

BEFORE THE NEW MEXICO PUBLIC REGULATION COMMISSION

**IN THE MATTER OF NEW MEXICO GAS COMPANY,)
INC.’S INTEGRATED RESOURCE PLAN FOR THE) Docket No. 24-00203-UT
PLANNING PERIOD OF 2024 THROUGH 2033 IN)
COMPLIANCE WITH 17.7.4.9 NMAC)
_____)**

INITIAL ORDER

THIS MATTER comes before the New Mexico Public Regulation Commission (the “Commission”) upon New Mexico Gas Company, Inc.’s (“NMGC”) Integrated Resource Plan (“IRP”) for the Planning Period of 2024 through 2033 and the Protest by Western Resource Advocates of New Mexico Gas Company Inc.’s 2024-2033 Integrated Resource Plan (the “Protest”). For the reasons discussed below, the Commission commences proceedings to resolve the Protest.

JURISDICTION AND PROCEDURAL HISTORY

1. The Commission has jurisdiction over this matter. *See* NMSA 1978, §§ 62-6-4 (2003); 62-17-10 (2005).
2. On April 16, 2024, NMGC filed its IRP in Compliance with 17.7.4.9 NMAC.¹
3. On May 16, 2024, Western Resource Advocates (“WRA”) filed its Protest to NMGC’s IRP.²
4. On May 17, 2024, the Coalition for Clean Affordable Energy (“CCAЕ”) filed its Concurrence in WRA’s Protest.³

DISCUSSION

5. New Mexico statute and Commission rules require public utilities supplying natural

¹ NMGC’s IRP is attached as Exhibit A.
² WRA’s Protest is attached as Exhibit B.
³ CCAЕ’s Concurrence is attached as Exhibit C.

gas services to file an integrated resource plan (“IRP”) with the Commission. NMSA 1978, § 62-17-10; 17.7.4.9 NMAC.

6. The IRP must contain the utility’s jurisdictional “current load forecast;” “description of existing portfolio of resources;” “summary of foreseeable resource needs for the planning period;” “anticipated resources to be added during the planning period and the evaluation of various options that could reasonably be added to the utility’s resource portfolio;” “a summary description of natural gas supply sources and delivery systems;” “a summary identification of critical facilities susceptible to supply-source or other failures;” “description of the public advisory process;” and “other information that may aid the commission in reviewing the utility’s planning processes.” 17.7.4.10 NMAC.

7. In addition, the utility “shall evaluate the ability of its natural gas resources to provide adequate redundancy of supply and of delivery systems,” 17.7.4.11(A) NMAC, and “shall evaluate, as appropriate, renewable energy, energy efficiency, load management and conventional supply-side resources on a consistent and comparable basis and take into consideration risk and uncertainty of energy supply, price volatility and costs of anticipated environmental regulations in order to identify the most cost-effective portfolio of resources to supply the energy needs of customers,” 17.7.4.11(B) NMAC. The latter evaluation “shall be based on a present-value analysis of revenue requirements and shall include discussion of any economic, risk, environmental, and reliability analyses.” *Id.*

8. The Commission reviews a gas utility’s IRP for “compliance with the procedures and objectives set forth [in the gas utility IRP Rule].” 17.7.4.15(A) NMAC. “The [C]ommission may accept the proposed IRP as compliant with this rule without a hearing, unless a protest is filed

that demonstrates to the commission's reasonable satisfaction that a hearing is necessary." *Id.*

9. "Protests must be filed within thirty (30) days of the filing of the proposed IRP." *Id.*

10. Finally, "[i]f the commission has not acted within forty-five (45) days after the filing of the proposed IRP, that IRP is deemed accepted as compliant with this rule."

11. WRA's timely filed Protest demonstrates to the Commission's reasonable satisfaction that a hearing is necessary. In short, WRA contends that NMGC's IRP is deficient on two bases. First, WRA argues that NMGC has not performed necessary analyses under 17.7.4.11(B) NMAC. *See* Protest at 7–9. Second, WRA asserts that the detail in which NMGC's IRP addresses the requirements of 17.7.4.10 is insufficient. *See id.* at 6–7, 9–10. These issues specifically concern the IRP's compliance with the requirements of the gas utility IRP Rule and are therefore appropriate for hearing. *See* 17.7.4.15(A) NMAC.

FINDINGS AND CONCLUSIONS

12. WRA's timely filed Protest demonstrates to the Commission's reasonable satisfaction that a hearing is necessary.

13. The Commission should, therefore, commence proceedings to determine whether NMGC's IRP complies with the requirements of the gas utility IRP Rule.

14. Any finding not expressly mentioned here but stated in the body of this order is embraced by the Commission. Similarly, any fact rejected in the body of this order not expressly identified hereunder is rejected by the Commission.

IT IS THEREFORE ORDERED:

- A. A proceeding is hereby commenced as provided by this Initial Order.
- B. The Commission shall issue a procedural schedule via subsequent order.
- C. NMGC's IRP shall not be deemed accepted under 17.7.4.15(A) NMAC because the Commission has acted within forty-five (45) days after the filing of the proposed IRP.
- D. This Order is effective when signed.
- E. A copy of this Order shall be served upon all persons listed on the attached Certificate of Service via e-mail if their e-mail addresses are known; otherwise, via regular mail. In computing time in accordance with Statute, Regulation, or Commission Order, the computation shall begin on the date that the Order is filed with the Chief Clerk or Chief Clerk designee.
- F. To the extent that the attached Certificate of Service does not include interveners in NMGC's most recent general rate case, and participants in its most recent energy efficiency and IRP proceedings, NMGC shall serve this Order on those intervenors and participants no later than June 6.

**SIGNED under the Seal of the Commission at Santa Fe, New Mexico, this 30th day of
May, 2024.**

NEW MEXICO PUBLIC REGULATION COMMISSION

/s/ Gabriel Aguilera, electronically signed
GABRIEL AGUILERA, COMMISSIONER

/s/ James F. Ellison, Jr., electronically signed
JAMES F. ELLISON, JR., COMMISSIONER

/s/ Patrick J. O'Connell, electronically signed
PATRICK J. O'CONNELL, COMMISSIONER



[EXTERNAL] REPLACEMENT FILING - New Mexico Gas Company, Inc.'s Integrated Resource Plan for the Planning Period of 2024 through 2033 in Compliance with 17.7.4.9 NMAC

Trujillo, Lisa A. <Lisa.Trujillo@nmgco.com>

Tue 4/16/2024 4:54 PM

To: Records, PRC, PRC <PRC.Records@prc.nm.gov>

Cc: Hart, Anita L. <Anita.Hart@nmgco.com>; Pohl, Breann B. <Breann.Pohl@nmgco.com>

 1 attachments (3 MB)

NMGC's 2024 Integrated Resource Plan for the Planning Period of 2024-2033 in Compliance with 17.7.4.9 NMAC.pdf;

CAUTION: This email originated outside of our organization. Exercise caution prior to clicking on links or opening attachments.

NMGC submitted its Integrated Resource Plan for the Planning Period of 2024 through 2033. Please replace this corrected version with the one that was filed earlier today.

The amendment includes on page 48 of the updated filing a disclaimer on the bottom of the page. That is the only update.

Thank you.

Lisa Trujillo
Regulatory Project Manager
New Mexico Gas Company
Regulatory Affairs - MS/AC04
7120 Wyoming Blvd. NE, Suite 20
Albuquerque, NM 87109
505-681-7110

From: Trujillo, Lisa A.

Sent: Tuesday, April 16, 2024 3:30 PM

To: Records, PRC, PRC <PRC.Records@prc.nm.gov>

Cc: Hart, Anita L. <Anita.Hart@nmgco.com>; Pohl, Breann B. <Breann.Pohl@nmgco.com>

Subject: New Mexico Gas Company, Inc.'s Integrated Resource Plan for the Planning Period of 2024 through 2033 in Compliance with 17.7.4.9 NMAC

In compliance with 17.7.4.9 NMAC attached for filing today, April 16, 2024, is New Mexico Gas Company, Inc.'s Integrated Resource Plan for the Planning Period of 2024 through 2033.

If you have any questions, please contact Anita Hart at 505-288-1820 or anita.hart@nmgco.com

Thank you.

Lisa Trujillo
Regulatory Project Manager
New Mexico Gas Company
Regulatory Affairs - MS/AC04
7120 Wyoming Blvd. NE, Suite 20
Albuquerque, NM 87109
505-681-7110



Office 505-697-3838
Fax 505-697-4487

April 16, 2024

Ms. Melanie Sandoval
New Mexico Public Regulation Commission
P. O. Box 1269
142 W Palace Ave
Santa Fe, New Mexico 87501

Subject: New Mexico Gas Company, Inc.'s Integrated Resource Plan for the Planning Period of 2024 through 2033 in Compliance with 17.7.4.9 NMAC

Dear Ms. Sandoval:

Enclosed is New Mexico Gas Company Inc.'s ("NMGC") Natural Gas Integrated Resource Plan ("IRP") for the period of 2024 through 2033. This compliance filing is pursuant to Section 9 of 17.7.4, which requires that public utilities supplying natural gas service to customers shall file an IRP every four years.

NMGC has posted a copy of its IRP to its website at https://www.nmgco.com/en/regulatory_filings,

If you have any questions, please contact me at (505) 288-1820.

Sincerely,

/s/ Anita Hart

Anita Hart
Director, Regulatory Affairs

cc: Ed Rilkoff – NMPRC
Tim Martinez – NMPRC

2024

Integrated Resource Plan



New Mexico
GAS COMPANY®
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TABLE OF CONTENTS

Safe Harbor Statement	1
IRP Regulatory Requirements	2
IRP Public Advisory Process	3
Announcement of Public Advisory Meetings	3
IRP Public Advisory Meeting Topics	3
Internet Posting of Information	4
New Mexico Gas Company's Delivery System Overview	4
Northwest System	5
Southeast Transmission System	11
Independent Systems	12
Current Load Forecast	13
Gas Supply Sources & Strategy	15
Gas Supply	15
Gas Basin Diversity	15
Contract Supplier and Transportation Diversity	15
Storage	16
Natural Gas Supply Sources	17
Anticipated Resources to be Added During Planning Period	19
Artesia Mainline Replacement	19
Truth or Consequences Mainline	19
Distribution System Projects	20
Lea County Compressor Station Compressor Replacement	20
Resources and Infrastructure Under Consideration	21
Albuquerque Mainline Reinforcement	21
Taos Mainline Reinforcement	21
Storage	21
Brazos Pipeline Reinforcement	21
Expansion to Unserved and Underserved Areas	22
Demand Side Considerations	22
Proactive and Targeted Customer Communications	22
Demand Response	22
Energy Efficiency	22
Greenhouse Gas Reduction	23
GHG Emissions Reduction Initiatives	23
NMGC Energy Efficiency Program	25
Introduction	25
Energy Efficiency Program Development Methodology	25
Energy Efficiency Public Advisory Process	25
2023 – 2025 Portfolio of Energy Efficiency Programs	25
Energy Efficiency Impact on Integrated Resource Plan	27
Appendix A - Public Advisory Meeting Presentation and Summaries	
Appendix B - Delivery System Details	
Appendix C - Design Day Study Methodology	
Appendix D - 2023-2024 Winter Supply Portfolio Supply Sources	

SAFE HARBOR STATEMENT

This document contains forward-looking statements. Such statements are subject to a variety of risks, uncertainties, and other factors, most of which are beyond New Mexico Gas Company, Inc.'s ("NMGC" or the "Company") control, and many of which could have a significant impact on the Company's operations, results of operations, and financial condition, and could cause actual results to differ materially from those anticipated.

The information in this document is based on the best available information at the time of preparation. The Company undertakes no obligation to update any forward-looking statement or statements to reflect events or circumstances that occur after the date on which such statement is made or to reflect the occurrence of unanticipated events, except to the extent the events or circumstances constitute material changes in the Integrated Resource Plan ("IRP") that are required to be reported to the New Mexico Public Regulation Commission ("NMPRC" or "Commission") pursuant to Rule 17.7.4 New Mexico Administrative Code ("NMAC").

IRP REGULATORY REQUIREMENTS

In accordance with Rule 17.7.4 NMAC IRP for Gas Utilities (“IRP Rule”), NMGC has established a process to analyze and determine the most cost-effective portfolio of resources to supply the natural gas needs of its customers for the planning period of 2024-2033. By Rule, NMGC’s IRP shall contain NMGC’s jurisdictional:

- Current load forecast,
- Description of existing portfolio of resources,
- Summary of foreseeable resource needs for the planning period,
- Anticipated resources to be added during the planning period and the evaluation of various options that could reasonably be added to the utility’s resource portfolio,
- A summary description of natural gas supply sources and delivery systems,
- A summary identification of critical facilities susceptible to supply-source or other failures,
- Description of the public advisory process, and
- Other information that may aid the Commission in reviewing the utility’s planning processes.

IRP PUBLIC ADVISORY PROCESS

Pursuant to 17.7.4.12 NMAC, NMGC initiated its Public Advisory process one year prior to the filing date of April 16, 2024 by providing notice to the Commission, intervenors in our most recent rate case, and participants in the most recent energy efficiency and IRP proceedings 30-days prior to the Company's first IRP public advisory meeting. Throughout the development of the IRP, NMGC held Public Advisory meetings to facilitate stakeholder and public participation and input. Participating stakeholders included representatives of the NMPRC Utility Staff ("Staff"), Western Resource Advocates ("WRA"), Tiger Natural Gas ("Tiger"), Southwest Energy Efficiency Project ("SWEEP"), and Southern Energy Alliance ("SEA").

Announcement of Public Advisory Meetings

In advance of each of the scheduled public advisory meetings, NMGC printed and published notices of the meetings in various publications to promote awareness and encourage participation. These publications included the Albuquerque Journal, which is circulated in every county that NMGC provides natural gas utility service, customer bills, NMGC's website and NMGC's Facebook, X (formerly Twitter) and LinkedIn social media platforms. Interested parties had the option to attend in-person, or to join the meetings on Microsoft Teams.

Table 1 - Public Meetings and Notifications

Meeting Location	Meeting Date	Meeting Notification Date and Publication
Albuquerque	6/23/2023	April 16, 2023 - Albuquerque Journal April 14 - May 12, 2023 - Customer Bill Message Notice, social media and NMGC web site
Santa Fe	12/14/2023	November 13 - December 14, 2023 - Customer Bill Message Notice, social media and NMGC web site
Farmington	2/1/2024	December 28, 2023 - January 25, 2024 - Customer Bill Message Notice, social media and NMGC web site
Anthony	3/12/2024	January 26 - March 12, 2024 - Customer Bill Message Notice, social media and NMGC web site
Roswell	3/13/2024	January 26 - March 12, 2024 - Customer Bill Message Notice, social media and NMGC web site

IRP Public Advisory Meeting Topics

In each of the meetings held across the state, a presentation was made addressing items required by the IRP Rule. This included a description of NMGC's system, NMGC's gas supply targets, gas supply strategies, and potential additional resources. Information was also provided about NMGC's energy efficiency program. NMGC responded to questions and comments from meeting participants. Appendix A includes the public advisory meeting presentation and additional details regarding topics of discussion.

Internet Posting of Information

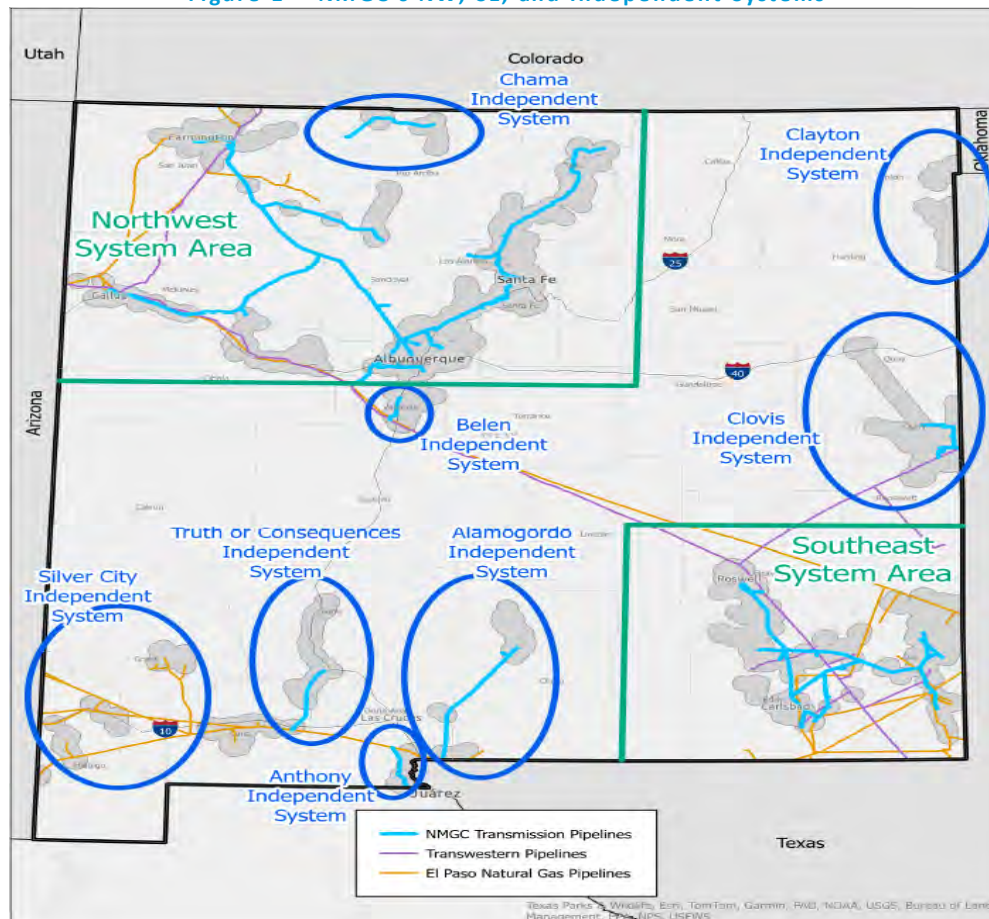
NMGC established an internet posting for IRP information. The Company's website shares a general description of the IRP process, meeting invitations, as well as a link to the NMPRC Rules, including the Gas IRP rule.

The IRP information can be found here: https://www.nmgco.com/en/regulatory_filings.

NEW MEXICO GAS COMPANY'S DELIVERY SYSTEM OVERVIEW

NMGC's service territory is throughout the state of New Mexico serving approximately 549,000 meters¹ or approximately 1.3 million New Mexicans in 26 of New Mexico's 33 counties and serves the Navajo Nation, Jicarilla Apache Nation, Fort Sill Apache Nation, and 15 Pueblos. NMGC owns, operates, and maintains over 12,500 miles of transmission and distribution pipelines throughout the state. For planning purposes, NMGC divides its service area into the Northwest (NW) system, the Southeast (SE) system, and the independent systems. A detailed description of system segments including pipeline size and Maximum Allowable Operating Pressure ("MAOP") is included in Appendix B.

Figure 1 – NMGC's NW, SE, and Independent Systems

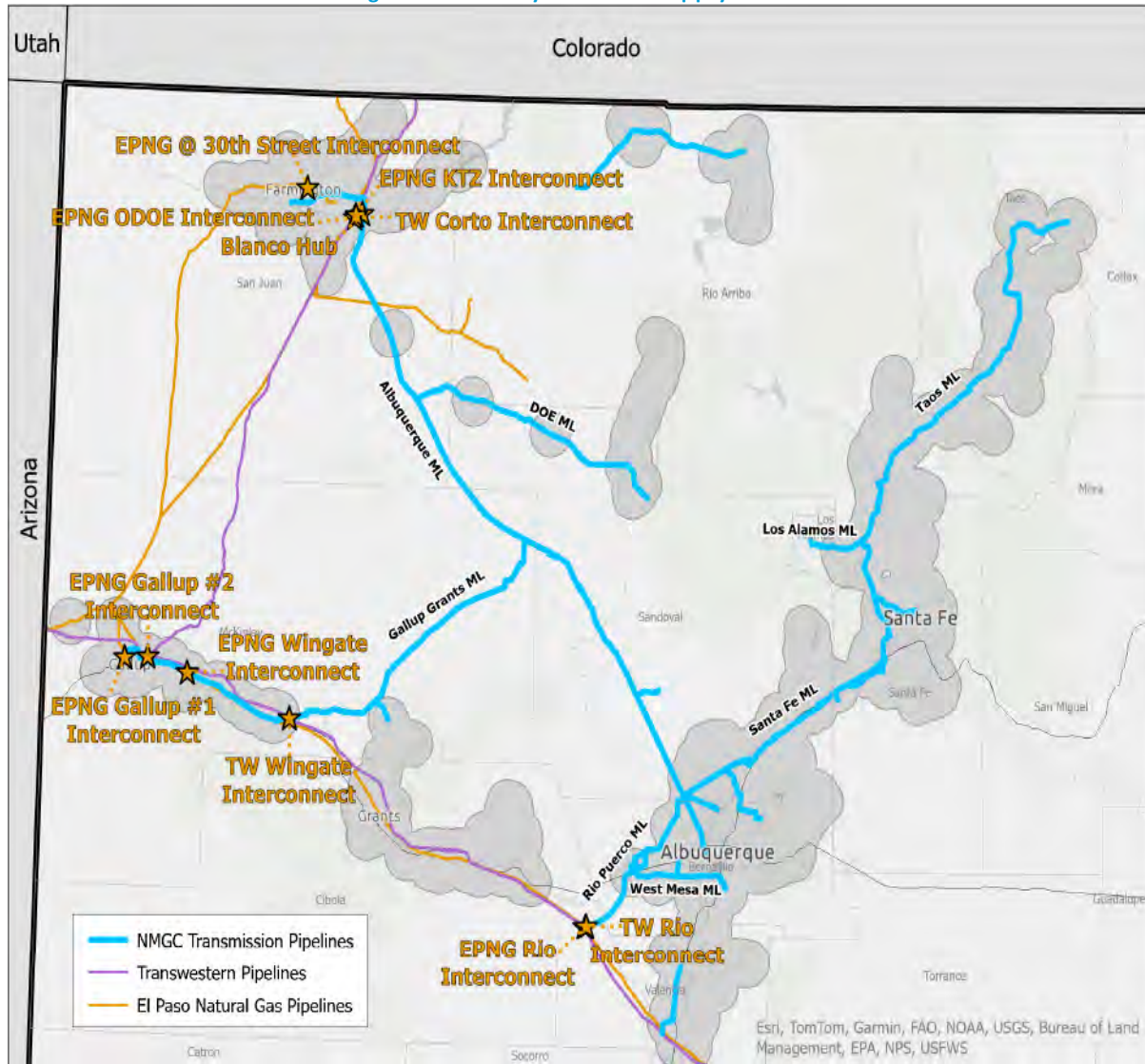


¹ NMGC meter count as of March 2024.

Northwest System

The NW system, which covers most of northern New Mexico, is made up by the following major service areas: the Albuquerque Metro area, the Santa Fe/Los Alamos area, the Española/Taos/Red River area, the Gallup-Grants area, and the Farmington area. The NW system is NMGC's largest system in both infrastructure and customers. This system accounts for approximately 69% of the total transmission and distribution pipeline mileage and approximately 79% of the total NMGC customers. Natural gas is delivered into the NW system from interstate pipelines, processing plant tailgates, and the Blanco Hub through the gas receipt points depicted in the following figure.

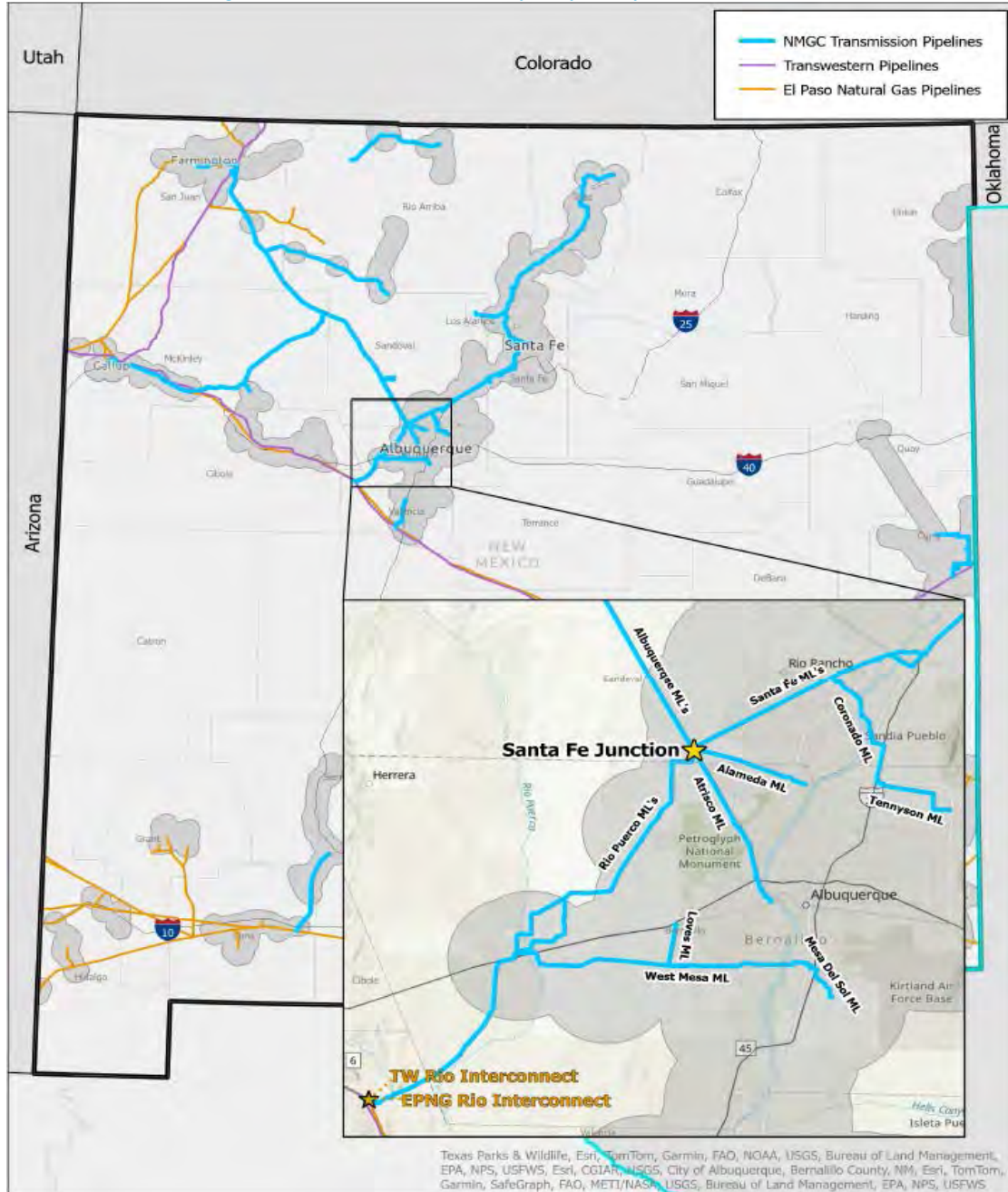
Figure 2 – NW System and Supply Points



Albuquerque Metro Area

The Albuquerque Metro area is comprised of Albuquerque, Rio Rancho, Bernalillo, and the East Mountains as well as the Pueblos of Isleta, Sandia, and Santa Ana. This is NMGC’s largest customer base amounting to approximately 55% of total customers served by NMGC. Major NMGC transmission pipelines that deliver gas to the Albuquerque Metro area are described in the table below. Gas is supplied to these pipelines through numerous supply points in the Farmington area (see Farmington area description) and the Transwestern (“TW”) and El Paso Natural Gas (“EPNG”) interconnects with Interstate Pipelines shown in the map below.

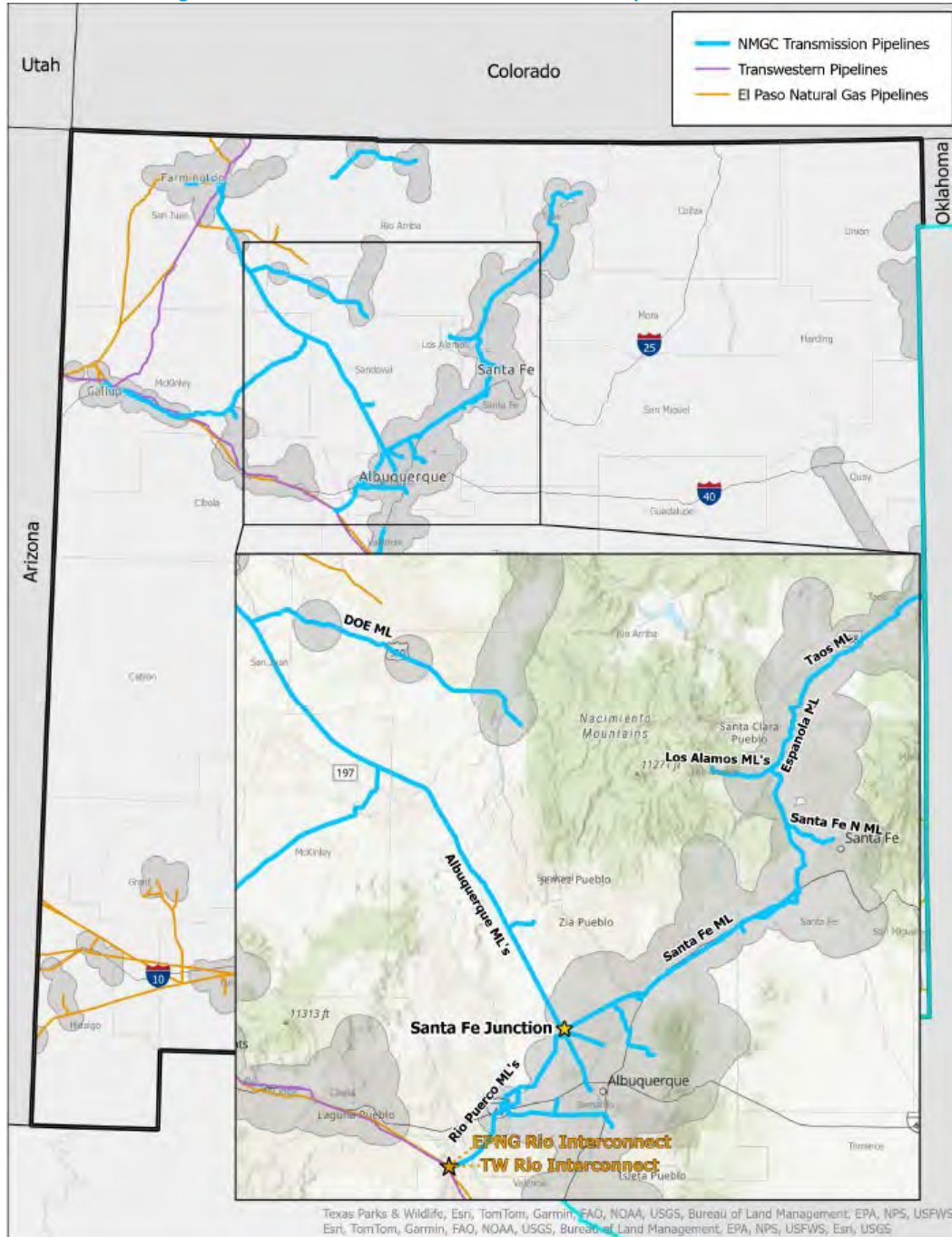
Figure 3 – Overview of Albuquerque Pipelines and Area



Santa Fe/Los Alamos Area

The Santa Fe/Los Alamos area includes Santa Fe and Los Alamos as well as other communities in the area including the Pueblos of San Felipe, Santo Domingo, Cochiti, Tesuque, San Ildefonso, Pojoaque, and Nambe. This area comprises 10% of NMGC's customer base. The pipelines that serve this area include the Santa Fe 20 inch mainline and the Santa Fe 12 inch mainline. Gas is supplied to these pipelines from the Santa Fe Junction.

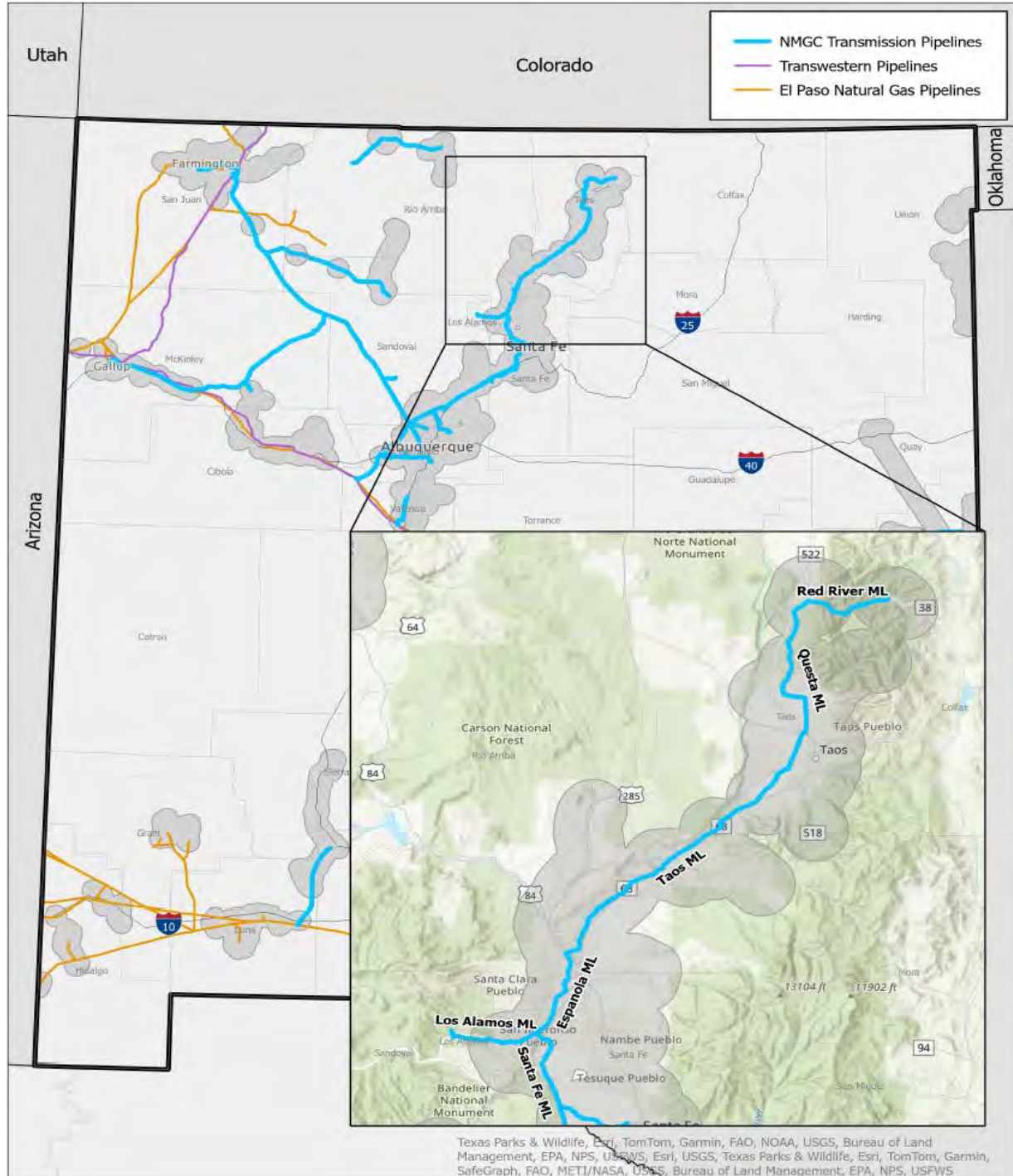
Figure 4 – Overview of Santa Fe and DOE Pipelines and Area



Española/Taos/Red River Area

The Española/Taos/Red River area includes Taos, Española, Questa and Red River, and other communities in the area including the Pueblos of Santa Clara, San Juan, and Taos. This area comprises 5% of the total customer base. The pipeline supplying this area is the Taos mainline which is supplied by the Santa Fe 20 inch mainline and the Santa Fe 12-inch mainline.

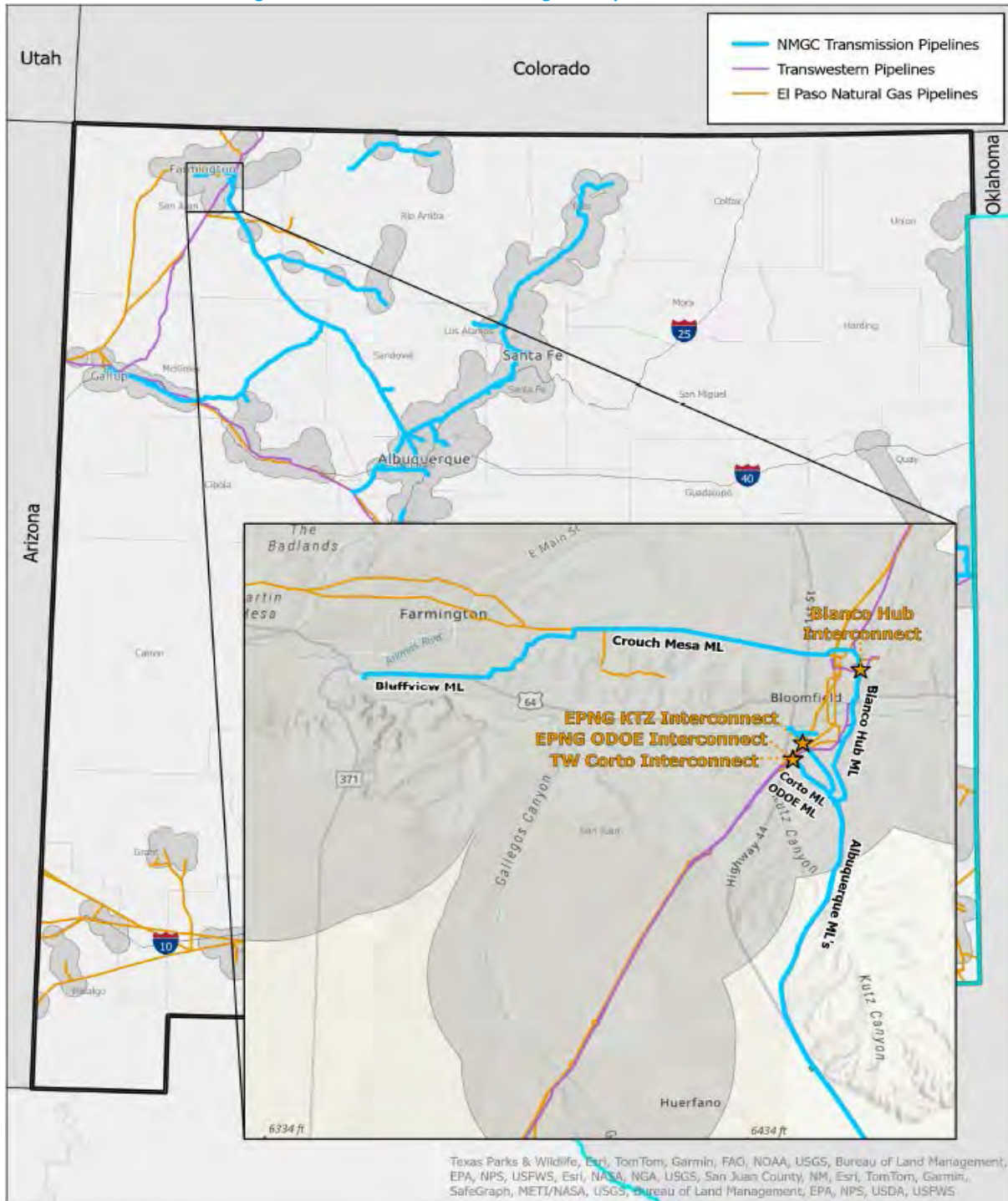
Figure 5 – Overview of the Taos Mainline and Area



Farmington Area

The Farmington area includes Farmington and Bloomfield as well as other smaller communities in the area including the Navajo Nation. This area comprises 6% of NMGC’s customer base. The pipelines that serve this area include Crouch Mesa, Bluffview, Farmington mainlines, and DOE mainline, which are supplied by the interconnects shown in the map below.

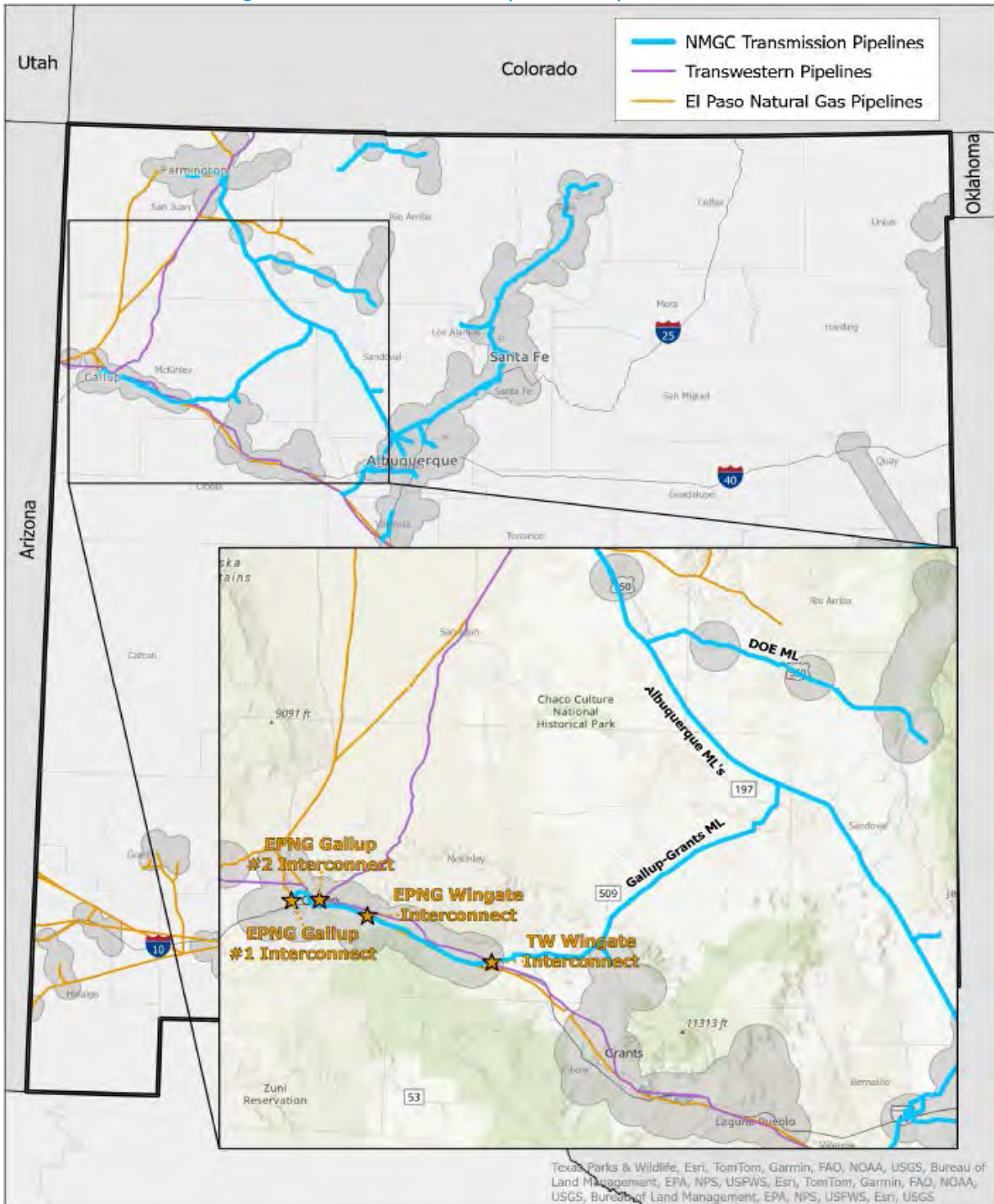
Figure 6 – Overview of Farmington Pipelines and Area



Gallup-Grants Area

The Gallup-Grants area includes Gallup, Grants and other communities in the area along with parts of the Navajo Nation and the Pueblos of Acoma and Laguna. This area comprises 3% of NMGC’s customers. The major NMGC gas transmission pipeline in the area is the Gallup-Grants mainline, which is supplied from the Albuquerque mainlines and interconnects shown in the map below.

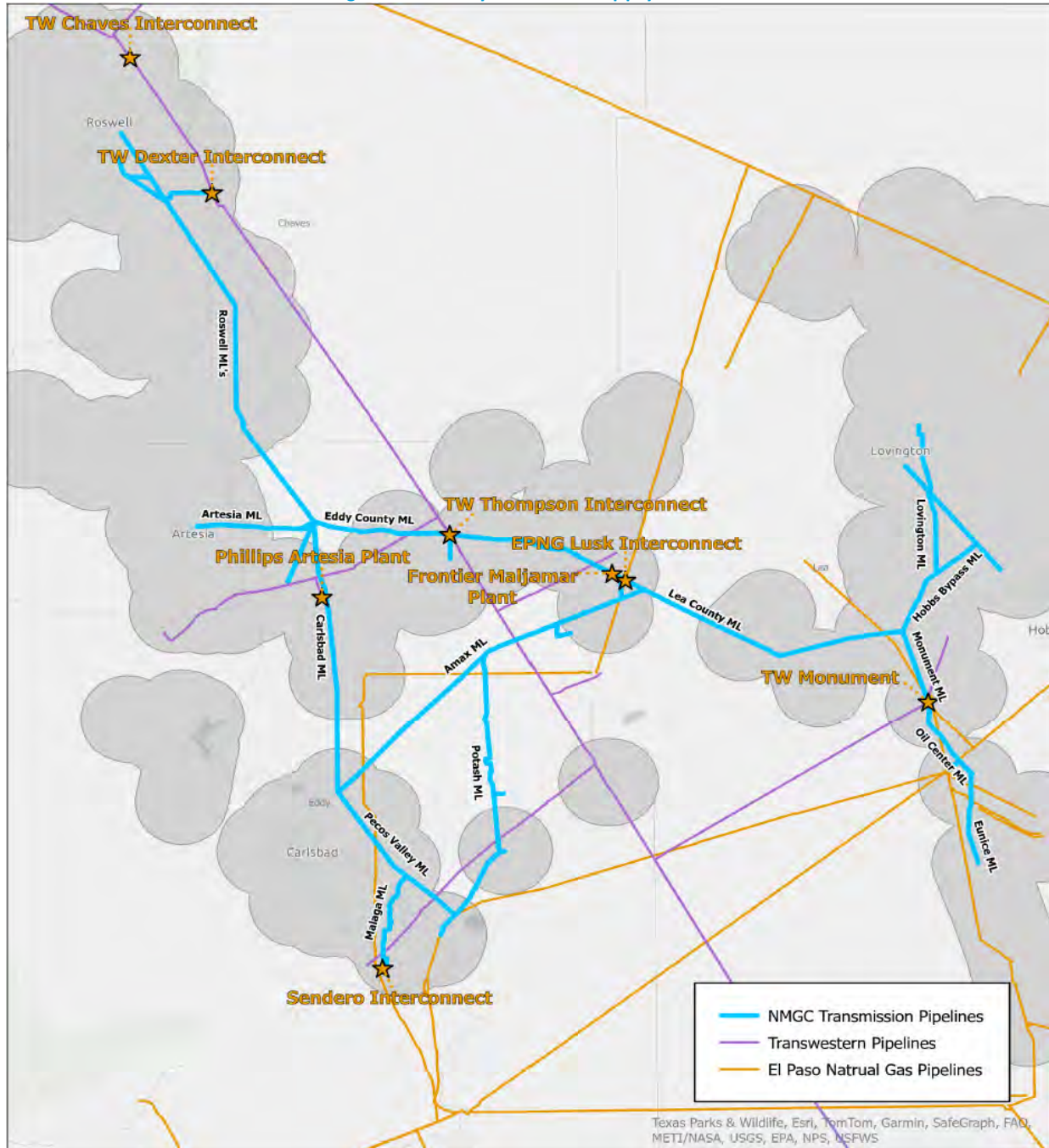
Figure 7 – Overview of Gallup-Grants Pipeline and Area



Southeast Transmission System

The southeast system supplies Roswell, Artesia, Carlsbad, and Lovington, Eunice, and other communities in the area. The SE system accounts for 13% of transmission and distribution pipeline mileage and supplies 6% of NMGC's total customers. Natural gas is delivered into the SE system from interstate pipelines and processing plant tailgates as shown in the following figure.

Figure 8 – SE System and Supply Points



Independent Systems

NMGC serves several areas that are not connected to the larger Northeast and Southeast systems. They are typically served by an NMGC owned transmission pipeline supplied from an interstate pipeline. These Systems total approximately 16% of the total customer base served by NMGC.

Clovis Area Transmission System

This independent transmission system is made up of approximately 50 miles of 4 through 10-inch diameter pipe and serves Clovis, Portales, and Tucumcari as well as nearby communities. This system is supplied gas through direct interconnects with both TW and EPNG interstate pipelines.

Belen Area Transmission System

This independent transmission system is 13.8 miles of 8 and 12-inch diameter pipe and serves Belen and Los Lunas, and nearby communities. This system is supplied through direct interconnects with both TW and EPNG interstate pipelines.

Alamogordo Area Transmission System

This independent transmission system is primarily comprised of two parallel pipelines each 68 miles in length and contains both 4 and 6-inch diameter pipe to serve Alamogordo, Tularosa, Chaparral and White Sands, as well as Holloman Air Force Base. This system is served through a direct interconnect with EPNG.

Truth or Consequences (T or C) Area Transmission System

This independent transmission system is approximately 41 miles of 4 and 8-inch pipe and serves T or C, Elephant Butte, the Ft. Sill Apache Nation, and nearby communities. This system is served through a direct interconnect with EPNG.

Anthony Area Transmission System

This independent transmission system is 24 miles of 6 to 12-inch diameter pipe and serves Sunland Park and Santa Teresa. This area is also comprised of small distribution systems that serve Anthony, La Union and other smaller nearby communities in the area. Each system is served through a direct interconnect with EPNG.

Silver City Area

The Silver City area is characterized by small distribution systems in the southwest corner of the state that serve Silver City, Bayard, and portions of Deming and Lordsburg, as well as other communities in the area. Each system is served through direct interconnects with EPNG.

Chama Area

This independent transmission system is comprised of approximately 40 miles of 4 and 6-inch diameter pipe which serves the Jicarilla Apache Nation and the communities of Chama, Dulce, and Lumberton. This system is supplied by natural gas production near Dulce.

Clayton Area

This independent system is comprised of small distribution systems that feed Clayton and nearby communities in the northeast part of the state. The distribution systems are supplied by direct interconnects with West Texas Gas.

CURRENT LOAD FORECAST

NMGC designs the natural gas transmission systems' capacity to operate and provide service to meet design day criteria. A design day is the highest flow volume that gas operations must accommodate within a single gas day. Most of the gas on the NMGC system is used for heating purposes, which means more gas is consumed as temperatures decrease. The Heating Degree Day ("HDD") is an index that is approximately proportional to the space heating load. It is defined as the difference between 65°F and the average of the high and low temperatures for the day and is widely used to correlate heat load with temperature. NMGC uses for its planning a refinement of the HDD which includes the effect of wind on space heating requirements, which is termed a Wind-Adjusted Heating Degree Day ("HDDW").

In November 2023, NMGC contracted Marquette Energy Analytics ("MEA") to complete a Design Day Study for the Northwest, Southeast, and Remote systems. MEA completed the following analysis for NMGC:

- Calculated the expected demand for conditions with an expected return frequency of once every 30 years, once in every five years and once in every year
- Calculated the demand expected under these conditions for the prior heating season, and estimated the growth of the demand for the next 10 heating seasons
- Calculated a confidence interval around the estimated demand

To calculate this demand, MEA uses weather data and historical demand and applies this data to design day conditions. This data is then adjusted to match current NMGC customer base characteristics to estimate the total design day for each system. Appendix C provides additional detail with respect to the modeling methodology. The design day forecast results for load centers are evaluated and adjusted by the Company to incorporate confidence intervals, impacts due to changes to system configuration, and known increases or decreases to system measurements and loads affecting those area forecasts. The final design day load forecasts for the major system areas include the addition of non-heat sensitive demand, which is comprised of large industrial and commercial customers.

Over the five-year period between December 2017 and December 2022 used for NMGC's most recent sales forecast, the number of customer meters served by NMGC increased from 524,553 to 545,185, an average increase of approximately 4,126 meters per year. The increased meter counts are distributed between sales and transportation customers, primarily across the residential and small general service customer classes. The Company is forecasting customer growth through the IRP planning period, reaching approximately 593,000 by the end of the 2033/2034 heating season.

Table 2 – NMGC Meter Counts 2017-2022

Customer Meters December 2017 - December 2022				
Area	Dec 2017	Dec 2022	Meter Count Change	Avg Change Per Year
Northwest	410,649	428,243	17,594	3,519
Southeast	32,911	32,328	-583	-117
Remote	80,993	84,614	3,621	724
Total	524,553	545,185	20,632	4,126

Below are summary tables of current and projected design day load forecasts and HDDWs for NMGC's systems over the 10-year planning period. Overall, the total design day loads for heat sensitive demand

are expected to increase by approximately 2% between the 2024-2025 and 2033-2034 Heating Seasons, primarily due to increased customer counts. Some load center forecasts indicate a reduction in design day loads associated with reduced customer counts or due to reduced system load center measurements in recent years. Total design day load is projected to decrease by the end of the 10-year planning period due to forecasted reduction in natural gas fired electric generation².

Table 3 - Design Day Forecast

Northwest System Design Day Loads			
Load Center	Design Day Forecast (MMBtu/d)		Design Day Temperature
	2024-2025	2033-2034	HDDW
Albuquerque	413,834	422,061	68
Santa Fe	78,721	78,202	70
Espanola	12,487	13,333	70
Taos	13,428	13,901	73
Los Alamos	17,462	17,042	70
Farmington	48,067	51,711	71
Gallup Grants	30,857	29,273	71
Non-Heat Sensitive Demand	98,000	55,000	
NW Area Total	712,857	680,523	

Southeast System Design Day Loads			
Load Center	Design Day Forecast (MMBtu/d)		Design Day Temperature
	2024-2025	2033-2034	HDDW
Roswell	19,436	18,943	63
Artesia	7,105	7,199	62
Carlsbad	11,550	12,654	61
Eunice Lovington	7,535	7,809	61
Non-Heat Sensitive Demand	75,000	75,000	
SE Area Total	120,625	121,605	

Remote System Design Day Loads			
Load Center	Design Day Forecast (MMBtu/d)		Design Day Temperature
	2024-2025	2033-2034	HDDW
Belen	29,081	30,228	70
Clovis	24,228	23,735	68
Alamogordo	21,625	22,479	56
Anthony	11,087	12,935	54
Silver City	9,049	8,856	55
Truth or Consequences	5,199	5,769	56
Clayton	2,080	3,185	69
Chama	2,015	2,063	76
Remote Area Total	104,364	109,251	

² The Non-Heat Sensitive Demand reduction for the Northwest Load Center between the 2024/2025 Heating Season and the 2033/2034 Heating Season is associated with the retirement of the PNM Reeves generating station identified in the December 2023 Integrated Resource Plan filed by Public Service Company of New Mexico (PNM) in case NMPRC Case No. 23-00409-UT.

GAS SUPPLY SOURCES & STRATEGY

Gas Supply

NMGC's gas supply strategy consists of diversifying supplies between supply basins, using multiple suppliers and differing contract types, thereby creating transportation diversity, and through contracts for gas storage. Sourcing supplies from multiple supply basins provides alternatives in the event a supply basin underperforms due to production or processing reductions. Supply disruptions can be caused by winter storms, electrical outages and technical or mechanical issues. Freezing weather can cause operational difficulties in gas wells, production facilities, and interstate pipelines connected to the NMGC system. Electrical failures can shut down production and processing plants. Once a processing plant goes offline, it may take days to resume full operations. During extreme weather events, it is possible for these basins to experience production reductions of 40% to 50%. The loss of large amounts of gas supply during periods of high demand creates supply challenges for NMGC. By having multiple sources and supply contract options, NMGC increases its flexibility in the way it sources gas and supplies its systems. Gas purchased in advance of need and placed in storage provides a source of firm gas that can be used for short-term peak demand needs. A description of the existing portfolio of resources for 2023-2024 winter heating season is included in Appendix D. The Company anticipates annual supply resource needs to be comparable to the overall levels identified in this summary.

Gas Basin Diversity

NMGC primarily contracts for supplies from the San Juan and Permian Basins and augments its portfolio with supplies sourced from the Piceance and Green River basins to allow for supply diversity and flexibility in sourcing. Should one supply basin become constrained due to regional weather conditions or other production issues, supplies can be increased from other basins. NMGC began sourcing gas from the Piceance basin in northwestern Colorado and the Green River basin in southwest Wyoming in 2015 to further diversify our gas supply.

Contract Supplier and Transportation Diversity

To provide the most reliable gas supply, NMGC enters into several types of contracts with multiple suppliers. By having multiple supply sources and contract options, NMGC has greater flexibility in the event that supply from a geographical area is disrupted or a specific supplier fails to perform.

NMGC does not own or control natural gas production or processing. NMGC contracts with producers and marketers for supplies from market pooling points or directly from processing plant tailgates. NMGC diversifies its supply portfolio to guard against the effects of supplier default. These contracts are spread between the supply basins and receipt points on NMGC's delivery systems. NMGC also enters into contracts which specify supply exclusivity and replacement provisions, higher degrees of supply reliability, greater nomination options, and/or delivery point flexibility.

All of the natural gas consumed by NMGC customers must be transported from its source to its point of use. NMGC owns and operates approximately 1,500 miles of transmission pipelines, which serve a significant portion of its transportation needs. For the remainder, NMGC relies on contractual relationships with third-party pipelines. NMGC currently contracts for interstate transportation services from TW, EPNG, TransColorado ("TC"), OkTex, and West Texas Gas. There are two processing plants that

are connected to NMGC's northwest transmission system via the Blanco Hub³. These processing plants generally provide reliable gas supply to the NMGC system since they eliminate the need to contract for transportation services on interstate pipelines. The gas supply from these plants makes up a large percentage of the total gas on the NMGC system. Should a processing plant cease to produce gas for any reason, NMGC is forced to react to the loss of a large amount of gas supply on short notice. Multiple processing plants that previously supplied gas directly to NMGC's transmission system have shut down over the past decade, increasing the risk that production at the remaining facilities could have significant impact on NMGC's supply. To address this issue, NMGC has made system changes which allow for switching to alternate sources of supply. These include the addition of new interstate pipeline interconnects and modifications to the NMGC transmission system.

NMGC holds firm rights for adequate capacity to serve its customers but is mindful that future growth in customer demand may require additional capacity. NMGC works closely with the interstate pipelines to maximize the flexibility of the capacity the Company currently holds and to strategically add to its interstate transportation portfolio as opportunities arise.

With production increasing from the Permian basin along with increased demand from Arizona, California, and Mexico, NMGC expects interstate pipeline capacity to become constrained and more expensive over time. There are several segments of interstate pipeline in New Mexico that are already constrained during the winter months. To address these issues, NMGC has begun diversifying its interstate transportation beyond TW and EPNG to include TransColorado and supplies delivered to the TW La Plata receipt point via Northwest Pipeline, which provide access to the Piceance basin.

Storage

NMGC currently contracts for storage services at the Keystone Gas Storage ("KGS") facility in Winkler County, Texas, which is connected to both TW and EPNG pipelines. Storage is used within the supply portfolio as a swing supply source during higher demand periods, a replacement supply during times of supply disruption, and to provide daily operational balancing. NMGC has injection rights of between 45,000 MMBtu/day and 65,000 MMBtu/day depending on the amount of gas in storage. During the peak winter months, NMGC has rights to withdraw up to 190,000 MMBtu/day. Interstate pipeline transportation is required to move gas from the storage facility to NMGC facilities.

NMGC's gas transmission and distribution pipelines also serve as a limited source of short-term gas storage. The term for this type of gas storage is linepack. During times of lower demand, pressure can be increased in the pipeline system, allowing the pipes to store gas for use during times of greater usage. This type of storage is typically effective to serve the higher morning and evening peak-hour loads. NMGC has established parameters for useable linepack on its NW system.

NMGC also contracts for mobile gas storage supplies in the form of Liquefied Natural Gas ("LNG") and/or Compressed Natural Gas trailers. These trailers are used to provide backup supply for isolated/remote systems during the heating season or to supply gas to isolated systems during maintenance or construction activities that would result in the system being disconnected from its supply source.

In order for gas storage to be the most effective to meet the needs of NMGC's customers, it should be as near as possible to major demand areas. If storage is located with direct access from and to NMGC's

³ Harvest Midstream Milagro & DCP Val Verde

system rather than an interstate pipeline, NMGC can dispatch gas more quickly and based on need rather than according to national gas scheduling cycles, which could delay storage-gas flow significantly. Currently, other than the Company’s lineup provided by having gas in its pipes, the only suitable gas storage available to NMGC is remote from NMGC’s demand areas and must be transported to NMGC’s system through interstate pipelines. Further, since the storage services are contracted from third-parties, those services are subject to contractual *force majeure* provisions at the discretion of the provider, which may reduce NMGC’s access to its gas in storage. Finally, the cost for these storage services is expected to increase in the future due to demand from other regional utilities, gas-fired generation and industrial natural gas users, and other activity in the Permian basin. NMGC’s current storage agreement expires in 2025, with an option to extend the agreement through 2027.

Since the NMPRC decision denying the Company’s LNG filing, the Company is initiating a renewed examination of alternatives open to the Company to enhance the reliability of storage gas to the Company. Alternatives being considered include alternative LNG Storage designs or locations, additional off-system underground storage in West Texas or New Mexico, additional demand-side opportunities, and options open to the Company to modify contracting opportunities, if any, that provide advantages to customers over the Company’s current gas-storage program.

Natural Gas Supply Sources

NMGC ensures contracts for the upcoming winter heating season are competitively priced. NMGC develops and issues an annual request for proposal to solicit bids from potential suppliers specifying volumes and contract types needed at specific receipt points or supply pools.

Winter supply portfolio targets based on design day loads are developed to meet demand during a design day event. The following figure depicts NMGC’s overall gas supplies for the 2023-2024 winter season. These totals can change from year-to-year based on revisions to design day demand and the amount of gas that NMGC transportation customers are expected to provide.

Figure 9 – 2023-2024 Winter Season Supply Targets



NMGC is an open access pipeline which allows NMGC customers to choose their own gas provider and use NMGC pipelines to transport their supply. Historically, these customers have been the larger industrial and commercial end-users. On an annual basis, these customers provide approximately half of NMGC's approximately 90 Bcf of volumetric average throughput.

Declining San Juan Basin

NMGC sources natural gas from several regional supply basins, but a greater percentage of gas is sourced from the San Juan and Permian basins due to their proximity.

NMGC currently contracts for approximately 60% of design day gas supply from the San Juan basin. The San Juan basin currently produces approximately 1.6 Bcf/d. Although the San Juan basin has seen steady decline for the past several years in production and investment, it still produces a significant amount of natural gas. The decline is being driven by economics which favor drilling and development of liquid rich plays and lower cost natural gas from shale and tight formations in other basins. Therefore, production companies have been restructuring drilling and production programs to areas with more favorable economics and where production assets can be consolidated at scale.

To address this issue, NMGC has contracted for transportation and supplies from the Piceance and Green River basins. In addition, to broaden access to existing San Juan basin production, NMGC has added a new high-pressure interconnect to the NW system. This interconnect allows NMGC to have more supply options in the El Paso San Juan Pool.

While production in the San Juan is decreasing, gas production in the Permian basin has been steadily increasing in recent years. Drilling activity in the Permian basin is primarily focused on crude oil with natural gas being a by-product, commonly referred to as associated gas. The market for hydrocarbon liquids has prompted more exploration and development in this area, and an increase in natural gas output has resulted.

Most of this new gas is expected to flow to the Gulf Coast for LNG exports although some will flow across New Mexico to markets in Arizona, California, and Mexico. As the San Juan basin declines and the Permian basin increases in natural gas output, NMGC may source more gas from the Permian basin, subject to the availability of interstate pipeline capacity. NMGC's Rio Puerco Mainline Looping Project, which was completed in 2016, has increased NMGC's receipt capacity from interstate pipelines that are transporting Permian basin gas supplies. NMGC's Malaga Interconnect, completed in the winter of 2020, also provides an additional source of Permian supply to the SE system.

ANTICIPATED RESOURCES TO BE ADDED DURING PLANNING PERIOD

NMGC ensures the sizing of its transmission and distribution systems are sufficient in order to allow for safe, reliable service and to accommodate future growth. Projects which substantially increase system capacity are often large in size, capital intensive, and require long planning cycles. Existing pipeline infrastructure is continually evaluated regarding safety and operational suitability. Based on these evaluations, segments are enhanced, or their operational parameters revised to best serve the customer.

NMGC's pipelines and facilities across the state must traverse public, private, and Native American jurisdictions. Based on historical experience, right-of-way ("ROW") costs are one of the fastest growing costs of new gas facility construction. Access to facilities on public lands is also becoming increasingly difficult and conditioned with limitations that restrict necessary evaluation and maintenance activities and contribute to increased costs.

To address these issues, NMGC is proactively working with stakeholders to provide adequate timing for project planning and construction. In some cases, alternate pipeline routes and facility locations can be identified to avoid contentious and/or expensive ROW and to avoid access issues.

The following projects are currently in advanced planning or under construction.

Artesia Mainline Replacement

The Artesia Mainline is comprised of three sections, all of which provide gas to customers in and around the City of Artesia. The first segment, constructed in 1967, is a six-inch coated steel pipeline in southeast New Mexico which needs to be replaced. The other two segments are eight-inch pipelines that were constructed after 1970 with more modern materials and have necessary records, and do not need to be replaced. The Artesia Six-Inch Mainline does not have traceable, verifiable, and complete pressure test and material records that are now required by federal regulations. This means that NMGC must perform pressure tests and material verification tests for the entire pipe. This pipeline will be tested to establish the MAOP at 720 psig increasing the capacity in the line.

Estimated Cost: \$5.7 Million

Estimated Completion: December 2025

Truth or Consequences Mainline

The T or C Mainline is a four-inch distribution pipeline that was originally constructed in 1967. Because of the standards in place at the time of its construction, over 50 years ago, the T or C Mainline is constructed of four-inch coated steel pipe that incorporates low frequency electric resistance welded long seams, which are no longer used in the industry. Also, inspections have revealed that the pipe has a wall of 0.141 inches, requiring highly skilled welders to perform any repairs. Additionally, NMGC is experiencing higher demand primarily from the area's chile producers who use gas to dehydrate part of the chile crop in southern New Mexico. NMGC is replacing parts of the T or C Mainline in order to bring it up to modern pipeline standards. NMGC replaced 3.5 miles in 2023. In 2026, NMGC will replace approximately 3.1 miles of pipeline that run through the business district of Garfield, New Mexico. During the replacement, NMGC

will install a modern eight-inch pipe which will satisfy current demand and reinforce the system supply of gas from Garfield to Truth or Consequences.

Estimated Cost: \$6.9 Million

Estimated Completion: December 2026

Distribution System Projects

NMGC continuously updates and enhances its distribution systems with projects that range from adding system capacity, installing secondary feeds, adding and/or rebuilding station infrastructure, and replacing pipe. These projects, which will continue through this planning period, ensure system reliability and system flexibility to meet customer demand today and in the future. Included in this category of projects are System Reinforcements, Legacy Replacements, and Town plant Specifics.

Estimated Cost: \$32 million

Estimated Completion Date: 2024-2029

Lea County Compressor Station Compressor Replacement

The Lea County Compressor station is part of the Company's southeast transmission system and is located between NMGC and EPNG at the Lusk interconnect. A new compressor and cooling system will be installed to provide increased reliability and flexibility and to enable the company to fully utilize southeast transmission system capacity during peak periods.

Estimated Cost: \$7.0 million

Estimated Completion Date: 2027-2028

RESOURCES AND INFRASTRUCTURE UNDER CONSIDERATION

Albuquerque Mainline Reinforcement

The Albuquerque Mainline brings gas from northwest New Mexico to the Santa Fe Junction, a major distribution point of the NW system. In addition to gas from the San Juan basin, the Albuquerque mainline receives gas from pipelines reaching into northwestern Colorado, Utah, Wyoming, and Canada. Depending on the market dynamics of gas supply and transportation, NMGC may wish to reinforce the Albuquerque mainline system to enable it to transport more gas by adding capacity through pipeline replacements and hydrotesting.

Taos Mainline Reinforcement

The Taos ML brings gas from Española to Questa and supplies the customers in all the communities in between. NMGC is weighing options for Maximum Allowable Operating Pressure “MAOP” reconfirmation, as required by Pipeline and Hazardous Materials Safety Administration “PHMSA”, for the Taos ML. PHMSA allows pipeline replacements or hydrotesting as reconfirmation methods. NMGC must comply with the regulation by 2034. Engineering analysis is under way to determine the best method to reinforce the system.

Storage

As discussed in the Gas Supply Sources and Strategy section, the most effective storage for meeting the needs of NMGC’s customers would be storage connected to NMGC’s system as near as possible to major demand areas. As detailed in the Storage Options Report filed with Company’s response to the 2021 Winter Storm Uri event⁴, a variety of on system storage options are available including LNG, Propane Air Blending, New Underground Storage, and compressed natural gas (“CNG”) facilities. The storage option report identified on-system LNG as the best option across multiple evaluation criteria including proximity, reliability, and operability.

NMGC’s December 2022 application for a Certificate of Public Convenience and Necessity, to construct and operate an on-system LNG storage facility, was not approved by the NMPRC in Q1 2024. As a result, the Company continues to consider available resource and infrastructure options to enhance the reliability of storage gas. Resource and infrastructure alternatives being considered include alternative LNG Storage designs or locations, additional linepack opportunities, additional off-system underground storage in West Texas or New Mexico, and additional demand-side programs, if any, that provide advantages to customers over the Company’s current gas-storage program.

Brazos Pipeline Reinforcement

Along with consideration of bulk LNG storage, the Company has considered the use of smaller permanent LNG or CNG facilities in certain areas to ensure supply reliability to isolated systems or installing a pipeline

⁴ NMPRC Case 21-00095-UT NMGC Exhibit TCB-2

to reinforce the supply. In particular, the Brazos line, which serves the community of Dulce within the Jicarilla Apache Nation along with the communities of Dulce and Lumberton in northern New Mexico, has access to a single source of supply from gas produced by the Jicarilla Apache Energy Corporation (“JAECO”) Blackhawk plant. If there are declines in the reliability or capacity of the Blackhawk supply to the Company’s X-41 receipt point or if the facility ceases to operate, permanent on-system storage along with pipeline extensions to connect the Brazos line to the Company’s Northwest system will be needed.

Expansion to Unserved and Underserved Areas

Large areas of New Mexico do not have natural gas service due to distance from existing natural gas infrastructure and high costs to extend facilities. From 2016 through 2020, NMGC’s Infrastructure Expansion Program, funded by Emera Inc. under a commitment related to its acquisition of NMGC in 2016, enabled the expansion into 76 unserved communities (mostly neighborhoods or business areas) as well as 2,070 conversion rebates for customers switching to natural gas as a fuel source. In addition, NMGC continues to evaluate the feasibility of options to provide supply to communities that are not close to existing gas infrastructure.

Demand Side Considerations

Proactive And Targeted Customer Communications

The Company has enhanced internal procedures to assess the need to initiate proactive customer communications related to severe weather and market pricing events, with a focus on advising customers about the potential for higher gas prices. Previous communications and notifications have principally relied on the Company’s web site, social media, information included with printed or online bills, and conventional communications/advertising in print, radio and television. The Company has enhanced how it provides information through these traditional channels. In future, the Company will also use direct communication to customers via email, text messaging, and autodialing/pre-recorded messages. The Company will assess the costs, the effectiveness, and customer feedback regarding these kinds of communications in response to weather and anticipated gas pricing.

Demand Response

Conceptually, Demand Response allows a utility to reduce system load during peak demand periods to address supply or operational constraints by way of a variety of mechanisms including fuel switching, voluntary curtailment, or voluntary load reduction. The potential reduction in system demand that may be achievable, and costs associated with the different programs are highly dependent on the amount of industrial load switching or curtailment available and the sophistication of the metering hardware and software. The Company continues to evaluate the potential of Demand Response programs and anticipates engaging industry consultants to assist in assessing the viability of Demand Response for NMGC and potentially performing a demand response study to identify and quantify the costs and opportunities for Demand Response as an augment to conventional supply resources.

Energy Efficiency

The Company expects to continue to offer energy efficiency programs under the Efficient Use of Energy Act (“EUEA”) over the course of the IRP Planning Period. The current Energy Efficiency plan approved under NMPRC Case No. 22-00232-UT is for the period expiring in March 2025, with an updated plan covering 2026 through 2029 expected to be filed in the second half of 2025. The current plan is described

in more detail in the NMGC Energy Efficiency Program section of this IRP. From an overall system and supply planning standpoint, incremental annual energy efficiency program results are not anticipated to deliver a material offset to peak customer demand, in general due to a focus on achieving overall energy savings as the core program scope. The impact that energy efficiency program participation has on the design day forecast is reflected in the underlying load data that is used to develop that forecast.

Greenhouse Gas Reduction

NMGC has conducted studies that inventory the Company's greenhouse gas ("GHG") impact on the state, as well as to help consider how to reduce these impacts. NMGC has completed several initiatives to reduce greenhouse gas emissions, including the repair of all Grade 3 leaks throughout its systems, the replacement of valve controllers with alternatives with substantially lower emissions (aka Wizard controllers), the installation of solar photo voltaic systems at company facilities, and the acquisition of lower emission fleet vehicles. The Company continues to evaluate strategies and opportunities to reduce its carbon dioxide and methane emissions (together "GHG Emissions") within the state of New Mexico.

GHG Emissions Reduction Initiatives

Advanced Mobile Leak Detection

NMGC has begun using Advanced Mobile Leak Detection ("AMLD") units that are capable of sensing natural gas in parts per billion. AMLD systems allow the company to survey its system while moving faster and with detection equipment that is more sensitive than older equipment. This allows NMGC to find and repair leaks sooner than with conventional technology, reducing the amount of gas unintentionally released into atmosphere and enhancing public and customer safety.

Mobile Flares

NMGC has purchased mobile flaring units to reduce methane emissions from natural gas venting related to inspection, maintenance, and construction activities. The flaring equipment burns natural gas that would otherwise be vented directly to the atmosphere, significantly reducing GHG emissions associated with those activities. NMGC has 49 permitted locations where the flares can be used and three units companywide.

Certified Low Emission Gas

NMGC is reviewing emerging regulations, performance standards, and markets associated with gas produced at facilities that can provide measurable evidence that gas producers are reducing the quantity of natural gas emitted at production facilities. Certified gas generally involves the producers of natural gas using different monitoring and detection technology to demonstrate that production wells and associated systems are not emitting natural gas to atmosphere as part of their normal operations. The Company is working on identifying the availability and costs associated with certified low emission gas as well as the potential regulatory and compliance considerations that may accompany the use of certified low emission gas as a mechanism for reducing GHG emissions.

Renewable Natural Gas

NMGC reviewing emerging technologies, costs, and markets associated with gas produced through biochemical processes generally characterized as Renewable Natural Gas ("RNG"). RNG is typically derived from biogas produced from organic waste at landfills, farms, and wastewater treatment facilities via anaerobic digestion which is processed to be interchangeable with pipeline quality natural gas. NMGC is currently involved in the transportation of RNG produced at facilities connected to the Company's system.

The Company's current understanding is that the cost of RNG is substantially higher than conventional natural gas and developing RNG facilities requires credits associated with various state specific greenhouse gas and low carbon fuel standards and requirements in order to be economically viable. However, as technology matures or as legislative and regulatory requirements evolve, the Company may identify opportunities to integrate RNG into its gas supply portfolio or to become involved in developing RNG resources.

Natural Gas Heat Pump Pilot

NMGC is engaged with manufacturers and installers piloting the installation of heat pumps fueled by natural gas as part of its Research and Development program. Natural Gas Heat pumps have the potential to offer significant reductions in overall energy consumption and associated GHG emissions.

Hydrogen Blending

NMGC has tested the blending hydrogen with natural gas to help ascertain the effects of the blends on piping and other system components as well as the effects on typical residential or other end-user appliances and equipment. Blends of up to 20% hydrogen have been tested in a closed system that does not serve customers. No decision regarding the use of hydrogen blending on NMGC's customer distribution system have been made.

Compressor Electrification

NMGC operates 18 compressors on its system with a total mechanical horsepower of approximately 21,000 HP. The majority of NMGC's compressor fleet is powered by natural gas. In the Company's most recent rate case filing (NMPRC case 23-00255-UT), the Company developed cost estimates for converting the Company's compression fleet to electric compressors. The Company does not believe electrification is currently an economic alternative, however, the Company will continue to evaluate options for emissions reductions from its compressor fleet over the ten-year IRP planning horizon.

NMGC ENERGY EFFICIENCY PROGRAM

Introduction

Pursuant to the Efficient Use of Energy Act (“EUEA”) and consistent with the NMPRC Energy Efficiency Rule 17.7.2 NMAC (“EE Rule”), the NMGC Energy Efficiency Program helps customers reduce their energy use and save money on their bills by providing incentives for implementing energy efficiency measures in their homes and businesses. The EUEA authorizes cost-effective public utility investments in energy efficiency and load management. The EUEA requires the NMPRC to direct utilities to evaluate and implement cost-effective energy efficiency programs. Since 2009, the Commission has engaged an independent evaluator and third-party contractor, through a competitive bidding process, to ensure compliance with the measurement and verification (“M&V”) reporting requirements of the EE Rule. EcoMetric has been as the independent third-party evaluator for the 2023 – 2025 period.

Energy Efficiency Program Development Methodology

The EE Rule requires use of a cost-effectiveness threshold test for program design and implementation, as measured by the Utility Cost Test (“UCT”). The UCT is the ratio of the net-present-value of the benefits of a program to the costs that includes the utility’s costs to implement the program and the savings are based on the avoided gas costs. A benefit-cost ratio greater than 1.0 indicates that the program is cost-effective and is beneficial to the ratepayer. All programs proposed and delivered by NMGC have a UCT of 1.0 or above.

Energy Efficiency Public Advisory Process

NMGC holds annual Energy Efficiency Public Advisory Group⁵ meetings, to share information about achieved energy savings, pending programs, and potential new program. The group provided significant input prior to NMGC proposing its 2023-2025 NMGC energy efficiency programs.

2023 – 2025 Portfolio of Energy Efficiency Programs

Approved by the NMPRC in March 2023 (NMPRC Case No. 22-00232-UT), the current portfolio includes program applications for sales and transportation customers in the residential and commercial customer classes.

Residential

- The Water Heating Program
- The Space Heating Program
- The New Homes Program
- The Income Qualified Program
- Native American Energy Efficiency Program
- The Multi-Family Program

⁵Members of the Energy Efficiency Public Advisory Group included: New Mexico Department of Justice, New Mexico Public Regulation Commission Staff; New Mexico Department of Energy Minerals and Natural Resources; New Mexico Mortgage Finance Authority; the Southwest Energy Efficiency Project; ICF International; CLEARResult; Public Service Company of New Mexico; AARP; Raton Natural Gas; and Zia Natural Gas. Public Advisory Group meetings have also periodically included residential customers from the metro Albuquerque region.

- Manufactured Home Communities Program
- Home Energy Reports

Commercial

- The Commercial Efficient Buildings Program

The following table shows anticipated participation and net annual therm savings for each program. Therm savings have been adjusted from gross to net to account for the number of therms credited to the programs as reported by the independent evaluator.

Table 4 – Anticipated Energy Efficiency Program Participation

Summary of Anticipated Program Participation		
Program	2023-2025 Estimated Average Annual Participation	Therm Savings
Water Heating	16,171	228,464
Space Heating	2,688	220,800
New Homes	1,150	400,752
Income Qualified	1,787	528,208
Multi-Family	4,000	372,969
Efficient Buildings	269	1,570,777
Home Energy Reports	220,000	1,210,000
All Programs		4,531,970

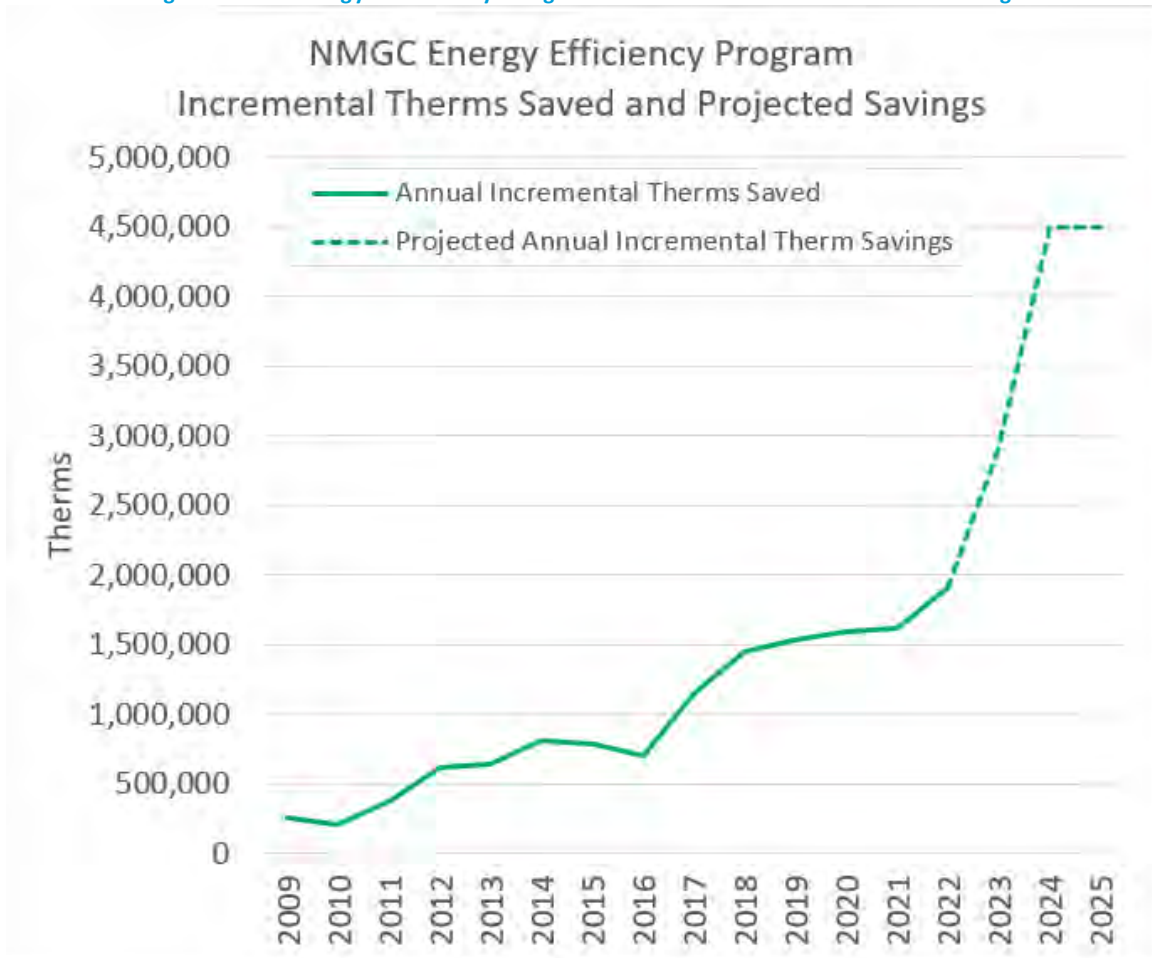
The 2023 – 2025 Energy Efficiency program annual budget is approximately \$15 million, approximately 4.2% of estimated annual revenues for the program period. Total program spending is capped at 5% of estimated customer bills under the EUEA⁶.

⁶ NMSA Section 62-17-6(A)(2)

Energy Efficiency Impact on Integrated Resource Plan

The following chart illustrates historical and planned savings from energy efficiency program implementation through 2025. The 2024 and 2025 incremental therm savings represent approximately 0.4% to 0.5% of the annual therm throughput.

Figure 10 – Energy Efficiency Program Incremental Annual Therm Savings



APPENDIX A - PUBLIC ADVISORY MEETING
PRESENTATION AND SUMMARIES

IRP Meeting Summaries

First IRP Meeting – Albuquerque, NM

During the dates of April 14 through May 12, 2023, NMGC included in all customers' bills a notice of information for the first IRP meeting. There was also a public notice published in the Albuquerque Journal and on social media channels, as well as on the IRP page on the NMGC web site.

June 23, 2023, at 10 a.m. - NM One Call Building 1021 Eubank Blvd. NE, Albuquerque, NM 87112

The meeting was held both in person and via Microsoft Teams. There were 16 people (in person and virtual) that attended the meeting. Members from NMPRC Staff (attended via Teams), Tiger Natural Gas, Presbyterian Health and Western Resource Advocates attended. Gerald Weseen welcomed attendees. Anita Hart presented a safety message. Kyle Brayton delivered the IRP presentation. There were comments and questions from a few attendees. Discussion included items on gas supply flow, the Design Day Study, advanced metering, and general LNG questions.

Second IRP Meeting – Santa Fe, NM

During the dates of November 13 through December 14, 2023, NMGC included in all customers' bills a notice of information for the second IRP meeting. Notice was also provided on social media channels, as well as on the IRP page on the NMGC web site.

December 14, 2023, at 2 p.m. – Teams meeting only.

This meeting was noticed as being in person at the Santa Fe Convention Center in addition to the virtual option. Since there was a high likelihood of winter weather conditions in Santa Fe on December 14, NMGC changed the meeting to Teams-only and sent a notice to participants via email. Signage about the change was also posted at the Convention Center.

There were 24 people who participated in the meeting. Members from NMPRC Staff, Tiger Natural Gas and Western Resource Advocates attended. Anita Hart welcomed participants, made introductions, and provided a safety message. Kyle Brayton delivered the IRP presentation. There were comments and questions from a few attendees and the discussion included items on low emissions gas, the Design Day Study, line extensions, conversion rebates and renewable natural gas.

Third IRP Meeting – Farmington, NM

During the dates of December 28, 2023, and January 25, 2024, NMGC included in all customers' bills a notice of information for the third IRP meeting. Notice was also provided on social media channels, as well as on the IRP page on the NMGC web site.

February 1, 2024, at 1 p.m. – Courtyard by Marriot Farmington 560 Scott Ave, Farmington, NM 87401

This meeting was held in person and via Teams. There were 17 attendees. All non-NMGC attendees attended virtually. Representatives from NMPRC Staff, Tiger Natural Gas, Southwest Energy Efficiency Project, and Western Resource Advocates attended. Anita Hart provided a welcome message, introductions, and the safety message. Kyle Brayton delivered the IRP presentation.

There were comments and questions from a few attendees and the discussion included items the Design Day Study, energy efficiency programs and efficient homes and system planning.

Fourth IRP Meeting – Anthony, NM

During the dates of January 26 through March 12, 2024, NMGC included in all customers' bills a notice of information for both the fourth and fifth IRP meetings. Notice was also provided on social media channels, as well as on the IRP page on the NMGC web site.

March 12, 2024, at 2 p.m. – NMGC's Anthony Office 350 Acosta Road, Anthony, NM 88201

This meeting was held in person and via Teams. Eight people attended, all virtually except for three NMGC representatives. Two members from NMPRC Staff attended. Anita Hart provided a welcome message, introductions, and a safety message. Kyle Brayton delivered the IRP presentation. There was one question in the meeting about NMGC gas system and gas supply.

Fifth IRP Meeting – Roswell, NM

During the dates of January 26 through March 12, 2024, NMGC included in all customers' bills a notice of information for both the fourth and fifth IRP meetings. Notice was also provided on social media channels, as well as on the IRP page on the NMGC web site.

March 13, 2024, at 2 p.m. – Fairfield Inn & Suites 1201 N Main Street, Roswell, NM 88021

This meeting was held in person and via Teams. Eight people attended the meeting, all virtually except three NMGC team members. Two members from NMPRC Staff attended. Anita Hart welcomed participants, made introductions, and provided a safety message. Kyle Brayton delivered the IRP presentation. There were comments and questions from attendees and including comments regarding sustainability tax credits renewable natural gas.

New Mexico Gas Company 2024 Integrated Resource Plan

Public Advisory Meeting

Roswell

March 13, 2024



Agenda

- Welcome and Introductions
- Safety Moment
- Overview of the IRP Process
- Gas System Overview and Planning Process
- Energy Efficiency
- Discussion



Safety – Daylight Savings Tips

Although an hour does not seem like much difference, it can disrupt our schedules and affect our energy levels for a few days as our bodies adjust. In fact, losing just two hours of sleep is the equivalent of having three beers.

- Fatigue caused by insufficient sleep is proven to affect workplace and roadway safety. The day after we adjust our schedules to account for “spring forward” and “fall back” sees an increase in fatal traffic accidents and in workplace accidents.
- Plan ahead: Give yourself extra time to drive to and from work. Use extra caution while driving. Because the darker part of the day will be in the morning hours, know that other drivers will also be adjusting to the time change and may be more prone to mistakes. Defensive driving is key!
- Rest up: Go to bed earlier to get your usual amount of sleep so you can be well rested and alert.
- Defer the dangerous: Schedule particularly hazardous work later in the week (where possible) after employees have had more time to adjust their sleep schedules.
- Step up the safety: Take extra safety precautions and assign extra safety monitors on days following the switch to help avoid potential workplace injuries before they occur.

<https://sccaweb.org/resource/safety-tip-of-the-month-daylight-saving/>

3



NMGC Gas Management

Kyle Brayton
Director, Gas Management

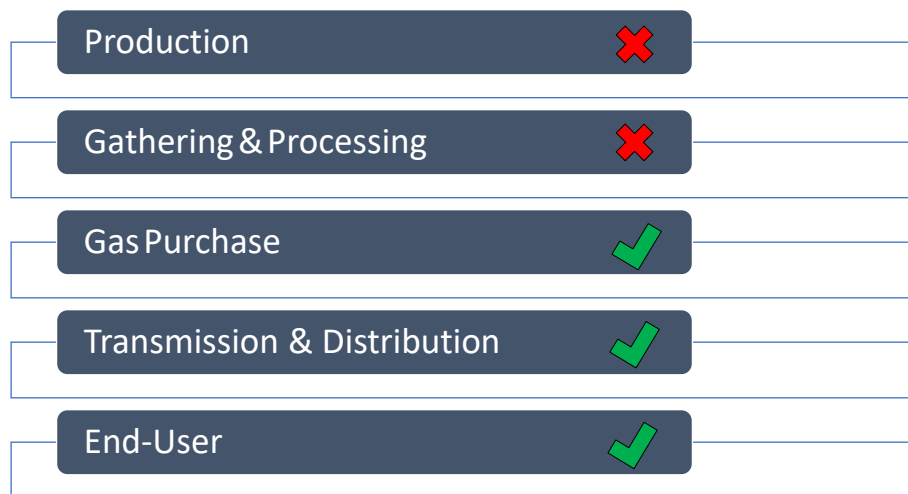


Integrated Resource Planning

- Required by NMPRC Rule - NMAC 17.7.4
- Filed with the NMPRC every four (4) years
- Identification of projects, plans, and programs to meet expected needs
- Includes a 10-year planning horizon
 - Gas supply and demand
 - System capacity
 - Energy efficiency



Natural Gas Supply Chain



Natural Gas Production Basins

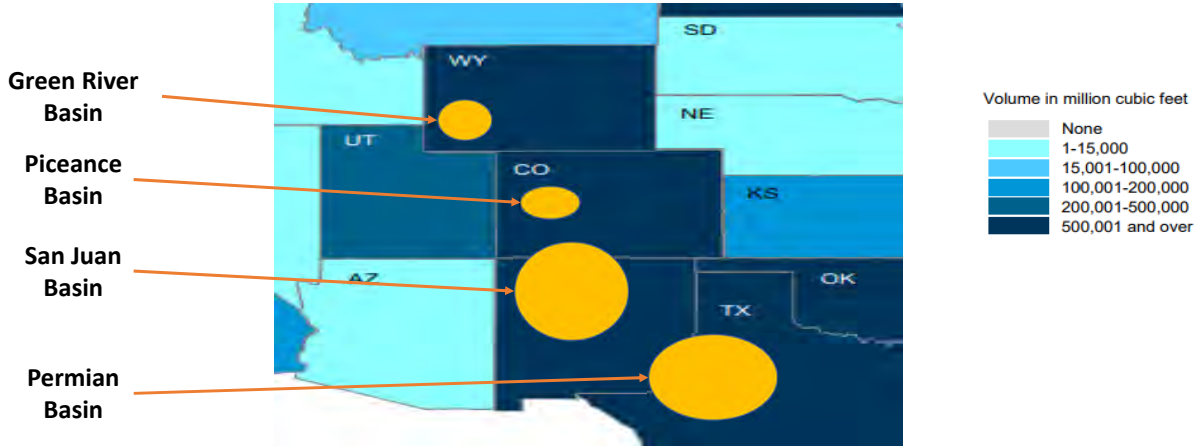
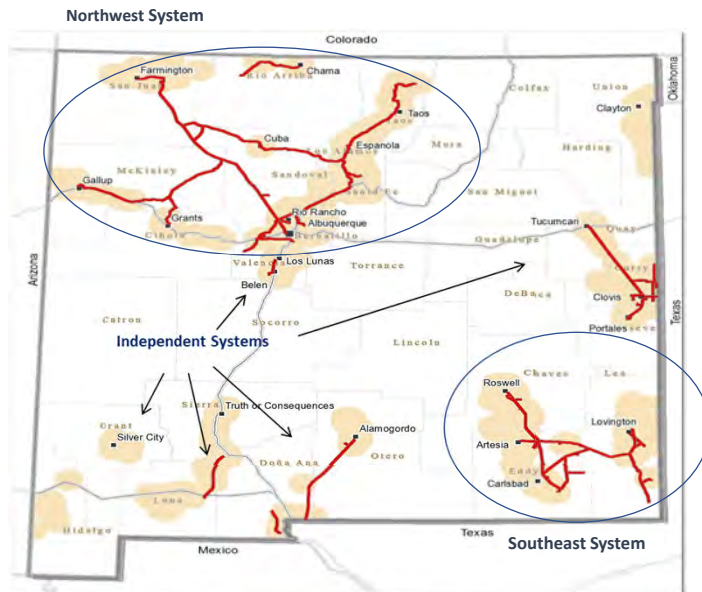


Figure 3. Marketed production of natural gas in the United States and the Gulf of Mexico, 2021
U.S. Energy Information Administration



NMGC System Overview

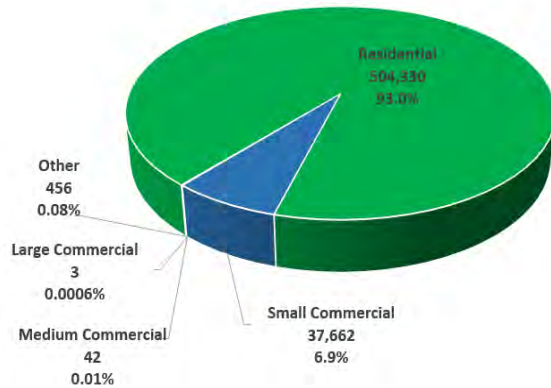


- Three separate systems
 - Northwest
 - Southeast
 - Independent
- ≈1,500 miles of transmission
- ≈11,000 miles distribution
- ≈540,000 meters in 26 counties
- ≈80 to 90 Bcf of annual throughput

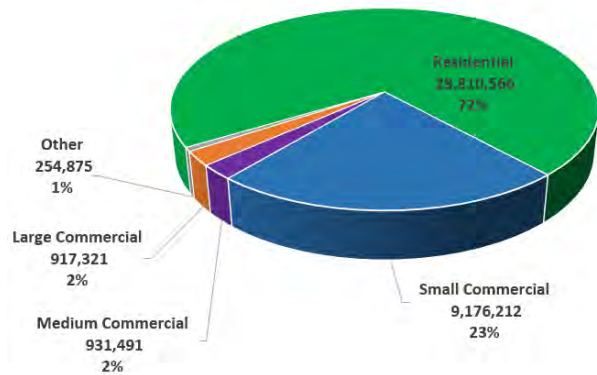


NMGC Sales Customers

Sales Meters by Customer Type
April 2023

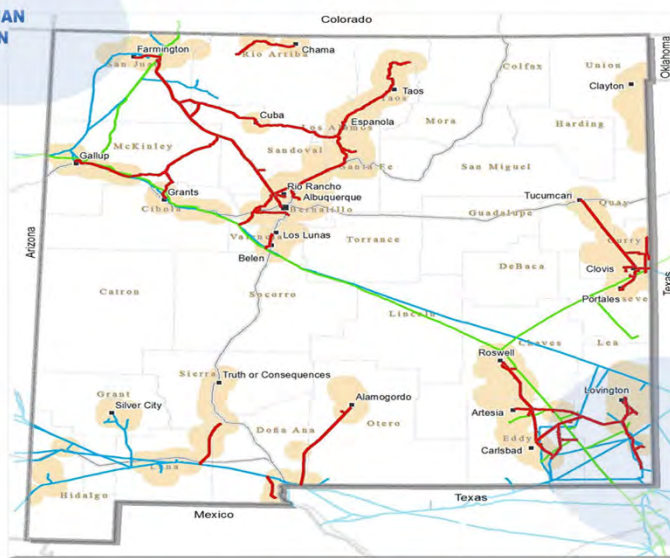


Sales Consumption (MMBtu) by Customer Type
October 2022 - April 2023



NMGC's Access to Gas Supply

SAN JUAN BASIN

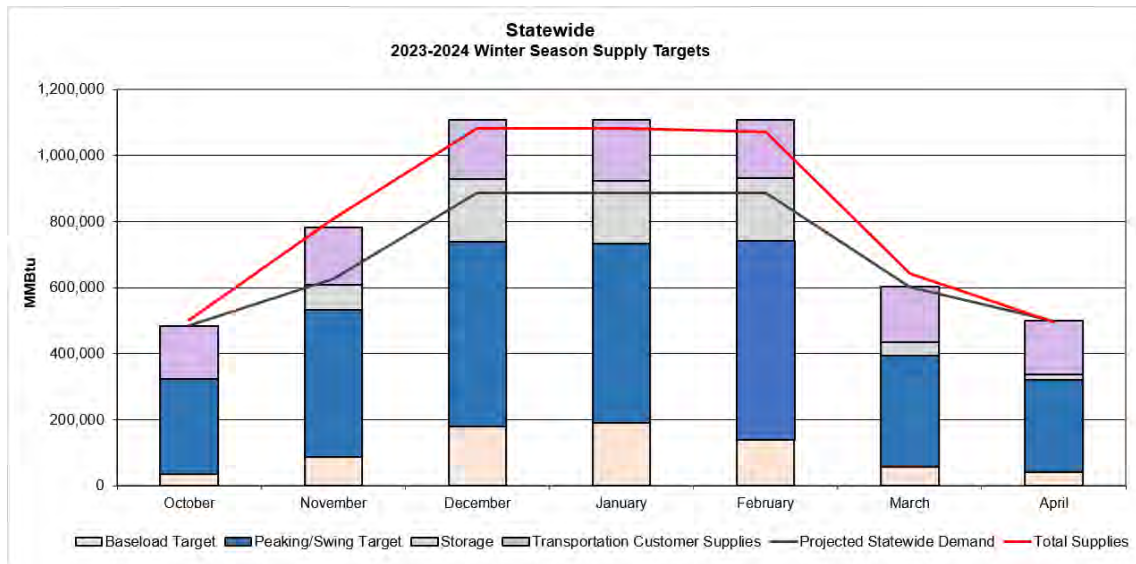


- NMGC
- Transwestern
- El Paso Natural Gas
- ▲ Storage

PERMIAN BASIN



Supply Plan Targets



11

Plan Considerations

- Load forecast and design day update
 - Evaluating current capacity and 10 year forecasted demand
 - Includes extreme weather events, customer growth, and energy efficiency program impacts
- Capacity and demand measures will be evaluated case-by-case
- Propose measures to ensure safe, reliable, and cost-effective gas service

12

Supply-Side Resources, Issues, & Strategy

- Contract, supplier, and transportation diversification
- Cost competitive supply
- Gas basin diversity
- Storage and Liquefied Natural Gas (LNG)
- Renewable Natural Gas
- Certified Low Emission Gas

13

2020 IRP Projects and Enhancements

- Malaga Pipeline and Interconnect
- Santa Fe Mainline Looping
- Pecos Valley Mainline
- Redondo Compressor Upgrades
- T or C Mainline Looping

14

Future Projects and Enhancements

- Albuquerque mainline looping and pressure uprates
- Expansion to unserved and underserved areas
- Ongoing distribution system improvements
- Pipeline Integrity Management Program
- Automated Meter Reading
- LNG production/storage

15



NMGC Energy Efficiency

Steve Casey

Manager, Energy Efficiency Program



NMGC Energy Efficiency Programs

The 2022 Energy Efficiency Program plan ended on March 31, 2023

- NMGC's 2022 Energy Efficiency program year began April 1, 2022, with a budget of \$7.8 million and a net annual savings goal of 1,509,440 therms.
- The final independent measurement and verification (M&V) evaluation report for Program Year 2022 was concluded on June 14, 2023.
- The M&V report determined the company operated high-quality energy efficiency programs that achieved significant energy savings and resulted in satisfied participants.
- The evaluation determined that NMGC's Energy Efficiency programs realized a net annual savings of 1,910,696 therms for the 2022 program year.



The NMGC Energy Efficiency department celebrated its 11th win of the US Environmental Protection Agency and Department of Energy's ENERGY STAR Partner of the Year – Sustained Excellence award for superior leadership, innovation and commitment to sustainability through energy efficiency programs.

17



Energy Efficiency Plan

New Three-Year Plan (2023 -2025)

- On March 22, 2023, the NMPRC approved NMGC's 2023 -2025 program plan substantially as filed. The 2023 Program Year began on April 1. The annual budget is \$15 million, with an expectation of annual net savings of 4,531,970 therms.
- NMGC continues to offer Water Heating, Space Heating, New Homes, Income Qualified, Multi-Family and Efficient Buildings programs to its residential and commercial customers. The Native American Energy Efficiency Program will continue as well as a mid-stream program.

Two New Programs:

Manufactured Home Communities

- NMGC expects to serve approximately 560 homes per year with an estimation of 166,700 therms to be saved annually once the program is fully operational come the 2024 program year. The first mobile home community receiving these services began on December 5, 2023.
- In New Mexico, there are approximately 64,000 manufactured homes that are 17.5% of all housing stock. In many counties, manufactured homes comprise one-third of the housing stock. There are 224 manufactured home communities within NMGC's service territory.
- According to the DOE, manufactured homes can consume 50% more energy than site-built homes of equal size and age.

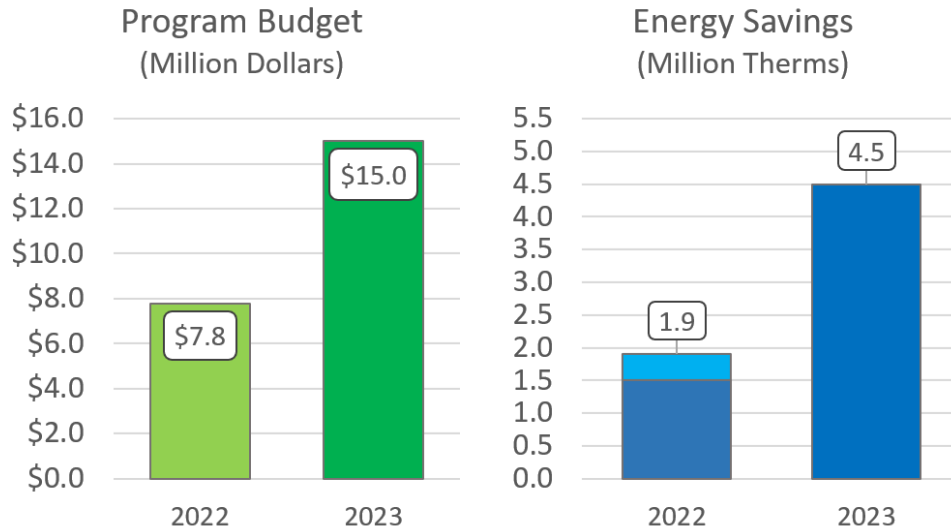
Home Energy Reports

- Reports began being delivered in January 2024 reaching approximately 170,000 customers. Five reports per year will be provided educating customers on cost-effective behavioral savings and to increase engagement in saving energy and participation in other services and programs offered by NMGC.
- The Home Energy Reports are expected to increase to almost 250,000 customers by 2025 with estimated savings of 1,210,000 therms.

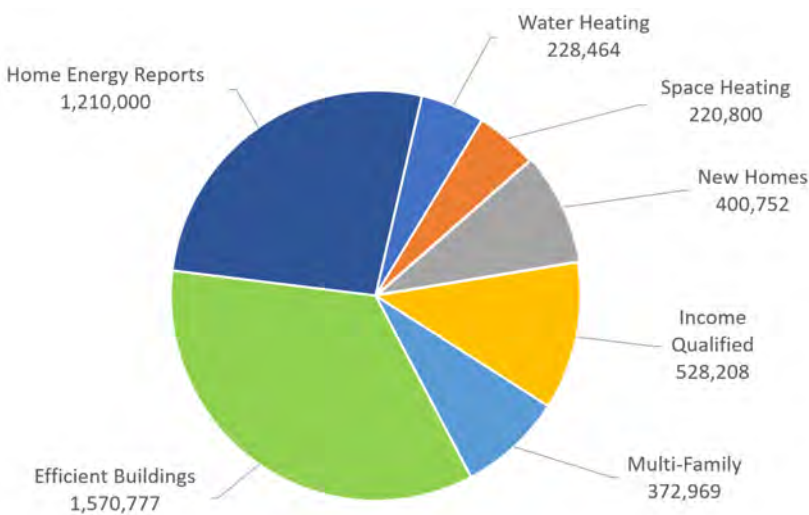
18



NMGC Energy Efficiency Plan



2023 Energy Efficiency Programs and Estimated Savings



Estimated net savings from Energy Efficiency programs in 2023 is 4,531,970 therms

Open Discussion

- Please raise your hand (in person or on Teams site)



21

NMGCO's IRP Resources and Contact Information

Website: https://www.nmgco.com/en/regulatory_filings

Email Address: 2024irp@nmgco.com

Phone Number: 505-697-4426

22

APPENDIX B - DELIVERY SYSTEM DETAILS

The Pipeline/Area Descriptions provided below are aggregations of multiple routes and MAOP districts for the purposes of providing summary description of the Transmission pipelines included NMGC's delivery system.

Table B-1 – Northwest System Details

Pipeline/Area Description	Length (miles)	Diameter (inches)	Maximum Allowable Operating Pressure (psig)
Alameda ML	14.5	16,20	466
Albuquerque ML High Pressure	189.2	20,24	600 - 1,003
Albuquerque ML Low Pressure	74.9	20	550
Atrisco ML	23.1	4,12,20	400
Blanco Hub ML	4.7	12	1,100
Bluffview ML	3.8	8	1,220
Coronado ML	8.9	16	600
Corto ML	2.1	12	800
Crouch Mesa ML	12.7	12	1,220
Delta Persons (Cobisa)	0.6	10,12	500
DOE Los Alamos ML	7.9	12	600 - 720
DOE ML	54.5	1,2,12	492 - 680
Española ML	6.9	6	375
Farmington ML	4.0	2,4,6,8,12	550
Gallup-Grants ML	106.4	6,8	720
Los Alamos MLs	20.2	6,8,12	492 - 600
Loves ML	2.9	6	932
Mesa Del Sol ML	3.0	10	493
ODOE ML	2.1	12	800
Questa ML	26.2	2,4,6,8	375
Red River ML	11.6	2,4,6	375
Rio Puerco ML	70.8	16,24	913 - 1,009
San Ysidro ML	4.9	12	960
Santa Fe ML (Albuquerque)	32.2	4,12,16,20	600 - 875
Santa Fe MLs	77.3	4,12,20	600 - 875
Santa Fe N ML	9.5	2,8	600
Taos ML	51.5	8,12	375
Tennyson ML	5.5	10	600
West Mesa ML	18.7	6,16,20	895 - 913

Table B-2 – Southeast System Details

Pipeline/Area Description	Length (miles)	Diameter (inches)	Maximum Allowable Operating Pressure (psig)
Amax ML	54.1	4,6,8,10	333 - 600
Artesia ML	22.1	4,6,8	348 - 940
Carlsbad ML	25.7	4,8	590
Eddy County ML	24.3	4,12	870
Eunice ML	8.5	8	600
Hobbs Bypass ML	10.7	8	600
Lea County ML	34.5	6,8,10	600 - 1,120
Lovington ML	27.4	2,4,6,8	300 - 600
Malaga ML	10.7	12	1000
Monument ML	9.2	8	600
Oil Center ML	8.5	6,8,10	600
Pecos Valley ML	15.3	8,10,12	590
Potash ML	31.0	4,6,8	350
Roswell ML	54.1	1,2,6,8,10	348 - 1,000

Table B-3 – Remote System Details

Pipeline/Area Description	Length (miles)	Diameter (inches)	Maximum Allowable Operating Pressure (psig)
Alamogordo	140.0	4,6	720 - 1,185
Anthony	24.0	6,12	1,085
Belen	13.8	8,12	961
Clovis	49.9	1,2,4,6,8,10	300
T or C	40.6	4,6,8	818
Chama	39.6	4,6	400

APPENDIX C - DESIGN DAY STUDY
METHODOLOGY

New Mexico Gas Co DDS 2023



Report on the Design Day Study for Albuquerque
18-Dec-2023

STATEMENT OF CONFIDENTIALITY	2
EXECUTIVE SUMMARY	3
CALCULATION OF DESIGN DAY CONDITIONS	4
ACQUISITION AND VALIDATION OF LOAD DATA	6
DETRENDING LOAD DATA	6
DESIGN DAY FORECASTING MODELS	6
WINTER SEVERITY ADJUSTMENT	7
SUMMARY OF DESIGN DAY DEMAND FOR PRIOR YEARS	7
DESIGN DAY GROWTH ESTIMATE FOR 2023-2024	8
DESIGN DAY GROWTH TEN-YEAR FORECAST	9
DESIGN DAY FORECAST SUMMARY	9

Statement of confidentiality

This report, along with all accompanying appendices and documents, falls under the terms of the Marquette Energy Analytics Software License Agreement and its enclosed terms of mutual confidentiality executed between New Mexico Gas Co and Marquette Energy Analytics.

All original and derived data generated for this report remain confidential as required under clause six of the license agreement. Likewise, the techniques, tools, and processes employed by Marquette Energy Analytics to produce this report remain the sole property of Marquette Energy Analytics, as specified in clause eight of the license agreement.

Executive summary

New Mexico Gas Co (NMGC) retained Marquette Energy Analytics to perform a Design Day study for their Albuquerque territory. The purpose of a Design Day study is to forecast the quantity of natural gas expected to be used during an extreme cold winter day, a “Design Day”.

The assumed weather conditions on a Design Day are the Design Day Conditions (DDC). DDCs are stated as a “1-in-N-year” condition, meaning that the condition is expected to be exceeded once every ‘N’ years. Marquette Energy Analytics presents the DDC as wind-adjusted temperature (TempW) and equivalently as a wind-adjusted heating degree day (HDDW).

NMGC elected to use 1-in-30-year DDC. Table 1 shows the corresponding TempW and HDDW for this condition. The DDC For Albuquerque is a TempW -2.8 or 67.8 HDDW. This means Marquette Energy Analytics expects one day that is at least as cold as 67.8 HDDW every 30 years.

Table 1 – Design Day Conditions in both TempW and HDDW.

1-in-30-year Design Day Condition

Design Day Condition	TempW	HDDW
Albuquerque	-2.8	67.8

Marquette Energy Analytics forecasted the Albuquerque Design Day demand as if the DDC were to occur during the upcoming 2023-2024 winter through the 2032-2033 winter. The Albuquerque Design Day demand forecast for 2023-2024 is 399,089 Dth.

Table 2 – Design Day forecast by winter (Dth). Forecasts for winters out to the 2032-2033 winter are available in Albuquerque.xlsx.

Albuquerque Design Day forecast by winter

	2022-2023	2023-2024	2024-2025	2025-2026	2026-2027
Design Day Demand	397,477	399,089	400,446	401,560	402,937
99% Confidence Demand	430,947	432,560	433,916	435,030	436,407

In Table 2, the Design Day demand forecast is presented in two ways – as a standard *Design Day Demand* and a *99% Confidence Demand*. The standard forecast is the expected level of demand if the DDC occurs. The 99% confidence forecast is the level of demand for which there is a 99% probability that actual demand will not exceed if the DDC occurs.

This report reviews the details of Marquette Energy Analytics’ Design Day estimation and forecasting methodology; including the collection of data, calculation of the DDC, detrending of historical demand data to account for customer growth and changes in customer composition and behavior, and the models used to calculate and forecast Design Day demand.

Calculation of Design Day Conditions

The calculation of the Design Day Condition (DDC), that is, the wind-adjusted temperature (TempW) or wind-adjusted heating degree days (HDDW) associated with a 1-in-N-year condition, is a statistical analysis of historical weather between 02-Jan-1950 and 15-Oct-2023. This analysis was limited to historical days between November 1st and March 31st.

A 1-in-30-year Design Day Condition (DDC) is a weather event that is expected to occur once every 30 years. For a 1-in-30-year event, there is a 3.3 chance of it occurring in any given year, and an approximately 63.8 chance of it occurring at least once in a 30-year period. Equivalently, there is a 36.2 chance of a 1-in-30-year event NOT occurring in a 30-year period. It is also possible for more than one 1-in-30-year event to occur in a 30-year period.

Weather data set

The weather data used in the analysis is sourced from WeatherBank/AccuWeather and the US National Oceanic and Atmospheric Administration (NOAA) back to 1950.

While the data received from the sources is hourly, the values used in this study are daily average temperatures aligned to the gas day. For the Albuquerque territory, this means that the weather is the daily average temperature between 8 AM and 8 AM each day.

Weighted combination of weather stations

Most service territories do not have a single centrally located weather station that represents the weather of the entire territory. For this reason, Marquette Energy Analytics used data from an optimally weighted combination of weather stations to represent the service territory. The optimal weights for each weather station were calculated to minimize error when modeling natural gas demand. Specifically, Marquette Energy Analytics calculated the weights that minimize the Root Mean Squared Error (RMSE) of the regressions used to model demand.

An initial set of potential weather stations were selected based on geographic proximity to the service territory. An iterative optimization process was then used to select the optimal set of weights with the objective of minimizing the regression's RMSE.

The optimization process can select weather stations outside the geographic territory. Due to geographical barriers, imperfect sensors, and many other obstacles, no weather station is a perfect representation of an area. Using multiple weather stations often works as a better proxy to estimate weather in areas in between weather stations. The weighted combination of weather stations for Albuquerque are in Table 3 below.

Table 3 – Weighted Combination of Weather Stations for Albuquerque.

Weighted Weather Station Combination

Weather Station Name	Call Sign	Weight
Albuquerque, NM	KABQ	0.846
Farmington, NM	KFMN	0.114
Santa Fe, NM	KSAF	0.040

Wind adjusted heating degree days (HDDW)

Marquette Energy Analytics has found that wind significantly improves the accuracy of demand estimates and forecasts, especially at colder temperatures. For this reason, wind is included in all of Marquette Energy Analytics' models and forecasts.

Similar to the wind chill effect people experience, buildings lose more heat on windier days. Wind-Adjusted Heating Degree Day (HDDW) approximates this effect and is expressed in Equation 1. This methodology for incorporating wind was developed internally by Marquette Energy Analytics and has been found to greatly reduce modeling error when compared to using HDD without wind.

Equation 1 – Wind-Adjusted Heating Degree Days (HDDW)

$$HDDW = \begin{cases} HDD \times \frac{72 + Wind}{80}, & Wind > 8 \\ HDD \times \frac{152 + Wind}{160}, & Wind \leq 8 \end{cases}$$

Note: Equation is based on wind speed represented in mph and base temperature in °F

Figure 1 illustrates the relationship between temperature, wind, and HDDW using historical weather for Albuquerque. Each dot represents a day of weather with temperature on the x-axis and wind on the y-axis. The red line in the plot represents all combinations of temperature and wind that produce the 1-in-30 DDC. Days to the right of or above the red line are events that are more extreme than the DDC.

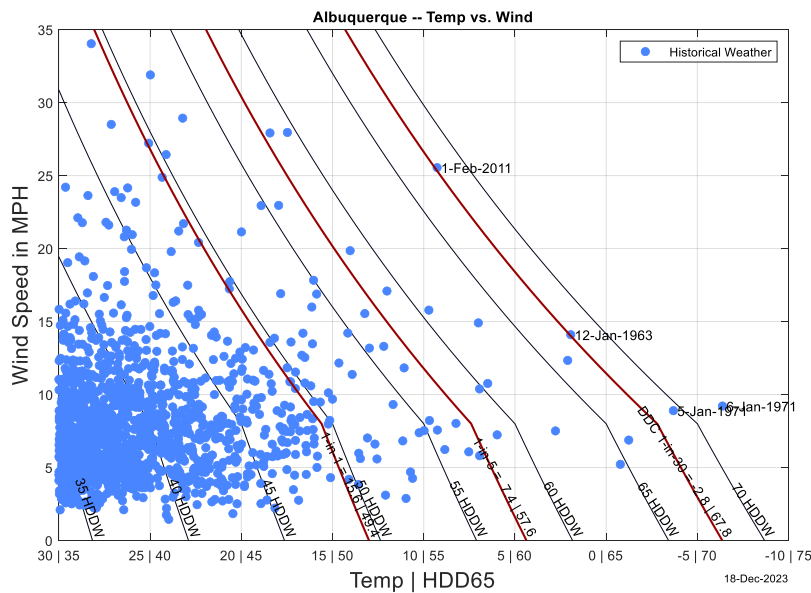


Figure 1: Temperature vs. Wind for Albuquerque.

Summary of Design Day Conditions

NMGC elected to use a 1-in-30-year DDC which is shown in Table 1. For Albuquerque The DDC is a TempW of -2.8 or 67.8 HDDW. Meaning that a wind-adjusted temperature of at least as cold as -2.8 is expected to occur at least once every 30 years.

Table 1 – Design Day Conditions

1-in-30 Year Design Day Condition

Design Day Condition (°F)	TempW	HDDW
Albuquerque	-2.8	67.8

Acquisition and validation of load data

The demand (referred to equivalently as load or sendout) data used in Marquette Energy Analytics' analysis was provided by NMGC. Before any forecasting analysis began a thorough review of the data for possible errors and omissions was conducted. In consultation with NMGC corrections and adjustments were made as necessary. The load data used in this study was daily data aligned to the gas day from 31-Dec-2014 to 30-Apr-2023.

Detrending load data

When forecasting rare events, such as a Design Day, it is important to use a long history of data because it's more likely to include historical extreme cold events. Since customer base characteristics change over time due to many factors (growth in customer base, energy efficiency, changes in customer behavior, changes in customer class composition, etc.), using unadjusted older load data might cause a forecasting model to understate or overstate the Design Day demand if it were to occur today.

Therefore, older historical load data is "detrended" to ensure that forecasts based on the historical data reflect the current customer base characteristics. To do this, Marquette Energy Analytics created simple regression models to fit "windows" of historical data. The difference in the regression coefficients between different windows of data was used to estimate how much the customer characteristics, such as baseload and headload (use per HDDW), have changed. This information was then used to adjust older historical load data to act like current customer data. Data that has gone through his processes is called "detrended load".

Design Day forecasting models

At the core of Marquette Energy Analytics' detrending and forecast analysis are five slightly different linear regression models of natural gas demand. In addition to weather variables, the models use different combinations of day-of-week and day-of-year cyclical coefficients as explanatory variables. The base model is a five-parameter linear regression model with these parameters:

- 1) Constant
- 2) HDDW65 – Wind-Adjusted HDD with a reference temperature of 65°F
- 3) HDDW55 – Wind-Adjusted HDD with a reference temperature of 55°F
- 4) Δ MHDDW – Day-to-Day change in the average of HDDW55 and HDDW65
- 5) CDD65 – Cooling Degree Day (CDD) with a reference temperature of 65°F (CDD65 = MAX(0, Temp – 65)).

The five regression models are:

- 1) The base model trained on all days
- 2) The base model trained on just Monday through Thursday data
- 3) The base model plus day-of-week coefficients (13-parameters)
- 4) The base model with day-of-year coefficients (13-parameters)
- 5) The base model with both day-of-week and day-of-year coefficients (21-parameters).

These five models are used to detrend historical demand data as described in the previous section and then are used to create Design Day forecasts. For forecasting, three additional linear fits are calculated using the detrended load from Model #1 and #2. These three linear fits are:

- 1) A line fit through the 20% coldest days of Model #1 detrended data
- 2) A line fit through the 20% coldest Monday through Thursday of Model #1 detrended data
- 3) A line fit through the 20% coldest days of Model #2 detrended data

Each of the five component regression models, along with the three linear fit models is evaluated at the DDC, for a total of eight estimates. This technique of combining forecasts derived from different methods, often called “ensemble forecasting” has been shown to be more accurate than a singular forecast and is a well-accepted practice in the forecasting field. The mean value of a weighted gaussian mixture model ensemble of the eight estimates is used as the final Design Day estimate.

Winter severity adjustment

Marquette Energy Analytics has found that in warmer climates demand per HDDW is larger during colder winters than it is during an average winter. The eight forecasts described in the previous section assume that the Design Day will occur in an average winter. This works well for most areas but for Albuquerque this methodology understates the Design Day demand when it occurs in a colder winter.

Since extreme cold events typically occur during colder winters, a winter severity adjustment must be added to the Design Day estimate. For Albuquerque, a winter severity adjustment of 1,164 Dth was applied to each Design Day estimate.

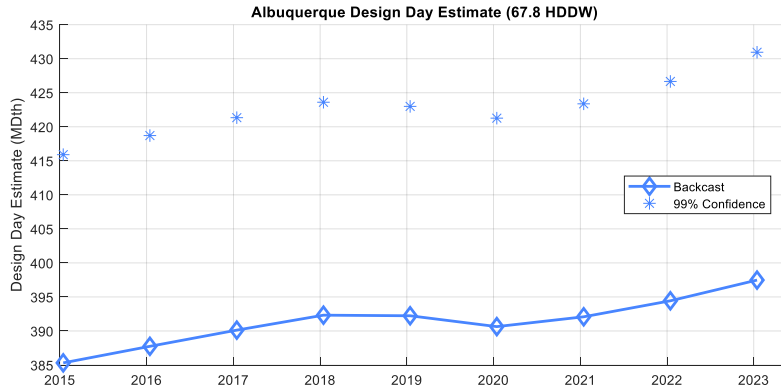
Summary of Design Day demand for prior years

This ensemble forecast is used to estimate what the Design Day demand would have been, if the Design Day condition of 67.8 HDDW, had occurred in each of the last 5 winters. The ensemble Design Day estimate for 2022-2023 is 397,477 Dth. The other previous winters are shown in Table 4 and Graph 2 below.

Table 4: Design Day estimate for prior winters (Dth). Estimates for winters back to the 2014-2015 winter are available in Albuquerque.xlsx.

Albuquerque prior winter Design Days

	2018-2019	2019-2020	2020-2021	2021-2022	2022-2023
Design Day Demand	392,233	390,640	392,082	394,431	397,477
99% Confidence Forecast	422,995	421,267	423,371	426,659	430,947



Graph 2: Design Day estimates for prior winters. Estimates for winters back to the 2014-2015 winter are available in Albuquerque.xlsx.

Design Day growth estimate for 2023-2024

Growth to the next heating season is accomplished by evaluating recent historical trends in baseload and heatload and usage per customer. This is done by weighting the one-year, two-year, and five-year baseload and heatload trends. From this Marquette Energy Analytics calculated the Albuquerque Design Day demand forecast for 2023-2024 to be 399,089 Dth.

99% Confidence forecast

The Design Day demand forecast is presented in two ways – a standard Design Day forecast of the expected level of demand, and a 99% confidence forecast.

The standard forecast is the expected demand if a 1-in-30-year weather event occurs. Assuming a normal distribution, there is a 50% probability that demand will exceed the forecast, and accordingly, a 50% chance that demand will be below the forecast.

The 99% confidence forecast includes an upward adjustment of the Design Day forecast by 2.5 standard deviations of the gaussian mixture model ensemble, which produces a forecast with an approximately 99% confidence level. This means if a 1-in-30 weather event occurs (67.8 HDDW), there is a 99% probability that the demand will not exceed the 99% confidence forecast.

In this analysis, the Albuquerque 99% confidence forecast for 2023-2024 is 432,560 Dth, which is 33,470 Dth (8.42%) greater than the standard 2023-2024 Design Day forecast. The choice to use the standard Design Day forecast or the 99% confidence forecast depends on the level of reliability needed from the forecast.

Design Day growth ten-year forecast

Marquette Energy Analytics also forecasted the Design Day growth out ten years. A long-term forecasting model was used to forecast changes in the baseload and heatload out ten years. This was accomplished with an ensemble of models that fit the historical data with linear and exponential trends of both the baseload and heatload demand.

Additionally, Marquette Energy Analytics incorporated economic components into the forecast. Specifically, forecasts of GDP from the Congressional Budget Office and commodity price forecasts derived from NYMEX Natural Gas futures were used.

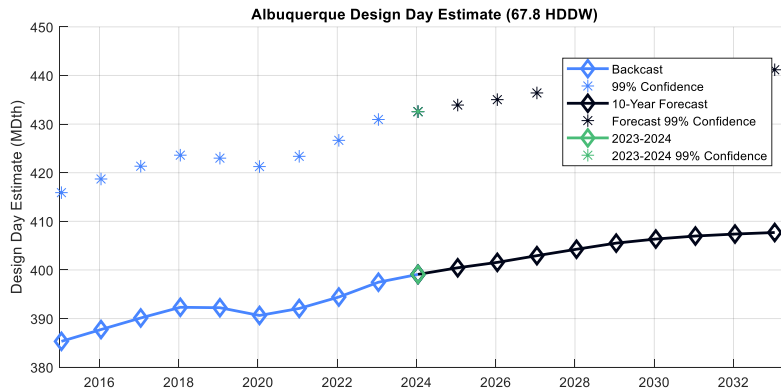
Design Day forecast summary

Marquette Energy Analytics forecasted the Albuquerque Design Day demand as if the DDC were to occur during the upcoming 2023-2024 winter through the 2032-2033 winter. The Albuquerque Design Day demand forecast for 2023-2024 is 399,089 Dth.

Table 2 – Design Day forecast by winter (Dth). Forecasts for winters out to the 2032-2033 winter are available in Albuquerque.xlsx.

Albuquerque Design Day forecast by winter

	2022-2023	2023-2024	2024-2025	2025-2026	2026-2027
Design Day Demand (Dth)	397,477	399,089	400,446	401,560	402,937
99% Confidence Forecast	430,947	432,560	433,916	435,030	436,407



Graph 3: Design Day forecasts by winter.

APPENDIX D - 2023-2024 WINTER SUPPLY PORTFOLIO SUPPLY SOURCES

Table D-1 – 2023-2024 Winter Supply Contracts

Baseload Contracts		Contract #	Price	Location	Oct-23	Nov-23	Dec-23	Jan-24	Feb-24	Mar-24	Apr-24
		25337		Milagro/IB Link	5,000	5,000	5,000	5,000	5,000	5,000	5,000
		25337		Milagro	5,000	15,000	20,000	20,000	20,000	15,000	10,000
		25337		Florida Plant	5,000	5,000	15,000	15,000	15,000	5,000	5,000
		25421		TW WTX Pool	-	-	-	-	-	-	-
		25421		EP Keystone Pool	4,000	-	-	-	-	-	4,000
		25443		Milagro/IB Link	-	-	15,000	15,000	-	-	-
		25444		EP Blanco Pool	-	8,000	9,000	9,000	8,000	-	-
		25445		EP Bondad St	-	5,000	10,000	10,000	5,000	-	-
		25430		Malaga	5,000	7,000	11,000	12,000	9,000	5,000	5,000
		25450		Milagro	10,000	5,000	40,000	40,000	40,000	-	10,000
		25459		Milagro	-	20,000	20,000	20,000	20,000	20,000	-
		25451		TW Blanco Pool	-	-	9,000	19,000	-	-	-
		25425		TW Blanco Pool	-	2,000	5,000	5,000	2,000	2,000	-
		25424		EP Bondad St	-	5,000	5,000	5,000	5,000	-	-
		25423		EP Blanco Pool	-	-	-	-	-	-	-
		25427		EP Blanco Pool	1,000	5,000	5,000	5,000	5,000	2,000	1,000
		25426		EP Keystone Pool	-	6,000	10,000	10,000	6,000	4,000	-
Total Baseload Contracted Volumes					35,000	88,000	179,000	190,000	140,000	58,000	40,000
				Northwest	25,000	65,000	150,000	155,000	105,000	40,000	25,000
				Southeast	4,000	7,000	11,000	12,000	9,000	5,000	4,000
				El Paso Blanco Independent Systems	1,000	3,000	4,000	4,000	3,000	2,000	1,000
				El Paso Keystone Independent Systems	4,000	6,000	10,000	10,000	6,000	4,000	4,000
				Transwestern Independent Systems	1,000	2,000	4,000	4,000	2,000	2,000	2,000
Total Baseload Recommendation					35,000	88,000	179,000	190,000	140,000	58,000	41,000
Overall Overage/(Deficit)					-	-	-	-	-	-	(1,000)
Peaking Contracts		Contract #	Price	Location	Oct-23	Nov-23	Dec-23	Jan-24	Feb-24	Mar-24	Apr-24
		25338		TW/EP/SJ	20,000	20,000	20,000	20,000	20,000	20,000	20,000
		25433		IB Link/Milagro	40,000	40,000	40,000	35,000	40,000	40,000	40,000
		25434		TWSJ	-	10,000	20,000	20,000	20,000	-	-
		25435		EPSJ Pool	-	20,000	20,000	20,000	20,000	-	-
		25421		EP Keystone	34,628	77,915	77,690	78,431	77,647	77,869	34,628
		25421		TW WTX	60,000	120,000	195,000	195,000	195,000	95,000	50,000
		25422		TW/EP/SJ	25,000	25,000	25,000	25,000	25,000	25,000	25,000
		25454		TWSJ Pool	-	30,000	30,000	30,000	30,000	30,000	-
		25458		EPSJ Pool	10,000	10,000	10,000	10,000	10,000	10,000	10,000
		25429		EPSJ Pool	-	5,000	5,000	5,000	5,000	-	-
		25428		Bondad St	5,000	5,000	5,000	5,000	5,000	5,000	5,000
		25439		Bondad St	5,000	5,000	5,000	5,000	5,000	5,000	5,000
		25431		La Plata	-	-	30,000	30,000	40,000	-	-
		25436		Bondad	8,000	15,000	-	-	5,000	10,000	8,000
		25448		YWRH	-	40,000	40,000	40,000	40,000	40,000	-
		25461		TW Rio	30,000	-	18,000	6,000	28,000	-	30,000
		25432		Artesia	-	-	10,000	10,000	10,000	-	-
		25446		EPSJ Pool	5,000	15,000	15,000	15,000	15,000	5,000	5,000
		25447		EPSJ Pool	-	15,000	15,000	15,000	15,000	-	-
		25440		TWSJ Pool	-	10,000	10,000	10,000	10,000	-	-
		25441		EP Rio	-	-	10,000	10,000	10,000	-	-
		25442		EPSJ Pool	-	10,000	10,000	10,000	10,000	-	-
		25438		TWSJ/EP/SJ	-	10,000	10,000	10,000	10,000	-	-
		25455		IB Link/Milagro	35,000	-	-	-	-	-	35,000
		25456		TWSJ/Milagro/IB link	-	-	10,000	10,000	10,000	-	-
		25457		TWSJ Pool	-	-	20,000	20,000	20,000	-	-
		25452		TWSJ Pool	-	15,000	15,000	15,000	15,000	15,000	-
		25453		EPSJ Pool	-	10,000	15,000	15,000	15,000	-	-
		25449		Milagro/EP/SJ Pool	10,000	-	10,000	10,000	10,000	-	10,000
		25423		EPSJ Pool	44,705	68,166	68,166	68,166	68,166	68,166	44,705
		25423		EPSJ Pool	20,000	20,000	20,000	20,000	20,000	20,000	20,000
Total Peaking Contracted Volumes					352,333	596,081	776,856	762,597	803,813	466,035	342,333
Natural Gas Storage		Contract #	Price	Location	Oct-23	Nov-23	Dec-23	Jan-24	Feb-24	Mar-24	Apr-24
		29018		TW WTX or EP Keystone	160,000	160,000	190,000	190,000	190,000	160,000	80,000
Total Storage					160,000	160,000	190,000	190,000	190,000	160,000	80,000
TOTAL PEAK DAY CONTRACTED VOLUMES					512,333	756,081	966,856	952,597	993,813	626,035	422,333
TOTAL FIRM SUPPLIES					547,333	844,081	1,145,856	1,142,597	1,133,813	684,035	462,333

BEFORE THE NEW MEXICO PUBLIC REGULATION COMMISSION

**IN THE MATTER OF NEW MEXICO GAS COMPANY,
INC.'S INTEGRATED RESOURCE PLAN FOR THE
PLANNING PERIOD OF 2024 THROUGH 2033 IN
COMPLIANCE WITH 17.7.4.9 NMAC**

**PROTEST BY WESTERN RESOURCE ADVOCATES
OF NEW MEXICO GAS COMPANY INC.'S
2024-2033 INTEGRATED RESOURCE PLAN**

Western Resource Advocates ("WRA") submits the following protest of New Mexico Gas Company's ("NMGC" or "Company") 2024-2033 Integrated Resource Plan ("IRP") filed on April 16, 2024. According to 17.7.4.15 New Mexico Administrative Code ("NMAC"), parties must file protests of the IRP to the New Mexico Public Regulation Commission ("Commission") within 30 days of the filing.

INTRODUCTION

WRA is a nonprofit conservation organization dedicated to protecting the land, air, and water of the interior West to ensure that communities exist in balance with nature, with a vision of a prosperous economy that is powered by clean energy. WRA develops and implements policies to reduce the environmental impacts of electric utilities in the Interior West by advocating for a Western electric system that provides clean, affordable, and reliable energy; reduces economic risks; and protects the environment through the expanded use of energy efficiency, renewable energy resources, and other clean energy technologies.

WRA has observed and participated in two public advisory meetings with NMGC pertaining to this 2024 IRP, but WRA has not previously participated in or responded to prior

gas IRPs. However, it is becoming increasingly clear that there is a disconnect between the information and reasoning NMGC provides in its filed IRP, the information and analysis required by the IRP rules, and the capital investment costs NMGC seeks to recover through rate cases or related filings. In its current and past IRP filings NMGC has presented an overview of the NMGC system and high-level descriptions of investments that will or could be made. In contrast, NMGC has come before the Commission four times in the last six years for rate increases.¹ Within these rate cases, NMGC requests approval for tens to hundreds of millions of dollars of new capital investments plus safety upgrades. NMGC does not include this level of information in its IRP, where it can be reviewed prior to the Company seeking cost recovery. Therefore, the Commission and stakeholders are unable to rely upon the IRP process to ensure that NMGC adequately considered alternatives, compare projects with lower cost alternatives or identify projects that may be avoided altogether, thus limiting rate increases.

The Commission recently raised the question as to whether the IRP assesses capital investment projects or simply looks at system fuel supply. NMGC confirmed their IRP mainly deals with gas supply and not so much capital investments.² This seems at odds with the instructions in the gas IRP rules to put forward a portfolio of the most cost-effective resources (demand-side and supply-side) to meet forecasted customer demand.³ Further, upon reviewing the IRP as filed, it is unclear whether meeting the needs of the portfolio would require specific system investments beyond securing gas through long-term contracts. The IRP observed the potential for future pipeline congestion.⁴ However, the plan lacked detail on anticipated system

¹ Case No. 23-00255-UT. New Mexico Gas Company, Inc.'s General Rate Case. Hearing Transcript April 1, 2024. Page 28.

² Ibid. Page 260.

³ 17.7.4.11 NMAC.

⁴ New Mexico Gas Company Integrated Resource Plan for the Planning Period of 2024 through 2033. Page 16.

capacity constraints, supply- and demand-side alternatives for alleviating those constraints, and cost effectiveness of alternatives.

Overall, NMGC has not presented enough detail or analysis in this IRP to ensure that the Commission and public are aware of possible future investments, related alternatives and risks, or that the investments NMGC intends to make are in the best interest of ratepayers. Recently, NMGC's request for a new liquified natural gas storage facility was denied by the Commission.⁵ The Commission based this denial in part because NMGC failed to provide an analysis proving this project was cost-effective and therefore in the interest of ratepayers.⁶ The IRP filing is an appropriate way for the gas utility to present analysis of potential projects that may be compared to alternatives before moving forward for a certificate of public convenience and necessity or cost recovery in a rate case.

WRA hereby files a protest of NMGC 2024-2033 IRP according to 17.7.4.15(A) NMAC. WRA asserts that the IRP fails to meet the requirements of 17.7.4.11(B) NMAC, which require NMGC to present a cost-effective portfolio of supply-side and demand-side resources to meet the needs forecast by the utility. Furthermore, NMGC did not include a present-value revenue requirement analysis of its selected resource portfolio. WRA recommends that the Commission require NMGC to refile its IRP to perform additional analyses to comply with 17.7.4.11(B) NMAC.

NATURAL GAS IRP REQUIREMENTS

⁵ Docket No. 22-00309-UT. New Mexico Gas Company, Inc.'s Application for the Issuance of a Certificate of Public Convenience and Necessity to Construct a Liquefied Natural Gas Facility. Final Order.

⁶ Ibid. Page 5.

The requirements for gas utility IRPs are found in 17.7.4 NMAC. The rules detail everything from plan contents to Commission review. Rule 17.7.4.10 NMAC details information a gas utility IRP must include:

- A. current load forecast;
- B. description of existing portfolio of resources;
- C. summary of foreseeable resource needs for the planning period;
- D. anticipated resources to be added during the planning period and the evaluation of various options that could reasonably be added to the utility's resource portfolio;
- E. a summary description of natural gas supply sources and delivery systems;
- F. a summary identification of critical facilities susceptible to supply-source or other failures;
- G. description of the public advisory process; and
- H. other information that may aid the commission in reviewing the utility's planning processes.

In addition, 17.7.4.11 NMAC details the evaluation of natural gas resources to be performed by the gas utility:

- A. The utility shall evaluate the ability of its natural gas resources to provide adequate redundancy of supply and of delivery systems.
- B. The utility shall evaluate, as appropriate, renewable energy, energy efficiency, load management and conventional supply-side resources on a consistent and comparable basis and take into consideration risk and uncertainty of energy supply, price volatility and costs of anticipated environmental regulations in order to identify the most cost-effective portfolio of resources to supply the energy needs of customers. The evaluation shall be based on a present-value analysis of revenue requirements and shall include discussion of any economic, risk, environmental, and reliability analyses.

[17.7.4.11 NMAC – N, 4-16-07; A, 12-31-12]

Overall, a gas IRP should act as a forecast of the utility's needs including investments into system upgrades, gas contracts, and extension facilities that may be necessary to meet customer demands over the timeframe of the IRP. The utility should compare a traditional infrastructure

investment (“conventional supply-side resources”) against alternatives on both the demand-side and supply-side. This ensures that the investments a utility intends to make are in the best interests of the ratepayer. The IRP should also weigh the impacts of policies and changing customer preferences when forecasting demand. This more comprehensive assessment can prepare the Commission and intervenors for future projects and should then align with cost recovery requests by the utility in future rate cases. If an IRP is not adequately detailed, then evaluating the prudence of different infrastructure and resource investments in future rate cases is extremely challenging. The Commission noted in NMGC’s most recent rate case that the Company will often settle for a lower revenue increase, but return to the table for another increase within a couple of years, in part to recoup costs incurred but deferred in previous settlements.⁷ Instead, if NMGC presents capital project details including expenditure information and comparison to alternatives in its IRP prior to making the investments, it would allow for stakeholders to weigh in. A proper IRP should show the Commission that NMGC is adequately considering alternatives. Thus, when NMGC comes before the Commission in a rate case, parties already understand the investments and the reasons they were made. Fundamentally the IRP should be a forecast, with IRP projects later appearing in rate cases. The closer they align, the better positioned all parties will be to engage in revenue requirement discussions.

OVERVIEW OF NMGC IRP

NMGC has filed IRPs under the statute since 2012. That makes this 2024 IRP the fourth such plan filed under the New Mexico gas IRP rules. The 2024-2033 IRP follows much the same format and information as the 2012, 2016, and 2020 iterations. The 2024 IRP provides:

⁷ New Mexico Gas Company General Rate Case. 23-00255-UT. Hearing Transcript April 1, 2024. Page 218 to 219.

- an overview of the NMGC gas system.
- a single load forecast.
- an overview of the company's gas supply and strategy for maintaining reliable supply.
- brief descriptions of anticipated resources or projects to be added during the 2024-2033 timeframe with some cost estimates.
- brief descriptions of possible resources, technologies, or projects the company will consider adding within the timeframe.
- an overview of NMGC's energy efficiency programs and estimated savings.⁸

NMGC provided in appendices presentations from the public advisory process, information on the NMGC gas delivery system, an updated design day study methodology report, and an overview of the 2023-2024 supply portfolio.⁹

COMPLIANCE WITH 17.7.4.10 NMAC

WRA finds that the NMGC IRP generally addresses the requirements set forth in NMAC 17.7.4.10 but provides insufficient detail in several ways to permit proper review of the drivers of future investments. For example, NMGC provides a load forecast and a description of existing resources, yet while there are descriptions of future projects, they are not tied directly back to specific supply shortfalls in certain years identified by NMGC in the plan, nor are the investments compared to other possible demand- or supply-side options.¹⁰

⁸ New Mexico Gas Company Integrated Resource Plan for the Planning Period of 2024 through 2033. Pages 2 to 27.

⁹ Ibid. Appendix A to D.

¹⁰ Ibid. Pages 13 to 14.

NMGC also presents an updated peak design day methodology to inform the resource need and load forecast. However, the Company does not provide any discussion of whether it is securing gas supply and building infrastructure to meet the design day demand (a 1-in-30-year event) or to satisfy an even more conservative target of the 99% confidence peak design day demand. The Company describes this additional 99% confidence metric as requiring additional gas supply resources above the typical 1-in-30-year requirement.¹¹ NMGC and its consultant also fail to acknowledge how future weather patterns may differ from historical weather. The plan does not discuss whether using the last 30 years of cold weather is useful for predicting the needs of the system in the next ten years. Overall, the IRP lacks an analysis or discussion to determine if either design day forecast is in the best interest of ratepayers and would not lead to an overbuild of infrastructure, especially if weather patterns warm and winter gas demand declines.

Similarly, while NMGC estimates system-wide future gas demand,¹² NMGC does not specify a resource portfolio to meet that need, or how the changing peak day loads by 2033/2034 in different portions of NMGC's system will lead to different investment and resource procurement strategies. This makes it very difficult for stakeholders to have confidence in the value or necessity of capital expenditures made by NMGC.

COMPLIANCE WITH 17.7.4.11 NMAC

WRA asserts that NMGC has failed to comply with the requirements under 17.7.4.11(B) NMAC. As set out above, this section of the IRP rules is very clear that the *“utility shall evaluate, as appropriate, renewable energy, energy efficiency, load management and*

¹¹ Ibid. Appendix C. Page C-8.

¹² NMGC projects the 2033/2034 heating season will require 911,379 MMBtu/d. Ibid. Page 14.

conventional supply-side resources on a consistent and comparable basis and take into consideration risk and uncertainty of energy supply, price volatility and costs of anticipated environmental regulations in order to identify the most cost-effective portfolio of resources to supply the energy needs of customers.” NMGC provides no evaluation or comparison of demand-side and supply-side resources, no indication of the relative risk of pursuing different resources, and no quantitative evaluation of the impacts of price volatility, environmental regulations, or any other potential scenario that would change the future demand of gas. Moreover, at no point does NMGC present for consideration any portfolio of resources that is optimized for cost-effectiveness. The language “*most cost-effective*” suggests the utility should have considered multiple portfolios when determining a preferred plan. NMGC instead presents a qualitative description of gas supply, probable and possible capital investments, and another qualitatively assessed list of technologies and strategies that may or may not play into the utility’s future.

The next line of that rule section requires: “*The evaluation shall be based on a present-value analysis of revenue requirements and shall include discussion of any economic, risk, environmental, and reliability analyses.*” NMGC failed to provide an analysis of revenue requirement changes for its chosen portfolio. Since this analysis was not performed, there is no discussion of economic, risk, environmental, and reliability aspects.

SUMMARY

WRA’s review of the 2024-2033 NMGC IRP led to the following:

- NMGC has not performed the necessary analyses to deem the 2024-2033 IRP satisfactory according to requirements under 17.7.4.11(B) NMAC. NMGC should have provided an assessment of supply-side and demand-side resources reasonably available, which could

lead to identification of alternative resources to meet customer demand over the forecasted period, and an evaluation of their cost-effectiveness or feasibility.

- For the proposed activities in the IRP¹³ (see sections entitled “*Anticipated Resources to Be Added During Planning Period*” and “*Resources and Infrastructure Under Consideration*”), NMGC does not provide any analysis that demonstrates that any one project is the most cost-effective solution for customers. NMGC’s presentation of each project lacks details. For example, there is no explanation of the revenue requirement of the project, and there is inadequate information for why the project is necessary or by when any capacity constraints occur, or replacements are needed. Furthermore, these projects are not compared to alternative solutions that may be more cost-effective, as 17.7.4.11 NMAC requires.
- NMGC does not provide any categorization of expected capital investments in its IRP. However, NMGC stated in its recent rate case that capital investment projects can be categorized as driven by customer growth, system reliability, normal operations, and risk-based system or safety improvements.¹⁴ Therefore, the Commission may consider requiring NMGC to include in its IRP a categorization of proposed projects and capital expenditures according to these key drivers. This information would also inform the IRP requirement to analyze the present-value revenue requirement impacts on ratepayers of anticipated investments.

¹³ Ibid. Pages 19 to 22.

¹⁴ New Mexico Gas Company General Rate Case. 23-00255-UT. Hearing Transcript April 1, 2024. Page 219 to 220.

- NMGC fails to provide any information about how its peak design day demand forecast connects to infrastructure investments or additional gas purchases.¹⁵ Nor is there a discussion of why the last 30 years of weather are reliable indicator of the weather over the next ten years. It is also unclear how the different parts of NMGC's system (i.e., Northeast system versus independent systems) must scale to meet the updated peak design day demand. Finally, NMGC provides no information on why it would consider a 99% confidence design day demand or how doing so is in the best interest of ratepayers or supported by customer demand.

RECOMMENDATION

Based on WRA's review, we recommend that the Commission direct NMGC to perform additional analyses for its 2024-2033 IRP to fulfill the requirements of 17.7.4.11(B) NMAC. The IRP should clearly present a most cost-effective portfolio of resources that NMGC will need to serve its anticipated customer demand over the forecast period. Descriptions of future projects should tie back to specific supply or capacity shortfalls as identified through the Company's 1-in-30-year peak design day demand forecast. As with any IRP process, the utility should provide and compare alternative portfolios. The Commission may consider requiring the utility to provide a minimum, specific set of portfolios presented in the gas IRPs. In choosing the most cost-effective portfolio, NMGC should compare available renewable energy, energy efficiency, load management and conventional supply-side alternatives on a consistent and comparable basis to meet identified supply and capacity shortfalls. NMGC must show a present-value analysis of revenue requirements for the proposed portfolio and include a discussion of this analysis that

¹⁵ New Mexico Gas Company Integrated Resource Plan for the Planning Period of 2024 through 2033. Pages 13 to 14.

considers economic, risk, environmental, and reliability aspects as 17.7.4.11(B) NMAC requires. To aid the Commission in the identification of the various deficiencies and guidance to be provided to the utility in refiling instructions, consistent with 17.7.4.15(A) NMAC, WRA suggests the Commission hold a workshop with NMGC, Commission Staff, and other interested parties. Given the scale of the additional analyses potentially requested of NMGC, the Commission may allow up to six months for the Company to refile its IRP.

Wherefore, WRA respectfully requests the Commission grant this Protest and set a hearing or workshop to discuss the deficiencies with NMGC 's 2024 IRP and provide instructions to NMGC for refiling.

Respectfully submitted,

WESTERN RESOURCE ADVOCATES

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BEFORE THE NEW MEXICO PUBLIC REGULATION COMMISSION

**IN THE MATTER OF NEW MEXICO GAS COMPANY,
INC.'S INTEGRATED RESOURCE PLAN FOR THE
PLANNING PERIOD OF 2024 THROUGH 2033 IN
COMPLIANCE WITH 17.7.4.9 NMAC**

CERTIFICATE OF SERVICE

I CERTIFY that on this day I sent via email a true and correct copy of the **Protest by Western Resource Advocates of New Mexico Gas Company Inc.'s 2024-2033 Integrated Resource Plan** to the parties listed below:

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DATED this 16th day of May 2024.



Caitlin Evans

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BEFORE THE NEW MEXICO PUBLIC REGULATION COMMISSION

**IN THE MATTER OF NEW MEXICO GAS COMPANY,
INC.'S INTEGRATED RESOURCE PLAN FOR THE
PLANNING PERIOD OF 2024 THROUGH 2033 IN
COMPLIANCE WITH 17.7.4.9 NMAC**

**COALITION FOR CLEAN AFFORDABLE ENERGY'S
CONCURRENCE IN WESTERN RESOURCE ADVOCATES'
PROTEST OF NEW MEXICO GAS COMPANY'S
2024-2033 INTEGRATED RESOURCE PLAN**

Pursuant to section 17.7.4.15 NMAC, Coalition for Clean Affordable Energy, an intervenor in this matter, hereby concurs in the Protest of Western Resource Advocates of New Mexico Gas Company's 2024-2033 Integrated Resource Plan. On April 16, 2024, New Mexico Gas Company's filed with the New Mexico Public Regulation Commission its 2024-2033 Integrated Resource Plan (IRP). Under section 17.7.4.15 NMAC, a party may file a protest to an IRP within 30 days of the filing of the IRP. On this date, Western Resource Advocates is filing its protest. Coalition for Clean Affordable Energy concurs in that protest for the reasons stated therein. New Mexico Gas Company filed its IRP without notifying parties, including CCAE, and WRA filed its protest yesterday very close to the close of business, hence, CCAE is filing its concurrence today.

Respectfully submitted,

/s/ Cara R. Lynch

May 17, 2024

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BEFORE THE NEW MEXICO PUBLIC REGULATION COMMISSION

**IN THE MATTER OF NEW MEXICO GAS COMPANY,
INC.'S INTEGRATED RESOURCE PLAN FOR THE
PLANNING PERIOD OF 2024 THROUGH 2033 IN
COMPLIANCE WITH 17.7.4.9 NMAC**

CERTIFICATE OF SERVICE

I CERTIFY that on this day I sent via email a true and correct copy of *Coalition for Clean Affordable Energy's Concurrence in Western Resource Advocates' Protest of New Mexico Gas Company's 2024-2033 Integrated Resource Plan* to the parties listed below:

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DATED this 17th day of May 2024.



Caitlin Evans
Paralegal
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BEFORE THE NEW MEXICO PUBLIC REGULATION COMMISSION

IN THE MATTER OF NEW MEXICO GAS COMPANY,)
INC.'S INTEGRATED RESOURCE PLAN FOR THE) Docket No. 24-00203-UT
PLANNING PERIOD OF 2024 THROUGH 2033 IN)
COMPLIANCE WITH 17.7.4.9 NMAC)
)

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NEW MEXICO PUBLIC REGULATION COMMISSION

/s/ LaurieAnn Santillanes, electronically signed
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