water Heating Measure. Zia gave away 265 of the 500 packages available.

In previous years, as part of the evaluation of Zia’s fuel conversion measures (electric resistance heat to gas forced air heat and electric to gas water heat) allowed in the Space Heating and Water Heating Measures, EcoMetric reported a negative gas savings, but concurred that the electric to natural gas conversions lower the cost of electricity by more than they increase the cost of natural gas, thus creating a household utility savings. Because Zia did not issue a rebate for either fuel conversion Components, the evaluation team did not evaluate the fuel conversion measures in Plan Year 2024.

**A. Summary of Expenditures**

The following table shows Zia’s expenditures for its Energy Efficiency Program for Plan Year 2024.

**Table 3: 2024 Program Expenditures**

Plan Year 2024	Total Actual Expenditures
Internal Administration	\$ 106,879
External Administration	\$ 108,904
Promotion/ Marketing	\$ 31,812
Rebates	\$ 30,417
Income Qualified	\$ 11,953
Commercial	\$ 62,100
<b>Total</b>	<b>\$ 352,065</b>

## **1. Administration**

Zia broke administration expenditures into internal administration and external administration. Internal administration includes all costs Zia expended on administering the 2024 Energy Efficiency Program including labor, travel and meals, training, legal expenses, and office expenses. Internal administrative time during Plan Year 2024 was spent on implementing, promoting, and overseeing the Program. The costs were allocated amongst Zia's five Energy Efficiency Program Measures on an equal basis. External administration is the amount charged by Zia's contractor, CLEARresult, to implement the Income Qualified and Commercial Measures.

## **2. Promotion/Marketing**

This cost category contains all promotional costs expended on the Program including brochures, direct mail costs, program sponsorships, newspaper, radio, television, media design and production, and all other promotional costs. The expenditures were allocated amongst Zia's five Energy Efficiency Program Measures on an equal basis.

## **3. Rebates**

This cost category contains all the rebates, including the cost for the materials in the water conservation package, paid during Plan Year 2024 for the Space Heating, Water Heating, and New Construction Measures.

## **4. Income Qualified**

In Plan Year 2024, CLEARresult both directly installed various energy savings components for income qualified customers and worked with different contractors to provide a rebate for energy saving components. The expenditures in this category represent both the direct installation costs and rebates. Overall, the Total Measure Expenditure of \$84,193 is 23.9% of the Total Program Expenditures, as shown in Table 1 on Page 2.

## **5. Commercial**

The expenditures in the Commercial category represent the labor and material costs for CLEARresult to directly install overhead door weatherstripping in commercial customer facilities in Zia's Lincoln County service area.

### **B. Cost Recovery**

#### **1. Tariff Collections**

Beginning January 1, 2017, for all gas sales on or after January 1, 2017, Zia added Original Rate Rider No. 2, Energy Efficiency Rider (Advice Notice No. 56) as a separate line item on all applicable customer class bills for recovery of Energy Efficiency Program expenditures. The applicable customer classes are Zia Rate No. 1 – Residential, Rate No. 2 – Small Commercial, and Rate No. 3 – Large Commercial. The Energy Efficiency Rider has been adjusted annually to account for over-recovery of program costs. At the end of Plan Year 2024, Zia Energy Efficiency Program had an over-recovered

balance of \$120,483. The Seventh Revised Rate Rider No. 2, Energy Efficiency Rider Rate of 0.01709/cscf, is still in effect as of the filing of the 2024 Plan Year Annual Report.

## **2. Tariff Reconciliation**

As of March 31, 2024, the over-recovered balance on Zia's Energy Efficiency Program increased from the previous year to \$120,483. By the end of July 2025, Zia expects the balance will be under-recovered at an estimated \$1,698. Zia's Plan Year 2025 Budget is \$583,801 as approved by Final Order issued on April 3, 2025 in Case No. 24-00247-UT.

Zia's approved Energy Efficiency Rider tariff describes the mechanism by which the Energy Efficiency Rider Rate is calculated and reconciled. First, the Energy Efficiency Plan Year Cost Factor is calculated by dividing the Plan Year budget by the basis sales volume. Second, the Energy Efficiency Plan Year Reconciliation Factor is calculated by dividing the over-recovered amount by the basis sales volume. If the program is over-recovered, the Energy Efficiency Plan Year Reconciliation Factor is subtracted from the Energy Efficiency Plan Year Cost Factor to determine the proposed Energy Efficiency Rider Rate. If the program is under-recovered, the Energy Efficiency Plan Year Reconciliation Factor is added to the Energy Efficiency Plan Year Cost Factor to determine the proposed Energy Efficiency Rider Rate.

Concurrent with the filing of the Annual Report, Zia is filing Advice Notice No. 66, which proposes to adjust the Energy Efficiency Rider for the over-recovered amount along with recovery of the Plan Year 2025 Program budget amount and explains the reconciliation mechanism in greater detail.

## **3. Profit Incentive**

Plan Year 2024 is the third year in the 2022-2024 Energy Efficiency Program approved by the New Mexico Public Regulation Commission ("Commission" or "NMPRC") in Case No. 21-00222-UT. In the Commission's Final Order Adopting Recommended Decision, the Commission approved Zia's request to earn a profit incentive on its 2022-2024 Energy Efficiency Program as allowed in 17.7.2.8.L NMAC, with the condition that the UCT standard of equal to or greater than 1.0 be met. As is explained later in this Annual Report, the Measurement and Verification Report prepared by EcoMetrics concluded that Zia's program had an overall UCT of 1.14 for Plan Year 2024, above the 1.0 minimum UCT to demonstrate satisfactory performance for a profit incentive. Therefore, Zia included the profit incentive in its energy efficiency rate reconciliation and Advice Notice No. 66 filed concurrently with this Annual Report.

### **C. Regulatory Proceedings**

#### **1. Zia's 2017 Energy Efficiency Program**

The Commission approved Zia's first proposed Energy Efficiency Program for Plan Year 2017 and Rate Rider in Case No. 16-00021-UT.

#### **2. 2017 Energy Efficiency Rule Amendments and Zia's 2018 Energy Efficiency Program:**

On September 26, 2017, revisions to the Commission's Energy Efficiency Rule, 17.7.2 NMAC, went into effect. The revised Rule required public utilities to, among other things, file an Energy

Efficiency Application every three years, and specified that Zia shall file its then-next Energy Efficiency Application on or before August 31, 2018. The revised Rule also provided that natural gas utilities shall file their annual energy efficiency reports on or before July 1 of each year in the same docket as the application that covered the period of the annual report. The Commission further confirmed this timing for filing of Zia's next Energy Efficiency Application and Annual Report in its Order issued July 26, 2017 in Case No. 16-00021-UT. Accordingly, Zia renewed the approved 2017 Energy Efficiency Program Plan for Plan Year 2018, filed the Energy Efficiency Program Annual Report for Plan Year 2017 on July 29, 2018, and filed its Annual Report on the 2018 Plan Year in Case No. 16-00021-UT on July 1, 2019.

### **3. Zia's 2019-2021 Energy Efficiency Program**

Zia filed its Application for Approval of Zia's 2019-2021 Energy Efficiency Program on August 31, 2018 in Case No. 18-00280-UT. The Hearing Examiner recommended (1) approval of Zia's proposed 2019-2021 Energy Efficiency Program Plan subject to Zia revising the Program to continue offering rebates for upgrading from electric resistive heat to natural gas forced air heat and for upgrading from an electric water heater to a natural gas water heater with an EF of 0.67 or greater, (2) approval of Zia's proposed Second Revised Rate No. 2; (3) Zia's proposal to recover an incentive; and (4) Zia's proposal to begin its Energy Efficiency Plan Year on April 1 of each year. The Commission approved and adopted the Recommended Decision by Final Order issued February 27, 2019. On March 8, 2019, Zia made its compliance filing of its revised Exhibit JWP-1 reflecting the changes approved by the Commission.

On July 30, 2020, Zia filed its Energy Efficiency Annual Report on the 2019 Plan Year in Case No. 18-00280-UT and its 2020 Energy Efficiency rate reconciliation and Advice Notice No. 62, which went into effect on September 1, 2020.

On June 30, 2021, Zia filed its Annual Report on the 2020 Plan Year and 2021 Energy Efficiency rate reconciliation and Advice Notice No. 63, which went into effect on August 1, 2021.

On June 30, 2022, Zia filed its Annual Report on the 2021 Plan Year and on July 1, 2022, Zia filed its rate reconciliation and Advice Notice No. 64, which went into effect on August 1, 2022.

Plan Year 2021, the final year under the approved 2018-2021 Energy Efficiency Program, concluded on March 31, 2022.

### **4. Zia's 2022-2024 Energy Efficiency Program**

On September 20, 2021, Zia filed an application for the 2022-2024 Energy Efficiency Program in Case No. 21-00222-UT, which was approved by Final Order Adopting Recommended Decision on March 23, 2022.

On July 31, 2023, Zia filed its Annual Report on the 2022 Plan Year and 2023 Energy Efficiency rate reconciliation and Advice Notice No. 65, which went into effect on September 1, 2023.

On June 28, 2024, Zia filed a Motion for an Extension of Time to File its Energy Efficiency Annual Report and Rate Rider Reconciliation by July 31, 2024. On July 23, 2024, the NMPRC granted Zia's motion.

On July 31, 2024, Zia filed its Annual Report on the 2023 Plan Year and its Notice of No Change To Its Energy Efficiency Rate Rider.

Plan Year 2024, the final year under the approved 2022-2024 Energy Efficiency Program, concluded on March 31, 2025.

#### **5. Zia's 2025-2027 Energy Efficiency Program**

On September 30, 2024, Zia filed an application for the 2025-2027 Energy Efficiency Program in Case No. 24-00247-UT, which was approved by Final Order Adopting Recommended Decision on April 3, 2025.

### **III. Summary of Measurement & Verification Report Findings**

#### **A. Background and Purpose of Independent Evaluation**

The NMPRC selected EcoMetric Consulting, LLC in December 2022 to perform independent energy efficiency evaluations for New Mexico utilities. In May of 2024 EcoMetric started its measurement and verification of Zia's Energy Efficiency Program for Plan Year 2024. Zia worked with EcoMetric to provide the data necessary to complete the 2024 M&V Report. This included providing Program Participation worksheet files for all Measures, budget and financial data, net and gross savings assumptions, and avoided cost information.

The primary purpose of the independent evaluation is to assess the cost effectiveness of the Energy Efficiency Program using the Utility Cost Test ("UCT"). The other purposes of the evaluation are to measure and verify energy savings, assess how well the Program is being implemented, and provide recommendations for Program improvements.

#### **B. 2024 M&V Report**

The Plan Year 2024 evaluation consisted of an analysis of the five Measures offered by Zia and an overall Program analysis. Please see Appendix A for the final M&V Report.

#### **C. Summary of Findings and Zia Comments**

EcoMetric determined that the overall UCT for Plan Year 2024 Program was 1.14. EcoMetric performed a Deemed Savings Review for five Measures in Plan Year 2024. EcoMetric also performed an Engineering Savings Review for the Space Heating and Water Heating Measures' fuel conversion programs but provided no comment. EcoMetric estimated net impacts using *ex ante* net-to-gross ("NTG") ratios, since a participant survey to collect information needed for a self-report analysis of free ridership was not conducted. The NTG ratios came from New Mexico Gas Company's evaluation report.

EcoMetric determined that the "portfolio was cost effective with a UCT ratio of 1.14." (Section E.4.2.1, M&V Report)

Below is a summary of EcoMetric's findings and recommendations along with Zia's comments.

## **D. Evaluation Results and Recommendations**

### **1. Space Heating Measure:**

EcoMetric calculated a UCT for the Space Heating Measure of 0.94, which is not cost effective. (Table 16, Section E.3, M&V Report) The evaluation team concluded that “Zia is utilizing correct and reasonable savings values based on input assumptions specific to its service territory.” (Section E.2.1, M&V Report) The team made a small adjustment to savings calculations as discussed below in the Recommendation. Finally, EcoMetric concluded that Zia’s Space Heating Measure resulted in net annual savings of 6,184 therms or 9.4% of the overall program savings. (Table 1, Page 2)

***EcoMetric Recommendation 1 (Section E.4.1.1): Update the per-unit Therm savings up to four decimals to get a more accurate Therm savings.***

#### Zia’s Response:

EcoMetric’s recommendation created an Engineering Adjustment Factor of 1.0003 which has a minimal impact on the savings calculation.

### **2. Water Heating Measure:**

EcoMetric calculated a UCT for the Water Heating Measure of 0.43, which is not cost effective. (Table 16, Section E.3, M&V Report) EcoMetric concluded that Zia’s Water Heating Measure resulted in net annual savings of 2,331 therms or 3.5% of the overall program savings. (Table 1, Page 2)

EcoMetric had one recommendation for Zia’s program.

***EcoMetric Recommendation 2 (Section E.4.1.2): Update the per-unit Therm saving up to four decimals to get more accurate Therm savings.***

#### Zia’s Response:

EcoMetric’s recommendation created an Engineering Adjustment Factor of 0.9991 which has a minimal impact on the savings calculation.

### **3. New Construction Measure:**

There was no participation in the New Construction Measure. Zia found that several contractors applied for rebates for individual Components in the Space Heating and Water Heating Measures instead. As discussed in Section VIII, 2025 Energy Efficiency Program, of the Annual Report, Zia modified its New Construction Measure to include individual components for new homes instead of a whole home package.

### **4. Income Qualified Measure:**

EcoMetric calculated a UCT for the Income Qualified Measure of 0.33, which is not cost effective. (Table 16, Section E.3, M&V Report) EcoMetric concluded that the Income Qualified Measure resulted in a net annual savings of 3,164 therms or 4.8% of the overall program savings. (Table 1, Page 2)

EcoMetric noted that “[i]n the engineering review of Income Qualified measure category, the evaluation team observed that site specific inputs were provided to the NEAT software to calculate ex ante savings”. However, “NEAT software does not provide details of the calculations like algorithm and other inputs.” (Section E.4.1.3, M&V Report) Based on the calculation method, EcoMetric made one recommendation concerning the determination of savings for the Income Qualified Measure.

***EcoMetric Recommendation 3 (Section E.4.1.3):*** Use New Mexico TRM algorithm and inputs to calculate savings. Use site-specific inputs in the New Mexico TRM algorithm wherever available.

Zia’s Response:

Zia has discussed the recommendation with CLEAResult. Zia and its contractor will use the New Mexico TRM algorithm in future calculations.

## **5. Commercial Measure:**

EcoMetric calculated a UCT for the Commercial Measure of 2.0, which is cost effective. (Table 16, Section E.3, M&V Report) In the Deemed Savings review for the Commercial Program, EcoMetric found that two of the calculations used the incorrect Therm savings per linear foot for weatherstripping. The calculation is based upon the gap width and is impacted by the various climate zones in the state. EcoMetric made the necessary corrections and adjusted the realized gross therm savings. EcoMetric also adjusted the calculation for the gas fryer component to match the 2023 NM TRM. EcoMetric determined that Zia’s Commercial Measure resulted in a net annual savings of 54,181 therms or 82.3% of the overall program savings. (Table 1, Page 2)

EcoMetric had two recommendations for Zia’s program.

***EcoMetric Recommendation 4 (Section E.4.1.4):*** Ensure that correct deemed savings per lineal feet of weatherstripping are used consistent with the gap width and climate zone from the 2023 New Mexico TRM.

Zia’s Response:

Zia will ensure the proper calculation of energy savings for overhead door weatherstripping.

***EcoMetric Recommendation 5 (Section E.4.1.4):*** Calculate savings using the inputs provided in the project documentation and 2023 New Mexico TRM.

Zia’s Response:

Zia will ensure that the New Mexico TRM is utilized when possible to calculate energy savings.

## **E. Cost Effectiveness**

Cost effectiveness was calculated using the Utility Cost Test (“UCT”) for the Zia Energy Efficiency Program overall. EcoMetric found the following during its analysis (Section E.4.2.1, M&V Report):

- A 20% benefit adder is included in the UCT calculation for Income Qualified projects to account for utility system economic benefits.

- The UCT revealed that the portfolio was cost effective with a UCT ratio of 1.14. However, Space Heating, Water Heating and Income Qualified measure categories were not cost effective and had a UCT ratio of less than 1.00.

The decrease in the UCT ratio from PY2023 to PY2024 was primarily driven by a 43.5% reduction in total net lifetime savings, while total administrative costs remained relatively steady, decreasing by only 3.6%. Although overall portfolio costs remained stable, the decline in savings led to a corresponding reduction in net benefits. These factors combined to lower the portfolio's UCT. (Section E.3, M&V Report)

**EcoMetric Recommendation 6 (Section E.4.2.1):** *If Zia or the NMPRC desires that cost effectiveness be calculated at the individual measure category level with more precision, the evaluation team suggests that Zia track non-incentive administrative costs by measure category so that the exact costs can be utilized for the cost effectiveness test. Tracking costs by measure category will help in comparing the performance of the measure categories.*

Zia's Response:

Zia has allocated administrative costs by Measure to generate a UCT on the overall Program level and at the Measure level. Please see "Table 6: Actuals for Plan Year 2024" below in Section IV(D). From discussion with EcoMetric, Zia believes the recommendation suggests that Zia track costs on the individual Component level of each Measure within the Program. Zia's understanding is that the Commission's approach is to determine cost effectiveness of Measures and the overall Program but not of individual components. That is consistent with the Commission's approach on Zia's prior Energy Efficiency Plans. Zia will continue to comply with the Commission's previously approved approach until ordered otherwise.

**F. Improving UCT**

EcoMetric determined the UCT for the 2022 Plan Year was 1.14 which is over the 1.0 UCT needed to demonstrate satisfactory performance of the Program.

**IV. Energy Efficiency Rule 17.7.2.14 NMAC Reporting Requirements**

This section of the Annual Report follows the reporting requirements and section headings as specified in the NMPRC Energy Efficiency Rule Subsections 17.7.2.14.C and D NMAC.

**A. Subsection 14.C Measure and Program Data**

This Annual Report includes the following data required by 17.7.2.14.C NMAC:

1. Section IV.D provides documentation of Plan Year 2024 program expenditures. Section II.B provides documentation of estimates of the program expenditures expected in the next year (2025 Plan Year), including documentation of any adjustments to expenditures in the 2024 Plan Year.
2. Section IV.E provides estimated and actual customer participation levels.
3. Section IV.D provides estimated and actual energy savings/demand data.
4. Sections IV.D and V provide estimated and actual monetary costs of the public utility.

5. Section IV.D and Appendix A provide estimated and actual avoided monetary costs of the public utility.
6. Sections III.E and IV.D provide an evaluation of the Program’s cost effectiveness.

The Annual Report does not provide an evaluation of the cost-effectiveness and pay-back periods of self-directed programs because Zia has no such programs.

**B. Subsection 14.D(1) Independent Measurement and Verification Report**

The Commission’s energy efficiency independent evaluator, EcoMetric, conducted the independent evaluation of Zia’s Energy Efficiency Program for Plan Year 2024. EcoMetric’s report entitled “PY2024 Zia Natural Gas EE Program Evaluation” is attached as Appendix A and addresses savings of all Energy Efficiency Measures and the Program overall. EcoMetric’s M&V Report also addresses cost effectiveness by Measure.

**C. Subsection 14.D(2) Program Expenditures Not Included in the M&V Report**

EcoMetric’s M&V Report for Plan Year 2024 contains an expenditure analysis of all five of Zia’s Energy Efficiency Program Measures. There are no other expenditures that have not been included in the M&V Report.

**D. Subsection 14.D(3) Material Variances in Program Costs**

The tables below provide comparisons between estimated and actual energy savings/demand savings, monetary costs, and avoided monetary costs. For reference, Zia also included actual results from Plan Year 2023. Zia’s contractor, CLEAResult, was not able to identify as many projects in the Income Qualified Measure in Plan Year 2024 as in Plan Year 2023, which led to less spending for the Income Qualified Measure. Otherwise, program costs were similar, the cost per therm saved increased, and the UCT decreased although it remained over 1.0 (*i.e.*, benefits exceeded costs).

**Table 4: Estimates for Plan Year 2024**

Measure	2024 Year Estimated Participation	Estimated Annual Therms Saved*	Estimated Lifetime Therms Saved*	Total Measure Budget	NPV Measure Benefits	UCT	Cost per Therm Saved
Space Heating	340	12,323	135,557	\$55,082	\$87,069	1.58	\$0.41
Water Heating	660	10,784	118,620	\$50,202	\$76,190	1.52	\$0.42
New Construction	60	8,541	170,820	\$66,542	\$104,839	1.58	\$0.39
Income Qualified	300	31,590	315,900	\$164,465	\$244,876	1.49	\$0.52
Commercial	60	47,093	470,925	\$178,122	\$304,205	1.71	\$0.38
<b>Total</b>	<b>1,319</b>	<b>110,331</b>	<b>1,211,822</b>	<b>\$514,414</b>	<b>\$817,179</b>	<b>1.59</b>	<b>\$0.42</b>

\*Adjusted for free ridership as derived from the NMTRM

**Table 5: Actuals for Plan Year 2023**

Measure	2023 Year Actual Participation	Actual Annual Therms Saved*	Actual Lifetime Therms Saved*	Total Measure Expenditures	NPV Measure Benefits	UCT	Cost per Therm Saved
Space Heating	192	6,012	110,455	\$46,928	\$53,440	1.14	\$0.42
Water Heating	525	4,996	74,384	\$36,313	\$42,095	1.16	\$0.49
New Construction	3	442	8,835	\$26,428	\$4,553	0.17	\$2.99
Low Income	419	20,191	354,708	\$111,618	\$229,850	2.06	\$0.31
Commercial	15	75,736	742,620	\$144,030	\$477,476	3.32	\$0.19
<b>Total</b>	<b>1,154</b>	<b>107,377</b>	<b>1,291,001</b>	<b>\$365,316</b>	<b>\$807,413</b>	<b>2.21</b>	<b>\$0.28</b>

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

**Table 6: Actuals for Plan Year 2024**

Measure	2024 Year Actual Participation	Actual Annual Therms Saved*	Actual Lifetime Therms Saved*	Total Measure Expenditures	NPV Measure Benefits	UCT	Cost per Therm Saved
Space Heating	178	6,184	114,066	\$52,813	\$49,894	0.94	\$0.46
Water Heating	278	2,331	25,598	\$33,080	\$14,064	0.43	\$1.29
New Construction	-	-	-	\$27,738	-	0.00	-
Income Qualified	329	3,164	45,788	\$84,193	\$28,098	0.33	\$1.84
Commercial	19	54,181	543,524	\$154,241	\$309,000	2.00	\$0.28
<b>Total</b>	<b>804</b>	<b>65,860</b>	<b>728,976</b>	<b>\$352,065</b>	<b>\$401,056</b>	<b>1.14</b>	<b>\$0.48</b>

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

**E. Subsection 14.D(4) Number of Program Participants**

Total numbers of participants for each Energy Efficiency Measure for Plan Years 2023 and 2024 are shown in Tables 5 and 6. The tables comparing 2023 and 2024 performance indicate an overall decrease in participation in Zia’s Energy Efficiency Program. The Commercial Measure had more participation but less overall savings.

Participation in the program was lower for Space Heating, Water Heating, New Construction, and Income Qualified. In the Water Heating Measure, Zia handed out 265 of the 500 water conservation packages. Typically, Zia’s has been able to give away 500 packages per year. In the New Construction Measure, Zia found that several contractors applied for rebates for individual Components in the Space Heating and Water Heating Measures instead of applying for the whole home package. Finally, Plan Year 2024 was CLEAResult’s third year of implementing Zia’s Income Qualified Measure. During the first two years, Zia and CLEAResult were able to work with a multi-family unit during a major remodel and provide rebates to install energy efficient components in each unit. The significant savings from the remodel helped CLEAResult achieve the program savings goals for those two years. Both Zia and CLEAResult were unable to identify a similar opportunity in Plan Year 2024 and struggled to find participants even on an individual home basis. Therefore, Zia missed its savings target of 31,590 therms.

The total number of participants for each Energy Efficiency Measure for Plan Year 2024 is shown in Table 7 below for each of Zia’s service territories.

**Table 7: 2023 Measure Participation Per District**

Measure	Lea County	Lincoln County	Colfax County	Dona Ana	Measure Total
Space Heating	116	31	5	26	178
Water Heating	153	54	5	66	278
New Construction	0	0	0	0	0
Income Qualified	4	21	0	304	329
Commercial	19	0	0	0	19
<b>District Total</b>	<b>292</b>	<b>106</b>	<b>10</b>	<b>396</b>	<b>804</b>

**F. Subsection 14.D(5) Economic Benefits**

Please refer to “Table 6: Actuals for Plan Year 2023” above in Section IV.D for calculated economic benefits for each approved Measure.

**G. Subsection 14.D(6) Self-Direct Programs**

Zia’s Energy Efficiency Program does not include any Self-Directed Programs.

**H. Subsection 14.D(7) Other Information of Interest to the Commission**

In Case No. 18-00280-UT, the Commission expressed interest in a more in-depth review of savings assumptions and calculations showing the change in both natural gas and electricity consumption resulting from the Fuel Conversion Components currently offered in the Space Heating and Water Heating Measure categories. EcoMetric did not perform a review in the Plan Year 2024 M&V Report of the energy savings for the Fuel Conversion Component. In past evaluations, EcoMetric performed an engineering review of the energy savings for the Fuel Conversion Component. Comparing the utility system costs of increased gas consumption to the utility system benefits of decreased electricity consumption shows that these Components are cost effective, with utility system benefits being greater than utility system costs.

In Case No. 16-00021-UT, the Commission expressed interest regarding program participation in each of Zia’s four service territories, including the rural communities in Colfax County, New Mexico. As shown in “Table 7: 2024 Measure Participation Per District” above, Program participation occurred in each of Zia’s four operating districts, with 12% of Program participation occurring in Colfax County. This demonstrates higher participation compared to the total number of customer accounts in Colfax County, which make up only 3% of Zia’s total customer accounts in New Mexico.

The latest update to the TRM was released by EcoMetric Economics on March 24, 2025. Zia will review the latest version of the New Mexico TRM to record savings for Plan Year 2025.

**I. Other Section 14 Requirements**

This Annual Report provides information relating to Zia's actions to comply with the EUEA, as required by Rule Subsection 14.A. Zia will post its Annual Report on its publicly available website at <https://www.zngc.com/>, as required by Rule Subsection 14.B.

## V. Cost Allocation and Expenses by Measure

The following table shows the allocation of expenditures to the various Measures for Plan Year 2023.

**Table 8: 2024 Measure Expenditures**

Measure	Rebates	Internal Administration	External Administration	Promotion	Total Measure Expenditures
Space Heating	\$25,075	\$21,376		\$6,362	\$52,813
Water Heating	\$5,342	\$21,376		\$6,362	\$33,080
New Construction	\$0	\$21,376		\$6,362	\$27,738
Low Income	\$11,953	\$21,376	\$44,501	\$6,362	\$84,193
Commercial	\$62,100	\$21,376	\$64,403	\$6,362	\$154,241
<b>Total</b>	<b>\$104,470</b>	<b>\$106,879</b>	<b>\$108,904</b>	<b>\$31,812</b>	<b>\$352,065</b>

The Rebate cost category includes all rebates paid directly to participating customers. Materials necessary for Water Conservation Packages are also included in this category.

The Administration category includes all costs Zia expended on the 2024 Energy Efficiency Program including labor, travel and meals, training, legal expenses, and office expenses. Administrative time during Plan Year 2024 was spent on implementing the entire Program including ordering materials, improving data tracking tools, and working with the contractor. Time was also spent on oversight of the Energy Efficiency Program including promoting the Program, tracking new data, application, and installation verification, issuing money or credits for rebates, preparing and submitting NMPRC compliance reporting, and working with EcoMetric regarding its M&V evaluation. The internal administration costs were allocated amongst the five Energy Efficiency Program Measures on an equal basis.

External administration is the amount charged by Zia’s contractor, CLEARresult, to implement the Income Qualified and Commercial Measures.

Promotional expenses for 2024 were primarily for raising awareness of the Program and available Measures through brochures, flyers, direct contact with certified plumbing and HVAC contractors, and advertising campaigns. Promotional expenses were allocated amongst the five Energy Efficiency Measures equally. (Please see the Promotional Activities section below for more details on specific promotional activities).

## VI. Non-Energy Benefits

The following table shows the CO<sub>2</sub> emission reductions associated with Zia’s 2024 Energy Efficiency Program. The annual and lifetime avoided emissions are determined by multiplying the emissions rates (estimated by the U.S. Department of Energy’s Energy Information Administration) times the annual and lifetime therms saved due to the Energy Efficiency Program. In addition, Zia’s Water Conservation Packages and Income Qualified Measure contribute directly to water savings. The Water Conservation Packages and Income Qualified Measure’s direct-installations of low flow showerheads and faucet aerators account for more than 939,480 gallons of water saved annually. The expected

lifetime for those measures is 10 years for showerheads and 5 years for faucet aerators, as determined by New Mexico’s Technical Resource Manual.

**Table 9: Non-Energy Benefits**

2024 Program year

Emission Impact	Annual Avoided Gas Emission Rate (lbs/therm)**	Annual Avoided Gas Emission Rate (Metric tons)	Lifetime Avoided Emissions (Metric tons)
CO <sub>2</sub>	117	3,495	38,687
Water Impact		Annual Water Saved (gallons)*	Lifetime Water Saved (gallons)*
Water Savings		939,480	8,425,381

*\*Savings adjusted for free-ridership and derived from M&V Report and NMTRM.*

*\*\*The avoided CO<sub>2</sub> emissions rate for gas combustion was taken from U.S. Department of Energy - Energy Information Administration’s Annual Energy Outlook 2016.*

## VII. Promotional Activities

Zia performed an extensive marketing program in order to saturate the market in each of its service areas with information of its energy efficiency program via newspaper, magazine, advertising signs in the lobbies and social media. The level of safety messages remained steady, and many of the other messages were about the Energy Efficiency Program and Rebates offered.

### A. Mass Media Communications

Zia advertises monthly in newspapers, social media or Facebook, and radio stations in each of its service areas. Zia designed, built and approved its newspaper ads to provide an Energy Efficiency rebates overview and to educate its customers about the Energy Efficiency Program and the availability of the free Water Conservation Packages. Newspaper ads for the Energy Efficiency Program ran between 2-4 times each month in each service area.

Zia utilized radio stations to record radio scripts about the Energy Efficiency Program, including a rebate overview, specific Income Qualified Package availability, specific Commercial rebate availability, and free Water Conservation Package mixed in with Zia’s safety and general business radio ads. The goal was to have effective Program exposure while maintaining Program budgetary constraints. Zia continues to advertise on a variety of different radio stations encompassing multiple target audience age groups and many different genres of programming. The radio ads were rotated each quarter so that each district would receive new ads. The radio ads will continue to be updated quarterly.

### B. Targeted Communications

Zia also utilized program brochures available in each office in each of Zia's districts to educate customers about the Program. The brochures contain a brief overview of all Program Measures. Flyers containing more in-depth information on each individual Program Measure are also available.

Zia continues to maintain contact with licensed plumbers, HVAC contractors, housing developers, and general building contractors in each of its operating districts to ensure that they

maintain understanding of Zia's Program and promote the use of higher efficiency appliances in instances when installed equipment does not meet Zia's program standards for efficiency.

Zia continues to meet in person with contractors to promote understanding of the Energy Efficiency Program so that the contractors may also promote Zia's Energy Efficiency Program.

Zia continues to utilize its monthly newsletters as a primary means to notify customers of the Energy Efficiency Program offerings. The newsletter is included with every customer bill mailed at the beginning of each month. Zia does not offer e-billing so each customer received a paper copy of the newsletter. Zia newsletters are also archived and available on Zia's website at [www.zngc.com](http://www.zngc.com). Zia also created a Facebook page, which is a very useful way to centralize information and engage with Zia's customers in a one-on-one format.

All of the brochures, flyers, newspaper and radio ads addressing the Income Qualified or Commercial Measures also included contact information for CLEAResult, which is the third-party administrator for those two Measures. To assist with promotion, when CLEAResult received an Income Qualified or Commercial assessment request from an electric utility customer in Zia's service areas, CLEAResult would offer Zia's Energy Efficiency Program Measures to the customer as well. When CLEAResult visits Zia's districts, we assist with outreach to customers to offer energy efficiency assessments.

### **C. Results**

The cost effectiveness of Zia's program declined between Plan Year 2023 and Plan Year 2024. As can be seen in the decrease in therm saving and expenditures in the Income Qualified Measure, finding participants for the Income Qualified Measure is challenging. CLEAResult continues to work with income-qualified multi-family units, the Mortgage Finance Authority, and potential Income Qualified customers as identified by local Zia office staff. CLEAResult met and exceeded the program goals for the Commercial Measure by contacting Zia commercial customers and directly installing energy saving components such as overhead door weatherstripping.

Internally, Zia personnel were affected by a large forest fire in Zia's service area in Lincoln County diverting personnel and resources for almost two months of the 2024 Plan Year. Zia also lost and hired a new Business Development Manager. The new Business Development Manager is now working to continue promotion of the program.

As part of the information gathered on the rebate application, Zia requested to know where each customer learned about the Energy Efficiency Program. The most common customer responses were the newsletter, in the office, social media, website, or from their plumber. The least common responses were radio and newspaper ads. Zia has decided its marketing strategy going forward will continue to include personal contact with customers and contractors while maintaining constant Program exposure in the Zia's monthly newsletter. The Business Development Manager, who is also tasked with implementation of the Energy Efficiency Program, is also working with Zia personnel to better promote the Program during customer interaction.

Zia will continue to work with CLEAResult to implement the Income Qualified Measure and Commercial Measure throughout the 2025-2027 Energy Efficiency Program, which includes Plan Year 2025. As part of its contract, CLEAResult provided a Program Manual with targeted therm savings,

targeted participation, and estimated administration costs and rebate/incentive costs. Zia believes it can continue to achieve improved participation and results by utilizing the expertise of this nation-wide company.

## **VIII. 2025 Energy Efficiency Program**

Zia's 2025-2027 Energy Efficiency Program was approved by Final Order Adopting Recommended Decision in Case No. 24-00247-UT on April 3, 2025, and pertains to Plan Years 2025, 2026, and 2027 unless modified by application to the Commission. Zia's Plan Year 2025 began on April 1, 2025 and is the first year of the 2025-2027 Energy Efficiency Program.

Zia's 2025-2025 Energy Efficiency Program will continue to offer energy efficiency Measures in five general categories: (1) Space Heating, (2) Water Heating, (3) New Construction, (4) Income Qualified, and (5) Commercial. Zia renewed the contract with CLEARResult to implement the Income Qualified and Commercial Measures. As approved by the Commission, the budget for Income Qualified has been reduced due to challenges in implementation. The budget for Commercial has increased due to success in implementation of the program. Zia will continue to offer similar rebates in the Space Heating Measure. Zia removed the Condensing Storage Tank Water Heater rebate from the Water Heating Measure. The remaining components of the Water Heating Measure remain the same. Zia redesigned the New Construction measure to offer rebates for individual components instead of whole home packages.

### **A. Participation**

Zia recognizes program participation as its biggest challenge to achieving a cost-effective program. Participation decreased in Plan Year 2024. In Plan Year 2025, Zia will increase promotion of the smart thermostat, programmable thermostat, and water heater tank insulation rebates. Zia will continue to work with local contractors to improve education and promote the Program. In addition, Zia is providing training to its employees on how the Energy Efficiency Program works and how to promote the Program to our customers. Zia will continue to use its Facebook page to provide more education and outreach to customers on the Energy Efficiency Program. Zia's Business Development Manager actively promotes the Program to each community at Chamber of Commerce events, makes personal contact with targeted customer groups to promote the Energy Efficiency Program, and goes door-to-door to hand out informational packets to customers.

Zia also plans to continue working with its contractor, CLEARResult, and to utilize some of their tools to promote the Energy Efficiency Program. CLEARResult has nationwide experience implementing energy efficiency programs. Zia will work with CLEARResult to identify multi-family units for potential energy savings actions and assist in reaching the therm saving goals for the Income Qualified Measure.

### **B. Space Heating**

Zia will continue to offer rebates for higher efficiency gas furnaces, upgrades to hydronic heating systems, insulation improvements, gas furnace tune-ups, programmable thermostats, and smart thermostats.

Additionally, Zia will continue to provide a rebate for the Fuel Conversion Component of the Space Heating Measure. For the Space Heating Measure, the Hearing Examiner noted the following in the Recommended Decision, page 16 (approved by Final Order in Case No. 18-00280-UT):

*The holding from Case No. 12-00317-UT should be followed in this case, and electric savings from Zia's Space Heating Measure should be counted as benefits in the UCT calculation. The Commission's reasoning in Case No. 12-00317-UT, while involving the TRC calculation, applies equally to the UCT calculation. The EUEA's mandate that "[t]he commission shall direct public utilities to evaluate and implement cost-effective programs that reduce energy demand and consumption" has not changed: the EUEA today still contains that mandate to reduce energy demand and consumption overall. NMSA 1978, §62-17-5(B).*

Therefore, Zia will continue to offer the upgrade from electric resistive heat to natural gas forced air heating with an AFUE of 95% or greater. Additionally, Zia asked EcoMetric to perform an engineering review of the Fuel Conversion Component in light of this Final Order in the 2018 case. EcoMetric's analysis of the Component showed that the Component saves the consumer money because the electric savings, the benefit, is greater than the natural gas usage, the cost.

### **C. Water Heating**

Zia will continue to offer rebates for installation of higher efficiency natural gas water heaters and water heater tank insulation. Zia will also provide water conservation packages including a low flow showerhead, kitchen faucet aerator, and bathroom aerator at no cost to the customer.

Zia will also continue to provide a rebate for the Fuel Conversion Component of the Water Heating Measure. For the Water Heating Measure, the Hearing Examiner noted the following in the Recommended Decision, page 18 (approved by Final Order in Case No. 18-00280-UT):

*The holding from case No. 12-00317-UT should be followed in this case, and electric savings from Zia's Water Heating Measure should be counted as benefits in the UCT calculation. Zia should be required to revise its 2019-2021 Program Plan to continue offering a rebate for upgrading from an electric water heater to a natural gas water heater with an EF of 0.67 or greater.*

Therefore, Zia will continue to offer the upgrade from an electric water heater to a natural gas water heater with an Energy Factor (EF) of 0.67 or greater. Additionally, Zia asked EcoMetric to perform the engineering review of the Fuel Conversion Component in light of the Final Order in the 2018 case. An analysis of the Component showed that the Component saves the consumer money because the electric savings, the benefit, is greater than the natural gas usage, the cost.

### **D. New Construction**

Zia will continue to promote the New Construction Measure directly to local area contractors.

### **E. Income Qualified**

Zia will continue to work with CLEAResult to implement the Income Qualified Measure for the 2025 Plan Year. As part of its contract, CLEAResult provided a Program Manual with targeted therm savings, targeted participation, and estimated administration costs and rebate/incentive costs. For the proposed Income Qualified Measure, CLEAResult will offer a two-pronged approach. CLEAResult will provide direct installation of energy saving components such as a low-flow showerhead, kitchen faucet aerator, bathroom faucet aerator, weather-stripping, programmable thermostat, hot water pipe wrap, water heater tank insulation, and air sealing. CLEAResult will also connect non-profits and income-qualified customers to available funding and assistance resources for larger energy efficiency and home upgrade projects such as insulation, space heating, and water heating upgrades. Zia and CLEAResult are targeting multi-family, income qualified, housing as a potential for significant energy savings.

## **F. Commercial**

Zia will continue to work with CLEAResult to implement the Commercial Measure. CLEAResult will implement the Measure in a two-pronged approach. CLEAResult will directly install basic energy saving components such as pre-rinse spray nozzles, low-flow aerators, and weather-stripping. In addition, CLEAResult will also provide more prescriptive components based on an assessment of the commercial customer's operations and needs. CLEAResult provides energy efficient solutions to utilities and companies nation-wide. Zia believes it can continue to achieve improved participation and results by utilizing the expertise of this nation-wide company.

**Appendix A**  
**EcoMetric Economics Measurement & Verification Report**



# PY2024 Zia Natural Gas EE Program Evaluation

Date:	6/20/2025
To:	Leslie Graham, Crystal Sifuentes
From:	Glenn Gavi, Mike Frischmann
Re:	Zia Natural Gas PY2024 Evaluation Results

This memo presents the independent evaluation results for the Zia Natural Gas Company's (Zia) energy efficiency programs for program year 2024 (PY2024).

The energy efficiency program evaluation requirements were first established in 2005 by the New Mexico legislature's passage of the 2005 Efficient Use of Energy Act (EUEA).<sup>1</sup> The EUEA requires public utilities in New Mexico, in collaboration with other parties, to develop cost-effective programs that reduce energy demand and consumption. Utilities are required to submit their proposed portfolio of programs to the New Mexico Public Regulation Commission (NMPRC) for approval. As a part of its approval process, the NMPRC must find that the program portfolio is cost effective based on the Utility Cost Test (UCT).

An additional requirement of the EUEA is that each program must be evaluated at least once every three years. As part of the evaluation requirement, Zia must submit to the NMPRC a comprehensive evaluation report prepared by an independent program evaluator. As part of the reporting process, the evaluator must measure and verify energy and demand savings, determine program cost effectiveness, assess how well the programs are being implemented, and provide recommendations for program improvements as needed.

For PY2024, the following measure categories had participation and were evaluated:

- ▶ **Space Heating:** The measures eligible for the Space Heating category include gas furnace upgrades, boiler upgrades, insulation, furnace tune-ups, fuel conversion from electric resistive heat to an efficient gas furnace, and programmable and smart thermostats.

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<sup>1</sup> NMSA §§ 62-17-1 et seq (SB 644). Per the New Mexico Public Regulation Commission Rule Pursuant to the requirements of the EUEA, the NMPRC issued its most recent Energy Efficiency Rule (17.7.2 NMAC) effective September 26, 2017, that sets forth the NMPRC's policy and requirements for energy efficiency and load management programs.



- ▶ **Water Heating:** The measures eligible for the Water Heating category include low flow showerheads and faucet aerators, water heater upgrades, tankless water heaters, condensing storage tank water heaters, fuel conversion from electric water heaters to an efficient gas water heater, and water heater tank insulation.
- ▶ **Income Qualified:** This category provides weatherization and other efficiency improvements at no cost or low cost to low-income households. This includes a variety of measure combinations including low flow showerheads and faucet aerators, programmable thermostats, attic insulation, air sealing, and water heating tank insulation to low-income customers.
- ▶ **New Construction:** The New Construction category provides incentives for new homes built with natural gas efficiency in mind. For homes of 2,000 square feet or less, the program requires an efficient natural gas main heat source, an efficient natural gas water heater, one additional gas outlet, and insulation with a rating of R30 or greater. For homes above 2,000 square feet, all the above plus a natural gas dryer or range are required.
- ▶ **Commercial:** The Commercial category includes both a direct install component and a prescriptive component based on an assessment of commercial customer needs. In PY2023, only the direct install component was utilized for overhead door weatherstripping installation.

For each of the evaluated measure categories, the evaluation team estimated realized gross and net Therm impacts and calculated program cost effectiveness using UCT.

Table 1 summarizes the PY2024 evaluation methods.

*Table 1: Summary of PY2024 Evaluation Methods by Program*

Measure Category	Deemed Savings Review	Engineering Desk Review
Space Heating	✓	✓
Water Heating	✓	✓
New Construction	✓	
Income Qualified	✓	
Commercial	✓	

The results of the PY2024 impact evaluation are shown in Table 2. The net-to-gross (NTG) ratios used to calculate net impacts are based on the PY2024 New Mexico Gas Company (NMGC) evaluation report, apart from the Commercial measure category. The evaluation team applied a NTG ratio of 1.00 since all projects were directly installed.



Table 2: PY2024 Savings Summary – Therms

Measure Category	# of Projects	Expected Gross Therm Savings	Engineering Adjustment Factor	Realized Gross Therm Savings	NTG Ratio	Realized Net Therm Savings
Space Heating	178	8,348	1.0003	8,351	0.7406	6,184
Water Heating	270	3,986	0.9991	3,982	0.5854	2,331
New Construction	-	-	-	-	-	-
Income Qualified	329	3,856	0.8205	3,164	1.0000	3,164
Commercial	19	53,612	1.0106	54,181	1.0000	54,181
<b>Total</b>	<b>796</b>	<b>69,801</b>	<b>0.9982</b>	<b>69,677</b>	<b>0.9452</b>	<b>65,860</b>

Lifetime Therm savings are shown in Table 3 for each measure category and the program overall. This includes expected gross, realized gross, and realized net lifetime savings.

Table 3: PY2024 Savings Summary – Lifetime Therms

Measure Category	Expected Gross Lifetime Savings (Therms)	Realized Gross Lifetime Savings (Therms)	Realized Net Lifetime Savings (Therms)
Space Heating	136,659	154,916	114,066
Water Heating	43,763	43,728	25,598
New Construction	-	-	-
Income Qualified	53,081	45,788	45,788
Commercial	537,980	543,524	543,524
<b>Total</b>	<b>771,484</b>	<b>787,955</b>	<b>728,976</b>

Using net realized savings from this evaluation and cost information provided by Zia, the evaluation team calculated the ratio of benefits to costs for Zia’s program overall. The evaluation team calculated cost effectiveness using UCT, which compares the benefits and costs to the utility or program administrator implementing the program.<sup>2</sup> The evaluation team conducted this test in a manner consistent with the California Energy Efficiency Policy Manual.<sup>3</sup> The results of the UCT are shown below in Table 4.

<sup>2</sup> The Utility Cost Test is sometimes referred to as the Program Administrator Cost Test, or PACT.

<sup>3</sup> California Public Utilities Commission. 2020. California Energy Efficiency Policy Manual – Version 6.

<https://www.cpuc.ca.gov/-/media/cpuc-website/files/legacyfiles/e/6442465683-eepolicymanualrevised-march-20-2020-b.pdf>



Table 4: PY2024 Cost Effectiveness

Measure Category	Utility Cost Test (UCT)
Space Heating	0.94
Water Heating	0.43
New Construction	-
Income Qualified	0.33
Commercial	2.00
Overall Program	1.14

## E.1 EVALUATION METHODS

The analysis methods used for the evaluated PY2024 measure categories are summarized as follows:

**Space Heating:** The measures eligible for the Space Heating category include gas furnace upgrades, boiler upgrades, insulation, furnace tune-ups, thermostats, and fuel conversion from electric resistive heat to an efficient gas furnace. In PY2024, furnace upgrades made up the largest number of projects for this category. Boiler upgrades and fuel conversion from electric resistive heat to efficient gas furnace measures had no participation. Gross impacts were estimated based on a deemed savings review of per unit measure savings. An engineering review of the savings algorithm for the fuel conversion measure was also conducted as part of the gross impact analysis. As recommended in the PY2021, PY2022 and PY2023 evaluation reports, the net impacts were estimated using NTG ratios from the PY2024 New Mexico Gas Company (NMGC) evaluation report.

**Water Heating:** The measures eligible for the Water Heating category include low flow showerheads and faucet aerators, water heater upgrades, tankless water heaters, condensing storage tank water heaters, fuel conversion from electric water heaters to an efficient gas water heater, and water heater tank insulation. In PY2024, the Hot Water Conservation Package which consisted of low flow showerheads and faucet aerators made up the largest number of projects completed through the program. Condensing storage tank water heaters, fuel conversion from electric water heaters to an efficient gas water heater, and water heater tank insulation measures had no participation. Gross impacts were estimated based on a deemed savings review of per unit measure savings. An engineering review of the savings algorithm for the fuel conversion measure was also conducted as part of the gross impact analysis. Consistent with our PY2021, PY2022 and PY2023 recommendations and since NMGC has similar water heating program offerings as Zia, the evaluation team used the PY2024 NMGC NTG ratios to estimate the net impacts.



**New Construction:** The New Construction category provides incentives for new homes built with natural gas efficiency in mind. For homes of 2,000 square feet or less, the program requires an efficient natural gas main heat source, an efficient natural gas water heater, one additional gas outlet, and insulation with a rating of R30 or greater. For homes over 2,000 square feet, all the above plus a natural gas dryer or range are required. In PY2024, no new construction projects were a part of the program.

**Income Qualified:** This category provides weatherization and other efficiency improvements at no cost or low cost to low-income households. Equipment packages of assistance are available with a variety of measure combinations including low flow showerheads, faucet aerators, programmable thermostats, attic insulation, air sealing, and water heater tank insulation. In PY2024, the program distributed efficiency packages to low-income customers. Gross impacts were estimated based on a deemed savings review of per unit measure savings. Net impacts were estimated using the ex ante NTG ratio of 1.00 as is deemed for low-income programs.

**Commercial:** The Commercial category includes both a direct install component and a prescriptive component based on an assessment of commercial customer needs. In PY2024, direct install component was utilized to install overhead door weatherstripping for 18 separate units and one unit of ENERGY Star® Gas Fryer. Gross impacts were estimated based on a deemed savings review of per unit measure savings. Since this measure category was comprised of all direct install measures, the evaluation team applied a NTG ratio of 1.00.

### **E.1.1 Deemed Savings Review**

To verify gross savings estimates, the evaluation team reviewed the deemed savings values Zia used for all five measure categories evaluated in PY2024. The goal of the deemed savings review was to ensure that input assumptions were appropriate for the individual measures, calculations matched TRM algorithms, and savings were being correctly applied to measures in the program tracking data.

For prescriptive measures in the Space Heating, Water Heating, New Construction, Income Qualified, and Commercial categories, the deemed savings reviews included the following:

- ▶ Review of documentation available in the New Mexico TRM (or other referenced source of savings) to determine that the correct algorithms were being used;
- ▶ Recreation of savings calculations using the TRM algorithm and inputs as documented in Zia savings assumptions;
- ▶ Review of hard-coded savings values in the program tracking data; and



- ▶ Review of New Mexico TRM algorithms to identify candidates for future updates and improvements.

### **E.1.2 Engineering Savings Review**

A more in-depth review of savings assumptions and calculations was conducted for the fuel conversion measures currently offered in the Space Heating and Water Heating measure categories. Zia currently claims natural gas savings for converting customers from electric space heating to natural gas space heating. The premise of these measure offerings is that while natural gas consumption is increased at the customer's home, natural gas consumption at gas-fired electric power plants is reduced by a greater amount, as electricity is no longer needed for space heating.

The evaluation team reviewed these assumptions and the deemed savings algorithms currently used by Zia for these measures, with a specific focus on the technical soundness of the calculation approach and the correct use of input assumptions.

### **E.1.3 Net Impacts Calculations**

Zia net to gross impact calculations follows a standard approach.

#### **E.1.3.1 Free Ridership and Net-to-Gross Ratios**

Due to the short timeline for evaluation and the relatively small number of program participants, the evaluation team did not conduct participant phone surveys to collect information to inform a self-report analysis of free ridership. As a result, the evaluation team utilized NTG ratios from the PY2024 NMGC evaluation results for each measure type. To further refine the NTG ratios for the Space Heating program, the evaluation team calculated a weighted average NTG ratio using the PY2024 Zia program data for the Furnace/Insulation and Thermostat measures.

Using these ex ante values for free ridership, the total NTG ratio for each measure was calculated using the following formula:

$$\text{Net to Gross Ratio} = (1 - \text{Free Ridership Rate})$$

The NTG ratio for each measure was then used in conjunction with the associated savings for that measure to calculate a weighted NTG ratio for each measure category and for the program overall.

#### **E.1.3.2 Realized Gross Savings and Net Impact Calculation**

The final step in the impact evaluation process is to calculate the realized gross and net savings, based on the measure category-level analysis described above. The **Gross Realized Savings** are calculated by taking the original ex ante savings values from the participant tracking databases and adjusting



them using an **Engineering Adjustment** factor (based on the deemed savings review and engineering analysis):

$$\text{Gross Realized Savings} = (\text{Ex Ante Savings}) * (\text{Engineering Adjustment Factor})$$

**Net Realized Savings** are then determined by multiplying the Gross Realized Savings by the NTG ratio:

$$\text{Net Realized Savings} = (\text{Net} - \text{to} - \text{Gross Ratio}) * (\text{Gross Realized Savings})$$

#### **E.1.4 Cost Effectiveness**

The cost effectiveness of Zia's energy efficiency program was tested using the Utility Cost Test (UCT). In the UCT, the benefits of a program are the present value of the net energy saved, and the costs are the present value of the program's administrative costs plus incentives paid to customers. To perform the cost effectiveness analysis, the evaluation team obtained the following from Zia:

- ▶ Avoided cost of energy (costs per MMBtu or per Therm over a 20+ year time horizon);
- ▶ Distribution loss factor (percentage used to adjust avoided cost for distribution losses);
- ▶ Discount rate (percentage used to calculate the net-present value of future savings);
- ▶ Any assumed non-energy benefits, expressed in monetary terms or as a percentage of savings for each measure or measure category; and
- ▶ Administrative costs (all non-incentive expenditures associated with program delivery).

Non-incentive program costs were tracked at the measure category level. The evaluation team utilized the same allocation costs as provided by Zia.

Program savings, incremental measure costs, and effective useful life values were taken from the final PY2024 tracking data or the program plan submitted by Zia. The final net energy savings values estimated from the PY2024 impact evaluation were used in the final cost effectiveness calculations.

Additionally, Section 17.7.2.9.B(4) of the New Mexico Energy Efficiency Rule allows utilities to claim utility system economic benefits for low-income programs equal to 20 percent of the calculated energy benefits. The evaluation team applied this 20 percent adder to the benefits calculated for the Income Qualified measure category.

The evaluation team input the savings and cost data into a cost effectiveness model that calculated the benefits, costs, and benefit-cost ratio for each measure, project, or measure category entered, and rolled up the data into measure category-level UCT values.



## E.2 IMPACT EVALUATION RESULTS

The results of the PY2024 impact evaluation are shown in Table 5. The net-to-gross (NTG) ratios are based on the values from the PY2024 NMGC evaluation report.

Table 5: PY2024 Savings Summary – Therms

Measure Category	# of Projects	Expected Gross Therm Savings	Engineering Adjustment Factor	Realized Gross Therm Savings	NTG Ratio	Realized Net Therm Savings
Space Heating	178	8,348	1.0003	8,351	0.7406	6,184
Water Heating	270	3,986	0.9991	3,982	0.5854	2,331
New Construction	-	-	-	-	-	-
Income Qualified	329	3,856	0.8205	3,164	1.0000	3,164
Commercial	19	53,612	1.0106	54,181	1.0000	54,181
<b>Total</b>	<b>796</b>	<b>69,801</b>	<b>0.9982</b>	<b>69,677</b>	<b>0.9452</b>	<b>65,860</b>

Lifetime Therm savings are shown in Table 6 for each measure category and the program overall. This includes expected gross, realized gross, and realized net lifetime savings.

Table 6: PY2024 Savings Summary – Lifetime Therms

Measure Category	Expected Gross Lifetime Savings (Therms)	Realized Gross Lifetime Savings (Therms)	Realized Net Lifetime Savings (Therms)
Space Heating	136,659	154,916	114,066
Water Heating	43,763	43,728	25,598
New Construction	-	-	-
Income Qualified	53,081	45,788	45,788
Commercial	537,980	543,524	543,524
<b>Total</b>	<b>771,484</b>	<b>787,955</b>	<b>728,976</b>

Details on the individual measure category impacts are summarized below.

### E.2.1 Space Heating

Measures in the Space Heating category include heating system upgrades, insulation, furnace tune-ups, and conversion from electric to natural gas efficient heat. The ex-ante PY2024 impacts are summarized in Table 7 for the Space Heating category.



Table 7: PY2024 Space Heating Savings Summary

Measure	# of Projects	Expected Gross Therm Savings
Upgrade to AFUE 92-94.9%	45	2,295
Upgrade to AFUE 95% or higher	8	494
Upgrade Boiler/Hydronic Heating System to 90% AFUE or higher	-	-
Insulation	38	2,535
Furnace Tune-Up	37	1,021
Electric Resistance to Gas Forced Air Heat, AFUE 95% or higher	-	-
Upgrade to Programmable Thermostat	38	1,383
Upgrade to Smart Thermostat	12	620
<b>Space Heating Total</b>	<b>178</b>	<b>8,348</b>

To evaluate impacts for the Space Heating measure category, the evaluation team conducted a deemed savings review for all measures and an engineering review of the savings algorithm for the fuel conversion measure. The evaluation team also reviewed the tracking data file to confirm that savings were correctly applied for each measure.

For the deemed savings review, the evaluation team attempted to replicate the per unit savings values used by Zia based on the assumptions in the New Mexico TRM or other source of savings when applicable. Based on this review, the evaluation team found Zia is utilizing correct and reasonable savings values based on input assumptions specific to its service territory.

The evaluation team made one small adjustment that impacted the saving as listed below.

- ▶ The evaluation team used per-unit Therm savings up to four decimals to calculate Total Therm savings, whereas ex ante calculations used per-unit Therm savings up to one decimal.

Table 8 shows the results of the desk reviews and how the resulting engineering adjustments were used to calculate realized savings. For the space heating measures overall, these adjustments resulted in an engineering adjustment factor of 1.0003.



Table 8: PY2024 Space Heating Impact Summary

Measure	# of Projects	Expected Gross Therm Savings	Engineering Adjustment Factor	Realized Gross Therm Savings	NTG Ratio	Realized Net Therm Savings
Upgrade to AFUE 92-94.9%	45	2,295	1.0000	2,295	0.7313	1,678
Upgrade to AFUE 95% or higher	8	494	1.0006	494	0.7313	361
Upgrade Boiler/Hydronic Heating System to 90% AFUE or higher	-	-	-	-	-	-
Insulation	38	2,535	0.9997	2,534	0.7313	1,853
Furnace Tune-Up	37	1,021	1.0012	1,022	0.7313	748
Electric Resistance to Gas Forced Air Heat, AFUE 95% or higher	-	-	-	-	-	-
Upgrade to Programmable Thermostat	38	1,383	1.0012	1,385	0.7700	1,066
Upgrade to Smart Thermostat	12	620	1.0005	621	0.7700	478
<b>Space Heating Total</b>	<b>178</b>	<b>8,348</b>	<b>1.0003</b>	<b>8,351</b>	<b>0.7406</b>	<b>6,184</b>

### E.2.2 Water Heating

Measures in the Water Heating category include low flow showerheads and faucet aerators, efficient natural gas storage water heaters, and tankless water heaters. The ex-ante PY2024 impacts are summarized in Table 9 for the Water Heating category.

Table 9: PY2024 Water Heating Savings Summary

Measure	# of Projects	Expected Gross Therm Savings
Low Flow Showerhead and Faucet Aerators	265	3,471.50
Natural Gas Water Heater EF 0.67 or higher	2	138
Tankless Water Heater	3	376.50
Condensing Storage Tank Water Heater	-	-
Electric to Natural Gas Water Heater, EF 0.67 or higher	-	-
Water Heater Tank Insulation	-	-
<b>Water Heating Total</b>	<b>270</b>	<b>3,986</b>

To evaluate impacts for the Water Heating measure category, the evaluation team conducted a deemed savings review for all measures and an engineering review of the savings algorithm for the fuel conversion measure. The evaluation team also reviewed the tracking data file to confirm that savings were correctly applied for each measure.

For the deemed savings review, the evaluation team attempted to replicate the per unit savings values used by Zia based on the assumptions in the New Mexico TRM for all measures except fuel conversion,



which received a detailed engineering review described below. Based on this review, the evaluation team found that the savings values in use by Zia match the values found in the New Mexico TRM.

The evaluation team made one adjustment that impacted the saving which is listed below.

- ▶ The evaluation team used per-unit Therm savings up to four decimals to calculate Total Therm savings, whereas ex ante calculations used per-unit Therm savings up to one decimal.

Table 10 shows the results of the savings reviews and how the resulting engineering adjustment factor was used to calculate realized savings. Based on the evaluation team’s review, the resulting realization rate was 0.9991.

*Table 10: PY2024 Water Heating Impact Summary*

Measure	# of Projects	Expected Gross Therm Savings	Engineering Adjustment Factor	Realized Gross Therm Savings	NTG Ratio	Realized Net Therm Savings
Low Flow Showerhead and Faucet Aerators	265	3,472	0.9990	3,468	0.5854	2,030
Natural Gas Water Heater EF 0.67 or higher	2	138	0.9993	138	0.5854	81
Tankless Water Heater	3	377	1.0000	376	0.5854	220
Condensing Storage Tank Water Heater	-	-	-	-	-	-
Electric to Natural Gas Water Heater, EF 0.67 or higher	-	-	-	-	-	-
Water Heater Tank Insulation	-	-	-	-	-	-
<b>Water Heating Total</b>	<b>270</b>	<b>3,986</b>	<b>0.9991</b>	<b>3,982</b>	<b>0.5854</b>	<b>2,331.35</b>

### E.2.3 New Construction

In PY2024, no New Construction projects participated in the program.

### E.2.4 Income Qualified

The Income Qualified program included the installation of a combination of various measures including aerators, insulation, showerheads, programmable thermostats, and air sealing. The ex ante PY2024 impacts for the Income Qualified category are summarized in Table 11. In total, the Income Qualified category accounted for four percent of energy impacts in Zia’s overall energy efficiency program for PY2024.



Table 11: PY2024 Income Qualified Savings Summary

Measure	# of Projects	Expected Gross Therm Savings
Income Qualified Total	329	3,856

To evaluate impacts for the Income Qualified measure category, the evaluation team conducted a deemed savings for all measures.

In the deemed savings review, the evaluation team attempted to replicate the per unit savings values for the individual package components based on the assumptions in the New Mexico TRM or other source of savings when applicable. The evaluation team observed that NEAT software was used to determine the ex-ante savings. The evaluation team used inputs from the NEAT Audit Report and algorithms and inputs from the New Mexico TRM to calculate realized savings.

Table 12 shows the final realized gross and net savings for the Income Qualified measure category. Since there was one adjustment based on the deemed savings review, the engineering adjustment factor was 0.8205.

Table 12: PY2024 Income Qualified Impact Summary

Measure	# of Projects	Expected Gross Therm Savings	Engineering Adjustment Factor	Realized Gross Therm Savings	NTG Ratio	Realized Net Therm Savings
Income Qualified Total	329	3,855.95	0.8205	3,163.71	1	3,163.71

### E.2.5 Commercial

The Commercial program included the installation of overhead door weatherstripping for 15 separate units. The ex-ante PY2024 impacts for the Commercial category are summarized in Table 13. In total, the Commercial category accounted for 78 percent of energy impacts in Zia’s overall energy efficiency program for PY2024.

Table 13: PY2024 Commercial Savings Summary

Measure	# of Projects	Expected Gross Therm Savings
Commercial Total	19	53,612

To evaluate impacts for the Commercial measure category, the evaluation team conducted a deemed savings review for the measures.



In the deemed savings review, the evaluation team attempted to replicate the per unit savings values for the measures based on the assumptions in the New Mexico TRM and project documentation provided by Zia. Based on this review, the evaluation team adjusted the savings and details of the adjustments are provided in section E.4.1.4. Table 14 shows the final realized gross and net savings for the Commercial measure category.

*Table 14: PY2024 Commercial Impact Summary*

Measure	# of Projects	Expected Gross Therm Savings	Engineering Adjustment Factor	Realized Gross Therm Savings	NTG Ratio	Realized Net Therm Savings
Commercial Total	19	53,612	1.0106	54,181	1	54,181

### E.3 COST EFFECTIVENESS RESULTS

The evaluation team calculated cost effectiveness using the Utility Cost Test (UCT) for the Zia energy efficiency program. The evaluation team conducted this test in a manner consistent with the California Energy Efficiency Policy Manual.

Cost effectiveness tests compare relative benefits and costs from different perspectives. The specific cost effectiveness test used in this evaluation, the UCT, compares the benefits and costs to the utility or program administrator implementing the program. UCT explicitly accounts for the benefits and costs shown in Table 15.

*Table 15: Utility Cost Test Benefits and Costs*

Benefits	Costs
<ul style="list-style-type: none"> <li>Utility avoided energy-related costs</li> </ul>	<ul style="list-style-type: none"> <li>Program overhead/ administrative costs</li> </ul>
<ul style="list-style-type: none"> <li>Utility avoided capacity-related costs, including generation, transmission, and distribution</li> </ul>	<ul style="list-style-type: none"> <li>Utility incentive costs</li> <li>Utility installation costs</li> </ul>

Using net realized savings from this evaluation and cost information provided by Zia, the evaluation team calculated the ratio of benefits to costs for each of the measure categories in Zia’s energy efficiency program and the program overall. The results of the UCT are shown below in Table 16.



Table 16: PY2024 Cost Effectiveness

Measure Category	Utility Cost Test (UCT)
Space Heating	0.94
Water Heating	0.43
New Construction	-
Income Qualified	0.33
Commercial	2.00
Overall Program	1.14

The decrease in the UCT ratio from PY2023 to PY2024 was primarily driven by a 43.5% reduction in total net lifetime savings, while total administrative costs remained relatively steady, decreasing by only 3.6%. Although overall portfolio costs remained stable, the decline in savings led to a corresponding reduction in net benefits. These factors combined to lower the portfolio's UCT.

## E.4 FINDINGS AND RECOMMENDATIONS

The general evaluation conclusions are presented below, along with recommendations for program improvement where appropriate.

Based on the results from the analysis described in the previous chapters, the evaluation team has developed several conclusions and recommendations to improve Zia's programs. These are organized below by evaluation component (impact evaluation or cost effectiveness) and by measure category.

### E.4.1 Impact Evaluation

Impact evaluation activities for the PY2024 Zia energy efficiency program included a deemed savings review of all measure types installed in PY2024 and engineering savings reviews of the fuel conversion measures in the Space Heating category. Net impacts for the Zia energy efficiency program were calculated using updated NTG ratios from a recent New Mexico Gas Company evaluation for similar programs similar to Zia's. The overall realized annual net savings for the Zia energy efficiency program were found to be 65,860 Therms.

#### E.4.1.1 Space Heating

In the engineering review of Space Heating measures, the evaluation team observed that ex ante calculations used per-unit Therm savings up to one decimal. The evaluation team used per-unit Therm savings up to four decimals to get more accurate realized Therm savings.



**Recommendation 1.** Update the per-unit Therm savings up to four decimals to get more accurate Therm savings.

#### **E.4.1.2 Water Heating**

In the engineering review of Water Heating measures, the evaluation team observed that ex ante calculations used per-unit Therm savings up to one decimal. The evaluation team used per-unit Therm savings up to four decimals to get more accurate realized Therm savings.

**Recommendation 2.** Update the per-unit Therm savings up to four decimals to get more accurate Therm savings.

#### **E.4.1.3 Income Qualified**

In the engineering review of Income Qualified measure category, the evaluation team observed that site specific inputs were provided to the NEAT software to calculate ex ante savings. NEAT software does not provide details of the calculations like algorithm and other inputs.

The evaluation team used algorithm and inputs consistent with the 2023 New Mexico TRM. For site-specific inputs, the evaluation team referred to the supporting NEAT reports.

**Recommendation 3.** Use New Mexico TRM algorithm and inputs to calculate savings. Use site-specific inputs in the New Mexico TRM algorithm wherever available.

#### **E.4.1.4 Commercial**

For two Over-Head Door Infiltration Reduction Commercial measure instances, ex ante calculations used incorrect Therm savings per linear feet of weatherstripping to calculate savings. For one measure instance, ex ante calculations used 29.13 Therms per linear feet compared to 14.92 Therms per linear for ½" gap width, and for the other instance, ex ante calculations used 13.04 Therms per linear feet compared to 29.86 Therms per linear for 1" gap width, consistent with Las Cruces climate zone from the 2023 New Mexico TRM. The evaluation team used deemed savings consistent with the New Mexico TRM to calculate realized savings.

**Recommendation 4.** Ensure that correct deemed savings per linear feet of weatherstripping are used consistent with the gap width and climate zone from the 2023 New Mexico TRM.

For the one ENERGY Star® Gas Fryer measure, the evaluation team was unable to replicate the ex ante savings using inputs provided in the project documentation and 2023 New Mexico TRM. The evaluation team calculated realized savings using inputs provided in the project documentation and 2023 New Mexico TRM.



**Recommendation 5.** Calculate savings using the inputs provided in the project documentation and 2023 New Mexico TRM.

## **E.4.2 Cost Effectiveness**

### **E.4.2.1 UCT Calculations**

Cost effectiveness was calculated using the Utility Cost Test (UCT) for the Zia energy efficiency program measure categories and for the program overall. The evaluation team found the following during our analysis:

- ▶ A 20 percent benefit adder is included in the UCT calculation for low-income projects to account for utility system economic benefits.
- ▶ The UCT revealed that the portfolio was cost effective with a UCT ratio of 1.14. However, Space Heating, Water Heating and Income Eligible measure categories were not cost effective and had a UCT ratio of less than 1.00.

Internal administration costs and promotion costs were tracked at the portfolio level (rather than at the measure-category level). Zia provided the internal administration costs and promotion costs that appeared to be split evenly among different programs. Zia also provided external administration costs for Commercial and Income Eligible programs.

In PY2024, the Internal administration costs and promotion costs remained similar to PY2023 for Space Heating, Water Heating and Income Eligible measure categories. There was no participation in the New Construction measure category, but the sub-program had costs associated with it. However, the savings reduced considerably in PY2024 compared to PY2023. This resulted in a lower UCT ratio in PY2024 compared to PY2023.

**Recommendation 6.** If Zia or the NMPRC desires that cost effectiveness be calculated at the individual measure category level with more precision, the evaluation team suggests that Zia track non-incentive administrative costs by measure category so that the exact costs can be utilized for the cost effectiveness test. Tracking costs by measure category will help in comparing the performance of the measure categories.