

BEFORE THE NEW MEXICO PUBLIC REGULATION COMMISSION

IN THE MATTER OF THE APPLICATION)
BY ZIA NATURAL GAS COMPANY FOR)
APPROVAL OF ITS 2022-2024 ENERGY)
EFFICIENCY PROGRAM)
PURSUANT TO THE NEW MEXICO)
PUBLIC UTILITY ACT AND THE)
EFFICIENT USE OF ENERGY ACT)
ZIA NATURAL GAS COMPANY,)
Applicant.)

Case No. 21-00222-UT

**APPLICATION FOR APPROVAL OF ZIA NATURAL GAS COMPANY’S
2022-2024 ENERGY EFFICIENCY PROGRAM**

Natural Gas Processing Co. (“NGP”), through its operating division, Zia Natural Gas Company (“Zia”), respectfully applies to the New Mexico Public Regulation Commission (“Commission” or “PRC”), pursuant to the Efficiency Use of Energy Act, NMSA 62-17-1 *et seq.* (“EUEA”), the Energy Efficiency Rule, 17.7.2 NMAC, for approval of Zia’s 2022-2024 Energy Efficiency Program and budget described herein. Pursuant to the requirements of 17.7.2 NMAC, Zia is filing the Direct Testimony and Exhibits of Oscar G. Saucedo, the Direct Testimony of Weston E. Hacker, and the Direct Testimony and Exhibits of Leslie A. Graham. Zia’s proposed 2022-2024 Energy Efficiency Program Plan is attached to Mr. Saucedo’s Direct Testimony. A Proposed Form of Notice is attached to this Application. In support of this Application, Zia states the following:

I. BACKGROUND

Zia is the operating division of NGP that owns, operates and controls public utility plant, property and facilities, including natural gas distribution facilities that provide retail

gas service in New Mexico. As an operating division of NGP, Zia is a public utility subject to the jurisdiction of the Commission.

The EUEA establishes the state's policy that public utilities include cost effective energy efficiency and load management programs in their energy resource portfolios, that disincentives to development of such energy efficiency and load management programs be removed in a manner that balances the public interest, consumers' interests, and investors' interests, and that public utilities be allowed to earn a profit on cost-effective energy efficiency and load management resources. NMSA 1978, § 62-17-3. In furtherance of that policy, the EUEA requires public utilities to evaluate and implement cost-effective and achievable measures or programs available in their service territories that reduce energy demand and energy consumption. NMSA 1978, § 62-17-5.B and G.

The EUEA further requires public utilities to obtain Commission approval of energy efficiency and load management programs before they are implemented, and requires the Commission to first find that the portfolio of programs is cost-effective under the Utility Cost Test ("UCT"), and is designed to provide every affected customer class with the opportunity to participate and benefit economically. NMSA 1978, § 62-17-5.C and E.

This is Zia's third energy efficiency program application. The Commission approved Zia's first energy efficiency program and Energy Efficiency Rate Rider No. 2 by Final Order issued on December 16, 2016 in Case No. 16-00021-UT. Following revisions to the Commission's Energy Efficiency Rule in 2017 regarding the timing of application filings, Zia filed its second energy efficiency program application on July 29, 2018 in Case No. 18-00280-UT, and the Commission approved Zia's 2019-2021 Energy Efficiency

Program and Second Revised Rate Rider No. 2 by Order issued February 27, 2019. On July 30, 2020, Zia filed its *Energy Efficiency Program Annual Report for Plan Year 2019* and Zia Advice Notice No. 62, which reconciled Rate Rider No. 2 and went into effect September 1, 2020. On June 30, 2021, Zia filed its *Energy Efficiency Program Annual Report for Plan Year 2020* and Zia Advice Notice No. 63, which again reconciled Rate Rider No. 2 and went into effect August 1, 2021.

On August 30, 2021, the Commission issued its Order granting Zia’s motion for extension of time until September 20, 2021 to file its energy efficiency application in this case. Zia is now filing its Application for Approval of its 2022-2024 Energy Efficiency Program and budget, including a request to earn an incentive as provided in the EUEA.

II. 2022-2024 ENERGY EFFICIENCY PROGRAM AND BUDGET

Based on its research, coordination with energy efficiency experts, and customer feedback, Zia proposes to 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. Within each of these general categories, Zia proposes energy efficiency components designed to pinpoint high energy usage appliances, identify and eliminate drafts and energy leakage, and improve overall energy consumption and efficiency within both residential and commercial buildings. Because the majority of Zia’s customers and load are residential, and since the primary drivers of residential gas use are space heating and water heating, Zia’s proposed program focuses first on opportunities to increase energy efficiency in those areas. Zia’s proposed annual budget for Plan Years 2022, 2023, and 2024 is \$514,414, including an incentive of \$36,659 as provided in the EUEA.

The proposed Program Measures, and the changes Zia proposes based on evaluation of its 2019-2021 Energy Efficiency Program and feedback received in its public advisory process, are described in the Direct Testimony of Oscar G. Saucedo and in Zia's 2022-2024 Energy Efficiency Program Plan attached as Exhibit OGS-1 to Mr. Saucedo's Direct Testimony. The public advisory process and Zia's cost/benefit UCT analysis for its proposed Energy Efficiency Program are described in the Direct Testimony of Weston E. Hacker. The proposed budget is described in the Direct Testimony of Leslie A. Graham.

Zia requests the Commission approve its 2022-2024 Energy Efficiency Program and budget, including an incentive, for Plan Years 2022, 2023, and 2024. Zia will request Commission approval if it proposes major changes to its approved Energy Efficiency Program before filing its next energy efficiency application on August 31, 2024, and will continue to file its annual reports and rate reconciliations.

III. PROGRAM COST TARIFF RIDER

The EUEA authorizes public utilities offering cost effective energy efficiency and load management programs to recover all program costs through an approved tariff rider. NMSA 1978, § 62-17-6. The Commission approved Zia's Original Rate Rider No. 2 in Case No. 16-00021-UT. Zia is not proposing any adjustment to the tariff rider rate in this case, since Zia's most recent Rate Reconciliation went into effect on September 1, 2021. The tariff rider rate will remain as currently set until the Commission approves otherwise.

IV. REQUESTED FINDINGS AND APPROVALS

To implement the proposed Program revisions, Zia requests the Commission make the following findings and grant the following approvals:

A. Pursuant to Section 62-17-5(C) of the EUEA and 17.7.2 NMAC of the Energy Efficiency Rule, determinations that Zia's proposed 2022-2024 Energy Efficiency Program is cost-effective and designed to provide every affected customer class with the opportunity to participate and benefit economically, and is approved for Plan Years 2022, 2023, and 2024.

B. Pursuant to 17.7.2.12.C and D and 17.7.2.13.C(5) NMAC, approval of Zia's recovery of budgeted costs going forward.

C. Approval of Zia's proposal to recover an incentive pursuant to the provisions of the EUEA.

D. Such other approvals as may be required to implement Zia's proposed 2022-2024 Energy Efficiency Program and budget as described in the 2022-2024 Energy Efficiency Program Plan and Direct Testimonies and Exhibits of Oscar G. Saucedo, Weston E. Hacker, and Leslie A. Graham.

V. OTHER MATTERS

Zia includes and incorporates the Direct Testimonies and Exhibits of Oscar G. Saucedo, Weston E. Hacker, and Leslie A. Graham. Zia will serve copies of this Application, supporting Direct Testimonies and Exhibits, and the attached Proposed Form of Customer Notice on the parties included on the Commission's most recent service list in Zia's last energy efficiency case, Case No. 18-00280-UT. Zia will also publish notice of this filing in accordance with the requirements of the Commission's Rules of Practice and Procedure, 1.2.2.24.C NMAC, as may be directed by the Commission. Zia provides a Proposed Form of Customer Notice as Exhibit 1 to this Application.

The following request to receive all notices, discovery requests, objections and responses, briefs, and all other documents related to this case as follows:

Leslie A. Graham at lgraham@zngc.com
Oscar G. Saucedo at osaucedo@zngc.com
Weston E. Hacker at wes.hacker@zngc.com
Janeen Capshaw at jcapshaw@naturalgaspro.com
Joan E. Drake at jdrake@modrall.com

WHEREFORE, Zia respectfully requests that the Commission enter its final order granting the approvals requested herein and all other approvals, authorizations, and actions that may be required under the Public Utility Act, Efficient Use of Energy Act, and Energy Efficiency Rule to implement Zia's proposed 2022-2024 Energy Efficiency Program and budget.

Respectfully submitted on September 20, 2021

MODRALL, SPERLING, ROEHL,
HARRIS & SISK, P.A.

By: /s/ Joan E. Drake
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Attorneys for Zia Natural Gas Company

BEFORE THE NEW MEXICO PUBLIC REGULATION COMMISSION

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PROPOSED FORM OF NOTICE TO CUSTOMERS

Notice is hereby given by the New Mexico Public Regulation Commission ("NMPRC" or the "Commission") of the following:

On September 20, 2021, Zia Natural Gas Company, Inc. ("Zia") filed with the Commission an Application requesting approvals and authorizations necessary to implement its proposed 2022-2024 Energy Efficiency Program and budget. The Application requests approval of its proposed modifications to Zia's Energy Efficiency Program offerings approved in Case No. 18-00280-UT in order to increase Program effectiveness and encourage greater customer participation in Zia's 2022-2024 Energy Efficiency Program, and the Plan Year budget of \$514,414, including Zia's request to earn an incentive of approximately \$36,659 as provided in the Efficient Use of Energy Act.

The New Mexico Efficient Use of Energy Act allows Zia to recover costs incurred as a result of implementing, funding and administering energy efficiency programs through a tariff rider. Zia currently recovers its program costs through its approved Fifth Energy Efficiency Rate Rider No. 2. Zia requests no change to the currently approved Rate Rider tariff rate.

The Commission has assigned Case No. 21-00222-UT to this proceeding, and all inquiries or written comments concerning this proceeding should refer to that case number.

The Hearing Examiner has established the following schedule for this case:

A. Any person who desires to become a party to this case must file a Motion for Leave to Intervene, pursuant to 1.2.2.23 NMAC, by _____.

B. The Commission Utility Division Staff shall, and Interveners may, file Direct Testimony by _____.

C. Rebuttal Testimony may be filed by _____.

D. A Proposed Final Order shall be filed by Applicants on or before _____.

E. A public hearing, if deemed necessary by the Commission, will begin at __ A.M. on _____. The hearing may be vacated if, after the filing of prepared testimony, the parties and the Hearing Examiner agree that the hearing is not necessary to develop a complete evidentiary record on Zia's request. Due to the ongoing COVID-19 pandemic, a public hearing, if deemed necessary by the Commission, shall be conducted via the Zoom videoconference platform. Participation in the public hearing, if deemed necessary by the Commission, shall be limited to party-participants (i.e., counsel, witnesses, and other representatives of the parties), the Commissioners, and other Commission personnel. Other interested persons may view the hearing via a livestream on YouTube provided on the Commission's website at www.nmprc.state.nm.us. Any person whose testimony has been pre-filed shall attend the hearing, if one is held, and submit to examination under oath.

F. The procedural dates and requirements provided herein are subject to further Order of the Commission or the Hearing Examiner. Interested persons should contact the

Commission for confirmation of the hearing date, time and place, since hearings are occasionally rescheduled.

Any interested party may appear at the time and place of hearing, if one is held, and make written or oral comment pursuant to 1.2.2.23(F) NMAC without becoming an intervener. Interested persons may also send written comments, which shall reference NMPRC Case No. 21-00222-UT, to the Records Bureau of the Commission as set out below. Such comments will not be considered as evidence in this case.

Any person may examine Zia's filing in this case together with any exhibits and related papers that may be filed in this case at Zia's office, 100 Short Drive, Ruidoso Downs, New Mexico 88346, telephone: (800) 520-4277 or (575) 378-4277, or at the Commission's offices, 1120 Paseo de Peralta, Santa Fe, New Mexico 87501, telephone: (888) 427-5772. You can obtain further information regarding this case at the Commission's website, <http://www.nmprc.state.nm.us/> or at Zia's website, <http://zngc.com/>.

Copies of documents filed with the Commission must be served on all parties of record and the Commission's utility Division Staff ("Staff") in the manner indicated on the Certificate of Service for this case. All filings shall be emailed to Staff and the parties on the date they are filed with the Commission. All filings shall be emailed to the Hearing Examiner at _____.

Anyone filing pleadings, documents or testimony in this case shall, until further notice, comply with the Commission's electronic filing policy as posted on the Commission website, as amended from time to time. This includes filings in pdf format,

with electronic signatures, sent to the Records Bureau's email address at: prc.records@state.nm.us within regular business hours of the due date, in order to be considered timely filed. Documents received after regular business hours, will be considered as being filed the next business day. Regular business hours are from 8:00 a.m. to 12:00 p.m. and from 1:00 p.m. to 5:00 p.m. MT. Parties shall serve a copy on all parties of record and Staff. All filings shall be emailed on the date they are filed with the Commission.

Any person with a disability requiring special assistance in order to participate in the public hearing should contact the director of Administrative Services Jim Williamson at Jim.Williamson@state.nm.us or (505) 467-9116 at least 24 hours prior to the commencement of the public hearing.

The Commission's Rules of Procedure, 1.2.2 NMAC, shall apply in this case except as modified or varied by order of the Commission. The Rules of Procedure and other NMPRC rules are available online at the New Mexico Commission of Public Records, State Records Center and Archives website at <http://www.srca.nm.gov/nmac-home/nmac-titles>.

I S S U E D at Santa Fe, New Mexico this ____ day of _____, 2021.

NEW MEXICO PUBLIC REGULATION COMMISSION

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**IN THE MATTER OF THE APPLICATION)
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ZIA NATURAL GAS COMPANY,)
)
Applicant.)
_____)**

Case No. 21-00222-UT

**DIRECT TESTIMONY AND EXHIBITS
OF
OSCAR G. SAUCEDO
ON BEHALF OF
ZIA NATURAL GAS COMPANY**

September 20, 2021

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I. WITNESS INTRODUCTION

Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A. My name is Oscar G. Saucedo and I am employed by Natural Gas Processing Co. (“NGP”). I work at the Zia Natural Gas Company main office at 100 Short Drive, PO Box 888, Ruidoso Downs, NM, 88346.

Q. WHAT ARE YOUR POSITION AND RESPONSIBILITIES WITH NGP?

A. I am the Business Development Manager, with responsibility as director of marketing/advertising and public awareness and safety programs, as well as management and administration of Zia’s Energy Efficiency Program.

Q. PLEASE SUMMARIZE YOUR EDUCATIONAL BACKGROUND AND PROFESSIONAL QUALIFICATIONS.

A. I am a high school graduate with some college, and am currently enrolled at Eastern New Mexico University at Ruidoso I have six years of experience in the natural gas industry as a senior technician. I currently serve in the Army National Guard in New Mexico as an Engineer in Construction.

Q. ON WHOSE BEHALF ARE YOU TESTIFYING IN THIS PROCEEDING?

A. I am testifying on behalf of the applicant, Zia Natural Gas Company.

Q. HAVE YOU PREVIOUSLY TESTIFIED BEFORE THE COMMISSION?

A. No, I have not.

Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?

A. The purpose of my testimony is to present background on Zia and its proposed 2022-2024 Energy Efficiency Program pursuant to New Mexico’s Efficient Use of Energy Act, NMSA 1978, Sections 62-17-1 *et seq.* (“EUEA”), and the New Mexico Public Regulation

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Commission’s (“Commission” or “PRC”) Energy Efficiency Rule, 17.7.2 NMAC. I describe Zia’s various energy efficiency measures and proposed Energy Efficiency Program updates.

Q. DO YOU SPONSOR ANY EXHIBITS WITH YOUR TESTIMONY?

A. Yes, I sponsor Exhibit OGS-1, which is Zia’s 2022-2024 Energy Efficiency Program Plan.

Q. WAS EXHIBIT OGS-1 PREPARED BY YOU OR UNDER YOUR DIRECT SUPERVISION AND CONTROL?

A. Yes.

Q. IS EXHIBIT OGS-1 TRUE AND CORRECT TO THE BEST OF YOUR KNOWLEDGE AND BELIEF?

A. Yes.

II. OVERVIEW

Q. PLEASE PROVIDE AN OVERVIEW OF ZIA’S APPLICATION.

A. Zia’s Application is being made pursuant to the Efficient Use of Energy Act and the Energy Efficiency Rule. Zia’s proposed Energy Efficiency Program is described in its 2022-2024 Energy Efficiency Program Plan (“Program Plan”), attached to my testimony as Exhibit OGS-1. Attached to the Program Plan are several exhibits that provide data and information on aspects of the Program. For convenience, I will refer to exhibits to the Program Plan as “Program Plan Exhibit ___.”

Zia’s Application, Program Plan, and supporting testimonies describe the extensive background investigation of potential energy efficiency measures that Zia undertook before selecting those measures that appeared to offer meaningful energy savings at costs that could meet the Commission’s Utility Cost Test (“UCT”) standards. The Application

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provides an Executive Summary and summarizes Zia’s requested approvals. My testimony provides background information, identifies and describes measures in Zia’s approved 2019-2021 Energy Efficiency Program and proposed changes to the Measures for Zia’s 2022-2024 Energy Efficiency Program, and explains the participation criteria and Program promotion. The Direct Testimony of Leslie A. Graham explains the budget, request to earn a profit, discount rate, and avoided supply side costs. The Direct Testimony of Weston E. Hacker reviews Zia’s pre-application coordination, evaluation of potential energy efficiency measures, and explains the cost-benefit analysis and compliance with the Commission’s UCT standards.

Q. PLEASE PROVIDE AN OVERVIEW OF ZIA’S PROPOSED 2022-2024 ENERGY EFFICIENCY PROGRAM.

A. Zia proposes to continue offering energy efficiency Measures in five general categories: (1) Space Heating, (2) Water Heating, (3) New Construction, (4) Income Qualified (formerly, Low-Income), and (5) Commercial. Zia’s 2022-2024 Energy Efficiency Program would be available to customers in its residential and commercial rate classes. Zia proposes several revisions in its 2022-2024 Energy Efficiency Program based on the recommendations of Evergreen Energy in its *Evaluation of the 2020 Zia Natural Gas Company Energy Efficiency Program Final Report*, dated June 29, 2021 (the “M&V Report”)¹ and the input Zia received as a result of its public advisory process.

¹ Evergreen Energy is the Commission’s selected contractor to perform the independent measurement and verification (“M&V”) of a utility’s energy efficiency program required by the Energy Efficiency Rule 17.7.2.15 NMAC. Zia provided Evergreen Energy’s M&V Report regarding Zia’s 2020 Energy Efficiency Program as an attachment to its Energy Efficiency Annual Report filed July 1, 2021 in Case No. 18-00280-UT.

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Zia proposes a 2022-2024 Energy Efficiency Program Plan Year budget of \$514,414. Zia estimates its proposed 2022-2024 Energy Efficiency Program will result in benefit-cost ratios above 1.0 pursuant to UCT standards, both overall and for each of the five proposed categories. Leslie A. Graham describes in her Direct Testimony and Exhibits the costs and budget for the proposed 2022-2024 Energy Efficiency Program. Weston E. Hacker explains the benefit-cost analysis that Zia performed pursuant to the Commission's UCT standards.

III. BACKGROUND

Q. PLEASE PROVIDE BACKGROUND INFORMATION ON ZIA NATURAL GAS COMPANY.

A. Zia is the operating division of NGP that owns, operates and controls public utility plant, property and facilities, including natural gas distribution facilities that provide retail gas service in New Mexico. Zia is a public utility subject to the jurisdiction of the Commission. Zia operates in four separate service areas in five different counties in New Mexico: the Hobbs District, the Ruidoso District, the Maxwell District, and the Dona Ana District.

In Lea and Eddy Counties, in the southeast corner of New Mexico, Zia operates the Hobbs District, which provides distribution service in Hobbs, Jal, and Malaga, and to 25 customers directly across the state line in Texas. There are approximately 10,850 residential and commercial customers in the Hobbs District as of June, 2021.

In Lincoln County, Zia provides transmission and distribution service in Ruidoso, Ruidoso Downs, Alto, Capitan, Carrizozo and surrounding areas, collectively known as the Ruidoso District. Zia serves approximately 13,894 residential and commercial customers in Lincoln County.

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In Colfax County, in northeastern New Mexico, Zia provides transmission and distribution service in the Village of Maxwell, the Village of Cimarron, the Town of Springer, and areas around Raton, as well as sale for resale service to the City of Las Vegas. This is known as the Maxwell District. Zia currently serves approximately 1,251 residential and commercial customers in the Maxwell District.

In Dona Ana County, in the southern part of the state, Zia operates its Dona Ana System, which provides service to areas in Dona Ana County outside the City of Las Cruces. Zia currently serves approximately 12,757 residential and commercial customers in the Dona Ana District.

Overall, Zia serves approximately 38,752 customers statewide as of June, 2021. As such, Zia is a small utility relative to a company such as New Mexico Gas Company. The vast majority of Zia's customers, approximately 35,960, are residential.

Q. DOES ZIA HAVE AN ENERGY EFFICIENCY PROGRAM CURRENTLY IN EFFECT?

A. Yes, it does. Zia filed its 2019-2021 Energy Efficiency Program Plan in Commission Case No. 18-00280-UT on August 31, 2018. The Commission approved the 2019-2021 Energy Efficiency Program on February 27, 2019, and the 2019-2021 Energy Efficiency Program became available to customers on April 1, 2019 for Plan Year 2019 (“PY2019”). On August 30, 2021, the Commission issued its *Order Granting Zia Natural Gas Company’s Motion for Extension of Time to File Energy Efficiency Application*, allowing Zia to file its application for approval of its 2022-2024 Energy Efficiency Program in Case No. 21-00222-UT on or before September 20, 2021. Zia now files its Application in accordance with the Commission’s Order.

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Pursuant to the revised Energy Efficiency Rule Section 17.7.2.8.A, Zia expects its 2022-2024 Energy Efficiency Program, once approved, will continue in effect until the Commission approves Zia's next Energy Efficiency application to be filed by August 31, 2024, subject to rate rider reconciliations and Commission approval of Program changes that Zia may file prior to that time.

IV. PROPOSED PROGRAM CHANGES

Q. WHAT MEASURES DOES ZIA PROPOSE TO CHANGE?

A. Based on Evergreen Energy's M&V Report, Zia's own research and pre-application coordination efforts, as well as customer and contractor feedback (all discussed in the Direct Testimony of Weston E. Hacker), Zia proposes relatively minor changes to the following Energy Efficiency Program Measures: 1) Space Heating, 2) Water Heating 3) New Construction 4) Income Qualified, and 5) Commercial. With this filing, Zia proposes to change the name of the Low-Income Measure to Income Qualified.

Q. PLEASE DESCRIBE THE PROPOSED CHANGES TO THE SPACE HEATING MEASURE.

A. Zia proposes to add a rebate for the installation of a programmable thermostat or a smart thermostat. In addition, Zia increased the amount of the rebate to further encourage participation and adjusted the rebate for an upgrade from an electric furnace to a natural gas furnace based on recommendations from Evergreen Economics. For further details concerning the cost effectiveness of the proposed Measure, please see the Direct Testimony of Weston E. Hacker.

Q. PLEASE DESCRIBE THE PROPOSED CHANGES TO THE WATER HEATING MEASURE.

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A. Zia proposes add a rebate for the installation of water heater tank insulation, commonly referred to as a water heater tank wrap. In addition, Zia increased the amount of the rebate to further encourage participation, and adjusted the rebate for an upgrade from an electric water heater to a natural gas water heater based on recommendations from Evergreen Economics. For further details concerning the cost effectiveness of the proposed Measure, please see the Direct Testimony of Weston E. Hacker.

Q. PLEASE DESCRIBE THE PROPOSED CHANGES TO THE NEW CONSTRUCTION MEASURE.

A. Zia proposes to add a smart thermostat to the criteria needed to receive the New Construction rebate. The addition of a smart thermostat increases estimated savings and allows Zia to provide a slightly higher rebate to encourage participation. For further details concerning the cost effectiveness of the proposed Measure, please see the Direct Testimony of Weston E. Hacker.

Q. PLEASE DESCRIBE THE PROPOSED CHANGES TO THE INCOME QUALIFIED MEASURE.

A. Zia has chosen CLEAResult as its new contractor to implement the Income Qualified Measure. CLEAResult proposes to offer both direct install and prescriptive components to achieve energy savings. For direct install, CLEAResult contractors will directly install energy saving components such as low-flow showerheads, low-flow faucet aerators, weather stripping, programmable thermostats, hot water pipe insulation, and air sealing at no cost to the Income Qualified residential customer. In addition, CLEAResult will identify and connect the Income Qualified residential customer to non-profit organizations that will be able to financially assist the customer with more prescriptive upgrades such as

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new heating or water heating or insulation. The prescriptive components will also qualify for a rebate through Zia's program.

Q. PLEASE DESCRIBE THE PROPOSED CHANGES TO THE COMMERCIAL MEASURE.

A. Zia has chosen CLEAResult as its new contractor to implement the Commercial Measure. CLEAResult has a proven, nation-wide program and has developed the trade allies to better contact and implement Commercial energy saving options. CLEAResult proposes to directly install energy saving components at no cost to the commercial customer as well as assist commercial customers in identifying more prescriptive measures that the customer may install at the customer's cost. Zia's Program would provide a rebate for a portion of the cost of the prescriptive measure. Zia will work with CLEAResult to help focus efforts on Zia's commercial customers.

Q. DOES ZIA PROPOSE TO ELIMINATE ANY MEASURES?

A. No, Zia does not propose to eliminate any Measures from its Energy Efficiency Program for 2022-2024. Rather, Zia proposes relatively minor changes to its current Program to increase Program participation and total therm savings.

Q. DOES ZIA PROPOSE ADDITIONAL ACTIONS TO INCREASE PROGRAM PARTICIPATION?

A. Yes. Zia plans to use its monthly newsletter to better inform customers about the Energy Efficiency Program, how to use the Program, its benefits, and its costs. Zia also intends to build and maintain communications with contractors such as HVAC and plumbing contractors so that they will be knowledgeable about Zia's Program and can help inform

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customers. Zia is also exploring the use of social media such as a Facebook page to promote the Energy Efficiency Program.

V. ZIA'S PROPOSED 2022-2024 ENERGY EFFICIENCY PROGRAM

Q. PLEASE DESCRIBE ZIA'S PROPOSED 2022-2024 ENERGY EFFICIENCY PROGRAM.

A. Zia continues to propose Energy efficiency Measures in five general categories: (1) Space Heating, (2) Water Heating, (3) New Construction, (4) Income Qualified, and (5) Commercial. Within each of these Measures, Zia proposes energy efficiency components designed to encourage replacement of high energy usage appliances with lower energy usage appliances, identify and eliminate drafts and energy leakage, and improve overall energy consumption and efficiency within both residential and commercial buildings. Because the majority of Zia's customers and load are residential, and since the primary drivers of residential gas use are space heating and water heating, Zia's proposed 2022-2024 Energy Efficiency Program focuses first on opportunities to increase energy efficiency in those areas. I review the proposed Energy Efficiency Measures below.

A. Space Heating Measure.

Q. PLEASE DESCRIBE THE PROPOSED SPACE HEATING MEASURE.

A. Space heating accounts for the largest proportion of natural gas consumption in residential applications, and offers opportunities for energy efficiency savings. *See, e.g.,* American Gas Association ("AGA") at www.aga.org, the U.S. Energy Information Administration ("EIA") at <http://www.eia.gov>; and the Department of Energy at <http://energy.gov>. Accordingly, Zia's Space Heating Measure offers incentives to replace or upgrade existing lower efficiency furnace and boiler models to more efficient models rated 92% or higher.

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In order to meet UCT standards, the offered incentive levels vary with therms saved or efficiency ratings achieved. Zia's Space Heating Measure proposes eight distinct components:

- (1) Install or Replace Existing Gas Furnace to AFUE 92-94.9%.
- (2) Install or Replace Existing Gas Furnace to AFUE 95% or Higher.
- (3) Boiler/Hydronic Heating System to 90% AFUE or Higher.
- (4) Insulation from R-11 or Lower to R-30 or Higher.
- (5) Gas Furnace/Heater Inspection or Tune-up.
- (6) Electric to Natural Gas Furnace, AFUE 95% or Higher.
- (7) Install Programmable Thermostat.
- (8) Install Smart Thermostat.

I describe below the benefits of these components in general. Program Plan Exhibit C describes the Space Heating Measure and illustrates the expected savings in therms, incentives, expected life, and costs involved.

Q. PLEASE EXPLAIN THE BENEFITS OF FURNACE/BOILER UPGRADES OR REPLACEMENTS.

A. While older furnace and boiler systems have efficiencies in the range of 56% to 70%, modern conventional heating systems can achieve efficiencies as high as 98.5%, converting nearly all the fuel to useful heat. Energy efficiency upgrades and a new high-efficiency heating system can often cut fuel bills and furnace pollution output in half. See for example, <http://energy.gov/energysaver/furnaces-and-boilers>. Nearly all modern-day furnaces and heaters are being made at 80% Annual Fuel Utilization Efficiency ("AFUE") or higher. Increasing from 80% AFUE to 92% or better will reduce the amount of natural gas being used and save money for the homeowner.

Q. PLEASE EXPLAIN THE BENEFITS OF FURNACE/HEATER INSPECTION OR TUNE-UP.

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A. An expert examination can spot needed adjustments that extend the life of a furnace. Inspecting and cleaning the blower components ensures reliable service, and testing the amount of electrical current reaching the motor can avert a component failure. A tune-up can increase comfort levels and reduce energy consumption. Some of the tasks performed are specifically aimed at increasing furnace efficiency. These include checking the fan control to ensure its accuracy, lubricating the moving parts to reduce friction, checking for proper pilot light and burner operation to eliminate fuel waste. Other tasks, such as checking the thermostat calibration and testing the system's start-up cycle, ensure the system is working at peak efficiency. An ancillary benefit is that the customer's system is also checked for proper venting and safety concerns. See also <http://buildingefficiencyinitiative.org/articles/studies-show-hvac-system-maintenance-saves-energy>.

Q. PLEASE EXPLAIN THE BENEFITS OF INSULATION INSTALLATION OR REPLACEMENT.

A. Unless the customer's home was specially constructed to enhance energy efficiency, the customer can reduce overall energy consumption by adding more insulation. Many older homes have less insulation than homes built today, but even adding insulation to a newer home can pay for itself within a few years. See for example, <http://energy.gov/energysaver/adding-insulation-existing-home>.

Q. PLEASE EXPLAIN THE DIFFERENCE BETWEEN A PROGRAMMABLE AND SMART THERMOSTAT.

A. A programmable thermostat allows the customer to program the home's cooling and heating system, and pre-set temperatures for certain times of the day. Smart thermostats

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are also programmable, but they are also designed to learn behavior over time in order to automatically adjust the temperature in the home to accommodate the customer's habits, and may be wi-fi enabled. See for example: <https://www.superior-air.com/blog/hvac/programmable-vs-smart-thermostats-whats-the-difference/>.

A thermostat with a smart system has automatic air heating and cooling adjustment technology that helps save money in electric bills. Smart thermostats will take the HVAC information and climate settings to adjust automatically, while programmable thermostats do not make automatic adjustments. Neither a programmable nor smart thermostat in Zia's Program would be monitored or controlled by Zia; rather, the thermostat would be controlled by the customer.

Q. PLEASE EXPLAIN THE BENEFITS OF THE PROGRAMMABLE AND SMART THERMOSTATS.

A. According to the EIA, energy costs for heating and cooling together comprise, on average, about 42% of consumer home energy expenditures. See <https://www.eia.gov>.

The EIA points out that much of this energy expenditure seems to be used for space conditioning during times that the home is unoccupied or the occupants are sleeping. Therefore, these "unoccupied" periods represent an often-untapped opportunity for reducing home energy consumption.

Q. PLEASE EXPLAIN THE BENEFITS OF THE ELECTRIC TO GAS CONVERSION.

A. As recognized in the Recommended Decision adopted by the Commission in Zia's prior energy efficiency case, Case No. 18-00280-UT, the electric to gas conversion takes into account the difference in overall energy use - not just reductions in natural gas consumption

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- when a customer converts from electric resistive heat to gas space heat. The EUEA's mandate in NMSA 1978, § 62-17-5(B) is that "[t]he commission shall direct public utilities to evaluate and implement cost-effective programs that reduce energy demand and consumption." (Emphasis added.) The EUEA today still contains that mandate to reduce energy demand and consumption overall. In Case No. 18-00280-UT, the Commission ordered Zia to continue to offer this component of its Energy Efficiency Program, and Zia continues to do so.

B. Water Heating Measure.

Q. PLEASE DESCRIBE THE PROPOSED WATER HEATING MEASURE.

A. Following space heating, water heating accounts for the second largest proportion of natural gas consumption in residential applications. See for example, <https://www.eia.gov/todayinenergy/detail.php?id=37433>.

Zia's Water Heating Measure addresses this issue by focusing on increasing efficiency of current water heaters and reducing overall water usage in order to reduce the need for water heating. The Measure proposes three distinct components: (1) Installation of a hot water conservation package that consists of a low-flow showerhead, kitchen aerator, and bathroom aerator called the Water Conservation Package, (2) Installation of water heater tank insulation, and (3) Installation of energy efficient water heaters with an Energy Factor ("EF") rating of .67 or higher. I describe below the benefits of these components of the Measure in general. Program Plan Exhibit D describes the Water Heating Measure and illustrates the expected savings in therms, incentives, expected life, and costs involved.

Q. PLEASE EXPLAIN THE BENEFITS OF LOW FLOW SHOWERHEADS.

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A. Because showering accounts for anywhere from 17 to 30 percent of overall household water usage, installation of a low flow showerhead is a good first step to take when making more environmentally friendly changes around the home. See for example, <http://www.brothersplumbing.com/plumbing/benefits-of-using-a-low-flow-shower-head/>.

A few years ago, showerheads delivered about 5 to 8 gallons per minute (gpm). The current standard is a showerhead that dispenses 2.5 gallons of water each minute, and an even lower flow showerhead dispenses 1.5 gallons or less of water per minute. Low flow showerheads can decrease water consumption by 50% or more and reduce the cost of heating water by up to 50%. See for example, <https://learn.eartheasy.com/guides/low-flow-aerators-showerheads/>. This not only conserves water but also cuts down on the energy used to heat the water.

Q. PLEASE EXPLAIN THE BENEFITS OF FAUCET AERATORS.

A. The most important benefit of a faucet aerator is that it conserves water and when used in conjunction with low-flow shower heads is the most effective water conservation component you can take for your home. See <https://learn.eartheasy.com/guides/low-flow-aerators-showerheads/>. Installing a faucet aerator can reduce the water use at a faucet by as much as 60 percent. A flow rate of 2.5 gallons per minute is standard for a faucet aerator (compared to as much as 5 or 6 gallons per minute for a faucet without an aerator), but faucet aerators with a flow of as little as 0.5 gallons per minute are available. See <http://energy.gov/energysaver/reduce-hot-water-use-energy-savings>. Using faucet aerators to conserve water used in the home lowers the cost of heating water for washing dishes and other activities that require hot water.

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Q. PLEASE EXPLAIN THE BENEFITS OF UPGRADING OR REPLACING AN EXISTING WATER HEATER.

A. Like most home appliances, water heaters have become much more energy efficient in recent years. A decade ago, 25 percent of our home energy dollars typically went to heating water; today the Department of Energy claims water heating accounts for about 14 to 18 percent of your utility bill. See, for example, <https://www.energy.gov/articles/new-infographic-and-projects-keep-your-energy-bills-out-hot-water>. Energy efficient water heaters use less energy to heat the water in the tank by keeping the hot water at a constant temperature for a lot longer. Customers typically begin to see immediate monthly savings with this feature. See for example, <https://www.jimwagnerplumbing.com/blog/the-benefits-of-a-new-water-heater-in-your-home/>.

Older models of water heaters use outdated materials to retain the heat within the tank. Modern technology has improved water heater materials, such as insulation, which can better trap heat and keep outside temperatures from affecting the inside of the tank.

This component has options to include Tankless or Condensing Storage models as well as water heaters with a higher EF of 0.67 or higher.

Q. PLEASE DESCRIBE THE WATER HEATER TANK INSULATION.

A. An insulation blanket is a multi-layered cover that is wrapped around the hot water heater and controls the heat loss. The water tank insulation also maintains the water temperature in the water tank. The water tank thermal insulation material is made up of many heat resistant materials, such as foil, fiberglass, etc. For example, see <https://novawatertankcover.com/>.

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C. New Construction Measure.

Q. PLEASE DESCRIBE THE PROPOSED NEW CONSTRUCTION MEASURE.

A. Zia seeks to encourage homebuilders to construct more energy efficient and environmentally friendly homes by offering incentives to reduce overall energy usage in new home or building construction. Without energy efficiency incentives, some homebuilders may design and build homes based on the lowest cost per square foot and not with overall energy usage and costs in mind. Offering new homebuilders an incentive to offset costs of higher efficiency upgrades can help to ensure that new energy efficient homes and buildings become a priority.

The U.S. Dept. of Energy (“DOE”) found that up to 18% of our home energy usage is for heating water, and by comparison, 42% is for heating and air conditioning. See <https://www.energy.gov/energysaver/heat-and-cool/water-heating> and <https://www.energy.gov/energysaver/heating-and-cooling>. For example, Wisconsin Public Service Company (“WPSC”), which offers both electric and gas utility service, found that homeowners could save \$1,698 a year using a gas furnace versus an electric one. WPSC found that annual savings from using a gas range could tally \$79; a clothes dryer, \$81; and a water heater, \$297. See <https://www.wisconsinpublicservice.com/savings/gas-calculator>. Considering that WPSC offers both electric and natural gas utilities, they offer no bias as to which form of energy to use other than savings. CenterPoint energy offers a home energy costs and emissions calculator to calculate the annual cost difference between natural versus electricity and propane at varying prices and efficiency factors.

When the current average energy prices within Zia’s service areas are input into this calculator at a cost per therm for natural gas at \$0.6554 and cost per kWh for electricity

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at \$0.1185, the savings for a home less than 2,000 sq. ft. with high efficiency appliances is in excess of \$500.00 annually, and for a 2,000-3,000 sq. ft. home is in excess of over \$700.00 annually.

With these potential savings in mind, Zia proposes to offer incentives based on home size for both high efficiency space and water heating. For larger new homes, 2,000 sq. ft. and above, Zia proposes to offer incentives for having four natural gas outlets. For smaller new homes, less than 2,000 sq. ft., Zia offers incentives for having just three natural gas outlets. These natural gas outlets, along with insulation meeting Energy Star compliance and a smart thermostat, offer substantial opportunities to reduce energy costs and usage. Program Plan Exhibit E describes the New Construction Measure and illustrates the expected savings in therms, incentives, expected life, and costs involved.

D. Income Qualified Measure.

Q. PLEASE DESCRIBE THE PROPOSED INCOME QUALIFIED MEASURE.

A. Zia has updated the name of this Measure from Low-Income to Income Qualified. In accordance with the Energy Efficiency Rule, 17.7.2.8.K and 17.7.2.9 NMAC, Zia proposes that no less than 5% of the energy efficiency funding shall be specifically directed to measures for income qualified customers. According to NMAC 17.7.2.7(D), the customer must meet the criteria of “an annual household income at or below two hundred percent of the federal poverty level, as published annually by the United State department of health and human services.”

Zia currently, through its contractor EnergyWorks, offers energy efficient components to be a deliverable specific to each home and based on individual customer needs. EnergyWorks offers low-flow showerheads, faucet aerators, water heater pipe

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insulation, water heater tank insulation, infiltration reduction, programmable thermostats, and duct sealing. Participation in this Measure has decreased steadily since inception. EnergyWorks' performance has not met the goals Zia set several years ago when designing the Low-Income Measure.

Zia has decided to contract with CLEAResult to implement the Income Qualified Measure for the next three Plan Years. As part of its proposal, CLEAResult provided a target therm savings, target participation, and estimated administration costs and rebate/incentive costs. For the proposed Income Qualified Measure, CLEAResult will offer a two-prong 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. Program Plan Exhibit F illustrates the quoted savings in therms, incentives, expected life, and costs involved for the proposed update to the Income Qualified Measure.

E. Commercial Measure.

Q. PLEASE DESCRIBE THE PROPOSED COMMERCIAL MEASURE.

A. Within Zia's service area, the majority of commercial customers have heating needs associated with larger buildings such as schools, hotels, department stores, shops, warehouses, and restaurants, but not as large as industrial uses. Currently, Zia through its contractor, Energy Works, offers several direct installation options to commercial customers to assist with energy savings. The direct install components target water

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conservation and heating savings and are free to Zia commercial customers. Zia also kept the option open to provide a rebate to commercial customers who installed an energy efficient appliance or measure. The rebate was based upon a \$1.50/therm saved.

Zia’s Commercial Measure has not been well adopted. Zia now proposes to contract with CLEAResult to implement the Commercial Measure. CLEAResult proposes to implement the Measure in a two-prong approach. They propose to directly install basic energy saving components such as pre-rinse spray nozzles, low-flow aerators, and weather-stripping. In addition, CLEAResult also proposes 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 achieve improved participation and results by utilizing the expertise of this nation-wide company. Program Plan Exhibit G describes the Commercial Measure and illustrates the expected savings in therms, incentives, expected life, and costs involved.

VI. IMPLEMENTATION AND PARTICIPATION

Q. DID ZIA REVIEW PAST PROGRAM PERFORMANCE WHEN DECIDING THE 2022-2024 PROGRAM?

A. Yes. Zia compiled the participation data for each Measure for the past four completed Plan Years. Table 1 may be found on Page 5 of the Program Plan

Table 1 - Actual Program Participation				
Measure	2017	2018*	2019	2020
Space Heating	59	88	118	124
Water Heating	474	485	474	448
New Construction	1	6	4	7
Low Income	93	68	50	25
Commercial	-	1	-	1
Total	627	648	646	602
Target Total	1,650	1,650	1,319	1,319

* 2018 Plan Year included 15 months as Zia realigned its Plan Year with the Commission Rules.

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Participation in the Space Heating Measure has increased year over year. Participation in the Water Heating Measure has held steady primarily due to the immediate acceptance of the Water Conservation Packages. The New Construction Measure participation has increased minutely due to Zia's outreach to and education of contractors. Unfortunately, participation in the Low-Income Measure has declined each year. Further details may be found in the Energy Efficiency Annual Reports filed each year by Zia. Zia has implemented several strategies to encourage use of the Program, including direct contact with customers, contractors, and appliance vendors.

The biggest detriment to Zia's Program for Plan Year 2019 and 2020 was the COVID-19 Pandemic. For public health and safety reasons, our contractors struggled to go into homes to directly install the components of the Low-Income Measures for Zia customers. It appears that commercial customers were not focused on energy efficiency during the Pandemic. Another consideration is performance by Zia's previous contractor for its Low-Income (now called Income Qualified) and Commercial Measures, which did not meet Zia's expectations in either Plan Year 2019 or 2020.

Q. HOW DOES ZIA PROPOSED TO IMPROVE PROGRAM PARTICIPATION?

A. Zia intends to use its monthly newsletter and is considering implementing social media to better inform customers and encourage greater participation in the Energy Efficiency Program. Zia also intends to coordinate more closely with contractors, such as HVAC and plumbing contractors, who can inform customers about Zia's Program. Zia is continuing to educate and encourage Zia personnel to promote the Energy Efficiency Program. Zia will also work with customer service staff to identify Zia customers who may benefit from the Income Qualified Measure. Finally, Zia also expects its new contractor for the Income

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Qualified and Commercial Measures, CLEAResult, will manage those Measures to increase participation. For example, CLEAResult has online tools to help customers assess possible energy savings.

Q. HOW DOES ZIA PROPOSE TO IMPLEMENT THE NEW SMART AND PROGRAMMABLE THERMOSTAT COMPONENT IN THE SPACE HEATING MEASURE?

A. Zia proposes that the customer would select and purchase their thermostat and then apply for a rebate.

Q. HOW DOES ZIA PROPOSE TO IMPLEMENT THE NEW WATER HEATER TANK WRAP COMPONENT IN THE WATER HEATING MEASURE?

A. Zia proposes that the customer would select and purchase their thermostat and then apply for a rebate. As part of its coordination with HVAC and plumbing contractors, Zia will encourage contractors to also install tank wraps when installing new equipment or doing a tune-up.

VII. PROPOSED CHANGES TO PARTICIPATION CRITERIA

Q. HAS ZIA ESTABLISHED PARTICIPATION CRITERIA FOR EACH ENERGY EFFICIENCY MEASURE?

A. Yes.

Q. PLEASE DESCRIBE THE PARTICIPATION CRITERIA.

A. In general, rebates or incentives may be available to any current or prospective and eligible Zia customers. Specific components of each Measure may apply to specific rate classes (for example, the Commercial Measure applies only to Zia's Small Commercial and Large Commercial rate classes). Only qualified natural gas and HVAC equipment purchased,

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installed or serviced during the timeframe the Program is in effect will be considered for a rebate or incentive. Rebate checks or incentives are subject to availability of Program funds. Completed applications will be reviewed and processed by Zia on a first-come, first-served basis until Program funds are depleted. Zia reserves the right for its representatives, contractors, and agents to inspect completed upgrades to ensure compliance with both its Energy Efficiency Program and New Mexico natural gas safety standards. Program participation criteria for each Energy Efficiency Measure are described on Program Plan Exhibits C through G.

Q. ARE THERE ANY EXCLUDED RATE CLASSES?

A. Yes. Zia's Energy Efficiency Plan does not apply to Rate No. 15 customers (Sale for Re-sale customers), Rate No. 16 Customers (Irrigation Small Service), Rate No. 17 Customers (Irrigation Large Service), Rate No. 18 Customers (Industrial Medium Service), Rate No. 19 Customers (Industrial Large Service), and Zia's Texas customers.

VIII. SUMMARY AND CONCLUSIONS

Q. PLEASE SUMMARIZE YOUR TESTIMONY.

A. Zia offers no major additions or significant changes to its proposed 2022-2024 Energy Efficiency Program. Rather, based on information gathered from the M&V Report, public advisory meetings and customer input, Zia proposes relatively simple changes to its Energy Efficiency Program that will offer greater savings to our customers and encourage increased Program participation and thereby, therm savings.

Zia's proposed 2022-2024 Energy Efficiency Program will be of greater benefit to its customers, and will meet or exceed the Commission's energy efficiency standards. With relatively minor changes to each Measure, Zia proposes to continue to offer the five

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general Measures included in its 2019-2021 Energy Efficiency Program: (1) Space Heating, (2) Water Heating, (3) New Construction, (4) Income Qualified, and (5) Commercial. Zia requests the Commission's expeditious approval in order to put its proposed 2022-2024 Energy Efficiency Program into effect for the benefit of its customers.

Q. IN YOUR OPINION, HAS ZIA'S EFFORTS TO COORDINATE, EVALUATE, AND PROPOSE ENERGY EFFICIENCY MEASURES COMPLIED WITH THE REQUIREMENTS OF THE EFFICIENT USE OF ENERGY ACT AND THE ENERGY EFFICIENCY RULE?

A. Yes, in my opinion, Zia's efforts have complied with the requirements of the EUEA and the Energy Efficiency Rule that I reviewed in my testimony.

Q. DOES THIS CONCLUDE YOUR TESTIMONY AT THIS TIME?

A. Yes, it does.



Zia Natural Gas Company

**2022-2024
Energy Efficiency Program Plan**

September 20, 2021

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- B: Customer Survey Results
- C: Space Heating Measure
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I. EXECUTIVE SUMMARY

Zia Natural Gas Company, a division of Natural Gas Processing Co. (“Zia”) herein presents for New Mexico Public Regulation Commission (“PRC” or “Commission”) approval its third proposed Energy Efficiency Program Plan pursuant to New Mexico’s Efficient Use of Energy Act, NMSA 1978 § 62-17-1 *et seq.* (“EUEA”), and the Energy Efficiency Rule, 17.7.2 NMAC. This 2022-2024 Energy Efficiency Program Plan summarizes Zia’s energy efficiency evaluation and proposal.

Following consultation with energy efficiency experts, research into various measures, and feedback from customers, Zia proposes to continue offering energy efficiency Measures in five general categories: (1) Space Heating, (2) Water Heating, (3) New Construction, (4) Income Qualified, and (5) Commercial. Zia’s Energy Efficiency Program is available to customers in its residential and commercial rate classes (“affected customers”) and provides every affected customer with the opportunity to participate and benefit economically. Zia proposes an annual Program budget of \$514,414 which will not exceed 3% of the total affected customer bills for the Plan Year. Zia estimates its proposed Energy Efficiency Program will result in benefit-cost ratios above 1.0 pursuant to the Commission’s Utility Cost Test (“UCT”) standards, both overall and for each of the five categories. Zia proposes to continue to fund the Energy Efficiency Program through its Fifth Revised Rate Rider No. 2, Energy Efficiency Rider, effective by operation of law on August 1, 2021, under Advice Notice No. 63.

This Program Plan describes and explains Zia’s 2022-2024 Energy Efficiency Program in the following six sections. Section II below provides background information on Zia and the requirements of EUEA and the Energy Efficiency Rule. Section III describes Zia’s pre-application coordination and results of the evaluation of the current 2020 Energy Efficiency Program Plan Year. Section IV identifies and describes the Measures in the current Energy Efficiency Program and proposed changes to the Measures. Section V explains the participation criteria and Program promotion. Section VI explains the cost-benefit analysis and compliance with the Commission’s UCT standards. Further details are provided in the Direct Testimonies and Exhibits of Leslie A. Graham, Oscar G. Saucedo, and Weston E. Hacker.

II. BACKGROUND

Zia is the operating division of Natural Gas Processing Co. (“NGP”) that owns, operates, and controls public utility plant, property, and facilities, including natural gas distribution facilities that provide retail gas service in New Mexico. Zia, as an operating division of NGP, is a public utility subject to the jurisdiction of the Commission.

Zia operates in four separate service areas in five different counties in New Mexico: the Hobbs District, the Ruidoso District, the Maxwell District, and the Dona Ana District. In Lea and Eddy Counties, in the southeast corner of New Mexico, Zia operates the Hobbs District, which provides distribution service in Hobbs, Jal, Malaga and to 25 customers directly across the state line in Texas. There are approximately 10,850 residential and commercial customers in the Hobbs District as of June, 2021. In Lincoln County, Zia provides transmission and distribution service in Ruidoso, Ruidoso Downs, Alto, Capitan, Carrizozo, and surrounding areas, collectively known

as the Ruidoso District. Zia serves approximately 13,894 residential and commercial customers in Lincoln County. In Colfax County, in northeastern New Mexico, Zia provides transmission and distribution service in the Village of Maxwell, the Village of Cimarron, the Town of Springer and areas around Raton, as well as sale for resale service to the City of Las Vegas. This is known as the Maxwell District. Zia currently serves 1,251 residential and commercial customers in the Maxwell District. In Dona Ana County, in the southern part of the state, Zia operates its Dona Ana System, which provides service to areas in Dona Ana County outside the City of Las Cruces. Zia currently serves 12,757 residential and commercial customers in the Dona Ana District. Overall, Zia serves approximately 38,752 residential and commercial customers statewide as of June, 2021. The vast majority of Zia's customers, approximately 35,960, are residential.

The EUEA establishes the state's policy that public utilities include cost effective energy efficiency and load management programs in their energy resource portfolios, that disincentives to development of such energy efficiency and load management programs be removed in a manner that balances the public interest, consumers' interests, and investors' interests, and that public utilities be allowed to earn a profit on cost-effective energy efficiency and load management resources. NMSA 1978, § 62-17-3. In furtherance of that policy, the EUEA requires public utilities to evaluate and implement cost-effective and achievable measures or programs available in their service territories that reduce energy demand and energy consumption. NMSA 1978, § 62-17-5.B and G.

The EUEA further requires public utilities to obtain Commission approval of energy efficiency and load management programs before they are implemented, and requires the Commission to first find that the portfolio of programs is cost-effective under the UCT and is designed to provide every affected customer class with the opportunity to participate and benefit economically. NMSA 1978, § 62-17-5.C and E.

On February 27, 2019 in Commission Case No. 18-00280-UT, Zia received approval for its 2019-2021 Energy Efficiency Program Plan. On June 30, 2021, Zia filed its Energy Efficiency Reconciliation filing and Advice Notice No. 63, which became effective on August 1, 2021. On July 1, 2021, Zia filed its *Energy Efficiency Program Annual Report for Plan Year 2020*. On August 30, 2021, the Commission issued its *Order Granting Zia Natural Gas Company's Motion for Extension of Time to File Energy Efficiency Application*, allowing Zia to file its application for approval of its 2022-2024 Energy Efficiency Program in Case No. 21-00222-UT on or before September 20, 2021.

III. PRE-APPLICATION COORDINATION AND EVALUATION

A. Initial Coordination

Section 62-17-5. E of the EUEA requires that, prior to seeking Commission approval, utilities solicit nonbinding recommendations on the design, implementation and use of third-party energy service contractors through competitive bidding on the programs, from Commission Staff, the Attorney General, the Energy, Minerals, and Natural Resources Department ("EMNRD"), and other interested parties. Accordingly, prior to developing its proposed Energy Efficiency Program, Zia coordinated with its customers, Commission Staff, the Attorney General, EMNRD Staff, and energy efficiency experts to identify and evaluate potential measures to achieve energy efficiency

in its service territories that would be consistent with the Commission's standards under the EUEA and the Energy Efficiency Rule. Following this initial coordination, Zia met with various organizations with expertise in this subject to inform and assist our efforts to develop a robust and comprehensive energy efficiency program. Those organizations included New Mexico Gas Company, CLEAResult, EnergyWorks, Frontier Energy, ICF Management Consulting, and Evergreen Economics.

On August 10, 2021, Zia conducted a Public Advisory Group meeting to gather input from regulators, peers, and industry leaders for guidance in increasing performance of Zia's Energy Efficiency Program. In addition to Zia's representatives, representatives from Commission Staff, EMNRD, EnergyWorks, CLEAResult, Frontier Energy, ICF, New Mexico Gas Company, and Raton Natural Gas Company attended this meeting via Zoom meetings. An invitation to attend this meeting was also extended to the New Mexico Attorney General's ("NMAG") Office, but a NMAG representative did not attend. Zia presented its review of Evergreen Economics' *Evaluation of the 2020 Zia Natural Gas Company Energy Efficiency Program Final Report* regarding Zia's Energy Efficiency Program.¹

Zia also conducted a customer survey concerning the Energy Efficiency Program, which was delivered to Zia's customer base through the July 2021 issue of Zia's monthly newsletter, an insert in the customers' monthly billing statements. The survey was also available to customers in each of Zia's offices. A copy of the survey form is included in Program Plan Exhibit A. Zia received approximately 540 completed surveys, which collectively revealed that most of Zia's surveyed customers first learned of Zia's Energy Efficiency Program through information periodically included in Zia's newsletter. Customers responding to the survey further indicated that, now being aware of the Program, they would be more likely than not to participate in the Program, by a ratio of 9:1. Additionally, Zia customers support the continued funding of the Energy Efficiency Program through the rate rider with just over 61% in favor. The results of the customer surveys are shown in Program Plan Exhibit B.

Zia sent out a Request For Proposal ("RFP") for the upcoming Energy Efficiency Program Plan years. Zia sent the RFP to CLEAResult, EnergyWorks, ICF Management Consultants, and Frontier Energy. Zia sought proposals to implement the Income Qualified and Commercial Measures for the next Energy Efficiency Program starting on April 1, 2022. The request was for a program that would achieve the goals of increased consumer participation in all districts, increased therm savings per year, save the consumer money by reducing household or business energy needs, and support collaboration efforts of all utilities with respect to energy efficiency programs. Both EnergyWorks and CLEAResult submitted a proposal. After evaluating both proposals, Zia chose CLEAResult to implement its 2022-2024 Energy Efficiency Program Income Qualified and Commercial Measures.

¹ Evergreen Energy is the Commission's selected contractor to perform the independent measurement and verification ("M&V") of a utility's energy efficiency program required by the Energy Efficiency Rule 17.7.2.15 NMAC. Zia provided Evergreen Economics' M&V Report regarding Zia's 2020 Energy Efficiency Program as an attachment to its Energy Efficiency Annual Report filed July 1, 2021.

Finally, Zia sought additional input from EnergyWorks, the current contractor responsible for the direct installation and implementation of Zia's Income Qualified and Commercial measures. Doug Champion, EnergyWorks President, offered several suggestions to improve Program participation, primarily for Zia to identify the customers for his organization to work with. Zia understands the importance of this and has adopted the recommendation into its proposed 2022-2024 Energy Efficiency Program Plan. Mr. Champion also indicated difficulty directly installing energy efficiency components related to the Commercial Measure during the 2019 and 2020 Plan Years. Many commercial customers were overwhelmed by the impact of the Covid-19 Pandemic and were not interested in the Energy Efficiency Program. Mr. Champion suggested that Zia identify specific commercial customers and assist with initial contact for direct install Commercial Measures.

The advice and suggestions Zia received from these meetings and customer surveys support the conclusions of its evaluation, and included the following key points: (1) the cornerstones of an effective natural gas energy efficiency program focus on space and water heating; (2) starting with a higher efficiency home and high efficiency natural gas appliances is the most cost effective way to realize overall energy savings; (3) in order to keep costs down, Zia should implement the majority of its program internally, but for Income Qualified and Commercial Measures Zia should utilize an external administrator who can take advantage of experience with multiple energy efficiency programs, utilize their expertise for these specific customer classes, and maximize the savings provided to the customer; (4) all Zia employees need to take an active role to educate and identify customers who could benefit from the Energy Efficiency Program; (5) upgrading or replacing existing appliances to higher efficiency models should be a top priority due to the increased therm savings over the life of the appliance, allowing incentives and rebates that keep these measures in line with UCT requirements for New Mexico; and (6) eliminating the need for increased energy usage should be accomplished through a reduction in water use, thus using less energy to heat, or by adding insulation and air sealing to the structure, which increases the overall energy efficiency. Zia proposes its 2022-2024 Energy Efficiency Program Plan in line with these key conclusions.

B. Energy Efficiency Program History

Zia is currently in its fifth year of implementing an energy efficiency program. Zia's first plan year program was found to be cost effective with a UCT ratio above 1.0. The next three plan year programs did not achieve the UCT ratio goal of 1.0 or higher. The following tables show the program participation, actual expenses, and overall UCT over the four completed Plan Years.

Measure	2017	2018*	2019	2020
Space Heating	59	88	118	124
Water Heating	474	485	474	448
New Construction	1	6	4	7
Low Income	93	68	50	25
Commercial	-	1	-	1
Total	627	648	646	602
Target Total	1,650	1,650	1,319	1,319

* 2018 Plan Year included 15 months as Zia realigned its Plan Year with the Commission Rules.

Expenses	2017	2018*	2019	2020
Administration	\$ 93,506	\$ 141,423	\$ 98,032	\$90,530
Promotion/ Marketing	\$ 19,380	\$ 39,855	\$ 22,634	\$18,281
Rebates	\$ 13,553	\$ 23,771	\$ 19,756	\$33,858
Low Income	\$ 66,030	\$ 65,022	\$ 28,431	\$11,913
Commercial		\$ 135	\$ -	\$2,651
Total	\$ 192,468	\$ 270,206	\$ 168,853	\$157,232
Target Total	\$ 432,528	\$ 432,528	\$ 373,578	\$373,578

* 2018 Plan Year included 15 months as Zia realigned its Plan Year with the Commission Rules.

Measure	2017	2018*	2019	2020
Space Heating	0.40	0.68	0.57	0.62
Water Heating	2.76	2.73	1.30	1.40
New Construction	0.05	0.70	0.62	0.55
Low Income	1.42	0.73	0.89	0.87
Commercial	-	1.33	-	1.12
Total	1.15	0.93	0.91	0.94
Target Total	1.46	1.46	1.47	1.47

* 2018 Plan Year included 15 months as Zia realigned its Plan Year with the Commission Rules.

Further details may be found in the Energy Efficiency Annual Reports filed each year by Zia. The overall conclusion is that Zia has struggled to implement a fully successful Energy Efficiency Program as indicated by UCTs less than 1.0. Setting aside Plan Year 2018, which was extended to 15 months, the primary reason appears to be the lack of participation in the Program in Plan Years 2019 and 2020. Zia has implemented several strategies to encourage use of the Program, including direct contact with customers, contractors, and appliance vendors. It is also recognized Zia needs to achieve over 50% of estimated participation levels in all of the components of each Measure presented in this Plan in order to overcome the administrative expense required to implement the Program. While Zia has relatively modest administrative expenses for its Program compared to a larger program, those costs must still inevitably be incurred in order to implement and manage a compliant Program. As indicated on the Energy Efficiency Program

applications that have been received and the most recent customer survey, Zia customers primarily hear about the Program through Zia's monthly Newsletter.

The most successful component of any of the Measures has been the Water Conservation Package. Because the Water Conservation Package is a free package to customers, Zia has been able to hand those out at the office and at community events such as the Lincoln County Home and Garden Show.

The biggest detriment to Zia's program for Plan Year 2019 and 2020 was the Covid-19 Pandemic. For public health and safety reasons, our contractors struggled to go into homes to directly install the components of the Low-Income Measures for Zia customers. Another consideration is performance by Zia's contractor for its Low-Income (now called Income Qualified) and Commercial Measures, which did not meet Zia's expectations in either Plan Year 2019 or 2020.

Table 1 shows Program participation. Participation in the Space Heating Measure has increased year over year. Participation in the Water Heating Measure has held steady primarily due to the immediate acceptance of the Water Conservation Packages. The New Construction Measure participation has increased minutely due to Zia's outreach to and education of contractors. Unfortunately, participation in the Low-Income Measure has declined each year. If the Low-Income goals had been met in Plan Year 2020, Zia would have had a cost-effective program with a UCT ratio above 1.

C. Evaluation of Current Measures

Evergreen Economics' M&V report regarding Zia's PY 2020 Energy Efficiency Program found Zia achieved overall net savings of 18,568 therms, but the overall program was not cost effective with a UCT ratio of 0.94.² Evergreen Economics further made five recommendations to assist in the evaluation of the Energy Efficiency Program. It was recognized that a contributing factor to the low UCT ratio was partially due to relatively low participation numbers, but Evergreen did not offer suggestions for participation improvement. Many of the recommendations in the M&V Report pertained to updating the therm savings values to reflect updated information available in the 2021 New Mexico Technical Resource Manual (the "2021 NM TRM") as well as adjusting the Net-to-Gross ("NTG") ratio to values consistent with those used by the NM Gas Company. Further, Evergreen identified that UCT ratios for PY2020 in the Space Heating, New Construction, and Low-Income Weatherization categories all had individual values of less than 1.0, and that this is the primary reason the overall value of the Program was below 1.0.

C. Potential New Measures

Zia proposes to add water heater tank insulation to the Water Heating Measure, programmable and smart thermostats as new components to the Space Heating Measure, and smart thermostats to the New Construction Measure for the 2022-2024 Energy Efficiency Program. As discussed below, Zia is also focused on ways to increase Program participation and update current Measures to make them more attractive to eligible customers.

² M&V Report attached to Zia's 2020 Annual Report, at 19-20.

D. Rejected Measures

Based on its research, coordination with energy efficiency experts, and customer feedback, Zia choose to forego adding the following into the proposed 2022-2024 Energy Efficiency Program: (1) luxury items such as fireplace inserts, natural gas log sets, gas lighting, barbeque grills, and outdoor fire pits; and (2) ancillary uses for natural gas such as cooking and clothes drying. Zia reviewed the Energy Savings Estimations for Energy Star Windows and Energy Star Clothes Dryer but rejected the components because none had high enough therm savings values to be beneficial to the Program.

IV. CURRENT ENERGY EFFICIENCY PROGRAM AND PROPOSED CHANGES

Based on its research and coordination with energy efficiency experts, as well as customer feedback and Commission approval, Zia’s 2019-2021 Energy Efficiency Program offered energy efficiency Measures in five general categories: (1) Space Heating, (2) Water Heating, (3) New Construction, (4) Low Income, and (5) Commercial. Within each of these general categories, Zia offered energy efficiency components designed to pinpoint high energy usage appliances, identify and eliminate drafts and energy leakage, and improve overall energy consumption and efficiency within both residential and commercial buildings. Because the majority of Zia’s customers and load are residential, and the primary drivers of residential gas use are space heating and water heating, Zia’s Program focused first on opportunities to increase energy efficiency in those areas. Zia’s 2022-2024 Energy Efficiency Program proposes to continue the five categories with updates. The Measures and changes to each Measure offered for each category are described below.

A. Space Heating.

Space heating accounts for the largest proportion of natural gas consumption in residential applications and offers opportunities for energy efficiency savings.³ Zia’s 2019-2021 Energy Efficiency Program offered six distinct components within this category which will carry over to the 2022-2024 Energy Efficiency Program. New to the 2022-2024 Energy Efficiency Program are components 7 & 8:

Table 4: Space Heating Components and Rebates

Component Description:	Current	Proposed
(1) Install Gas Furnace to AFUE ⁴ 92-94.9%.	\$150	\$200
(2) Install Gas Furnace to AFUE 95% or Higher.	\$200	\$275
(3) Upgrade Boiler/Hydronic Heating System to 0.90 or higher AFUE.	\$200	\$300
(4) Insulation from R-11 or Lower to R-30 or Higher.	\$250	\$300
(5) Gas Furnace/Heater Inspection or Tune-up.	\$25	\$25

³ See, e.g., American Gas Association (“AGA”) at www.aga.org, the U.S. Energy Information Administration (“EIA”) at <http://www.eia.gov/>, and the Department of Energy at <http://energy.gov/>.

⁴ “AFUE” is an acronym for Annual Fuel Utilization Efficiency.

(6) Upgrade from Electric Resistive Heat to Gas Forced Air Heat, AFUE 95% or Higher.	\$1,000	\$325
(7) Installation of Programmable Thermostat, Manual/No Thermostat to Programmable Thermostat.	NA	\$25
(8) Installation of Smart Thermostat, Manual/No Thermostat upgraded to Smart Thermostat.	NA	\$50

Zia has chosen to add two additional components with respect to thermostats. The first being a rebate for the installation of a programmable thermostat and the second being the installation of a smart thermostat. A programmable thermostat allows the customer to program the home's cooling and heating system, and pre-set temperatures for certain times of the day. Smart thermostats are also programmable, but they are also designed to learn behavior over time in order to automatically adjust the temperature in the home to accommodate the customer's habits, and may be wi-fi enabled.⁵ The therm savings when upgrading from a manually controlled furnace to a programmable or smart thermostat both show noticeable therm savings of 36.4 and 51.7 respectively. These components now have much lower incremental costs than when first on the market, and are expected to be a value-added item for our customers.

During Case No. 18-00280-UT, component 6 of the Space Heating Measure (upgrade from electric to gas heat) came into question. The Hearing Examiner's Recommended Decision in that case recommended that "[t]he 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). Zia should be required to revise its 2019-2021 Program Plan to continue offering a rebate for upgrading from electric resistive heat to natural gas forced air heat."⁶ The Final Order issued February 27, 2019 in that case adopted the Recommended Decision and required Zia to "continue offering rebates for upgrading from electric resistive heat to natural gas forced air heat."

In Evergreen's engineering review of the fuel conversion measure, the evaluation team found that the switch from electric resistive heat to gas forced air heat results in an overall savings to "source energy" and therefore provides a positive benefit to the utility system. In Evergreen's comparison of utility system benefits of reduced electricity consumption to the utility system cost of increased gas consumption, they converted the energy savings and consumption values into monetary impacts on the utility system, using units of dollars. "Comparing the utility system costs of increased gas consumption to the utility system benefits of decreased electricity consumption shows that this measure is cost effective, with utility system benefits being greater than utility

⁵ Neither a programmable or smart thermostat in Zia's Program would be monitored or controlled by Zia; rather, the thermostat would be controlled by the customer.

⁶ Case No. 18-00280-UT, Recommended Decision (February 7, 2019, as corrected) at 16.

system costs.”⁷ Evergreen’s cost effectiveness analysis concluded this component is cost effective, with a lifetime savings of \$432.

Based on Evergreen’s cost effectiveness analysis, Zia used the estimated lifetime value, 11 years, with the NTG ratio of 53% to calculate avoided cost of gas per year, which resulted in a Net Benefit of \$432. The overall gross annual therm savings was calculated to be 117.5. Zia has chosen to keep the Measure as an incentive for those customers electing to participate in that manner.

Program Plan Exhibit C illustrates the expected savings in therms, incentives, expected life, and costs involved for the proposed update to the Space Heating Measure.

B. Water Heating.

Following space heating, water heating accounts for the second largest proportion of natural gas consumption in residential applications.⁸ Zia’s Program addresses this issue by focusing on increasing efficiency of current water heaters and reducing overall water usage to reduce the need for water heating. Zia’s 2019-2021 Energy Efficiency Program offered three distinct components within this category:

Table 5: Water Heating Measures and Rebates

Component Description:	Current	Proposed
(1) Water Conservation Package – Low Flow Showerhead (1) and Faucet Aerator (2)	\$13	\$16.15
(2) Install Existing Water Heaters:		
(a) Natural Gas to Natural Gas EF ⁹ of 0.67 or higher	\$125	\$150
(b) Natural Gas to Tankless	\$200	\$225
(c) Natural Gas to Condensing Storage Tank Water Heater	\$200	\$200
(d) Electric to Natural Gas EF of 0.67 or higher	\$350	\$275
(3) Water Heater Tank Insulation	NA	\$20

Zia proposes to add a rebate for water heat tank insulation to the Water Heating Measure for the 2022-2024 Energy Efficiency Program. Both prospective contractors listed water heater tank insulation as part of their proposed program for the Income Qualified Measure. Based on the 2021 NM TRM, a customer may save an estimated 20.9 therms annually by insulating the water heater storage tank. The insulation is estimated to cost the customer \$40 thus making the component a low cost option to save energy.

During Case No. 18-00280-UT, component 3(d) of the Water Heating Measure (upgrade from electric to gas heat) came into question. The Hearing Examiner’s Recommended Decision

⁷ M&V Report attached to 2020 Annual Report, at 12.

⁸ See <https://www.eia.gov/todayinenergy/detail.cfm?id=10271>.

⁹ “EF” is an acronym for Energy Factor.

referred to the Final Order in Case No. 12-00317-UT, which noted that “[a]s argued by PNM and CAE/WRA, the EUEA does not distinguish between different types of energy in the TRC Test or in its directive to reduce energy demand and consumption.”¹⁰ “The Commission’s reasoning in Case No. 12-000317-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).”¹¹ “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.”¹² The Final Order adopted the Recommended Decision and ordered Zia to “continue offering rebates for..... upgrading from an electric water heater to a natural gas water heater with an EF or 0.67 or greater.”

During the review of the Program, Evergreen validated the savings assumptions and calculations for the Water Heating Measure except for component 3(d). Evergreen again used the cost effectiveness analysis as described in the Space Heating section to determine the conversion from electric to a gas water heater, which results in an overall savings to source energy and therefore a positive benefit to the utility system. “Comparing the utility system costs of increased gas consumption to the utility system benefits of decreased electricity consumption shows that this measure is cost effective, with utility system benefits being greater than utility system costs.”¹³ Evergreen’s cost effectiveness analysis concluded that this Measure is cost effective, with a lifetime savings of \$578.

Based on Evergreen’s cost effectiveness analysis results, Zia used the estimated lifetime value, 12 years, with the NTG ratio of 48% to calculate avoided cost of gas per year which resulted in a Net Benefit of \$578. The overall gross annual therm savings was calculated to be 158.8.

Zia is continuing the use of a Water Conservation Package that includes a low flow showerhead and two faucet aerators along with a reusable bag, Teflon tape for installation, and literature concerning the other Zia energy efficiency Measures. The package is an easy and professional way to distribute the showerhead and aerators to customers and will be counted as one component of the Water Heating Measure. However, the updated 2021 NM TRM released on March 9, 2021 reduced the therm savings attributable to the Water Conservation Package from 40.1 therms to a mere 13.1 therms, thus reducing the cost effectiveness of the package and affecting the overall UCT performance of the Water Heating Measure.

Program Plan Exhibit D illustrates the expected number of participants, savings in therms, incentives, expected life, and costs involved for the proposed update to the Water Heating Measure.

¹⁰ Case No. 18-00280-UT, Recommended Decision (February 7, 2019, as corrected) at 15.

¹¹ *Id.* at 16.

¹² *Id.* at 18.

¹³ M&V Report attached to 2020 Annual Report, at 15.

C. New Construction.

Zia continues to encourage homebuilders to construct more energy efficient and environmentally friendly homes by offering incentives to reduce overall energy usage in new home or building construction. Without energy efficiency incentives, some homebuilders may design and build homes based on the lowest cost per square foot and not with overall energy usage and costs in mind. Providing new homebuilders an incentive to offset costs of higher efficiency upgrades can help ensure new energy efficient homes and buildings become a priority.

Zia offers incentives based on new home size for both space and water heating, inclusion of a smart thermostat and insulation with a higher R-value than set minimums. For larger new homes, 2,000 sq. ft. and above, Zia offers incentives for having four natural gas outlets. For smaller new homes, less than 2,000 sq. ft., Zia offers incentives for having just three natural gas outlets.

After receiving feedback from several builders in Zia's service area, Zia's 2019-2021 Energy Efficiency Program included a variety of insulation methods that qualify under the Energy Efficiency code. Specifically, several builders use Blow-In Blanket Systems ("BIBS") to insulate the whole house along with other techniques to prevent air loss and heat transfer. The BIBS system of insulating new homes is a more energy efficient alternative to standard batt insulation¹⁴ and is included in the Energy Star ratings for energy efficient homes.

For the 2022-2024 Energy Efficiency Program, Zia added a smart thermostat to the criteria needed to receive the New Construction rebate. The addition of the smart thermostat further encourages the builder to provide an additional energy saving option for the new homeowner at a minimal cost. For the times when the builder is undecided, the rebate can help encourage the move up to additional therm savings in the home upon completion of the build, instead of sometime later.

Program Plan Exhibit E illustrates expected number of participants, savings in therms, incentives, expected life, and costs involved for the proposed update to the New Construction Measure.

D. Income Qualified (Formerly Low-Income).

In accordance with the Energy Efficiency Rule, 17.7.2.8.K and 17.7.2.9 NMAC, Zia proposes that no less than 5% of the energy efficiency funding shall be specifically directed to measures for income qualified customers. Zia previously selected EnergyWorks as the administrator for its PY2019 and 2020 Low-Income Residential and Commercial Measures because EnergyWorks had existing relationships within Zia's service areas and proposed the best cost basis for Zia's proposed components. Zia has also updated the name of this Measure from Low-Income to Income Qualified. According to NMAC 17.7.2.7(D), the customer must meet the criteria of "an annual household income at or below two hundred percent of the federal poverty level, as published annually by the United State department of health and human services."

¹⁴ "Batt" insulation is typically pre-cut into flat pieces or rolls that are manually installed between the studs, rafters, and posts of a home as it is being built.

Currently, Zia through EnergyWorks, offers energy efficient components to be a deliverable specific to each home and based on individual customer needs. EnergyWorks offers low-flow showerheads, faucet aerators, water heater pipe insulation, water heater tank insulation, infiltration reduction, programmable thermostats, and duct sealing. Participation in this Measure has decreased steadily since inception. EnergyWorks' performance has not met the goals Zia set several years ago when designing the Low-Income Measure.

Zia has decided to contract with CLEAResult to implement the Income Qualified Measure for the next three Plan Years. As part of its proposal, CLEAResult provided a target therm savings, target participation, and estimated administration costs and rebate/incentive costs. For the proposed Income Qualified Measure, CLEAResult will offer a two-prong 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. Program Plan Exhibit F illustrates the quoted savings in therms, incentives, expected life, and costs involved for the proposed update to the Income Qualified Measure.

E. Commercial.

Currently, Zia through its contractor, Energy Works, offers several direct installation options to Commercial customers to assist with energy savings. The direct install components target water conservation and heating savings and are free to Zia commercial customers. Zia also kept the option open to provide a rebate to commercial customers who installed an energy efficient appliance or measure. The rebate was based upon a \$1.50/therm saved.

Zia's Commercial Measure was not well adopted. Zia now proposes to contract with CLEAResult to implement the Commercial Measure. CLEAResult proposes to implement the Measure in a two-prong approach. They propose to directly install basic energy saving components such as pre-rinse spray nozzles, low-flow aerators, and weather-stripping. In addition, CLEAResult also proposes 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 achieve improved participation and results by utilizing the expertise of this nation-wide company.

V. PARTICIPATION CRITERIA AND PROGRAM PROMOTION

A. Program Participation Criteria

Rebates or incentives are available to any current or prospective and eligible Zia customers. Specific Measures may apply to specific rate classes (for example, the Commercial Measure applies only to Zia's Small Commercial and Large Commercial rate classes). Only qualified natural gas and HVAC equipment purchased, installed, or serviced during the timeframe that the Program is in effect is considered for a rebate or incentive. Rebate checks or incentives are subject to availability of Program funds. Completed applications are reviewed and processed by Zia on a

first-come, first-served basis until program funds are depleted. Zia reserves the right for its representatives, contractors, and agents to inspect completed upgrades to ensure compliance with both its Energy Efficiency Program and New Mexico natural gas safety standards.

B. Program Promotion

Zia's goal is to keep the Program as simple and straightforward as possible to administer while keeping costs to a minimum. Zia will dedicate one full-time employee to act as Program Manager and directly implement the majority of the Program. The Program Manager is required to travel between operating districts to both promote the Program and verify installation of approved Measures. The Program Manager is responsible for the following:

- Distribute the Water Conservation Package, which includes low flow showerheads and faucet aerators;
- Work with Zia's Operations Department to verify installation of Program qualifying appliances;
- Promote the program with customers, contractors and retailers;
- Verify the installation of additional insulation;
- Process and approve rebate applications;
- Follow-up with customers to ensure installation of the various Program Measures; Connect Income Qualified and Commercial customers with CLEAResult for evaluation of potential energy efficiency upgrades;
- Maintain annual participation records;
- Coordinate with and provide Program data to the M&V evaluator; and
- Coordinate preparation of the Annual Report and other regulatory filings.

CLEAResult will begin to implement Zia's Income Qualified and Commercial energy efficiency Measures. CLEAResult has several years of experience implementing energy efficiency programs and currently works with El Paso Electric Company ("EPE"), Public Service Company of New Mexico ("PNM"), and New Mexico Gas Company ("NMGC") on their energy efficiency programs. CLEAResult has the national experience and expertise to assist income qualified customers with installation of the various items included in Zia's Program. CLEAResult also has the industry connections and trade allies to successfully identify and implement energy saving options for commercial customers such as school districts, small businesses, restaurants, franchise organizations, and large chain businesses. Zia expects that CLEAResult's expertise and efforts, along with the gradual easing of COVID-19 Pandemic impacts, will help to increase Program participation in the 2022-2024 Plan Years.

VI. PROGRAM COST/BENEFIT ANALYSIS

A. Proposed Budget

Zia proposes a Program Year budget of \$514,414 for the next Energy Efficiency Program Plan, which includes three Program Years: PY2022, PY2023, and PY2024. The proposed budget is an increase of \$140,836 from the currently approved budget of \$373,578. The increase is primarily due to the external administration costs from the contractor. The annual budget is

comprised of General Administration expenses and Direct expenses. The proposed PY2022 General Administration budget is \$166,534 and includes Program Manager labor, travel and meals, education, promotion, training, legal expenses, incentive, and M&V expense). The proposed Direct expenses for PY2022 total \$347,880 and include \$122,446 in external administration and \$225,434 in rebates and incentives. Exhibit H, Page 1, “Program Administration Expense Budget” and Exhibit H, Page 2, “Direct Expense Summary” provide further detail for each piece of the budget. The cost labelled “Independent Measurement and Verification” on Exhibit H, Page 1, Line 12 is the estimated cost for the Independent Program Evaluator required by 17.7.2.15 NMAC. Currently Evergreen Economics serves as the Independent Program Evaluator for the state of New Mexico. As discussed in the Direct Testimony and Exhibits of Leslie A. Graham, Zia determined its proposed Plan Year budget is 2.1% of total affected customer bills, below the 3% threshold limit.

B. UCT Analysis

In New Mexico, a utility’s energy efficiency program must provide cost-effective measures that reduce energy demand and energy consumption. To prove cost-effectiveness, the Commission requires that a utility show that the Program meets the Utility Cost Test or UCT.¹⁵ The UCT compares the benefit from the utility’s avoided supply side costs to the cost of offering the measure. If the avoided costs outweigh or are larger than the cost to the utility to offer the program, then the program is deemed cost effective; therefore, a program’s UCT must be greater than 1.0 for a program to be deemed cost effective.

1. Overall UCT.

Zia estimates that its proposed Energy Efficiency Program starting with PY 2022 will result in a projected overall UCT ratio of 1.59. A summary table of the proposed measures and resulting UCT ratio is on Exhibit I, and the UCT ratio of each measure is discussed below. Zia has developed a simplified UCT spreadsheet to determine the UCT for the selected Measures based upon PNM’s spreadsheet. In addition to an overall portfolio UCT ratio of 1.59, each category of measures in the portfolio (*e.g.*, space heating, water heating, etc.) also resulted in a UCT ratio over 1.0.

Evergreen Economics validated the cost effectiveness of Zia’s 2020 Energy Efficiency Program along with the parameters and assumptions originally made to predict the initial program in the *Evaluation of the 2020 Zia Natural Gas Company Energy Efficiency Program: Final Report*, which was attached to Zia’s 2020 Annual Report filed with the Commission. The inputs to the cost effectiveness test are based on the experience of other utilities, published data for energy savings, and results from an internal customer survey. The information needed to calculate the UCT is energy savings in therms, expected useful life, number of participants, proposed rebate or incentive, a free ridership factor, direct and allocated expenses, projected avoided supply side costs, and the discount rate.

¹⁵ The Utility Cost Test, or UCT, is only one of several ways to show cost effectiveness and is fairly limited in its scope. Although it does calculate energy efficiency cost effectiveness from the perspective of a single utility, it misses the broader scope of the energy efficiency of home and energy conservation on the larger scale of an area or region.

To determine the energy savings in therms and expected useful life, Zia has used the New Mexico Technical Resource Manual dated March 9, 2021 (“2021 NM TRM”). If a potential component was not listed in the 2021 NM TRM, data from other state Technical Resource/Reference Manuals were used. To estimate participation, Zia used historical participation as well as a prediction that continued promotion would increase participation in the Program. The number of participants used in the calculation refers to the number of units installed rather than number of customers. For example, a customer going through a major remodel may choose to upgrade both the furnace and water heater as well as install a Water Conservation Package. Each one of those would count as one in the calculation for a total of three rebates. The free ridership factor was taken directly from the recommendation of Evergreen Economics and NM Gas Company’s filing and experience. The discount rate is used to determine the net present value of the lifetime benefits received by the customer for saving energy. Zia used the Ratepayer Discount Rate, which is the rate that Zia’s customers might experience when making home buying decisions. The Ratepayer Discount Rate based on 30-year fixed mortgage rate in New Mexico at the time of filing is 3.2%. Use of the Ratepayer Discount Rate was approved in NM Gas Company’s most recent Energy Efficiency filing, Commission Case No. 19-00248-UT, and is discussed further in the Direct Testimony and Exhibits of Leslie A. Graham.

The avoided supply side costs experienced by the utility should naturally be the avoided cost of purchasing gas because the customer is no longer burning as much gas. Therefore, Zia used Zia’s current Purchase Gas Adjustment Clause Transportation factor and the Extraordinary Cost Factor approve in Commission Case No 21-00096-UT plus NYMEX Henry Hub Gas Futures projections published in the August 12, 2021 S&P Global Platts Gas Daily report and the Energy Information Administration’s (“EIA”) Annual Energy Outlook 2021 to project the total purchased gas cost. Both NM Gas Company and Raton Natural Gas Co. (“RNG”) included their distribution and transmission costs to determine the avoided supply side cost; Zia similarly added its current distribution and transmission cost of service to the price projection. Further details are provided in the Direct Testimony and Exhibits of Leslie A. Graham.

2. UCT for Individual Categories of Measures

a. **Space Heating.** The UCT ratio for Zia’s proposed PY2022 Space Heating Measure is 1.58. Although improving furnace efficiency and insulation both save energy, the warm New Mexico climate makes it challenging to provide a highly cost-effective program. The challenge is to provide enough of a rebate to entice customers to choose the higher cost of the more efficient appliance while still maintaining a cost-effective program. Program Plan Exhibit C outlines each of the components in the Space Heating Measure. The table shows the projected number of units, the projected energy savings in therms, an estimated cost to the customer, the proposed rebate, the potential expected useful life (“EUL”), a free ridership score, and the source for the information provided. The 2021 NM TRM estimates energy saving for heating measures in four different climate zones based on the heating degree days (“HDD”) in those zones. Zia’s operating districts are located in all four zones. To determine an average savings value, the energy savings from each zone was allocated based on customer count in each operating district.

In the 2021 NM TRM, a gas furnace has a baseline efficiency rating of 80% AFUE. Zia provides a rebate if a customer installs a gas furnace with an AFUE to above 92% or above 95% AFUE. Zia also provides a rebate for the installation of a new residential sized Energy Star qualified high efficiency gas fired condensing boiler for residential space heating, baseline having an AFUE of 82% while the Energy Star has an AFUE of at least 90%.

Insulation was included in the Space Heating Measure because it has heat load sensitive energy savings. The energy savings from improved insulation are very dependent upon initial insulation rating, house size, and where the insulation is installed. Zia chose to provide a rebate for ceiling insulation for any residential or small commercial customer with a starting insulation rating factor less than or equal to R-11 and a final insulation rating factor of more than R-30. As a low-cost option, inspecting and properly maintaining a gas furnace will result in higher heating efficiency with extended equipment life. Zia used the Arkansas TRM to determine savings because gas furnace inspection is not included in the 2021 NM TRM. Finally, Zia added the thermostat measurements to include a rebate for the more efficient operation of source heating.

In summary, for a furnace upgrade Zia offers a rebate of \$200 for an installation of between 92% and 94.9% AFUE or \$275 for an installation of above 95% AFUE. The rebate for an upgrade to a hydronic or radiant heating system with an AFUE at or above 90% is \$300. The rebate for installing or improving ceiling insulation from an initial rating below R-11 to a rate of R-30 or higher is \$300. Zia provides a rebate of \$25 for proof of an annual gas furnace 16-point inspection. For customers that choose to convert from electric space heating to gas source heating, with an AFUE of 95% or higher, a rebate of \$325 is offered. In addition, there is a rebate available for upgrading from a manual controlled thermostat to a programmable or smart thermostat, \$25 and \$50 respectively.

b. **Water Heating.** The UCT ratio for Zia's proposed Water Heating Measure is 1.52. The water conservation package, which includes a low flow showerhead and two faucet aerators, has been a successful Measure for Zia with high participation rates and low cost to implement. Most of the data for the Water Heating Measure and its components were derived from the 2021 NM TRM. Program Plan Exhibit D shows the components of the Water Heating Measure and the various input values used to determine cost effectiveness. In summary, Zia provides a \$150 rebate for an upgrade to a natural gas water heater with a minimum EF of 0.67 or higher. The rebate for an upgrade from a standard water heater to a tankless water heater is \$225 or to a condensing storage water heater is \$200. For customers who elect to convert from an electric water heater to a gas water heater with a minimum EF of 0.67 or higher Zia provides a \$275 rebate. Finally, for the installation of water heater tank insulation Zia provides a \$20 rebate.

c. **New Construction.** The projected energy savings for the New Construction Measure is based upon the difference between baseline gas appliances and insulation and higher efficiency gas appliances and better insulation as well as the addition of a smart thermostat. The UCT ratio for the New Construction Measure is 1.58. For a smaller new home of 2,000 sq ft or less, the gas furnace must have an AFUE of 92% or higher, the water heater should be tankless with an Energy Factor ("EF") of 0.82 or gas condensing storage with an EF of 0.8 or at a minimum a basic water heater with an EF of 0.67 or greater, and the insulation must meet Energy

Conservation Code.¹⁶ In addition, the home must have a connection for a third gas appliance. The rebate for the smaller home is \$600. The rebate for the larger new home with greater than 2,000 sq ft is \$900. The larger home must also include the more efficient gas furnace and water heater and higher rated insulation like the criteria for the smaller home. It must also have one more gas appliance and a connection for a fourth appliance. The type of smart thermostat is the builder's choice. The components of the New Home Measure are shown on Program Plan Exhibit E.

d. ***Income Qualified.*** For the PY2022, Zia projects that approximately 32% of the Energy Efficiency Program budget will be allocated to the Income Qualified Measure, well above the 5% required minimum. The Income Qualified Measure is designed to provide multiple energy saving options that may be applied on an as-needed basis to the customer's home. The components of the Measure would provide not only gas savings, but also electric savings. CLEAResult (Zia's new contractor for implementation of the Income Qualified Measure) utilizes a "whole-house" approach for residential customers, and will pair customers with non-profit programs to install more prescriptive energy efficiency measures such as new space heating, water heating, or insulation. Based on the target savings and the quoted external administration and rebate/incentive expenses, as well as an allocation of administrative costs, the projected UCT result is 1.49. As allowed in NMAC 17.7.2.9.B.4, Zia may assume that 20% of the calculated energy savings is the reasonable value of reductions in working capital, reduced collection costs, lower bad-debt expense, improved customer service, effectiveness, and other appropriate factors qualifying as utility system economic benefits. Therefore, to calculate the UCT for the Income Qualified Measure, Zia grossed up the calculated energy savings by 20% to determine the monetary benefit. See Program Plan Exhibit F for more details.

e. ***Commercial.*** Zia's Commercial Measure had only one participant for the PY 2020. Evergreen Economics' evaluation team found the savings values used by Zia match the values found in the 2021 NM TRM. Zia is striving to increase participation numbers in the commercial measurements by selecting its new contractor, CLEAResult, and focusing on simple, direct install, water heating saving components that will result in therm savings at a very low cost. Additionally, CLEAResult will work with commercial customers to implement prescriptive energy saving components specific to the business' needs. CLEAResult will implement the Program. Based on the target savings and the quoted external administration and rebate costs as well as an allocation of administrative costs, the projected UCT result is 1.71. See Program Plan Exhibit G for more details.

VII. ENERGY EFFICIENCY RATE RIDER

On June 30, 2021, Zia filed Advice Notice No. 63, which reconciled the Energy Efficiency Rate Rider No. 2 and became effective on August 1, 2021. Advice Notice No. 63 set the Energy Efficiency Rider Rate at \$0.00721 per CSCF. In the current application, Zia does not propose to revise the Energy Efficiency Rider tariff rate or language.

¹⁶ EMNRD reports that a new building energy code went into effect March 25, 2021. Builders will now need to comply with the requirements of the 2018 International Energy Conservation Code (2018 IECC) and New Mexico Construction Industries Commission Amendments. See <https://www.emnrd.nm.gov/ecmd/energy-efficiency/>.

VIII. CONCLUSION

Zia's 2022-2024 Energy Efficiency Program and Second Revised Rate Rider No. 2 meet or exceed the Commission's standards for approval. Following consultation with energy efficiency experts, research into various energy efficiency Measures and components, and feedback from customers and contractors, Zia proposes to continue offering energy efficiency Measures in five general categories: (1) Space Heating, (2) Water Heating, (3) New Construction, (4) Income Qualified, and (5) Commercial. Zia's Energy Efficiency Program is available to customers in its residential and commercial rate classes and provides every affected customer with the opportunity to participate and benefit economically. Zia proposes its Plan Year budget of \$514,414, which will not exceed 3% of the total affected customer bills for the Plan Year. Zia estimates its Energy Efficiency Program Plan will result in benefit-cost ratios above 1.0 pursuant to the Commission's Utility Cost Test standards, both overall and for each of the five proposed Measures. Zia expects its revisions to its Program and performance by its new contractor for the Income Qualified and Commercial Measures, along with gradual easing of COVID-19 Pandemic impacts, will increase Program participation. Zia looks forward to continuing its Energy Efficiency Program to benefit its customers.

NATURAL GAS NEWS



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ENERGY EFFICIENCY CUSTOMER SURVEY QUESTIONNAIRE

Help us better serve you. Please take a moment to fill out this brief survey and be entered for a chance to win Ga\$ Buck\$. The answers provided in this survey will be compiled and included in our annual PRC filing and to also further improve our Energy Efficiency program in 2022 and beyond.

Upon completion of this survey, please fax it to 575-378-7011; return it to your local office; or include it in your payment envelope. We appreciate your assistance!

1. **Have you replaced or upgraded any natural gas appliances in your home in the past 3 years (2019-Present)?**

YES NO

If yes, please check those that apply:

- Water Heater
 Furnace
 Other: _____

2. **If you answered "YES" to question 1, did you apply for a rebate from Zia Natural Gas Company for installing a more energy efficient natural gas appliance?**

YES NO

3. **If you answered "YES" to question 1, did the Energy Efficiency rebates offered by Zia Natural Gas Company serve as an incentive for you to purchase a higher efficiency natural gas appliance?**

YES NO

4. **In the past three years, have you received a free Water Conservation Package (Green bag containing a shower head and aerators) from Zia Natural Gas Company?**

YES NO

5. **In the past three years, have you participated in Zia Natural Gas Company's Annual Furnace Inspection rebate program?**

YES NO

6. **Prior to completing this survey, were you aware of Zia Natural Gas Company's Energy Efficiency Program and Rebates?**

YES NO

7. **If you answered "YES" to question 5, how did you first become aware of Zia Natural Gas Company's Energy Efficiency and Rebate program?**

- Radio Ads Newspaper Ads Zia Newsletter
 Zia Office Friend Not aware

8. **When considering energy efficiency which is more important to you?**

- Environment Cost Savings Both

9. **With rebates and cost savings as an incentive, how likely are you to participate in Zia Natural Gas Company's Energy Efficiency program in the next year?**

Not Likely Somewhat Likely Likely Very Likely

10. **What additional Energy Efficiency installation rebates would you like to see included in Zia Natural Gas Company's next Energy Efficiency Program?**

- Smart Thermostat Rebate
 Energy Star™ Windows Rebate
 Energy Star™ Gas Clothes Dryer
 Energy Star™ Gas Range/Stove
 Other: _____

11. **Are you willing to continue to pay a small charge (Energy Efficient Rate Rider) each month to fund Energy Efficiency promotion and rebates? (The Energy Efficiency Rate Rider was approved in Case # 16-0021-UT and is not optional for qualified rate classes)**

YES NO

Additional Comments: _____

As a valued customer of Zia Natural Gas Company, your cooperation is vital to the success of our Energy Efficiency program. As a thank you for participating in this brief survey, we would like to enter your name in our Ga\$ Buck\$ drawing for your chance to win Ga\$ Buck\$.

Yes, please enter my name in the Ga\$ Buck\$ drawing:

Name: _____
(Please print name)

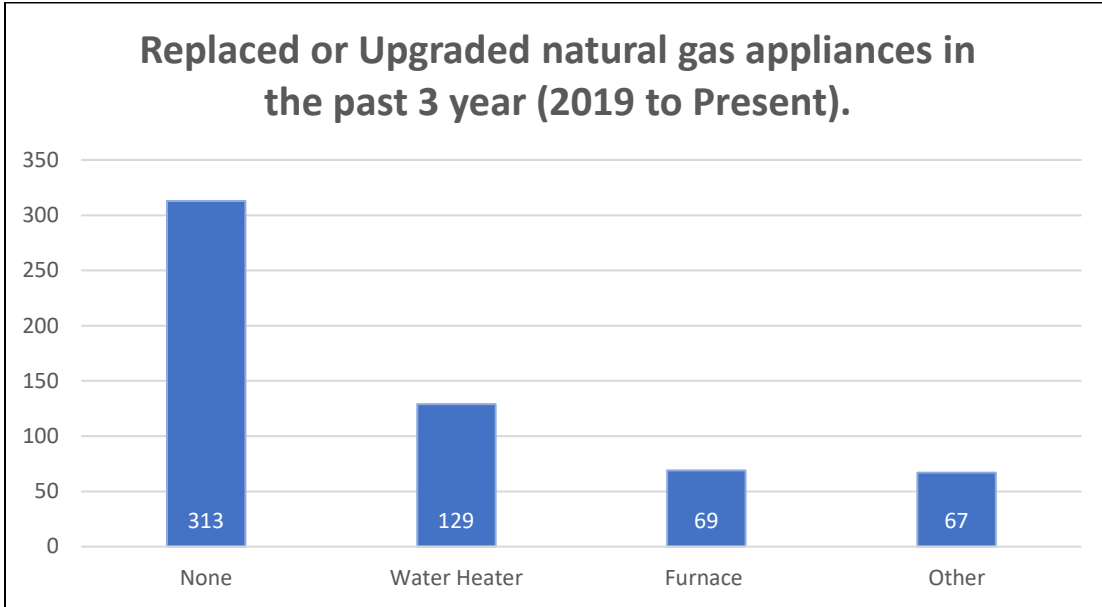
Acct: _____
(Please print account number)

Deadline for survey submission is July 31, 2021.

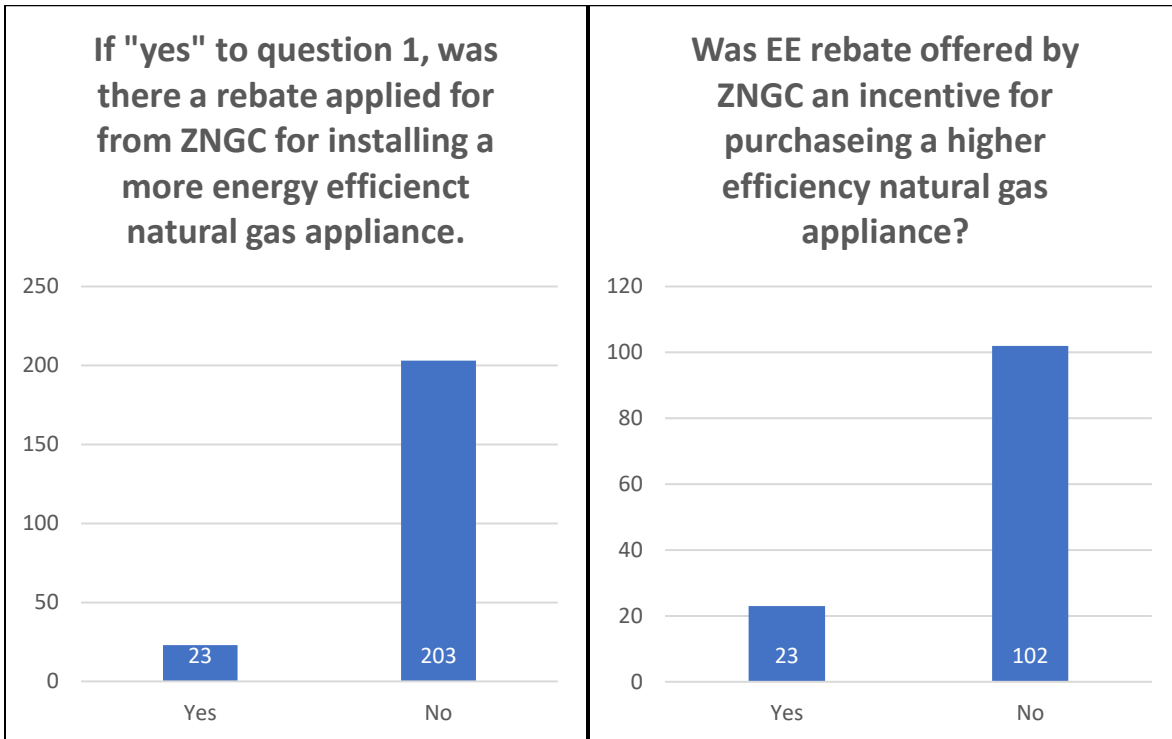
Our offices will be closed on Monday, July 5, 2021, in observance of Independence Day.



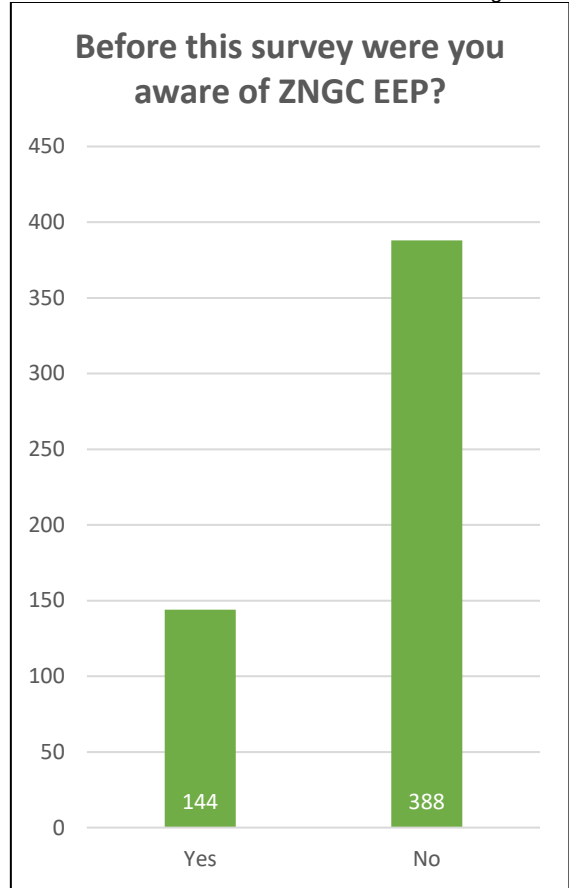
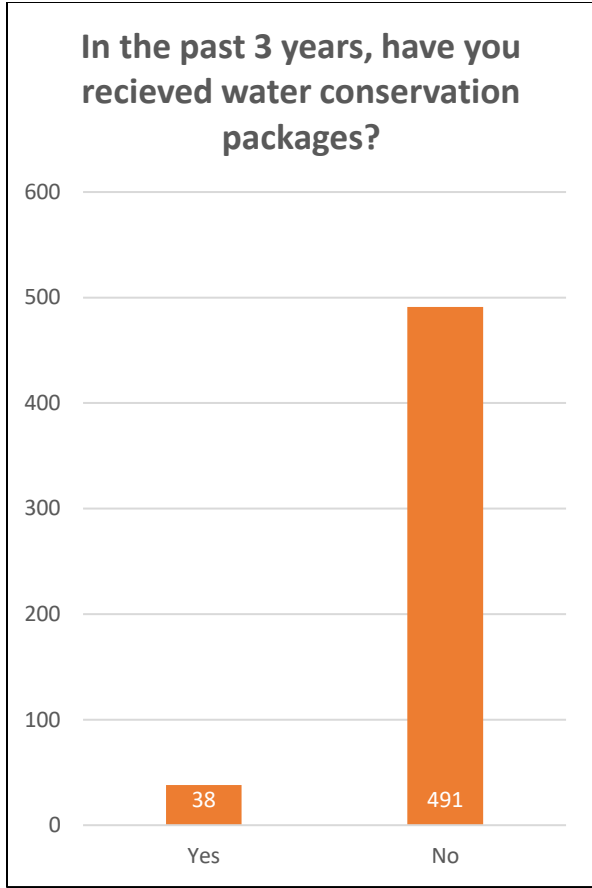
Exhibit B: Customer Survey Results



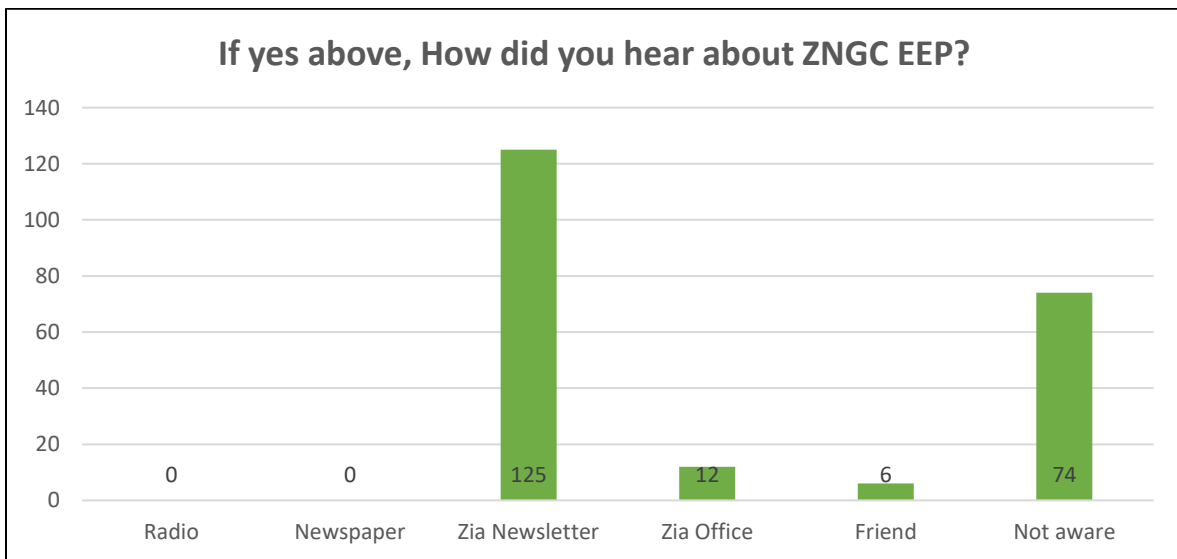
A majority of the surveys received indicate only a few have replaced or upgraded their natural gas appliances.



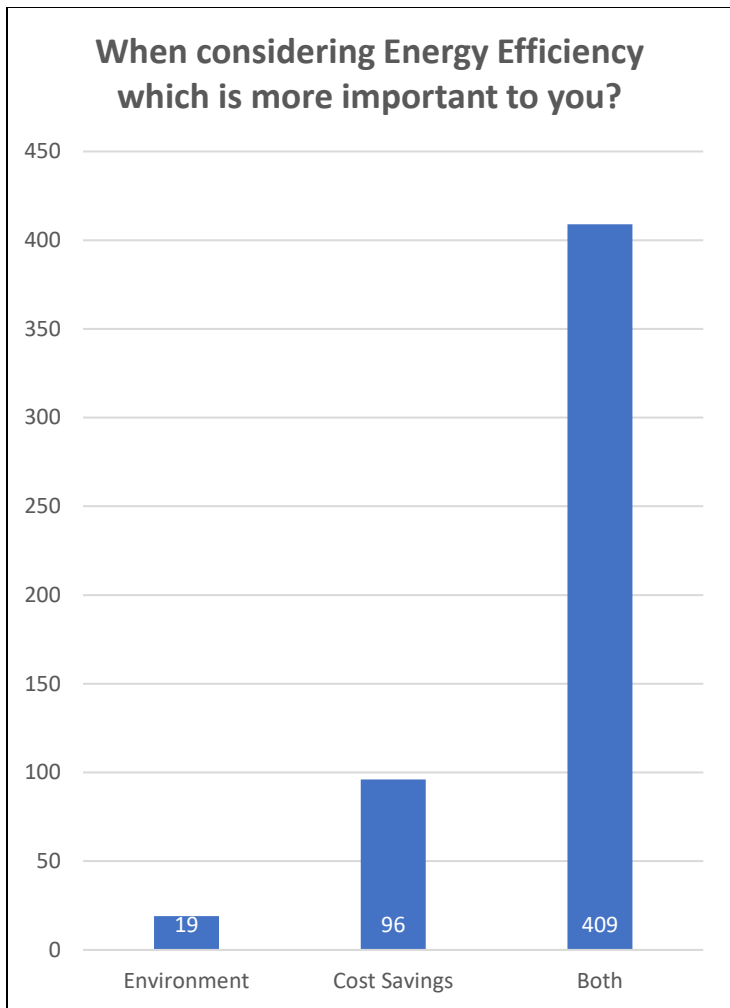
The survey results show very few customers applied for a rebate and the rebate offered was not an incentive to upgrade to a higher efficiency product.



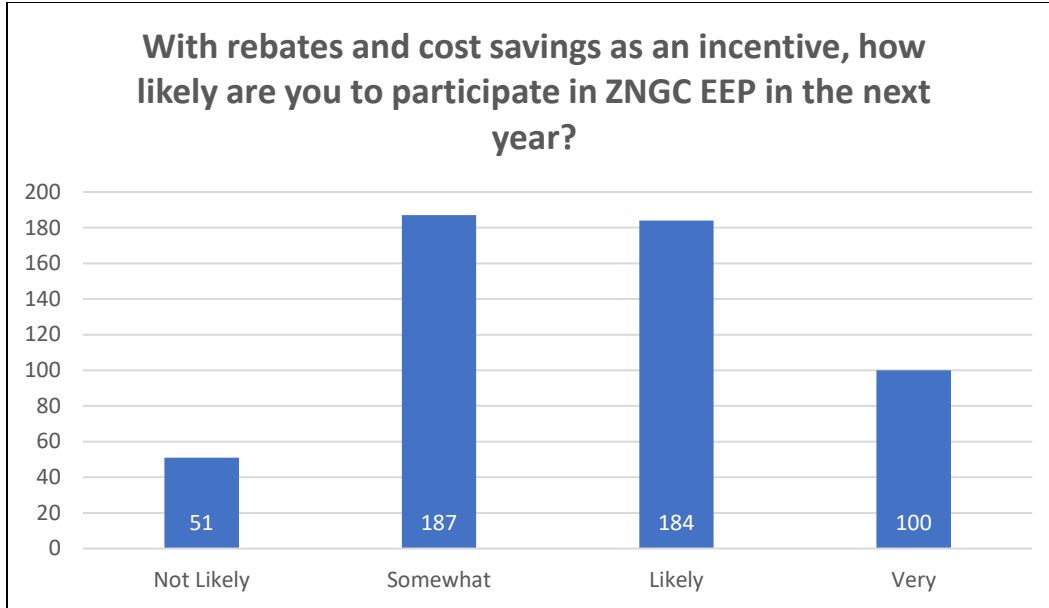
Of the approximately 540 surveys received, only 38 have received a Water Conservation Package and the majority of those customers are not aware of the Energy Efficiency Program.



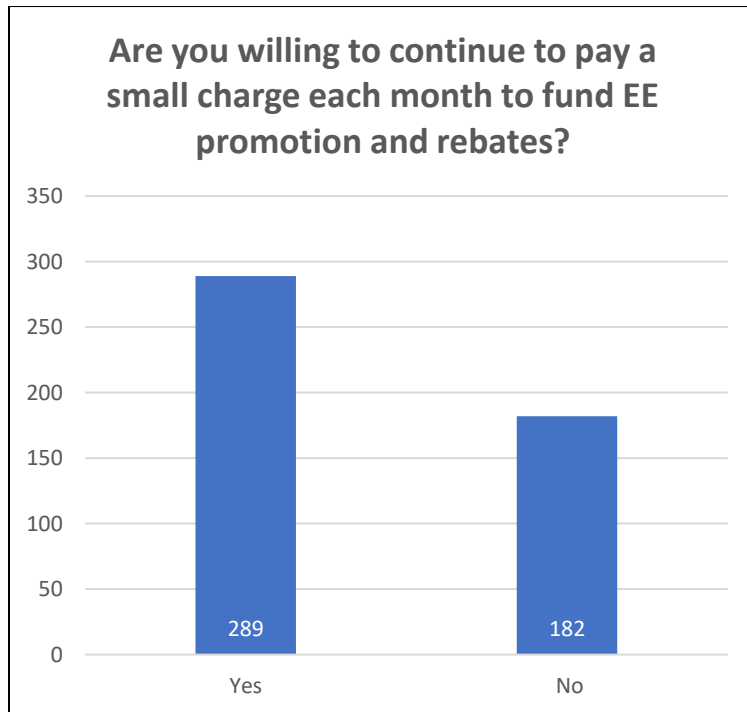
While the majority of customers participating in the survey answered they were not previously aware of the EEP, of the 144 whom were aware, 125 of them learned about the program through ZNGC’s newsletter.



Most customers indicated both cost savings and the environment are important when looking for new appliances.



471 customers answered they are somewhat to very likely to participate in the EE program in the coming year. Zia received several comments from customers stating their participation is based on whether or not a furnace or water heater fails. Indicating customers are disinclined to purchase an energy efficient appliance to replace an appliance solely to increase energy efficiency.



ZNGC customers indicated they are willing to continue paying the rate rider in order to fund the energy efficiency program. Numerous comments indicate the customer base does not know what they are paying, which is something ZNGC will try to inform them of in future newsletters.

Space Heating Measure

Criteria and Description:

- Affected Customer Class: Rate No. 1 - Residential, Rate No. 2 - Small Commercial, Current or Prospective
- Must be purchased, installed or serviced during the (DATES OF PROGRAM)
- Gas Furnace Inspection Minimum of 16 point inspection
- Must submit a complete application to be eligible for rebate or incentive.
- Rebate Checks or Incentives are subject to program funds and processed on first-come, first-served basis.
- Zia reserves the right to inspect completed installations to verify compliance with the Energy Efficiency Programs and applicable building codes.

Component	Units	Savings in Therm	Participant's cost	Utility Rebate	Expected Useful Life	Free Ridership	Sources
1 Install Gas Furnace Rated AFUE 92-94.9%	30	51.0	\$ 802	\$ 200	20	47%	NM Technical Resource Manual, March 9th, 2021
2 Install Gas Furnace Rated AFUE 95% or higher	50	61.7	\$ 1,438	\$ 275	20	47%	NM Technical Resource Manual, March 9th, 2021
3 Upgrade/Install Boiler/Hydronic Heating System Rated 90% AFUE or higher	10	174.8	\$ 1,272	\$ 300	20	47%	NM Technical Resource Manual, March 9th, 2021
4 Insulation from R-11 or lower to R-30 or higher	20	113.2	\$ 1,330	\$ 300	30	25%	NM Technical Resource Manual, March 9th, 2021
5 Gas Furnace Tune-up	125	27.6	\$ 125	\$ 25	3	20%	AR TRM, Ver. 3, Vol 2, 2013, Assistance from ADM; Part. Cost local HVAC
6 Upgrade from Electric Resistive Heat to Gas Forced Air Heat, AFUE 95% or higher	5	117.5	\$ 1,500	\$ 325	18	47%	PA TRM, Lowe's, PNM Generation Portfolio; Evergreen Economics review of net savings
7 Install Programmable Thermostat	50	36.4	\$ 40	\$ 25	10	20%	NM Technical Resource Manual, March 9th, 2021
8 Install Smart Thermostat	50	51.7	\$ 175	\$ 50	10	20%	NM Technical Resource Manual, March 9th, 2021
Weighted Average Result	340	50.2	497.5	109.6	11.4	28%	

Water Heating Measure

Criteria and Description:

- Affected Customer Class: Rate No. 1 - Residential, Rate No. 2 - Small Commercial, Current or Prospective
- Must be purchased, installed or serviced during the (DATES OF PROGRAM)
- Low Flow Showerhead must be 1.5 gpm, Kitchen Faucet Aerator - 1.5 gpm, bathroom faucet aerator - 1.0 gpm
- Must submit a complete application to be eligible for rebate or incentive.
- Free showerhead or faucet aerator kit available upon receipt of complete application.
- Rebate Checks or Incentives are subject to program funds and processed on first-come, first-served basis.
- Zia reserves the right to inspect completed installations to verify compliance with the Energy Efficiency Programs and applicable building codes.

Component	Units	Savings in Therm	Participant's cost	Rebate/ Incentive Value	Expected Useful Life	Free Ridership	Sources
1 Hot Water Conservation Package	500	13.09	\$ -	\$ 16.15	10	40%	NM Technical Resource Manual, March 9th, 2021
2 Natural Gas to Natural Gas Energy Factor of 0.67 or higher	40	69.0	\$ 117	\$ 150	11	52%	NM Technical Resource Manual, March 9th, 2021
3 Natural Gas to Tankless	60	125.5	\$ 547	\$ 225	20	52%	NM Technical Resource Manual, March 9th, 2021
4 Natural Gas to Condensing Storage Tank Water Heater	5	43.8	\$ 627	\$ 200	18	52%	NM Technical Resource Manual, March 9th, 2021
5 Electric to Natural Gas Energy Factor of 0.67 or higher	5	158.8	\$ 800	\$ 275	20	52%	PA TRM, Lowe's, PNM Generation Portfolio; Evergreen Economics review of net savings
6 Water Heater Tank Insulation	50	20.9	\$ 40	\$ 20	10	52%	NM Technical Resource Manual, March 9th, 2021
Weighted Average Result	660	28.6	70.7	46.9	11.1	43%	

New Construction Measure

Criteria and Description:

- Affected Customer Class: Rate No. 1 - Residential, Single or Multi-Family New Construction Prospective Customers
- Gas Appliance Criteria: Main Heat Source - 92% AFUE or higher
- Gas Appliance Criteria: Tankless (0.82 EF), Condensing Storage (0.80 EF), or Regular (0.67 EF)
- Must be purchased, installed or serviced during the (DATES OF PROGRAM)
- Must submit a complete application to be eligible for rebate or incentive.
- Rebate Checks or Incentives are subject to program funds and processed on first-come, first-served basis.
- Zia reserves the right to inspect completed upgrades to verify compliance with the Energy Efficiency Programs and applicable building codes.

Component	Saving (th)	Units	Participant Cost	Utility Rebate	Expected Useful Life	Free Ridership	Source
HOME 1: For New Construction over 2,000 sq ft							
Main Heat Source	50.8		\$ 477				NM TRM 2021
Water Heater	68.9		\$ 605				NM TRM 2021 pg 279/280
Dryer or Range							
Smart Thermostat	51.7		\$ 175				NM TRM 2021 Equation
One additional gas outlet							
Insulation - Energy Code or R-50	29.4		\$ 1,663				NM TRM 2021/ BIBS
Savings for Home 1	200.8	30	\$ 2,920	\$ 900	20	20	27%
HOME 2: For New Construction 2,000 sq ft or less							
Main Heat Source	50.8		\$ 477				NM TRM 2021
Water Heater	68.9		\$ 605				NM TRM 2021 pg 279/280
Smart Thermostat	51.7		\$ 175				NM TRM 2021 Equation
One additional gas outlet							
Insulation - Energy Code or R-50	17.6		\$ 1,197				NM TRM 2021/ BIBS
Savings for Home 2	189.1	30	\$ 2,454	\$ 600	20	20	27%
Weighted Average	194.9	60	\$ 2,687	\$ 750	20	20	27%

Income Qualified Measure

Measure Type	Residential, Low Income
Lifetime Years	10
Incremental Cost per Unit to Participant	\$0
Rebate Cost per annual therm saved	1.80
Gross Annual Therm Savings	26,325
Net to Gross	120%
Free Ridership	-20%
Net Annual Savings (therm) per unit	31,590
No of Units	130

UCT	
Net Benefits	\$ 244,876
Net Costs	\$ 164,465
UCT	<u>1.49</u>

Savings	
Annual Savings	31,590
Lifetime Savings	315,900

Direct Expenses	
Promotion	\$ -
3rd Party Admin	\$ 54,488
Rebates/Credit	\$ 56,734

Subtotal Direct	\$ 111,222
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Allocated Expenses	\$ 47,368
M&V	\$ 5,875
Subtotal Allocated	\$ 53,243

TOTAL Expenses	\$ 164,465
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<u>Benefits of Avoided Cost of Energy</u>	
Year	Avoided Cost of Gas
2022	\$ 25,707
2023	\$ 22,720
2024	\$ 21,892
2025	\$ 22,554
2026	\$ 23,276
2027	\$ 23,876
2028	\$ 24,780
2029	\$ 25,326
2030	\$ 25,887
2031	\$ 26,462
2032	\$ -
2033	\$ -
2034	\$ -
2035	\$ -
2036	\$ -
2037	\$ -
2038	\$ -
2039	\$ -
2040	\$ -
2041	\$ -
2042	\$ -
2043	\$ -
2044	\$ -

Commercial Energy Efficient Building Measure

Measure Type	Small and Large Commercial
Lifetime Years	10
Rebate Cost per annual therm saved	\$ 1.11
Gross Annual Therm Savings per unit	52,325
Net to Gross	90%
Free Ridership	10%
Net Annual Savings (therm) per unit	47,093
No of Units	60

UCT	
Net Benefits	\$ 304,205
Net Costs	\$ 178,122
UCT	1.71
Savings	
Annual Savings	47,093
Lifetime Savings	470,925
Direct Expenses	
Promotion	\$ -
3rd Party Admin	\$ 67,958
Rebates/Credit	\$ 52,500
Subtotal Direct	<u>\$ 120,458</u>
Allocated Expenses	\$ 51,302
M&V	\$ 6,363
Subtotal Allocated	<u>\$ 57,664</u>
TOTAL Expenses	<u><u>\$ 178,122</u></u>

Benefits of Avoided Cost of Energy	
Year	Avoided Cost of Gas
2022	\$ 38,322
2023	\$ 33,869
2024	\$ 32,635
2025	\$ 33,623
2026	\$ 34,698
2027	\$ 35,592
2028	\$ 36,940
2029	\$ 37,755
2030	\$ 38,590
2031	\$ 39,448
2032	\$ -
2033	\$ -
2034	\$ -
2035	\$ -
2036	\$ -

PLAN YEAR FUNDING

Program Administration Expense Budget

Line No.	Description	2022-2024		Notes
		Plan Year Budget	2020 Plan Year Actuals	
Administration Expenses				
1	Labor	\$ 81,000	\$ 81,000	
2	Travel and Meals	\$ 3,000	\$ 439	Decreased travel expense during Pandemic.
3	Education and Promotion - General	\$ 16,500	\$ 19,456	
4	Training	\$ -	\$ -	
5	Membership	\$ -	\$ -	
6	Legal	\$ 11,000	\$ 3,936	Budget based on 4 Year average legal expense.
7	Subtotal Administration Expenses	<u>\$ 111,500</u>	<u>\$ 104,831</u>	
8	Subtotal Other	\$ -	\$ -	
9	Subtotal Program Administration Expense	\$ 111,500	\$ 104,831	
10	Profit (Administration plus Direct)	\$ 36,659	\$ 13,035	(Administration plus Direct Expenses) x 7.98%
11	TOTAL General Budget	<u>\$ 148,159</u>	<u>\$ 117,866</u>	
12	Independent Measurement and Verification	\$ 18,375	\$ 5,155	4% of total budget

Direct Expense Summary

Line No.	Measure	Promotion	3rd Party Admin	Rebate/ Incentive	Subtotal Direct Expenses	2017 Actual Direct Expenses
13	Space Heating	\$ -	\$ -	\$ 37,250	\$ 37,250	\$ 4,250
14	Water Heating	\$ 3,000	\$ -	\$ 30,950	\$ 33,950	\$ 7,953
15	New Construction	\$ -	\$ -	\$ 45,000	\$ 45,000	\$ 500
16	Income Qualified	\$ -	\$ 54,488	\$ 56,734	\$ 111,222	\$ 66,030
17	Commercial	\$ -	\$ 67,958	\$ 52,500	\$ 120,458	\$ 850
18	TOTAL Direct Expense			\$ 347,880	\$ 347,880	\$ 79,583

Overall Budget Summary - Allocation of General Expenses by Measure

Line No.	Measure	Direct	Budget Allocation	GENERAL	Subtotal	M&V	TOTAL	Percent Budget per Measure
19	Space Heating	\$ 37,250	10.7%	\$ 15,864	\$ 53,114	\$ 1,968	\$ 55,082	10.7%
20	Water Heating	\$ 33,950	9.8%	\$ 14,459	\$ 48,409	\$ 1,793	\$ 50,202	9.8%
21	New Construction	\$ 45,000	12.9%	\$ 19,165	\$ 64,165	\$ 2,377	\$ 66,542	12.9%
22	Income Qualified	\$ 111,222	32.0%	\$ 47,368	\$ 158,590	\$ 5,875	\$ 164,465	32.0%
23	Commercial	\$ 120,458	34.6%	\$ 51,302	\$ 171,760	\$ 6,363	\$ 178,122	34.6%
24	TOTAL	\$ 347,880		\$ 148,159	\$ 496,039	\$ 18,375	\$ 514,414	

25 Independent Measurement and Verification Rate

4%

PROGRAM SUMMARY

Portfolio Cost Benefit Summary by Measure

Line No.	Measure	No. of Participants/ Units	Expected Useful Life (EUL)	Projected Annual Savings (th)	Projected Lifetime Savings (th)	Total Measure Costs	NPV Measure Benefits	UCT
1	Space Heating	340	11	12,323	135,557	\$ 55,082	\$ 87,069	1.58
2	Water Heating	660	11	10,784	118,620	\$ 50,202	\$ 76,190	1.52
3	New Construction	60	20	8,541	170,820	\$ 66,542	\$ 104,839	1.58
4	Income Qualified	130	10	31,590	315,900	\$ 164,465	\$ 244,876	1.49
5	Commercial	60	10	47,093	470,925	\$ 178,122	\$ 304,205	1.71
6	SUMMARY	1,250	11.28	110,331	1,211,822	\$ 514,414	\$ 817,179	1.59

AVOIDED COST CALCULATION

Year	Projected Gas Costs				
	Purchased Gas Cost (1)	Purchased Gas Cost (2)	ZIA Cost of Service (3)	TOTAL Cost - Avoided Cost	Avoided Cost (2)
	(\$/MSCF)	(\$/therm)	(\$/MSCF)	(\$/MSCF)	(\$/therm)
2022	5.328	0.517	3.062	8.390	0.8138
2023	4.353	0.422	3.062	7.415	0.7192
2024	4.052	0.393	3.093	7.145	0.6930
2025	4.238	0.411	3.124	7.361	0.7140
2026	4.442	0.431	3.155	7.597	0.7368
2027	4.606	0.447	3.186	7.792	0.7558
2028	4.869	0.472	3.218	8.087	0.7844
2029	5.015	0.486	3.250	8.266	0.8017
2030	5.166	0.501	3.283	8.449	0.8195
2031	5.321	0.516	3.316	8.636	0.8377
2032	5.480	0.532	3.349	8.829	0.8564
2033	5.645	0.547	3.382	9.027	0.8756
2034	5.814	0.564	3.416	9.230	0.8953
2035	5.988	0.581	3.450	9.439	0.9155
2036	6.168	0.598	3.485	9.653	0.9363
2037	6.353	0.616	3.520	9.873	0.9576
2038	6.544	0.635	3.555	10.099	0.9795
2039	6.740	0.654	3.590	10.331	1.0020
2040	6.942	0.673	3.626	10.569	1.0251
2041	7.151	0.694	3.663	10.813	1.0488
2042	7.365	0.714	3.699	11.064	1.0732
2043	7.586	0.736	3.736	11.322	1.0982

- Notes:
- (1) - Based upon Gas Daily Projection from August 12, 2021, EIA Annual Energy Outlook 2021 and assumption of 1% inflation in transportation price from 2024 to 2043.
 - (2) - Average ZIA delivered gas quality 1031 Btu/cf.
 - (3) - Projected 1% annual increase in ZIA rates starting in 2024.

BEFORE THE NEW MEXICO PUBLIC REGULATION COMMISSION

**IN THE MATTER OF THE APPLICATION)
BY ZIA NATURAL GAS COMPANY FOR)
APPROVAL OF ITS 2022-2024 ENERGY)
EFFICIENCY PROGRAM)
PURSUANT TO THE NEW MEXICO)
PUBLIC UTILITY ACT AND THE)
EFFICIENT USE OF ENERGY ACT)
ZIA NATURAL GAS COMPANY,)
)
Applicant.)
_____)**

Case No. 21-00222-UT

ELECTRONICALLY SUBMITTED VERIFICATION

Oscar G. Saucedo, under penalty of perjury under the laws of the State of New Mexico, states:

I make this verification pursuant to 1.2.2.10(E) NMAC and New Mexico R. 1-011(B) NMRA.

I have read the foregoing *Direct Testimony and Exhibits of Oscar G. Saucedo*, and the statements therein are true and correct based on my personal knowledge and belief.

9-17-21
Dated: _____

/s/ Oscar G. Saucedo
Oscar G. Saucedo

BEFORE THE NEW MEXICO PUBLIC REGULATION COMMISSION

**IN THE MATTER OF THE APPLICATION)
BY ZIA NATURAL GAS COMPANY FOR)
APPROVAL OF ITS 2022-2024 ENERGY)
EFFICIENCY PROGRAM)
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PUBLIC UTILITY ACT AND THE)
EFFICIENT USE OF ENERGY ACT)
ZIA NATURAL GAS COMPANY,)
)
Applicant.)
_____)**

Case No. 21-00222-UT

**DIRECT TESTIMONY
OF
WESTON E. HACKER**

**ON BEHALF OF
ZIA NATURAL GAS COMPANY**

September 20, 2021

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I. WITNESS INTRODUCTION

Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A. My name is Weston Edward Hacker and I am employed by Natural Gas Processing Co. (“NGP”). I work at the Zia Natural Gas Company main office at 100 Short Drive, PO Box 888, Ruidoso Downs, NM, 88346.

Q. WHAT ARE YOUR POSITION AND RESPONSIBILITIES WITH NGP?

A. As a Mechanical Engineer, I have been hired to work with all aspects of the Local Natural Gas Distribution system. This ranges from receiving the gas from the supplier and the transportation of the gas to the end point use in the home. The work includes design of regulator stations, cathodic protection of gas lines, collection and analysis of transmission data, and working on programs such as the efficient use of energy.

Q. PLEASE SUMMARIZE YOUR EDUCATIONAL BACKGROUND AND PROFESSIONAL QUALIFICATIONS.

A. Upon retiring from Law Enforcement in 2013 with the state of New Mexico, I enrolled in school at the New Mexico Institute of Mining and Technology (“New Mexico Tech”). I attended New Mexico Tech for four years and completed a Bachelor of Science in Mechanical Engineering in May of 2017.

Q. ON WHOSE BEHALF ARE YOU TESTIFYING IN THIS PROCEEDING?

A. I am testifying on behalf of the applicant, Zia Natural Gas Company.

Q. HAVE YOU PREVIOUSLY TESTIFIED BEFORE THE COMMISSION?

A. No.

Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?

A. The purpose of my testimony is to describe Zia’s pre-application coordination and to present the cost and benefit analysis Zia performed regarding its proposed changes to the

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Energy Efficiency Program, pursuant to the standards of the Efficient Use of Energy Act, NMSA 1978, Sections 62-17-1 *et seq.* (“EUEA”), the Energy Efficiency Rule 17.7.2 NMAC, and the Commission’s Utility Cost Test (“UCT”).

II. ZIA’S PRE-APPLICATION COORDINATION

Q. PLEASE DESCRIBE ZIA’S PRE-APPLICATION COORDINATION.

A. On August 10, 2021, Zia conducted its Public Advisory Group meeting via the online Zoom platform. Present for this meeting with Zia representatives were representatives from New Mexico Public Regulation Commission (“Commission” or “PRC”) Staff; the New Mexico Energy, Minerals, and Natural Resources Department (“EMNRD”); EnergyWorks; CLEARresult; Frontier Energy; New Mexico Gas Company (“NMGC”); and Raton Natural Gas Company (“RNG”). The New Mexico Attorney General (“NMAG”) was invited, but declined to attend.

Zia also conducted a customer survey in July 2021. This survey was included in Zia’s monthly newsletter, which the customers receive each month in their billing statements. The survey was comprised of eleven questions specific to the customer’s knowledge of and participation in Zia’s Energy Efficiency Program. Zia received approximately 540 completed surveys and was able to utilize customer responses to conduct a more targeted approach with regard to Program promotion.

Additionally, Zia published a Request for Proposal (“RFP”) for a contractor to implement and manage the Income Qualified and Commercial Measures of Zia’s Energy Efficiency Program. Zia received feedback from CLEARresult, EnergyWorks, ICF Management Corporation, and Frontier Energies. Zia met with each organization via Zoom meetings to fully explain Zia’s goals and how each organization would approach our

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customer base. In the end, CLEAResult and EnergyWorks were the two organizations best suited to work with Zia, and both submitted an official proposal.

Finally, Zia met several times with its current Low Income and Commercial Measure contractor, EnergyWorks. The focus of these meetings was to increase participation and coordinate outreach into the communities served by Zia. These meetings focused on discussions of expectations and potential modifications to each of these two Measures to increase participation and customer savings.

Q. PLEASE SUMMARIZE THE DISCUSSION AND KEY CONCLUSIONS FROM THE PUBLIC ADVISORY GROUP MEETING.

A. Zia reviewed the evaluation and conclusions of Evergreen Economics' Measurement and Verification ("M&V") 2020 Report with the Public Advisory Group. Zia explained the efforts Jonas Wade Proctor, Zia's previous Energy Efficiency Program manager, made during 2020 to try and increase promotion and participation. Attendees shared what each of their respective organizations had done to increase promotion and participation. Methods of promotion for those attendees in larger markets included print media, newsletter, radio ads, flyers, and television commercials. Zia inquired about the use of social media for program promotion, and one attendee advised that they had tried it with minimal success and further stated that one of the more effective ways to promote their energy efficiency program came through announcements in their newsletter. Zia concurred that its own newsletter achieved similar success. While those present believed that Zia's Program was effective, the general consensus was that for the Program to have a successful evaluation, increased participation was key.

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The Public Advisory Group discussed different ways to promote Zia's Program. EMNRD suggested identifying a pre-qualified list of HVAC and plumbing contractors who may mention Zia's Energy Efficiency Program in their advertising. NMGC noted that a pre-qualified list would just include contractors that are licensed, insured, and aware of Zia's Program. The Group discussed challenges with offering rebates through appliance dealers. Another suggestion was to record a video explaining how to use the Program. ENMRD suggested specific advertising to target customers for the Commercial Measure. RNG shared that funding for older homes in small rural communities is a challenge.

Zia also met with EnergyWorks, its current contractor for its Low Income (now Income Qualified) and Commercial Measures, individually in addition to the Public Advisory Group Meeting to talk about the challenges faced during the past two years and to identify potential Program modifications for the Income Qualified and Commercial Measures to increase participation. The primary change discussed was for Zia personnel to be more active in educating their customers about the Program and connecting customers with Zia's contractor, currently EnergyWorks, for follow up. This type of change would allow Zia's contractor to travel to the different communities and work on the direct install measures instead of spending time trying to identify customers in need of the help. Zia considered this to be a useful Program modification and has incorporated it in Zia's proposed 2022-2024 Energy Efficiency Program.

Q. DID ZIA CONTACT ITS CUSTOMERS TO ASSESS INTEREST IN ENERGY EFFICIENCY PROGRAMS?

A. Yes. Zia sent out a customer survey to each of its customers in July 2021. Zia also had surveys available for customer completion in each of its offices for walk-in customers. The

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survey focused on two areas that Zia believed it would be important to gather information on, which were 1) customer participation in the 2020 Energy Efficiency Program, and 2) customer knowledge of the Energy Efficiency Program. A comments section allowed customers to provide any additional information or explanation. The survey form is provided in Program Plan Exhibit A.¹

Q. PLEASE IDENTIFY THE INFORMATION REQUESTED IN THE SURVEY.

A. The survey included the following questions:

- (1) Have you replaced or upgraded any natural gas appliances in your home in the past year? (YES or NO response)

If yes, please check those that apply:

Water heater, Furnace, Other: _____

- (2) If you answered “YES” to questions 1, did you apply for a rebate from Zia Natural Gas Company for installing a more energy efficient natural gas appliance? (YES or NO Response)
- (3) If you answered “Yes” to question 1, did the Energy Efficiency rebates offered by Zia Natural Gas Company serve as an incentive for you to purchase a higher efficiency natural gas appliance? (YES or NO Response)
- (4) In the past three years, have you received a free Water Conservation Package (Green bag containing a shower head and aerators) from Zia Natural Gas Company? (YES or NO response)
- (5) In the past three years, have you participated in Zia Natural Gas Company’s Annual Furnace Inspection rebate program? (Yes or No Response)
- (6) Prior to completing this survey, were you aware of Zia Natural Gas Company’s Energy Efficiency rebates? (YES or NO Response)
- (7) If you answered “YES” to question 5, how did you first become aware of Zia Natural Gas Company’s Energy Efficiency Program? (Answer choices were: Radio Ads, Newspaper Ads, Zia Newsletter, Zia Office, Friend, Not Aware)
- (8) When considering energy efficiency, which is more important to you? (Answer choices were Environment, Cost Savings, or Both)

¹ Program Plan exhibits are attached to Zia’s 2022-2024 Energy Efficiency Program Plan, which is attached to the Direct Testimony of Oscar G. Saucedo.

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- (9) With rebates and cost savings as an incentive, how likely are you to participate in Zia Natural Gas Company's Energy Efficiency program next year? (Response choices were: Not Likely Somewhat Likely Likely Very Likely)
- (10) What additional Energy Efficiency installation rebates would you like to see included in Zia Natural Gas Company's next Energy Efficiency Program? (Response choices were: Smart Thermostat rebate, Energy Star (ES) Windows Rebate, ES Gas Clothes Dryer, ES Gas Range/Stove, Other)
- (11) Are you willing to continue to pay a small charge (Energy Efficiency Rate Rider) each month to fund Energy Efficiency promotion and rebates? (The Energy Efficiency Rate Rider was approved in Case #16-00021-UT and is not optional for qualified rate classes) (Answer choices "YES or "NO")

Q. PLEASE SUMMARIZE THE CUSTOMER SURVEY RESPONSES.

A. The information received as a result of the customer survey was helpful in connecting with Zia's customer base, particularly with respect to Program promotion. One of the key conclusions for Zia was that continued and more direct use of its monthly newsletter would be effective in encouraging greater participation and understanding in all aspects of Zia's Energy Efficiency Program.

Zia received approximately 540 responses to the July 2021 survey. Program Plan Exhibit B illustrates the survey results in graphs. A majority of customers (313) have not replaced or upgraded a natural gas appliance in the past three years. Of those who did, the majority (129) were water heater replacements, 69 were for furnace upgrades, and 67 were for installation of gas range or stove. Of the 246 of those customers who replaced or upgraded a natural gas appliance, only 23 applied for an Energy Efficiency Program rebate. The survey asked the customers who replaced or upgraded an appliance if the Energy Efficiency rebate offered by Zia was an incentive to pay more money for a higher efficiency appliance, to which only 23 customers answered in the affirmative. The survey further

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revealed that only about 7% of those responding to the survey had received a water conservation package from Zia.

A total of 388 customers responded that, prior to completing the survey, they were unaware of Zia's Energy Efficiency Program, which indicates the survey itself was an effective promotional tool as it reached 388 customers who otherwise would have been unaware of the Program. While the majority of customers who completed the survey were not aware of Zia's Energy Efficiency Program, those who responded that they were aware of the Program, by a large margin, became aware of the Program through Zia's newsletter.

The responding customers indicated that, when considering energy efficiency measures, both cost savings and the environment were of greater importance to them together than only cost savings or the environment alone. One encouraging result was that, while many of the respondents were not aware of the Energy Efficiency Program, most of them indicated that they would be more likely to participate in the Energy Efficiency Program based on cost savings and rebates from Zia if the need arises in the coming year.

Finally, when asked if they are willing to continue to pay a small charge each month to fund the Energy Efficiency Program and rebates, 289 said yes, and 182 said no. Many of the surveys for this question were left blank or with comments asking about how much the small charge is. This is something Zia is going to address in the future using the newsletter to educate customers about the amount of the Energy Efficiency Rider charge.

Q. WHAT WERE EVERGREEN ENERGY'S KEY RECOMMENDATIONS IN ITS M&V REPORT?

A. Evergreen Economics' M&V report regarding Zia's PY 2020 Energy Efficiency Program found Zia achieved overall net savings of 18,568 therms, but the overall Program was not

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cost effective with a UCT ratio of 0.94.² Evergreen Economics made five recommendations to improve the Energy Efficiency Program. It was recognized that a contributing factor to the low UCT ratio was partially due to relatively low participation numbers, but Evergreen did not offer suggestions for participation improvement. Many of the recommendations in the M&V Report pertained to updating the therm savings values to reflect updated information available in the updated 2021 New Mexico Technical Resource Manual (the “2021 NM TRM”) as well as adjusting the Net-to-Gross (“NTG”) ratio to values consistent with those used by the NM Gas Company. Further, Evergreen identified that UCT ratios for PY 2020 in the Space Heating, New Construction, and Low-Income Weatherization categories all had individual values of less than 1.0, and that this is the primary reason the overall value of the Program was below 1.0.

Q. WHAT ELSE DID ZIA DO TO IDENTIFY POTENTIAL IMPROVEMENTS TO ITS ENERGY EFFICIENCY PROGRAM?

A. In addition to considering the M&V Report recommendations, as well as input from its advisory meetings and customer survey, Zia looked to the recently revised 2021 NM TRM to supplement its current Measures with components that are already qualified in the 2021 NM TRM, such as duct sealing for Income Qualified and Commercial customers, programmable and smart thermostats,³ and water heater tank insulation.

Zia also sought RFPs for a contractor to implement the Income Qualified and Commercial Measures in its upcoming Energy Efficiency Program starting April 1, 2022.

The request was for a contractor program for these Measures that would achieve the goals

² M&V Report attached to Zia’s 2020 Annual Report, at 19-20.

³ Neither a programmable or smart thermostat in Zia’s Program would be monitored or controlled by Zia; rather, the thermostat would be controlled by the customer.

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of increased customer participation in all of Zia's districts, increase therm savings per year, save the consumer money by reducing household or business energy needs, and support collaborative efforts of all utilities with respect to energy efficiency programs. Both EnergyWorks and CLEAResult submitted proposals. After evaluating both proposals, Zia chose CLEAResult to implement its 2022-2024 Energy Efficiency Program Income Qualified and Commercial Measures.

Q. PLEASE SUMMARIZE THE KEY POINTS FROM ZIA'S PRE-APPLICATION COORDINATION.

- A. The advice and suggestions Zia received from its pre-application meetings and customer surveys include the following key points: (1) the cornerstones of an effective natural gas energy efficiency program focuses on space and water heating; (2) starting with a higher efficiency home and high efficiency natural gas appliances is the most cost effective way to realize overall energy savings; (3) in order to keep costs down, Zia should implement the majority of its program internally, but for Income Qualified and Commercial Measures Zia should utilize an external administrator who can take advantage of experience with multiple energy efficiency programs, utilize their expertise for these specific customer classes, and maximize the savings provided to the customer; (4) all Zia employees need to take an active role to educate and identify customers who could benefit from the Energy Efficiency Program; (5) upgrading or replacing existing appliances to higher efficiency models should be a top priority due to the increased therm savings over the life of the appliance, allowing incentives and rebates that keep these measures in line with UCT requirements for New Mexico; and (6) eliminating the need for increased energy usage should be accomplished through a reduction in water use, thus using less energy to heat, or

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by adding insulation and air sealing to the structure, which increases the overall energy efficiency. Zia proposes its 2022-2024 Energy Efficiency Program Plan in line with these key conclusions.

III. ZIA'S COST EFFECTIVENESS AND UCT ANALYSIS

Q. PLEASE EXPLAIN THE COMMISSION'S REQUIREMENTS FOR EVALUATION OF COST EFFECTIVENESS OF PROPOSED ENERGY EFFICIENCY MEASURES.

A. The Commission's Energy Efficiency Rule requires that a utility's energy efficiency program must provide cost-effective measures that reduce energy demand and energy consumption. To prove cost-effectiveness, the Commission requires that a utility show that the Program meets the UCT. The UCT is a ratio that compares the benefit from the utility's avoided supply side costs to the cost of offering the measure. If the avoided costs outweigh or are larger than the cost to the utility to offer the measure, then the measure is deemed cost effective; therefore, a proposed program's UCT ratio must be greater than 1.0 for a program to be deemed cost effective.

Q. DID ZIA PERFORM A UCT ANALYSIS TO ASSESS THE COST EFFECTIVENESS OF ITS PROPOSED ENERGY EFFICIENCY MEASURES AND PROGRAM OVERALL?

A. Yes, we did. We analyzed the UCT for the proposed 2022-2024 Energy Efficiency Program as a whole and for each of the five proposed Measures. The UCT is only one of several ways to show cost effectiveness and is fairly limited in its scope. Although it does calculate energy efficiency cost effectiveness from the perspective of a single utility, it misses the broader scope of the energy efficiency of home and energy conservation on the

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larger scale of an area or region. Nevertheless, Zia complied with the Commission's requirement to apply the UCT analysis to its proposed 2022-2024 Energy Efficiency Program.

Q. PLEASE SUMMARIZE THE CONCLUSIONS OF YOUR UCT ANALYSIS.

A. Zia estimates that the proposed changes to its Program will result in a projected overall UCT ratio of 1.59. A summary table of the five proposed Measures and resulting UCT is contained in Program Plan Exhibit I, and the UCT of each Measure is discussed below. Additionally, the Direct Testimony and Exhibits of Oscar G. Saucedo addresses proposed changes to the current Measures. Each Measure Zia chose to keep or update in its proposed 2022-2024 Energy Efficiency Program achieved a UCT ratio above 1.0. Therefore, Zia's proposed 2022-2024 Energy Efficiency Program exceeds the UCT requirements for the Program overall and for each Measure.

Q. PLEASE EXPLAIN HOW ZIA PERFORMED ITS UCT ANALYSIS.

A. Zia has developed a streamlined version of Public Service Company of New Mexico's ("PNM") UCT spreadsheet to determine the UCT for the proposed Measures within the Plan. The inputs to the cost effectiveness test are based on the experience of other utilities, published data for energy savings, and Technical Resource Manuals from New Mexico and other states. The information needed to calculate the UCT is energy savings in therms, expected useful life, number of participants, proposed rebate or incentive, a free ridership factor, direct and allocation expenses, projected avoided supply side costs, and the discount rate. With the information one can then calculate the Net Benefit and the Net Cost in order to determine the UCT ratio.

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Q. PLEASE EXPLAIN HOW ZIA DETERMINED THE EXPECTED ENERGY SAVINGS IN THERMS AND EXPECTED USEFUL LIFE OF PROPOSED MEASURES.

A. To determine the energy savings in therms and expected useful life of proposed components to the Measures, Zia first referenced the 2021 NM TRM. Zia has developed a spreadsheet to calculate energy savings in therms per year based on the equations presented in the 2021 NM TRM. This allows for energy savings values to be calculated when the values are not directly given in the 2021 NM TRM. If a potential component of the Measure was not listed in the 2021 NM TRM, data from another states' Technical Resource/Reference Manuals were used to determine the projected energy savings value. The expected useful life was obtained from the 2021 NM TRM whenever available, otherwise it was obtained from other states' TRMs.

Q. PLEASE EXPLAIN HOW ZIA PROJECTED POTENTIAL CUSTOMER PARTICIPATION.

A. Customer participation has been a challenge due to the recent COVID-19 Pandemic posture our communities have been faced with. The numbers used for participation are based on prior numbers and estimations, with the understanding that we need to have higher participation numbers for the Program to be successful. Through the promotion and education of the Program to our customers, Zia has seen an increase in participation over the past years. Zia's analysis found that its Program would have a UCT over 1.0 with only 50% of projected participants. The number of participants used in the UCT calculation refers to the number of units installed rather than number of customers. For example, a customer going through a major remodel may choose to upgrade both the furnace and water

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heater as well as install a Water Conservation Package: low flow showerhead and two faucet aerators. Each one of those would count as one in the calculation for a total of three rebates.

Q. PLEASE EXPLAIN HOW ZIA ESTIMATED THE FREE RIDERSHIP FACTOR.

A. Zia utilized the free ridership factor applied by New Mexico Gas Company (“NMGC”) in its energy efficiency analysis based on NMGC’s deeper experience with its energy efficiency program. In addition, Evergreen Economics recently completed a net impact analysis for programs similar to Zia’s. Evergreen developed updated Net to Gross (“NTG”) ratios and recommended their use for future evaluations in order to be up-to-date and consistent with NMGC. Evergreen’s recommended NTG ratio values are: Space Heating (excluding insulation and furnace tune up measures) 0.5294, Water Heating (excluding faucet aerators and low flow showerheads) 0.4839, New Construction 0.7333, Income Qualified Weatherization 1.0000, and Commercial 0.8990.⁴

Q. PLEASE EXPLAIN HOW ZIA DETERMINED THE NET PRESENT VALUE OF THE ENERGY SAVINGS.

A. Zia used a Ratepayer Discount Rate of 3.2% which is based on the rate for 30-year fixed-rate mortgage in New Mexico. For further detail, please see the Direct Testimony of Leslie A. Graham.

Q. PLEASE EXPLAIN HOW ZIA DETERMINED ITS PROJECTED AVOIDED SUPPLY SIDE COST.

A. The avoided supply side costs experienced by the utility should naturally be the avoided cost of purchasing gas because the customer is no longer burning as much gas.

⁴ Evergreen Energy’s 2020 M&V Report is attached to Zia’s 2020 Energy Efficiency Annual Report filed on July 1, 2021 in Case No. 18-00280-UT.

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Therefore, Zia used Zia's current Purchased Gas Adjustment Clause ("PGAC") Transportation factor and the Extraordinary Gas Cost Factor approved in Commission Case No 21-00096-UT, plus NYMEX Henry Hub Gas Futures projections published in the August 12, 2021 S&P Global Platts Gas Daily report and the Energy Information Administration's ("EIA") Annual Energy Outlook 2021 to project the total purchased gas cost. Both NMGC and Raton Natural Gas Co. ("RNG") included their distribution and transmission costs to determine the avoided supply side cost; Zia similarly added its current distribution and transmission cost of service to the price projection. Further details are provided in the Direct Testimony and Exhibits of Leslie A. Graham.

Q. PLEASE EXPLAIN ZIA'S UCT ANALYSIS FOR THE SPACE HEATING MEASURE.

A. The UCT for Zia's proposed Space Heating Measure is 1.58. To calculate this value, we estimated the participation and determined the savings in therms per year, participant's cost, rebate, expected useful life and free ridership for each of the components for the Measure. A weighted average was then calculated for the Measure. Using the weighted average values along with the avoided cost of gas, the Net Benefit Value was then calculated. The Net Cost was calculated combining the total rebate value and the allocated expenses. The ratio of Net Benefit Value to Net Cost results in the UCT.

Although improving furnace efficiency and insulation both save energy, the warm New Mexico climate and current cost of gas make it difficult to provide a highly cost-effective program at this point. The challenge is to provide enough of a rebate to entice customers to choose the higher up-front cost of the more efficient appliance while still maintaining a cost-effective program.

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Q. PLEASE EXPLAIN THE COMPONENTS OF THE SPACE HEATING MEASURE.

A. The Space Heating Measure contains a total of eight components. The components are shown in a table/spreadsheet format in Program Plan Exhibit C. The table shows the projected number of units, the projected energy savings in therms, an estimated cost to the customer, the proposed rebate, the potential expected useful life (“EUL”), a free ridership score, and the source for the information provided.

The 2021 NM TRM estimates energy savings for different components in four different climate zones within the state: Albuquerque, Roswell, Las Cruces, and Santa Fe. Zia’s operating districts are located in all four zones. To determine a weighted average energy savings value, the energy savings from each zone was calculated and allocated based on customer count in each operating district.

Component 1: The 2021 NM TRM designates a baseline efficiency rating of 80% AFUE⁵ for gas furnaces. Zia would provide a rebate to increase the AFUE to between 92% and 95% AFUE. The rebate for this component is \$200.

Component 2: Is the same as component 1 except provides a rebate of \$275 for installing a gas furnace with an AFUE above 95%.

Component 3: For the upgrade or installation of a boiler/hydronic heating system rated at 90% AFUE or higher, a rebate of \$300 is available.

Component 4: A rebate for ceiling insulation for any residential or small commercial customer with a starting insulation rating factor less than R-11 and a final insulation rating factor of more than R-30 with an area of 2000 sq.ft. The rebate amount is \$300.

⁵ AFUE is an acronym for Annual Fuel Utilization Efficiency.

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Component 5: For those who have their furnace inspected and properly maintained resulting in a more efficient system, there is a \$25 rebate. This component uses the Arkansas TRM to determine savings.

Component 6: If someone upgrades from an electric resistive heat to gas forced air heat with an AFUE of 95% or higher, there is a \$325 rebate.

Component 7: Installation of a programmable thermostat replacing a manual thermostat has a rebate of \$25.

Component 8: Installation of a smart thermostat replacing a manual thermostat has a rebate of \$50.

Q. PLEASE EXPLAIN ZIA'S UCT ANALYSIS FOR THE WATER HEATING MEASURE.

A. The UCT for Zia's proposed Water Heating Measure is 1.52. For this calculation, we used the same method as the Space Heating Measure. We estimated the participation and determined the savings in therms per year, participant's cost, rebate, expected useful life and free ridership for each of the components for the Measure. A weighted average was then calculated for the Measure. The Net Benefit Value was then calculated using the weighted average values along with the avoided cost of gas. The Net Cost was also calculated combining the total rebate value and the allocated expenses. The ratio of Net Benefit Value to Net Cost results in the UCT.

Q. PLEASE EXPLAIN THE COMPONENTS OF THE WATER HEATING MEASURE.

A. The Water heating Measure has six components. The components are shown in a table/spreadsheet format in Program Plan Exhibit C. The table shows the projected number

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of units, the projected energy savings in therms, an estimated cost to the customer, the proposed rebate, the potential expected useful life (“EUL”), a free ridership score, and the source for the information provided.

Again, the 2021 NM TRM estimates energy savings for different components in four different climate zones within the state: Albuquerque, Roswell, Las Cruces, and Santa Fe. Zia’s operating districts are located in all four zones. To determine a weighted average energy savings value, the energy savings from each zone was calculated and allocated based on customer count in each operating district.

Component 1: Hot Water Conservation Package. This package is provided by Zia and is available to the customer at no cost.

Component 2: For upgrading your water heater from natural gas to a natural gas heater with an EF of 0.67 or higher, there is a rebate of \$150.

Component 3: For upgrading from a natural gas heater to a natural gas tankless heater, there is a \$225 rebate.

Component 4: For upgrading from a natural gas heater to a natural gas condensing storage tank water heater, there is a \$200 rebate.

Component 5: For those who chose to switch from an electric water heater to a natural gas water heater with an energy factor of 0.67 or higher, there is a \$275 rebate.

Component 6: For the installation of water heater tank insulation there is a \$20 rebate.

Q. PLEASE EXPLAIN ZIA’S UCT ANALYSIS FOR ITS PROPOSED NEW CONSTRUCTION MEASURE.

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A. The projected energy savings for the New Construction Measure is based upon the difference between baseline gas appliances and insulation vs higher efficiency gas appliances and better insulation. The UCT for the New Construction Measure is 1.58. For a smaller new home of 2,000 sq ft or less, the gas furnace must have an AFUE of 92% or higher, the water heater should be tankless with an EF of 0.82, or gas condensing storage with an EF of 0.8, or at a minimum a basic water heater with an EF of 0.67 or greater, the insulation should meet Energy Conservation Code,⁶ and the home should have a smart thermostat. In addition, the home must have a connection for a third gas appliance. The rebate for the smaller home is \$600. The rebate for the larger new home with greater than 2,000 sq ft is \$900. The larger home must also include the more efficient gas furnace and water heater, higher rated insulation like the criteria for the smaller home, and a smart thermostat. It must also have one more gas appliance and a connection for a fourth appliance. Program Plan Exhibit E provides the UCT analysis for the New Construction Measure.

Q. PLEASE EXPLAIN ZIA'S UCT ANALYSIS FOR ITS PROPOSED INCOME QUALIFIED MEASURE.

A. To calculate the UCT for the Income Qualified Measure we totaled up the 3rd party (contractor) administrative expense, rebate funds, and Program administrative expenses to determine the Net Cost of the Measure, \$164,465. We then used CLEAResult's Gross Annual Therm Savings target value of 26,325. Using a Net to Gross of 120%, the projected

⁶ EMNRD reports that a new building energy code went into effect March 25, 2021. Builders will now need to comply with the requirements of the 2018 International Energy Conservation Code (2018 IECC) and New Mexico Construction Industries Commission Amendments. See <https://www.emnrd.nm.gov/ecmd/energy-efficiency/>.

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Net Annual Savings was determined to be 31,590 therms per year. Zia then calculated the total avoided cost of gas for the Expected Useful Life of 10 years for this Measure. The sum of the avoided costs results in the Total Net Benefits which was determined to be \$244,876. The UCT, Net Benefits to Net Costs, for this Measure results in a value of 1.49. As allowed in NMAC 17.7.2.9.B(4), Zia may assume that 20% of the calculated energy savings is the reasonable value of reductions in working capital, reduced collection costs, lower bad-debt expense, improved customer service, effectiveness, and other appropriate factors qualifying as utility system economic benefits. Therefore, to calculate the UCT for the Income Qualified Measure, Zia added 20% of the calculated energy savings to the calculated energy savings to determine the monetary benefit from offering an Income Qualified Measure. See Program Plan Exhibit F for more details.

Q. PLEASE EXPLAIN ZIA'S UCT ANALYSIS FOR ITS PROPOSED COMMERCIAL MEASURE.

A. To calculate the UCT for the Commercial Measure, the same method was used as that in the Income Qualified Measure. The Net Cost was determined to be \$178,122, which includes the 3rd party expenses, rebate funds, and Program administrative expenses. We again used CLEAResult's Gross Annual Therm Savings target value, which for the Commercial measure is 52,325. Zia then used a Net to Gross value of 90%, taking into account a 10% Free Ridership for this Measure, to calculate the Net Annual Therm Savings of 47,093. Zia then calculated the total avoided cost of gas for the Expected Useful Life of 10 years for this Measure. The sum of the avoided costs results in the Total Net Benefits, which was determined to be \$304,205. The UCT, Net Benefits to Net Costs, for this Measure results in a value of 1.71.

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The calculation method Zia proposes to use in the Income Qualified and Commercial Measures is different from that used in previous years when Zia worked with EnergyWorks. The previous UCT was calculated using the same ratio, Net Benefits to Net Costs, but EnergyWorks did not clearly set a target goal for annual therm savings. EnergyWorks took an approach of a cost per therm saved for the efforts of their organization. Zia expects CLEAResults' approach will be more effective.

IV. SUMMARY AND CONCLUSIONS

Q. PLEASE SUMMARIZE YOUR TESTIMONY.

A. Zia incorporated many of the suggestions that were offered in the M&V Report, the public advisory meetings and that resulted from the customer survey. Zia has added programmable and smart thermostats to the Space Heating Measure and also added water heater tank insulation to the Water Heating Measure. These additional components provide more opportunities for therm savings. In addition, based on information gathered from the M&V Report, public advisory meetings and customer input, Zia understands the need to educate the customer base about the Program and the associated cost, as well as identify those who could benefit from participating in the Program. Zia intends to use its monthly newsletter to keep customers informed, and will explore possibilities for use of social media. While Zia is going with a new contractor, CLEAResult, for the implementation of the Income Qualified and Commercial Measures, this will not be handed over completely blindly, but will have active participation by Zia's new Business Development Manager, Oscar Saucedo, in an effort to encourage increased participants.

Zia expects its proposed 2022-2024 Energy Efficiency Program will be of greater benefit to its customers, and will meet or exceed the Commission's energy efficiency

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standards. With only minor changes to each Measure, Zia proposes to continue to offer the five general Measures included in its 2022 Energy Efficiency Program: (1) Space Heating, (2) Water Heating, (3) New Construction, (4)Income Qualified, and (5) Commercial. Zia requests the Commission’s expeditious approval in order to put its proposed 2022-2024 Energy Efficiency Program into effect for the benefit of its customers.

Q. IN YOUR OPINION, HAS ZIA’S EFFORTS TO COORDINATE, EVALUATE, AND PROPOSE ENERGY EFFICIENCY MEASURES COMPLIED WITH THE REQUIREMENTS OF THE EFFICIENT USE OF ENERGY ACT AND THE ENERGY EFFICIENCY RULE?

A. Yes, in my opinion, Zia’s efforts have complied with the requirements of the EUEA and the Energy Efficiency Rule that I discuss in my testimony.

Q. DOES THIS CONCLUDE YOUR TESTIMONY AT THIS TIME?

A. Yes, it does.

BEFORE THE NEW MEXICO PUBLIC REGULATION COMMISSION

IN THE MATTER OF THE APPLICATION)
BY ZIA NATURAL GAS COMPANY FOR)
APPROVAL OF ITS 2022-2024 ENERGY)
EFFICIENCY PROGRAM)
PURSUANT TO THE NEW MEXICO)
PUBLIC UTILITY ACT AND THE)
EFFICIENT USE OF ENERGY ACT)
ZIA NATURAL GAS COMPANY,)
Applicant.)
_____)

Case No. 21-00222-UT

ELECTRONICALLY SUBMITTED VERIFICATION

Weston E. Hacker, under penalty of perjury under the laws of the State of New Mexico, states:

I make this verification pursuant to 1.2.2.10(E) NMAC and New Mexico R. 1-011(B) NMRA.

I have read the foregoing *Direct Testimony of Weston E. Hacker*, and the statements therein are true and correct based on my personal knowledge and belief.

Dated: 9/20/2021



Weston E. Hacker

BEFORE THE NEW MEXICO PUBLIC REGULATION COMMISSION

**IN THE MATTER OF THE APPLICATION)
BY ZIA NATURAL GAS COMPANY FOR)
APPROVAL OF ITS 2022-2024 ENERGY)
EFFICIENCY PROGRAM)
PURSUANT TO THE NEW MEXICO)
PUBLIC UTILITY ACT AND THE)
EFFICIENT USE OF ENERGY ACT)
ZIA NATURAL GAS COMPANY,)
Applicant.)**

Case No. 21-00222-UT

DIRECT TESTIMONY AND EXHIBITS

OF

LESLIE A. GRAHAM

ON BEHALF OF

ZIA NATURAL GAS COMPANY

September 20, 2021

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**NMPRC CASE NO. 21-00222-UT
DIRECT TESTIMONY AND EXHIBITS OF LESLIE A. GRAHAM**

I. WITNESS INTRODUCTION

Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A. My name is Leslie A. Graham and I am employed by Natural Gas Processing Co. (“NGP”). I work at the Zia Natural Gas Company main office at 100 Short Drive, PO Box 888, Ruidoso Downs, NM, 88346.

Q. WHAT ARE YOUR POSITION AND RESPONSIBILITIES WITH NGP?

A. I am the General Manager for the utility divisions, and I have been in this position since January 1, 2002. In 2014, my title was changed from Division Manager to General Manager, but my responsibilities remained the same. As General Manager, I am responsible for overseeing all day-to-day operations for Zia Natural Gas Company (“Zia” or “the Company”) and Wyoming Gas Company (“WGC”). I am responsible for supervising and preparing the operating budget, operation and maintenance, customer service operations, accounts payable and receivable, construction program, and regulatory compliance under the New Mexico Public Regulation Commission (“Commission” or “NMPRC”), Wyoming Public Service Commission (“WYPSC”), and the Pipeline and Hazardous Materials Safety Administration (“PHMSA”) rules and regulations. Prior to being promoted to General Manager, I was the District Manager for the Zia’s Hobbs District, beginning in September of 1998. There I was responsible for day-to-day operations of the Hobbs District. In addition, I was responsible for preparing the Hobbs District budget, engineering and executing construction plans, handling any customer issues, and ensuring regulatory compliance. Before coming to work for NGP, I worked for Aera Energy, LLC as a production engineer, from July 1, 1997 to May 15, 1998, and Mobil

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Exploration and Producing, U.S., as a production engineer from June 26, 1995 to June 30, 1997.

Q. PLEASE SUMMARIZE YOUR EDUCATIONAL BACKGROUND AND PROFESSIONAL QUALIFICATIONS.

A. I have a Bachelor of Science degree in Chemical Engineering and Petroleum Refining from the Colorado School of Mines. I also have taken training in Gas Distribution Engineering from the Institute of Gas Technology, Utility Rate Design sponsored by the American Gas Association, and Distribution Integrity Management Planning offered by the Gas Technology Institute. I am currently a member of the American Institute of Chemical Engineers, Society of Petroleum Engineers, New Mexico Gas Association, and the New Mexico Oil and Gas Association.

Q. ON WHOSE BEHALF ARE YOU TESTIFYING IN THIS PROCEEDING?

A. I am testifying on behalf of Zia Natural Gas Company.

Q. HAVE YOU PREVIOUSLY TESTIFIED BEFORE THE COMMISSION?

A. Yes, I testified in Zia's last energy efficiency case, Case No. 18-00280-UT; Zia's last rate case, Case No. 18-00018-UT; and Zia's recent extraordinary circumstances adjustment to its Purchased Gas Adjustment Clause ("PGAC"), Case No. 21-00096-UT. For a complete list, please refer to Exhibit LAG-1.

Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?

A. The purpose of my testimony is to describe Zia's proposed Plan Year budget for the proposed 2022-2024 Energy Efficiency Program, the use of the Ratepayer Discount Rate to determine the net present value of Program benefits, and the Avoided Cost calculation.

Q. DO YOU SPONSOR ANY EXIHIBITS WITH YOUR TESTIMONY?

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A. Yes, I do. In addition to Exhibit LAG-1 mentioned above, I also sponsor Exhibit LAG-2, Verification of Energy Efficiency Budget Limit and Basis Sales Volume.

Q. WERE THE EXHIBITS PREPARED BY YOU OR UNDER YOUR DIRECT SUPERVISION AND CONTROL?

A. Yes.

Q. ARE THE EXHIBITS TRUE AND CORRECT TO THE BEST OF YOUR KNOWLEDGE AND BELIEF?

A. Yes.

II. PROPOSED PLAN YEAR BUDGET

Q. PLEASE EXPLAIN THE COMMISSION'S REQUIREMENTS FOR IDENTIFICATION OF A UTILITY'S PLAN YEAR FUNDING.

A. The Energy Efficiency Rule, 17.7.2.8.C(2) NMAC, requires a gas utility to identify its plan year funding for its energy efficiency and load management program costs, and to demonstrate that its plan year funding shall not exceed 3% of customers' bills that the public utility estimates to be billed during the plan year, excluding (a) gross receipts taxes and franchise and right of way access fees; (b) revenues that the public utility estimates to bill during the plan year to any single customer that exceed \$75,000; (c) any customer's plan year self-directed program credits approved by the public utility or by a commission approved self-directed administrator; and (d) any customer's plan year self-directed program exemptions approved by the public utility or by a commission approved self-directed administrator. Zia does not have any self-directed customers, so those criteria do not apply here.

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Q. PLEASE PROVIDE AN OVERVIEW OF ZIA'S PROPOSED PLAN YEAR BUDGET FOR ITS ENERGY EFFICIENCY PROGRAM.

A. The proposed Plan Year budget for Zia's 2022-2024 Energy Efficiency Program is \$514,414. The Program administration budget is comprised of general expenses of \$166,534 and direct expenses of \$347,880. The general expenses are broken down into internal administration expenses of \$111,500, an incentive of \$36,659, and the independent measurement and verification ("M&V") expenses of \$18,375. The direct expenses are broken down into external administration expenses of \$122,446 and rebates of \$225,434.

Q. PLEASE EXPLAIN THE PROGRAM ADMINISTRATIVE EXPENSES.

A. The program administration expenses are the annual expenses incurred by Zia to administer the Energy Efficiency Program. The estimated annual administrative expenses of \$166,534 are outlined on page 1 of Exhibit H to Zia's 2022-2024 Energy Efficiency Program Plan, which itself is Exhibit OGS-1 attached to the Direct Testimony of Oscar G. Saucedo (for convenience, I will refer to exhibits to the Program Plan as "Program Plan Exhibit __").

The administrative expenses shown on page 1 of Program Plan Exhibit H include the following. Line Item 1 is the labor expense for a Program Manager. Line Item 2 is the travel and meal expense for the Program Manager to administer the Program throughout Zia's four operating districts. Line Item 3, Education and Promotion expenses, is related to general public education, contractor education, and general Energy Efficiency Program promotion. Line Item 6 lists the legal expense related to the annual filing requirements. Line 10 is the proposed profit incentive on the Program. Finally, the total independent measurement and verification cost, estimated to be 4% of the total budget consistent with recent practice, is listed on Line 12, page 1 of Program Plan Exhibit H.

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Q. HOW DOES THE ESTIMATED BUDGET COMPARE TO ZIA'S CURRENT ENERGY EFFICIENCY PROGRAM EXPENSES?

A. The proposed 2022-2024 Energy Efficiency Program annual budget is \$514,414. The 2019-2021 Energy Efficiency Program annual budget is \$373,578, approved in Case No. 18-00280-UT. I originally projected the 2020 Plan Year administrative expense to be \$163,888, but our actual expenses totaled \$104,831 plus \$5,155 paid in 2020 for the 2019 Independent Measurement and Verification Report prepared by Evergreen Economics and \$13,035 in profit. I used the actual 2020 expenditures to project the Plan Year budget. I anticipate no change in labor expense. I anticipate no change in the travel expense budget of \$3,000. We recorded only \$439 for travel expenses in 2020, but travel was limited that year due to the COVID-19 Pandemic. I will continue to budget \$16,500 for promotion and education. We spent \$19,456 in promotion and education in Plan Year 2020; however, approximately \$3,000 was for bags for the water conservation package and will be coded appropriately in Plan Year 2021 and going forward. I removed the budget for training as an attempt to reduce administrative overhead to improve the cost effectiveness of the 2022-2024 Energy Efficiency Program. We have not used the training budget in any of the prior years. Finally, I projected legal expenses based on the average legal expense for the past four years of \$11,000.

Q. PLEASE EXPLAIN ZIA'S ESTIMATED DIRECT EXPENSES FOR ITS ENERGY EFFICIENCY PROGRAM.

A. Zia's proposed 2022-2024 Energy Efficiency Program consists of five Measures: (1) Space Heating, (2) Water Heating, (3) New Construction, (4) Income Qualified (formerly labelled Low-Income), and (5) Commercial. Each Measure consists of individual components, for

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example, low flow showerheads in the Water Heating Measure, and insulation in the Space Heating Measure.

The annual direct expenses for each Measure in the 2022-2024 Energy Efficiency Program are summarized on Page 2 of Program Plan Exhibit H, under the heading Direct Expense Summary. For each Measure, we have listed direct promotion expenses, the additional third-party administration expenses for the Income Qualified and Commercial Measures, and the total of the proposed rebates or product costs. An example of direct promotion expenses would be the cost of the reusable shopping bags for the water conservation package. An example of a third-party administration expense would be the external administration costs charged by Zia's contractor, CLEAResult to implement the Income Qualified and Commercial Measures. The Direct Testimony of Weston E. Hacker explains in further detail the proposed rebates and product costs for individual measures.

Q. PLEASE EXPLAIN YOUR ALLOCATION OF PROGRAM EXPENSES TO EACH PROPOSED MEASURE.

A. I allocated the program administration expenses to each of the five Measures by the percentage of direct expense for each Measure. The allocation is shown on Page 2 of Program Plan Exhibit H, under the heading Overall Budget Summary – Allocation of General Expenses by Measure. For example, the direct expenses for the Space Heating Measure are \$37,250, which is 10.7% of the Total Direct Expenses. The Space Heating Measure was allocated 10.7% of the program administration expenses. The subtotal of the direct and administration expenses for Space Heating was multiplied by the M&V rate of 4% to determine the M&V cost for Space Heating. The total of direct, administration, and M&V is the total cost allocated to the Space Heating Measure, and is the basis for the cost

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of the Measure in the Utility Cost Test (“UCT”) analysis. The very last column in the table is the Percent of the Budget per Measure. As calculated and shown on this table, the Income Qualified Measure budget is 32% of the overall Program budget, which is substantially above the required minimum 5% in the Energy Efficiency Rule, 17.7.2.9.B NMAC, for low-income customers.

Q. DID ZIA VERIFY THAT ITS PROPOSED PLAN YEAR FUNDING DOES NOT EXCEED 3% OF AFFECTED CUSTOMERS’ BILLS FOR THE PLAN YEAR?

A. Yes, we did. Exhibit LAG-2 provides verification that Zia’s proposed Plan Year budget will not exceed 3% of the affected customers’ estimated billing during the Plan Year. For the historical period from April 1, 2020 to March 31, 2021, Zia billed the affected customers \$24,462,771, excluding gross receipts taxes, franchise fees, right of way fees, and inspection and supervision fees. The proposed Plan Year budget of \$514,414 is approximately 2.1% of the total billing, well under the 3% threshold limit. The historical period billed amount excludes sales to Texas customers.

Q. IN YOUR OPINION, HAS ZIA COMPLIED WITH THE COMMISSION’S REQUIREMENTS REGARDING PLAN YEAR FUNDING?

A. Yes, it has. Zia has identified its Plan Year funding estimate and components, and has demonstrated that its Plan Year funding will be well below the 3% threshold limit.

Q. DOES ZIA PROPOSE TO USE THE SAME PLAN YEAR BUDGET FOR EACH OF PLAN YEARS 2022, 2023, AND 2024?

A. Due to the Commission’s revision to the timing provisions of the Energy Efficiency Rule, 17.7.2.8.A NMAC, which requires energy efficiency applications to be filed every three years instead of annually, Zia’s Plan Year budget described herein is intended to be the

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Plan Year budget for each of Plan Years 2022, 2023, and 2024, or until Zia applies for and the Commission approves a different Plan Year budget.

III. REQUEST TO EARN A PROFIT

Q. DOES ZIA’S APPLICATION INCLUDE A REQUEST TO EARN A PROFIT ON ITS ENERGY EFFICIENCY PROGRAM?

A. Yes, it does. As shown on line 10, page 1 of Program Plan Exhibit H, Zia proposes to earn a profit of \$36,659 on administrative plus direct expenses. Zia requests approval of this profit amount for each of the three applicable Plan Years or until Zia applies for and the Commission approves a different profit amount.

Q. PLEASE EXPLAIN THE REQUIREMENTS FOR APPROVAL OF A REQUEST TO EARN A PROFIT ON AN ENERGY EFFICIENCY PROGRAM.

A. My understanding is that the Energy Efficiency Rule, 17.7.2.8.L NMAC, provides that applications may include a proposal for an opportunity to earn a profit on cost effective energy efficiency and load management resource development that is financially more attractive to the public utility than a supply-side utility resource. In other words, the utility must demonstrate that the program is cost effective. Later in my testimony I will discuss the cost-effectiveness of Zia’s proposed Program under the Commission’s UCT.

Under the Energy Efficiency Rule, 17.7.2.8.L NMAC, the criteria to earn a profit are as follows:

1. The annual incentive must be based on the utility’s costs.
2. The annual incentive must be based on satisfactory performance of measures and programs.
3. The annual incentive must be supported by written testimony and exhibits.

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4. The annual incentive shall not exceed the product of the weighted cost of capital and the approved annual program costs.

Q. HOW DID ZIA CALCULATE THE PROPOSED PROFIT?

- A.** I calculated the proposed profit, shown on page 1, line 10 of Program Plan Exhibit H, by adding the Administration Expenses and the Direct Expenses and multiplying the result by Zia's weighted cost of capital of 7.98% as established in Zia's last rate case, PRC Case No. 18-00018-UT. Therefore, the incentive is based on Zia's costs and will be the product of the weighted cost of capital and the annual program costs once the Program is approved.

Q. DID ZIA EARN A PROFIT ON ITS 2019-2021 ENERGY EFFICIENCY PROGRAM?

- A.** Yes, we did. The request to earn a profit on Zia's 2019-2021 Energy Efficiency Program was approved in Commission Case No. 18-00280-UT. Although Zia's Energy Efficiency Programs in Plan Year 2018, 2019, and 2020 came very close to but did not meet a UCT ratio of over 1, each Plan Year had specific circumstances that affected the overall performance of the Program. The historical UCT ratio for completed four years of Zia's Energy Efficiency Program is shown on Table 3 on page 5 of the Program Plan. In Plan Year 2018, Zia achieved a UCT ratio of 0.93. In Plan Year 2019, Zia achieved a UCT ratio of 0.91, and in Plan Year 2020, Zia achieved a UCT ratio of 0.94.

Q. PLEASE EXPLAIN WHY THE PROGRAM DID NOT ACHIEVE A UCT OF 1.0 FOR PLAN YEAR 2018.

- A.** "Overall[, in Plan Year 2018,] Evergreen [Economics] found "that Zia is operating a high-quality program that is achieving sizeable energy savings."¹ The Plan Year 2018 Program

¹ 2018 M&V Report, attached to Zia's 2018 Energy Efficiency Annual Report filed on July 1, 2019 in Case No. 18-00280-UT, at 5.

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covered 15 months instead of 12 months as Zia migrated its Energy Efficiency Programs to the new timing requirements for filing in Energy Efficiency Rules, NMAC 17.7.2.8.A. Zia's second year of implementing an Energy Efficiency Program saw increased participation, which was offset by 15 months of labor allocation and advertising expense. As Zia reported on Page 7 of the 2018 Annual Report, "had Plan Year 2018 ended on December 31, 2018, the 12-month period calculations using the total measure expenditures, without three months additional labor and advertising, shows a UCT number of 1.04." Other than the extended time imposed by the revision to the Energy Efficiency Rule, Zia's Program for Plan Year 2018 achieved satisfactory success.

Q. PLEASE EXPLAIN WHY THE PROGRAM DID NOT ACHIEVE A UCT OF 1.0 FOR PLAN YEAR 2019.

A. Plan Year 2019 was affected by three special circumstances.

First, an errata version of the New Mexico Technical Resource Manual ("NM TRM") was released in April of 2019, after Commission approval of Zia's Program Plan for 2019.² Zia's 2019 Program was designed using the older 2013 version of the NM TRM that applied during development and approval of Zia's 2019 Program, and relied heavily on the savings from the low flow showerheads and faucet aerators. In its evaluation, Evergreen Economics appropriately requested that Zia update the savings projections based upon the revised 2019 NM TRM. Although it appeared that Zia's Program would still be cost effective with the revised savings values, a big portion of Zia's Program - the Water Conservation Package, which includes a low flow showerhead and two faucet aerators - realized a reduction in expected savings from 40.1 therms to 13.1 therms.

² Final Order (February 27, 2019), Case No. 18-00280-UT.

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Second, Zia's contractor implementing the Low-Income and Commercial Measures at the time did not perform to Zia's expectations.

Third, participation in Zia's Low-Income Measure was cut short toward the end of the Plan Year by the outbreak of the COVID-19 Pandemic, which limited in-person contacts and installation of energy efficiency measures, particularly the Low-Income Measure. Evergreen Economics predicted that, had Zia's Low-Income targets been met, the Low-Income Measure of the whole Program would have yielded a UCT ratio of 1.4 instead of a UCT ratio of 0.89. Zia's Commercial Measure was also impacted by the COVID-19 Pandemic restrictions.

In the independent evaluation of the Plan Year 2019 Energy Efficiency Program provided by Evergreen Economics, Evergreen again concluded "that Zia is operating a high-quality program that is achieving sizeable energy savings."³ Considering the special circumstances described above, a program that is "achieving sizeable energy savings" should be considered to be achieving satisfactory performance.

Q. PLEASE EXPLAIN WHY THE PROGRAM DID NOT ACHIEVE A UCT OF 1.0 IN PLAN YEAR 2020.

A. In Plan Year 2020, Zia also saw a notable decrease in participation in the Low-Income Program, which was due in part to a delayed start to the 2020 Plan Year because of continued public health concerns regarding the COVID-19 Pandemic. The Program relies heavily on direct installation in residential homes. Although EnergyWorks, Zia's contractor for implementation of its Low-Income and Commercial Measures, developed a safe work plan, many customers were reluctant to work with the contractor in their

³ M&V Report attached to 2019 Annual Report filed on July 30, 2018 in Case No. 18-00280-UT, at 5.

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residences due to public health concerns during the Pandemic. The restrictions in place also affected the Commercial Measure. Many of Zia's commercial customers were financially impacted by the Pandemic and showed little interest in the Energy Efficiency Program. Zia projected that, had the Low-Income and Commercial Measure targets been met, Zia's Program would have achieved a UCT ratio of 1.18.

Q. IN YOUR OPINION, DOES ZIA'S REQUEST TO EARN A PROFIT COMPLY WITH THE REQUIREMENTS OF THE ENERGY EFFICIENCY RULE, 17.7.2.8.L NMAC, YOU PREVIOUSLY EXPLAINED?

A. Yes, it does.

First, Zia's request is based on Zia's costs.

Second, it is based on equipment and components known to save energy. After adjusting for the special circumstances outside Zia's control that occurred in Plan Years 2018, 2019, and 2020, Zia's Program achieved satisfactory performance and was ranked by Evergreen as "high-quality." Zia now proposes changes to the Income-Qualified and Commercial Measures to overcome the specific circumstances that have affected the Program in the past. Zia expects improved performance with the gradual easing of Pandemic restrictions and its newly selected contractor that will implement the Income Qualified and Commercial Measures going forward. Therefore, the proposed Program provides for satisfactory performance.

Third, it is supported by testimony and exhibits.

Finally, it was calculated as the product of Zia's most recently approved weighted cost of capital and the Program costs.

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Therefore, Zia's request complies with the requirements of the Energy Efficiency Rule I described above, and should be approved.

IV. DISCOUNT RATE

Q. HOW IS THE DISCOUNT RATE USED IN THE ASSESSMENT OF A PROPOSED ENERGY EFFICIENCY PROGRAM?

A. The discount rate is used in the UCT analysis to determine the net present value ("NPV") of the benefit received by installing or implementing an energy efficient component such as a more efficient gas furnace.

Q. IS ZIA PROPOSING TO USE THE SAME DISCOUNT RATE AS USED IN THE 2019-2021 ENERGY EFFICIENCY PROGRAM?

A. No, it does not. In the 2019-2021 Energy Efficiency Program approved in Commission Case No. 18-00280-UT, Zia used the Cost of Debt approved by the Commission in what was then Zia's most recently approved general rate case, Commission Case No. 08-00036-UT, which was 6.10%.⁴

Q. WHAT DISCOUNT RATE DOES ZIA PROPOSE TO USE IN THIS APPLICATION?

A. Zia proposes to use the Ratepayer Discount Rate which is based on the 30-year fixed mortgage rate, which I estimate to be 3.2%.

Q. WHY IS ZIA PROPOSING TO CHANGE THE DISCOUNT RATE USED FOR ITS ENERGY EFFICIENCY PROGRAM?

A. To prepare for the current filing, Zia reviewed the most recently approved New Mexico Gas Company ("NMGC") Energy Efficiency Program and discovered that the

⁴ The Commission had not issued a final order in Zia's 2018 general rate case, Case No. 18-00018-UT, when Zia filed its 2018 Energy Efficiency application in Case No. 28-00280-UT.

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Commission preferred and approved an alternate discount rate for NMGC, called the Ratepayer Discount Rate, in Case No. 19-00248-UT.⁵ The rate is based on the 30-year fixed mortgage rate in NM. I reviewed the testimony provided in that case as well as the Recommended Decision, which the Commission adopted, and was persuaded that this alternative Discount Rate is based on a national standard, represents the impact of energy efficiency choices on residential customers, and has the effect of improving the cost effectiveness of Zia's proposed Program.

Q. HOW DID ZIA DETERMINE THE CURRENT 30-YEAR FIXED MORTGAGE RATE?

A. I used the average between the published rates on the internet at bankrate.com, Wells Fargo, and US Bank as of August 16, 2021. I used the 30-year fixed refinance rate for the three websites. The average came to 3.193% which I rounded to 3.2%.

V. PROJECTION OF AVOIDED COSTS

Q. PLEASE EXPLAIN THE REQUIREMENT TO CONSIDER AVOIDED COST.

A. The Commission's Energy Efficiency Rule Section 17.7.2.8.H(14) NMAC requires energy efficiency applications to provide the estimated avoided monetary cost associated with developing, acquiring, and operating associated supply side resources. The Rule also requires the utility to provide testimony and exhibits that demonstrate that the estimated avoided cost will be equal to or greater than the actual avoided costs, and to explain the rationale and methodology used to estimate the cost.

⁵ Recommended Decision, Case No. 19-00248-UT, at 21-22.

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Q. PLEASE EXPLAIN THE AVOIDED SUPPLY SIDE COSTS USED BY ZIA TO CALCULATE THE BENEFIT OF PROVIDING AN ENERGY EFFICIENCY PROGRAM.

A. The avoided supply side costs are shown in Program Plan Exhibit J. Because many of the proposed Measures will provide a benefit to the customer and save energy for years, it was necessary to project supply side costs for the next 20 years. Predicting natural gas pricing for the next 20 years is almost impossible; however, I estimated the avoided gas costs by adding together a projected gas transportation factor, projected purchased gas cost factor, and Zia's projected cost of service. The transportation factor is based on Zia's current PGAC Transportation factor with a 1% annual inflation increase starting in 2024. The projected purchased gas cost factor is based on the following: the quote for gas for the next 12 months from the time of filing; the recently approved Extraordinary Cost Factor;⁶ the NYMEX Henry Hub Gas Futures projections as published on August 12, 2021 in S&P Global Platts Daily Report for 2023 and 2024, and the Energy Information Administration ("EIA") Annual Energy Outlook 2021 for years beyond 2024.

Q. DOES THE AVOIDED SUPPLY SIDE COST INCLUDE ZIA'S COST OF SERVICE?

A. Yes. To inform my analysis, I reviewed the Commission's treatment of other gas utilities on this issue. Both NMGC and Raton Natural Gas ("RNG") included their cost of service in the avoided supply side cost calculation in their energy efficiency analyses. In addition, ADM, the Commission's past independent energy efficiency evaluator, reported that most gas utilities include their cost of service in the avoided supply side cost calculation.

⁶ Final Order (May 28, 2021), Case No. 21-00096-UT.

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Therefore, Zia included the cost of service. Starting in year 2024, I projected a 1% annual increase in the cost of service. Although an annual increase does not accurately reflect actual utility rate making, it seemed to be a reasonable method to project the slow increase of long-term costs.

Q. DO YOU AGREE WITH THE INCLUSION OF ZIA’S COST OF SERVICE IN THE AVOIDED SUPPLY SIDE COSTS?

A. No. The Commission’s Energy Efficiency Rule does not require that the avoided supply side cost include the utility’s cost of service. According to an explanation of the Utility Cost Test (“UCT”) in a white paper from The Cadmus Group, the “test measures cost-effectiveness from the viewpoint of the sponsoring utility or program administrator.”⁷ The white paper also lists the benefit used in the UCT as the utility’s avoided supply side cost. From the utility perspective then, the avoided cost is the purchased gas cost. The utility still has all of the same expenses to operate the gas system whether a customer saves energy or not. For example, Zia will not pay its employees less if customers reduce their energy usage. Similarly, Zia will not conduct fewer leak surveys if customers reduce their energy usage. The only expense that varies with the volume of gas is the odorant injected into the gas, which is a minimal cost. Therefore, as a utility, Zia will not avoid its expenses if the customer saves energy, so Zia’s cost of service should not be included in the UCT calculation.

Q. WHAT WOULD BE THE EFFECT ON THE UCT CALCULATION IF ZIA’S COST OF SERVICE WAS REMOVED?

⁷ See The Cadmus Group, *Whose Perspective? The Impact of the Utility Cost Test* (December 12, 2011), available at www.cadmusgroup.com.

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A. Even at the current purchased gas price, most of the proposed Measures would not be cost effective. The costs would simply outweigh the benefits.

Q. WHY DID ZIA CHOOSE TO INCLUDE ITS COST OF SERVICE IN THE UCT CALCULATION?

A. Although Zia disagrees with the approach, it included its cost of service in the UCT analysis because that appears to be the approach currently acceptable to the Commission.

VI. SUMMARY AND CONCLUSIONS

Q. PLEASE SUMMARIZE YOUR TESTIMONY.

A. My testimony has presented Zia's proposed Plan Year budget for its proposed 2022-2024 Energy Efficiency Program, has presented Zia's proposal to continue to earn the profit incentive, has presented the Ratepayer Discount Rate that reflects the discount rate experienced by utility customers when making home investment decisions, and has presented the avoided costs included in Zia's analysis.

Q. IN YOUR OPINION, DO ZIA'S PROPOSED ENERGY EFFICIENCY PROGRAM AND RATE RIDER MEET THE REQUIREMENTS OF THE EFFICIENT USE OF ENERGY ACT AND THE ENERGY EFFICIENCY RULE?

A. Yes, they do. Zia's Application, testimonies and exhibits demonstrate that Zia's proposed 2022-2024 Energy Efficiency Program is cost-effective and designed to provide every affected customer class with the opportunity to participate and benefit economically. Zia's Program meets or exceeds the Commission's UCT standard, the Plan Year budget is well below 3% of affected customers' billings, the Income Qualified portion is well above the 5% minimum, and Zia's request to earn a profit meets the criteria under the Energy Efficiency Rule. The proposed 2022-2024 Energy Efficiency Program comports with the

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requirements of the Efficient Use of the Energy Act and the Energy Efficiency Rule, and should be approved.

Q. DOES THIS CONCLUDE YOUR TESTIMONY AT THIS TIME?

A. Yes, it does.

LESLIE A. GRAHAM – TESTIMONY CASE LIST:
NEW MEXICO PUBLIC REGULATION COMMISSION

<u>CASE NO.</u>	<u>DESCRIPTION</u>
05-00004-UT	Changes to Rules Rates and Forms Advice Notice 41
05-00252-UT	Acquisition of Springer’s Natural Gas System
05-00325-UT	Acquisition of Capitan Carrizozo Natural Gas
07-00137-PL	Pipeline Incident in Hobbs, NM
08-00036-UT	Zia Natural Gas Rate Case 2008
10-00272-UT	Acquisition of Two Gas Systems in Dona Ana County
11-00457-UT	Acquisition of Village of Wagon Mound Gas System
13-00235-UT	Approval of Voluntary Service Area Agreement, Dona Ana County
16-00021-UT	Approval for Energy Efficiency Application and Rate Rider
18-00018-UT	Zia Natural Gas General Rate Application 2018
18-00280-UT	Zia Natural Gas Energy Efficiency Program Application
21-00048-UT	Application for Emergency Authorization of Financing
21-00096-UT	Application for Expedited Adjustment to Purchased Gas Adjustment Clause

WYOMING PUBLIC SERVICE COMMISSION

<u>DOCKET NO.</u>	<u>DESCRIPTION</u>
30009-48-GR-08	Wyoming Gas Company General Rate Increase 2009
30009-60-GR-16	Wyoming Gas Company General Rate Increase 2016
50051-2-PR-16	Natural Gas Processing, NG Transmission Discontinue Utility Service
30009-63-GA-17	Application to Amend Wobbe Indices
30009-69-GM-19	Application for Infrastructure Integrity Management Rider

Verification of Energy Efficiency Budget Limit

	<u>Amount</u>
Affected Class Billing Revenue (1)	\$ 24,462,771
Less Texas Sales	\$ 12,302
Billing Revenue Basis for Budget Limit (2)	<u>\$ 24,450,469</u>
NMAC 17.7.2.8.C.2 - Maximum Budget	3% \$ 733,514
Current Plan Year Budget	\$ 514,414
Proposed Budget - Percent of Billing Revenue	2.1%

Plan Year Budget does not exceed 3% of Base Revenues

Basis Sales Volume

	<u>Amount (MSCF)</u>
Sales Volume - April 2020 to March 2021	2,765,919
Less - Texas Sales	1,256
Basis Sales Volume	<u>2,764,663</u>

Note (1) Affected Customer Classes are Rate No. 1, 2, and 3

Note (2) Sales Volume and Revenue from April 1, 2020 to March 31, 2021

BEFORE THE NEW MEXICO PUBLIC REGULATION COMMISSION

**IN THE MATTER OF THE APPLICATION)
BY ZIA NATURAL GAS COMPANY FOR)
APPROVAL OF ITS 2022-2024 ENERGY)
EFFICIENCY PROGRAM)
PURSUANT TO THE NEW MEXICO)
PUBLIC UTILITY ACT AND THE)
EFFICIENT USE OF ENERGY ACT)
ZIA NATURAL GAS COMPANY,)
)
Applicant.)
_____)**

Case No. 21-00222-UT

ELECTRONICALLY SUBMITTED VERIFICATION

Leslie A. Graham, under penalty of perjury under the laws of the State of New Mexico, states:

I make this verification pursuant to 1.2.2.10(E) NMAC and New Mexico R. 1-011(B) NMRA.

I have read the foregoing *Direct Testimony and Exhibits of Leslie A. Graham*, and the statements therein are true and correct based on my personal knowledge and belief.

Dated: September 20, 2021

/s/ Leslie A. Graham
Leslie A. Graham

BEFORE THE NEW MEXICO PUBLIC REGULATION COMMISSION

IN THE MATTER OF THE APPLICATION)
BY ZIA NATURAL GAS COMPANY FOR)
APPROVAL OF ITS 2022-2024 ENERGY)
EFFICIENCY PROGRAM)
PURSUANT TO THE NEW MEXICO)
PUBLIC UTILITY ACT AND THE)
EFFICIENT USE OF ENERGY ACT)
ZIA NATURAL GAS COMPANY,)
Applicant.)
_____)

Case No. 21-00222-UT

CERTIFICATE OF SERVICE

I HEREBY CERTIFY that on this date I sent a true and correct copy of the *Application for Approval of Zia Natural Gas Company's 2022-2024 Energy Efficiency Program* and accompanying testimonies and exhibits to each of the following by email only:

Leslie Graham	lgraham@zngc.com
Oscar Saucedo	osaucedo@zngc.com
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Dated this 20th day of September, 2021.

Modrall, Sperling, Roehl, Harris & Sisk, P.A.

By: /s/ Joan E. Drake
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