

**BEFORE THE NEW MEXICO PUBLIC REGULATION COMMISSION**

**IN THE MATTER OF THE APPLICATION )  
OF NEW MEXICO GAS COMPANY, INC. )  
FOR APPROVAL OF REVISIONS TO ITS )  
RATES, RULES, AND CHARGES PURSUANT )  
TO ADVICE NOTICE NO. 96 )**

**Case No. 23-00255-UT**

**NEW MEXICO GAS COMPANY, INC. )**

**Applicant.** )

**DIRECT TESTIMONY AND EXHIBITS**

**OF**

**TIMOTHY S. LYONS**

**September 14, 2023**

**DIRECT TESTIMONY OF  
TIMOTHY S. LYONS  
NMPRC CASE NO. 23-00255-UT**

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**I. INTRODUCTION**

**Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.**

**A.** My name is Timothy S. Lyons. My business address is 3 Speen Street, Suite 150, Framingham, Massachusetts 01701.

**Q. IN WHAT CAPACITY ARE YOU EMPLOYED?**

**A.** I am a Partner with ScottMadden, Inc.

**Q. PLEASE DESCRIBE YOUR PROFESSIONAL EXPERIENCE.**

**A.** I have more than 30 years of experience in the energy industry. I started my career in 1985 at Boston Gas Company, eventually becoming Director of Rates and Revenue Analysis. In 1993, I moved to Providence Gas Company, eventually becoming Vice President of Marketing and Regulatory Affairs. Starting in 2001, I held several management consulting positions in the energy industry, first at KEMA and then at Quantec, LLC. In 2005, I became Vice President of Sales and Marketing at Vermont Gas Systems, Inc. before joining Sussex Economic Advisors, LLC (“Sussex”) in 2013. Sussex was acquired by ScottMadden in 2016.

**Q. PLEASE DESCRIBE YOUR EDUCATIONAL BACKGROUND.**

**A.** I hold a bachelor’s degree from St. Anselm College, a master’s degree in economics from The Pennsylvania State University, and a master’s degree in business administration from Babson College.

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1   **Q.     ON WHOSE BEHALF ARE YOU TESTIFYING?**

2   **A.**    I am testifying on behalf of New Mexico Gas Company, Inc. (“NMGC” or the  
3           “Company”).  
4

5   **Q.     HAVE YOU PREVIOUSLY SPONSORED TESTIMONY BEFORE THE NEW**  
6           **MEXICO PUBLIC REGULATION COMMISSION (“NMPRC OR THE**  
7           **“COMMISSION”)?**

8   **A.**    No. I have sponsored testimony before 25 other regulatory commissions. A summary of  
9           my testimony experience is included in NMGC Exhibit TSL-1.  
10

11                           **II.   PURPOSE OF DIRECT TESTIMONY**

12   **Q.     WHAT IS THE PURPOSE OF YOUR DIRECT TESTIMONY IN THIS**  
13           **PROCEEDING?**

14   **A.**    The purpose of my Direct Testimony is to sponsor the Company’s proposed access fees  
15           and transmission and distribution charges. My Direct Testimony includes: (a) a list of the  
16           17.10.630 NMAC schedules (“Rule 630 Schedules”) and exhibits I am sponsoring; (b) a  
17           description of the current rate classes; (c) the Fully Allocated Cost of Service Study  
18           (“FACOS”) study; (d) development of the proposed class revenue targets, rate design, and  
19           customer bill impact analysis; and (e) support for continuation of Rate Rider No. 8 – the  
20           Company’s Weather Normalization Adjustment (“WNA”) Mechanism.<sup>1</sup>

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<sup>1</sup> The WNA Mechanism is described in the Company’s Rule No. 29:  
<https://www.nmgco.com/userfiles/files/PDF%20Rate%20Rider%20No.%208%20Details.pdf>

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1    **Q.     WHICH 630 SCHEDULES ARE YOU SPONSORING?**

2    **A.**     I am sponsoring the following 630 schedules.

630 Schedule	Description
A-2	Summary of Revenue Increase or Decrease at the Proposed Rates by Rate Class
K-1	Gas Operating Revenues and Sales Volumes
L-1	Allocation of Rate Base – Jurisdictional
L-2	Allocation of Rate Base – Functional Classification
L-3	Allocation of Rate Base – Demand, Commodity, and Customer
L-4	Allocation of Rate Base to Rate Classes
L-5	Allocation of Total Expenses – Jurisdictional
L-6	Allocation of Total Expenses – Functional Classification
L-7	Allocation of Total Expenses – Demand, Commodity, and Customer
L-8	Allocation of Total Expenses to Rate Classes
L-9	Allocation of Total Revenue – Jurisdictional
L-10	Allocation of Total Revenue – Demand, Commodity, and Customer
L-11	Allocation of Total Revenue to Rate Classes
M-1	Allocated Cost Per Billing Unit of Demand, Commodity, and Customer
N-1	Allocation Factors Used to Assign Items of Plant and Expenses to the Various Rate Classes
N-2	Classification Factors Used to Assign Items of Plant and Expenses to Demand, Commodity, and Customer Components
N-3	Demand and Commodity Loss Factors
O-1	Rate of Return by Rate Classification
P-1	Total Revenue Requirements by Rate Classification
P-2	Proof of Revenue Analysis
P-3	Comparison of Rates for Service Under the Present and Proposed Schedules
P-4	Explanation of Proposed Changes to Existing Rate Schedules
Q-5	Customer Information
Q-6	Weather Data

3

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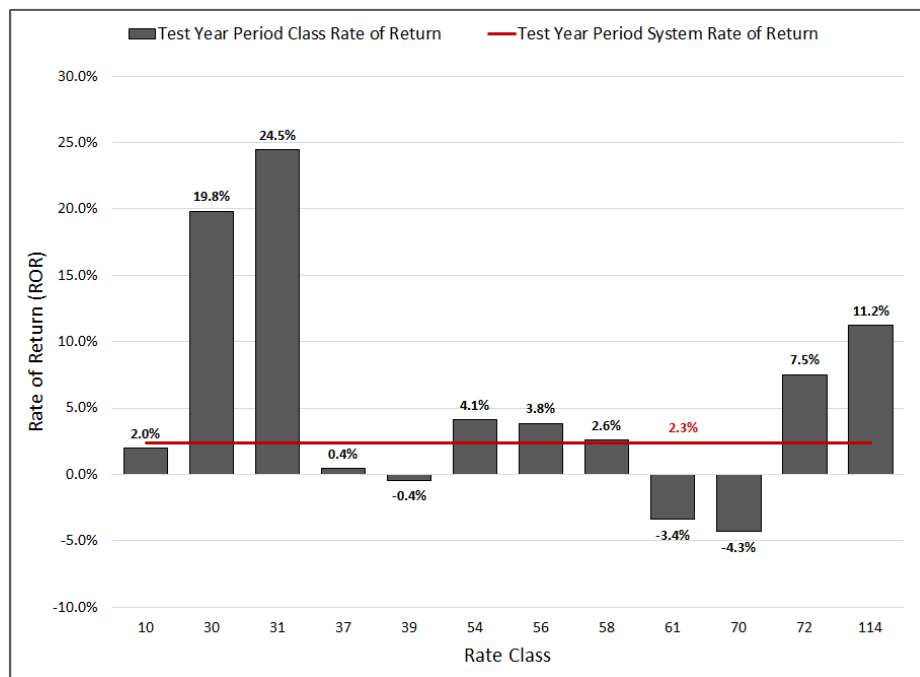
**Q. HAVE YOU PREPARED EXHIBITS SUPPORTING YOUR DIRECT TESTIMONY?**

**A.** Yes. My testimony is supported by the exhibits in the List of Exhibits (above). The Exhibits were prepared by me or under my direction.

**Q. PLEASE SUMMARIZE YOUR DIRECT TESTIMONY.**

**A.** The results of the Company's FACOS study show differences in class rates of return ("ROR") at current base rates for each rate class as compared to the system or overall ROR, as shown in Figure 1 (below).

**Figure 1: FACOS Study Results<sup>2</sup>**



<sup>2</sup> The Figure is contained in the Company's workpaper, "FACOS Rate Design\_vFinal.xlsx".

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1 Figure 1 compares class RORs to the system or overall ROR at current base rates. The  
2 Figure shows certain rate classes yield an ROR below the system ROR of 2.3 percent, while  
3 other rate classes yield RORs above the system ROR. The FACOS study was used as a  
4 guide to develop the proposed base rates.

5  
6 The proposed base rates reflect three important rate design principles: (a) rates should  
7 recover the overall cost of providing service; (b) rates should be fair in that each rate class  
8 should recover the costs caused by that customer class, minimizing inter- and intra-class  
9 inequities to the extent possible; and (c) rate changes should be tempered by rate continuity  
10 concerns. Because these principles can conflict, the proposed rate design reflects a level  
11 of judgment to balance these principles.

12  
13 The results of the FACOS study support a movement toward a more equitable rate structure  
14 where class RORs move closer to the system ROR. However, in this case the proposed  
15 movement to the system ROR was limited to address customer bill impact considerations.

16  
17 The Company developed proposed base rates for each rate class based on the following  
18 process. First, the Company proposed increases in the access fees, consistent with  
19 underlying customer costs. The proposed access fees better reflect recovery of customer  
20 costs, subject to bill continuity considerations. Class revenue targets not recovered in the  
21 access fees were then recovered through per therm transmission and distribution charges.

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1 In general, the proposed transmission and distribution charges, respectively, better reflect  
2 recovery of transmission and distribution costs, subject to bill continuity considerations.

3  
4 The Company prepared customer bill impacts to evaluate the effect of the proposed base  
5 rate changes, as shown in NMGC Exhibit TSL-9. The customer bill impacts included other  
6 applicable charges and fees to reflect the overall impact of the proposed changes.<sup>3</sup>

7  
8 Overall, the proposed base rates increase monthly bills for a residential customer using 90  
9 therms per month by \$8.99, or 9.20 percent. 90 therms represent the average monthly usage  
10 for residential customers during the peak months of November through March.

11 The proposed base rates increase monthly bills for a residential customer using 25 therms  
12 per month by \$4.98, or 15.80 percent. 25 therms represent the average monthly usage for  
13 residential customers during the off-peak months of April through October.

14 The proposed base rates increase monthly bills for a residential customer using 53 therms  
15 per month by \$6.71, or 11.2 percent. 53 therms represent an approximate average of  
16 monthly usage for residential customers during January through December. The customer  
17 bill impacts are presented in NMGC Exhibit TSL-9.

18  
19 **Q. HOW IS THE REMAINING PORTION OF YOUR TESTIMONY ORGANIZED?**

20 **A.** The remaining portion of my testimony is organized into the following sections.

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<sup>3</sup> Other charges and fees include: (1) weighted average Cost of Gas of \$0.5403 per therm in peak period (November through March), \$0.3396 per therm in off-peak period (April through October), and \$0.4781 per therm on annual basis; (2) Rate Rider 15 of \$0.0304 per therm; (3) Pipeline Safety Fee of \$0.0800 per month; (4) Franchise Fee of 3.000 percent; and (5) Gross Receipts Tax of 7.625 percent.



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- Section III provides an overview of the Company’s current rate classes.
- Section IV describes development of the FACOS study.
- Section V provides an overview of the rate design process.
- Section VI describes development of the proposed revenue targets, rate design, and customer bill impacts.
- Section VII supports continuation of the WNA.

**III. OVERVIEW OF CURRENT RATE CLASSES**

**Q. PLEASE DESCRIBE THE COMPANY’S SERVICE AREA.**

**A.** NMGC is a regulated gas utility providing gas service throughout New Mexico. The Company provides gas service to approximately 545,000 residential, commercial, and industrial customers.

**Q. PLEASE DESCRIBE THE COMPANY’S RATE CLASSES.**

**A.** Customers are presently served under one of the following rate schedules based on type of service.<sup>4</sup>

- Residential customers are served under Rate No. 10 – Residential Services (“Rate 10”).
- Commercial and industrial (“C&I”) customers are served primarily under one of three general service rate schedules based on annual usage.

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<sup>4</sup> NMGC’s rates are available on their website at: <https://www.nmgco.com/en/Rates>

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- 1                   ○ C&I customers whose annual usage is less than 200,000 therms per year are
- 2                   served under Rate No. 54 – Small Volume General Service (“Rate 54”).
- 3                   ○ C&I customers whose annual usage is between 200,000 therms and
- 4                   2,000,000 therms are served under Rate No. 56 – Medium Volume General
- 5                   Service (“Rate 56”).
- 6                   ○ C&I customers whose annual usage is equal to or greater than 2,000,000
- 7                   therms are served under Rate No. 58 – Large Volume-General Service
- 8                   (“Rate 58”).

9           Residential (Rate 10) and general service (Rates 54, 56 and 58) customers represent a  
10           significant portion of the Company’s customers, deliveries, and base rate revenues, as  
11           shown in Figure 2 (below).

12  
13           The Company also serves customers having specific end uses under one of the following  
14           tariff rate schedules.

- 15           • Rate No. 30 - Irrigation Service (“Rate 30”)
- 16           • Rate No. 31 - Water and Sewage Pumping (“Rate 31”)
- 17           • Rate No. 35 – Cogeneration Service (“Rate 35”)
- 18           • Rate No. 37 - Gas Air Conditioning (“Rate 37”)
- 19           • Rate No. 39 - Compressed Natural Gas Vehicle Fuel (“Rate 39”)
- 20           • Rate No. 61 - Sale for Resale (“Rate 61”)
- 21           • Rate No. 70 – Transportation Service (“Rate 70”)
- 22           • Rate No. 72 – Compressor Fuel Service (“Rate 72”)

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- Rate No. 114 - District Energy System Service (“Rate 114”).

The Company provides transportation service to customers who purchase their gas supply from third-party suppliers under Rate 70. Rate 70 includes terms and conditions for transportation service for both off-system and on-system customers; however, the base rate charges for on-system customers are based on the applicable rate schedules discussed above. When I refer to Rate 70 in my materials, I am referencing only the off-system service and customers.

**Q. PLEASE PROVIDE A BREAKDOWN BY RATE CLASS OF THE COMPANY’S CUSTOMERS, DELIVERIES, AND REVENUES.**

**A.** Figure 2 (below) provides a breakdown by rate class of the Company’s customers, deliveries, and base rate revenues at current rates for the test year October 1, 2024 through September 30, 2025.

**Figure 2: Customers and Deliveries<sup>5</sup>**

Rate Class	Customers	Customers %	Deliveries Thousand Therms	Deliveries %	Current Revenues	Revenues %	Revenues per Customer
Residential (Rate 10)	511,444	92.43%	319,098	42.83%	\$ 162,202,994	75.14%	\$ 317
Irrigation (Rate 30)	456	0.08%	8,581	1.15%	670,593	0.31%	1,472
Water and Sewer Pumping (Rate 31)	15	0.00%	200	0.03%	38,070	0.02%	2,538
Gas Air Conditioning (Rate 37)	1	0.00%	61	0.01%	2,596	0.00%	2,596
CNG Vehicle Fuel (Rate 39)	9	0.00%	3,067	0.41%	165,278	0.08%	18,364
Small General Service (Rate 54)	41,246	7.45%	157,012	21.07%	38,578,969	17.87%	935
Medium General Service (Rate 56)	105	0.02%	44,604	5.99%	4,908,892	2.27%	46,751
Large General Service( Rate 58)	9	0.00%	65,322	8.77%	5,190,415	2.40%	576,713
Sales for Resale (Rate 61)	6	0.00%	8,781	1.18%	417,805	0.19%	69,634
Offsystem Transportation (Rate 70)	4	0.00%	88,626	11.89%	1,976,562	0.92%	494,141
Compressor Fuel (Rate 72)	24	0.00%	40,254	5.40%	964,972	0.45%	40,207
District Energy System (Rate 114)	1	0.00%	9,498	1.27%	752,512	0.35%	752,512
<b>Total</b>	<b>553,319</b>	<b>100.00%</b>	<b>745,105</b>	<b>100.00%</b>	<b>\$ 215,869,660</b>	<b>100.00%</b>	<b>\$ 390</b>

<sup>5</sup> The Figure is contained in the Company’s workpaper, “Testimony Figures.xlsx”.

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1       Figure 2 shows the residential Rate 10 rate class represents 92.43 percent of the Company's  
2       customers. By comparison, the small general service Rate 54 rate class represents 7.45  
3       percent of customers.

4  
5       The Figure also shows variations in annual revenues per customer among the rate classes.  
6       Residential Rate 10 revenues per customer, for example, are \$317.00 per year, while large  
7       general service Rate 58 revenues per customer are \$576,713 per year.

8  
9       Figure 3 (below) shows monthly deliveries by rate class as a percentage of peak month  
10      (January) deliveries. Figure 3 shows deliveries vary seasonally for certain rate classes.

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**Figure 3: Monthly Deliveries as % of System Peak Month (January)<sup>6</sup>**

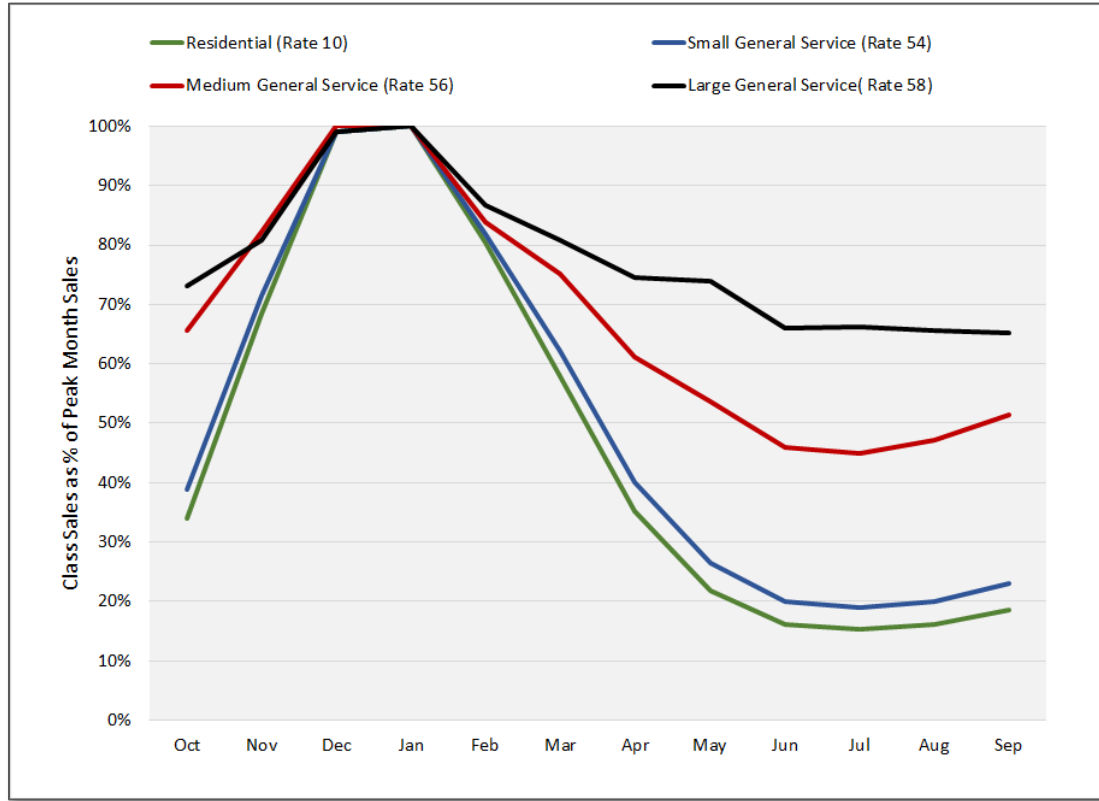


Figure 3 shows residential Rate 10 rate class deliveries, for example, have a seasonal load pattern, with deliveries increasing during the winter months, reflecting heating use. Large general service Rate 58 rate class deliveries, by comparison, have a relatively consistent pattern throughout the year, with only a slight increase in the winter months, reflecting water heating, cooking, and process use. Demand differences, as discussed below, have implications on the allocation of costs in the FACOS study.

<sup>6</sup> The Figure is contained in the Company's workpaper, "Testimony Figures.xlsx".

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**Q. PLEASE DESCRIBE THE EXISTING RATE DESIGN FOR RESIDENTIAL RATE 10 CUSTOMERS.**

**A.** The existing rate design for residential Rate 10 customers includes two types of base rate charges that are intended to recover the Company's non-gas revenue requirements. Presently, residential Rate 10 base rates consist of a \$12.40 monthly access fee and a usage or delivery charge that is \$0.2714 per therm. The delivery charge consists of a functional charge of \$0.1053 for transmission service and \$0.1661 per therm for distribution service.

Access fees are applied per customer per month. Transmission and distribution charges are applied to monthly therm usage.

The access fees are considered fixed charges because customer bills and Company revenues do not change based on customer usage. The transmission and distribution charges are considered variable charges because customer bills and Company revenues change based on customer usage.

**Q. DO THE GENERAL SERVICE RATE SCHEDULES (RATES 54, 56, AND 58) HAVE A SIMILAR RATE STRUCTURE?**

**A.** Yes. The Company's general service rate schedules have a similar rate structure consisting of access fees and transmission and distribution charges.

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**IV. FACOS STUDY**

**Q. WHAT IS THE PURPOSE OF A FACOS STUDY?**

**A.** The purpose of a FACOS study is to allocate a utility's overall cost of service to each rate class in a manner that reflects its underlying cost of service. This approach is well established in industry literature.<sup>7</sup>

**Q. WHAT APPROACH WAS USED TO DEVELOP THE FACOS STUDY IN THIS RATE CASE FILING?**

**A.** The approach used to develop the FACOS study in this rate case filing was based on three steps. First, costs were functionalized or assigned into functional categories. Next, functionalized costs were classified into one of three cost drivers, based on whether the costs are related to: (1) serving peak demands, (2) serving energy demands, or (3) meeting customer service requirements. Finally, classified costs were allocated to each rate class based on methods that best reflect how the costs were incurred.

The three steps were performed using two types of assignments: direct assignment and indirect assignment. Direct assignments utilized the Company's financial and plant records to assign plant investments and expenses to specific functions, classifications, and rate classes. Indirect assignments utilized composite allocators based on direct and indirect assignments developed during the functionalization, classification, and allocation process.

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<sup>7</sup> See Principles of Public Utility Rates by James C. Bonbright.

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1   **Q.    WHAT IS FUNCTIONALIZATION?**

2   **A.**    Functionalization is the process of assigning rate base and expense items into operational  
3           components. The functionalization of costs in the FACOS study was based on the  
4           Company's accounting records and cost of service study, which are maintained in  
5           accordance with the Federal Energy Regulatory Commission's ("FERC") Uniform System  
6           of Accounts ("USOA").

7  
8   **Q.    WHAT IS CLASSIFICATION?**

9   **A.**    Classification is the process of assigning rate base and expense items into categories that  
10          reflect cost-causation. There are three primary causes or drivers of costs related to the gas  
11          system:

- 12           • Customer-related – costs that vary with the number of customers, such as costs  
13           associated with connecting customers to the gas system and providing basic  
14           customer services, such as metering and billing;
- 15           • Demand-related – costs that vary with customer usage at the time of the system  
16           peak demand; and
- 17           • Energy-related – costs that vary with energy usage, such as the cost of gas.

18          Classification factors used in the FACOS study are included in Rule 630 Schedule N-2.  
19

20   **Q.    WHAT IS ALLOCATION?**

21   **A.**    Allocation is the process of assigning rate base and expense items to each rate class based  
22          on allocators that best reflect how the costs were incurred. In other words, cost allocation



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1           should follow how costs were incurred. Allocation factors used in the FACOS study are  
2           included in NMGC Exhibit TSL-5.

3  
4   **Q.   WHAT TYPES OF ALLOCATORS WERE USED TO DEVELOP THE FACOS**  
5   **STUDY?**

6   **A.**   Three types of allocators were used to develop the FACOS study:

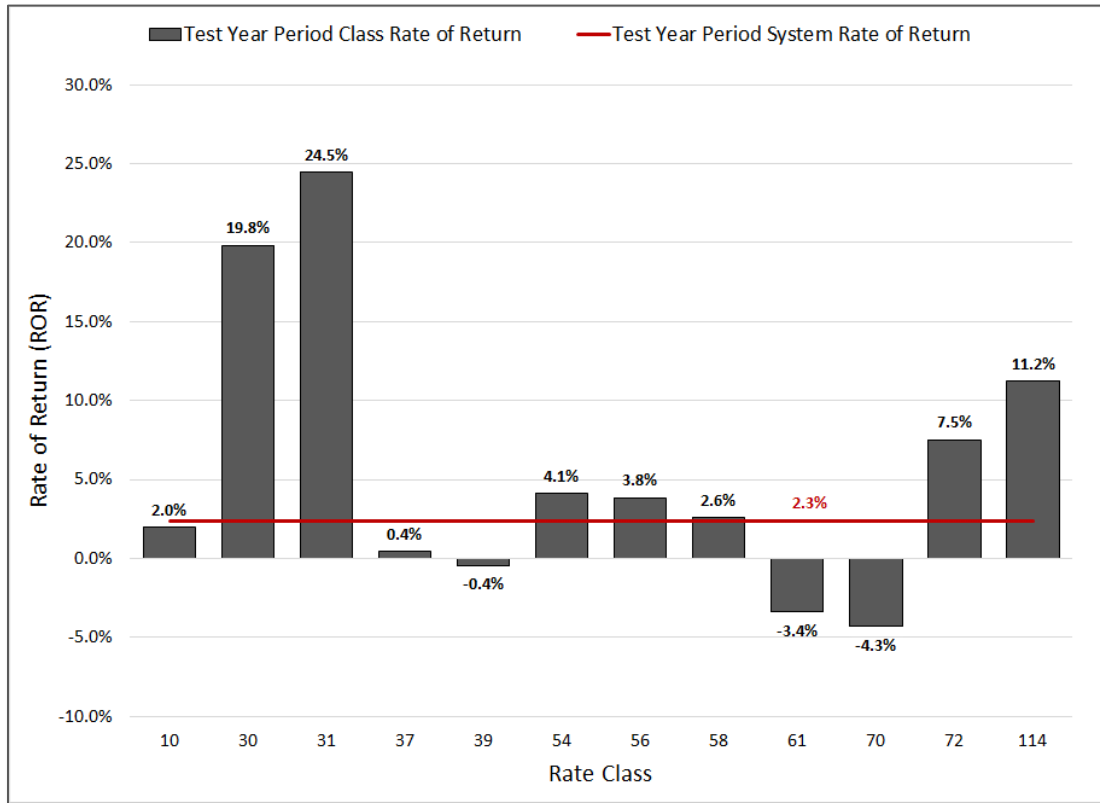
- 7           1. Class determinants – class characteristics, such as number of customers, peak  
8           demands, annual deliveries, and revenues by rate class;  
9           2. Special studies – detailed analysis of specific plant or expense items, such as meters  
10          and services; and  
11          3. Indirect – composite allocators based on how other costs were allocated.

12  
13 **Q.   WHAT APPROACH WAS USED TO DEVELOP THE FACOS STUDY FOR THIS**  
14 **RATE CASE FILING?**

15 **A.**   The FACOS study was based on a spreadsheet model developed specifically for this rate  
16       case filing, as included in NMGC Exhibit TSL-3. Rate base and expense items in the  
17       FACOS study were assigned to each rate class based on the three-step process described  
18       above. The results of the FACOS study are shown in Figure 1 (replicated below).

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**Figure 1: FACOS Study Results (Replicated)**



The results of the FACOS study summarized in NMGC Exhibit TSL-2.

**Q. WHAT CONCLUSIONS CAN BE REACHED WHEN A RATE CLASS YIELDS A ROR THAT IS LOWER OR HIGHER THAN THE SYSTEM OR OVERALL ROR?**

**A.** If a rate class yields a ROR that is lower than the system or overall ROR, then the revenues recovered from the rate class are less than its cost of service. Conversely, if a rate class yields a ROR that is higher than the system ROR, then the revenues recovered from the rate class are more than its cost of service. As discussed below, the FACOS study results were used as a guide to establish revenue targets for each rate class, subject to bill

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1 continuity concerns, that move the Company's proposed rates in aggregate closer to the  
2 system ROR to achieve more fair and equitable rates across rate classes.

3  
4 **Q. WHAT DATA WAS USED TO PREPARE THE FACOS STUDY?**

5 **A.** The FACOS study was based on the Company's Future Test Year data for October 1, 2024  
6 through September 30, 2025. The FACOS study includes the number of customers,  
7 deliveries, and revenues by rate class, as included in NMGC Exhibit TSL-4.

8  
9 The FACOS study includes rate base items, including intangible plant, transmission,  
10 distribution, and general net plant-in-service, working capital (e.g., materials and supplies)  
11 as well as additions to rate base (e.g., rights of way) and reductions to rate base (e.g.,  
12 customer deposits). The FACOS study also includes operations and maintenance  
13 ("O&M") expenses, including other gas supply expenses, transmission, distribution,  
14 customer accounting, sales, and administrative and general expenses as well as  
15 depreciation expense, income taxes other than income, such as payroll and property taxes,  
16 miscellaneous expense (e.g., interest on customer deposits), income taxes and revenue tax.  
17 The FACOS study also includes revenue credits.

18  
19 **Q. WHAT WAS THE APPROACH TO FUNCTIONALIZE COSTS IN THE FACOS**  
20 **STUDY?**

21 **A.** As discussed earlier, functionalization is an important first step in development of the  
22 FACOS study. The functionalization process in this study generally followed the USOA.

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Specifically, the overall cost of service was functionalized into one of the following categories:

- Intangible - investments associated with the Company's intangible plant. These include intangible plant, accumulated depreciation, and depreciation expense.
- Transmission - investments and expenses associated with the Company's transmission facilities. These include transmission plant, accumulated depreciation, depreciation expenses, and related O&M expenses.
- Distribution – investments and expenses associated with the Company's distribution facilities. These include distribution plant, accumulated depreciation, depreciation expenses, and related O&M expenses.
- General - investments and expenses associated with the Company's general plant facilities. These include general plant, accumulated depreciation, depreciation expenses, and related expenses.

**Q. WHAT WAS THE APPROACH TO CLASSIFY COSTS IN THE FACOS STUDY?**

**A.** The FACOS study classified costs into one of the following two categories:

- Customer – costs associated with customer access to the gas distribution system as well as on-going customer services, such as meter reading and billing services.
- Demand – costs associated with peak demand requirements.

**Q. WHAT WAS THE APPROACH TO CLASSIFY TRANSMISSION PLANT?**

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1    **A.**     Transmission plant was classified as demand to reflect transmission mains are designed to  
2           meet customer average daily and design day demands.<sup>8</sup>

3  
4    **Q.     WHAT WAS THE APPROACH TO CLASSIFY DISTRIBUTION PLANT?**

5    **A.**     Distribution plant represents the largest portion of the Company’s investment in utility  
6           plant. The classification of distribution mains – the largest portion of distribution plant –  
7           reflects two cost drivers. The first cost driver is number of customers. Distribution mains  
8           are designed to provide customers access to the natural gas system. The second driver is  
9           customer demands. Distribution mains are designed to meet average daily and design day  
10          demands.

11  
12          The classification of distribution mains in this rate case reflects a refinement to the  
13          approach in the prior rate case. Specifically, the Company in this rate case classified  
14          distribution mains into customer and demand based on an average of two recognized  
15          approaches to classify distribution main: (1) the zero-inch or zero-intercept method, and  
16          (2) the minimum system method. Both methods are recognized by the National  
17          Association of Regulated Utility Commissions (“NARUC”). NARUC states,

18                “One argument for inclusion of distribution related items in the customer  
19                cost classification is the ‘zero or minimize size main theory.’ This theory  
20                assumes that there is a zero or minimum size main necessary to connect the

---

<sup>8</sup> Design day demand is the highest estimated gas demand for a 24-hour period and is used as a basis for designing the capacity of the transmission and distribution system.

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1 customer to the system and thus affords the customer an opportunity to take  
2 service as he so desires.

3 Under the minimum size main theory, all distribution mains are priced  
4 out at the historical unit cost of the smallest main installed in the system, and  
5 assigned as customer costs. The remaining book cost of distribution  
6 mains is assigned to demand. The zero-inch main method would allocate the  
7 cost of a theoretical main of zero-inch diameter to the customer function, and  
8 allocate the remaining costs associated with mains to demand.”<sup>9</sup>

9 Previously, distribution mains were classified based only on the minimum system method.  
10

11 **Q. WHAT IS THE ZERO-INCH OR ZERO-INTERCEPT METHOD?**

12 **A.** The zero-inch or zero-intercept method represents the cost of connecting customers to the  
13 distribution system with a hypothetical "zero-size" main. The method is based on a  
14 regression analysis that examines the relationship between distribution main sizes and their  
15 average costs. The regression analysis produces an intercept that represents the average  
16 cost of a theoretical zero-inch distribution main, or a distribution main that serves no  
17 demand. Zero-inch main costs are classified as customer, while costs in excess of the zero-  
18 inch main costs are classified as demand.

19  
20 **Q. HOW WAS THE ESTIMATED COST OF A ZERO-INCH MAIN DETERMINED?**

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<sup>9</sup> NARUC Gas Distribution Rate Design Manual, pgs. 22-23.

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A. The estimated cost of a zero-inch main was based on a regression analysis of distribution main sizes and their average costs. The regression analysis produced an intercept that represented the average cost (\$ per foot) of a theoretical zero-inch distribution main. Multiplying the average cost of a zero- inch main by the actual number of feet in the system yielded a theoretical cost of a system comprised of zero-inch mains. The customer portion of distribution mains was calculated as the ratio of the cost of a zero-inch main to the total cost of all mains.

**Q. WHAT WERE THE RESULTS OF THE ZERO-INCH METHOD?**

A. The results of the zero-inch method show the customer portion of the mains investment is 48.43 percent, as shown in Figure 4 (below).

**Figure 4: Results of Zero-Inch Method<sup>10</sup>**

Type	Total Type Footage	Zero-Int. Cost per Foot	Cost of Minimum System
PLASTIC	35,740,529	\$ 7.06	\$ 252,264,797
STEEL	25,169,938	22.92	\$ 576,991,239
Zero-Intercept System Costs			\$ 829,256,036
Total Cost			\$ 1,712,325,663
Zero-Intercept			48.43%

Figure 4 shows the estimated cost of a zero-inch plastic and steel main was \$7.06 per foot and \$22.92 per foot, respectively. Multiplying the estimated cost of a zero-inch main by the actual number of feet in the system yielded a theoretical cost of a system comprised of zero-inch mains of \$829.3 million. The customer portion of distribution

<sup>10</sup> The Figure is contained in the Company's workpaper, "WP (Classifiers) – Mains.xlsx".

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1 mains of 48.43 percent was calculated as the ratio of the cost of zero-inch mains of  
2 \$829.2 million to the total cost of the mains system of \$1,712.3 million. The demand  
3 portion of the total cost of the mains system was 51.57 percent.  
4

5 **Q. HOW WAS THE ESTIMATED COST OF A MINIMUM SIZE MAIN**  
6 **DETERMINED?**

7 **A.** The estimated cost of a minimum size main was based on a two-inch plastic main,  
8 which is the smallest main commonly installed by the Company. Multiplying the  
9 estimated cost of two-inch plastic main by the actual number of feet in the system  
10 yielded the theoretical cost of a system comprised of two-inch mains. The customer  
11 portion of distribution mains was calculated as the ratio of the cost of a two-inch mains  
12 system to the cost of the total mains system.  
13

14 **Q. WHAT WERE THE RESULTS OF THE MINIMUM SIZE MAIN METHOD?**

15 **A.** The results of the minimum size main method show the customer portion of the mains  
16 investment is 35.87 percent, as shown in Figure 5 (below).



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**Figure 5: Results of Minimum System Method<sup>11</sup>**

Type	Total Type Footage	Min-Sys. Cost per Foot	Cost of Minimum System
PLASTIC	35,740,529	\$ 10.09	\$ 614,286,148
STEEL	25,169,938		
Minimum System Costs			\$ 614,286,148
Total Cost			\$ 1,712,325,663
Minimum System			35.87%

Figure 5 shows the estimated cost of a minimum size main is \$614.3 million, which is based on the estimated cost of a two-inch plastic main and the actual number of feet in the system. The customer portion of distribution mains of 35.87 percent was calculated as the ratio of the cost of minimum size main of \$614.3 million to the total cost of the mains of \$1,712.3 million. The demand portion of the mains investment was 64.13 percent.

**Q. WHAT IS THE COMPANY’S RECOMMENDATION REGARDING THE CLASSIFICATION OF DISTRIBUTION MAIN?**

**A.** The Company recommends classifying distribution mains in this proceeding as 42.15 percent customer and 57.85 percent demand. The proposed approach reflects an average of the zero-inch and minimum size system methods, as shown in Figure 6 (below).

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<sup>11</sup> The Figure is contained in the Company’s workpaper, “WP (Classifiers) – Mains.xlsx”.

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**Figure 6: Proposed Classification of Distribution Mains<sup>12</sup>**

Classification	Minimum System	Zero-Inch Zero-Intercept	Average
Customer	35.87%	48.43%	42.15%
Demand	64.13%	51.57%	57.85%

**Q. WHAT WAS THE APPROACH TO CLASSIFY METERS AND SERVICES?**

**A.** Services (Account 380) were classified as customer. Meters, Meter Installation, House Regulators and Industrial Measuring & Regulation (Accounts 380-385) were classified as customer.

**Q. HOW WERE OTHER PLANT ITEMS CLASSIFIED?**

**A.** Other plant items were similarly classified based on their underlying cost drivers. Rate base items not directly associated with one of the classification categories were classified through a composite classifier based on related costs.

**Q. PLEASE DISCUSS THE CLASSIFICATION OF O&M EXPENSES.**

**A.** Distribution O&M expenses were classified in a manner similar to the respective plant items. For example, distribution O&M expenses followed the classification of their respective plant accounts.

O&M expense items not directly associated with one of the classification categories were classified through an indirect composite classifier based on related costs.

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<sup>12</sup> The Figure is contained in the Company's workpaper, "WP (Classifiers) – Mains.xlsx".

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1

2   **Q.   PLEASE DESCRIBE THE ALLOCATION PROCESS USED IN DEVELOPING**  
3       **THE FACOS STUDY.**

4   **A.**   Costs were allocated to each rate class based on how costs are incurred to serve that class.  
5       In other words, for each component of cost, the Company developed an allocator that best  
6       reflects how costs are incurred.

7

8   **Q.   PLEASE DESCRIBE THE ALLOCATORS USED IN DEVELOPING THE FACOS**  
9       **STUDY.**

10   **A.**   The FACOS study was based on three types of allocators:

11           • Class determinants – class characteristics, such as number of customers, peak  
12           demands, deliveries, and revenues by rate class;

13           • Special studies – detailed analysis of specific plant or expense items, such as meters  
14           and service costs; and

15           • Indirect – composite allocators based on how other costs are allocated.

16       Allocation factors used in the FACOS study are included in NMGC Exhibit TSL-5.

17

18   **Q.   HOW WERE PLANT COSTS CLASSIFIED AS DEMAND ALLOCATED?**

19   **A.**   Plant costs classified as demand were allocated based on the Average and Peak (A&P)  
20       method. Plant costs classified as demand include transmission plant and the demand

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1 portion of distribution mains, as discussed earlier. The A&P method is a recognized  
2 approach for allocating plant costs classified as demand.<sup>13</sup>

3  
4 The allocator is based on each rate class's responsibility to the average day and peak  
5 day (or design day) demands of the system.

6  
7 The average day portion of the allocator is based on each rate class's responsibility to  
8 the average daily demands on the system. The "Peak" portion of the allocator is based  
9 on each rate class's responsibility to the peak day (or design day) demands of the  
10 system. The "Average" portion is weighted by the system's load factor. The "Peak"  
11 portion is weighted by the remaining amount (1 minus the system load factor).

12  
13 **Q. HOW WAS METER PLANT ALLOCATED?**

14 **A.** Meter plant was allocated to each rate class based on the results of a study that reflects the  
15 cost of meters serving each rate class. The allocator reflects the Company's estimate of  
16 meter and meter installation costs for each type of meter serving each rate class.

17  
18 **Q. HOW WAS SERVICE PLANT ALLOCATED?**

19 **A.** Service plant was allocated to each rate class based on the results of a study that reflects  
20 the material and installation cost of a service line for each rate class. The allocator reflects

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<sup>13</sup> NARUC Gas Distribution Rate Design Manual, p. 27 (June 1989)

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1 the Company's estimate of service line and service line installation costs for each type of  
2 service line for each rate class.

3  
4 **Q. WHAT WAS THE PROCESS TO DEVELOP THE COMPOSITE ALLOCATORS?**

5 **A.** There are several composite allocators developed internally based on the allocation of  
6 various plant investments and expenses. These are used to allocate cost items that cannot  
7 be readily categorized. For example, general plant is allocated based on the composite  
8 allocation of all other plant allocations.

9  
10 **Q. HOW WERE EXPENSES ALLOCATED TO EACH RATE CLASS?**

11 **A.** Expenses were generally allocated to each rate class consistent with their respective plant  
12 accounts allocation method. Certain expenses, such as administration and general and  
13 payroll taxes, were allocated using a labor allocation.

14  
15 **Q. DOES THE UNIT COST OF SERVICE VARY ACROSS THE COMPANY'S RATE  
16 CLASSES?**

17 **A.** Yes, the cost of service per customer and per therm (i.e., unit cost of service) varies across  
18 the Company's rate classes, as shown in Figure 7 (below).

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**Figure 7: Unit Cost of Service by Rate Class<sup>14</sup>**

Rate Class	Revenue Requirements	
	Per Customer	Per Therm
Residential (Rate 10)	\$ 388	\$ 0.62
Irrigation (Rate 30)	\$ 1,007	\$ 0.05
Water and Sewer Pumping (Rate 31)	\$ 1,737	\$ 0.13
Gas Air Conditioning (Rate 37)	\$ 3,879	\$ 0.06
CNG Vehicle Fuel (Rate 39)	\$ 28,469	\$ 0.08
Small General Service (Rate 54)	\$ 1,082	\$ 0.28
Medium General Service (Rate 56)	\$ 56,511	\$ 0.13
Large General Service (Rate 58)	\$ 761,529	\$ 0.10
Sales for Resale (Rate 61)	\$ 164,698	\$ 0.11
Offsystem Transportation (Rate 70)	\$ 1,358,352	\$ 0.06
Compressor Fuel (Rate 72)	\$ 39,890	\$ 0.02
District Energy System (Rate 114)	\$ 632,012	\$ 0.07

The Figure shows, for example, the unit per customer cost of service for residential Rate 10 is \$388 per customer, while the unit cost of service for large general service Rate 58 is \$761,529 per customer. By comparison, the unit per therm cost of service for residential Rate 10 is \$0.62 per therm, while the unit cost of service for the large general service Rate 58 is \$0.10 per therm.

**Q. HOW ARE VARIATIONS IN THE UNIT COST OF SERVICE USED TO SUPPORT THE COMPANY'S RATE DESIGN?**

**A.** Variations in the unit cost of service support the need for distinct rate classes and rates.

<sup>14</sup> The Figure is contained in the Company's workpaper, "Testimony Figures.xlsx".

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**V. OVERVIEW OF RATE DESIGN**

**Q. WHAT WERE THE PRINCIPLES USED TO GUIDE THE PROPOSED RATE DESIGN?**

**A.** The proposed rate design was guided by several principles commonly used throughout the industry, including: (a) rates should recover the overall cost of providing service; (b) rates should be fair in that each rate class should recover the costs caused by that customer class, minimizing inter- and intra-class inequities to the extent possible; and (c) rate changes should be tempered by rate continuity concerns.

Because these principles can conflict, the proposed rate design reflects a level of judgment to balance these principles.

**Q. HOW WERE THESE PRINCIPLES APPLIED IN THIS PROCEEDING?**

**A.** First, rates were designed to recover the overall cost of service. This was done by developing access fees and delivery charges based on Future Test Year bills and deliveries. In addition, rates were designed to be fair and equitable. This was done by setting revenue targets for each rate class that reflect in aggregate a movement toward the system ROR based on the results of the FACOS study. Specifically, the results of the FACOS study show certain classes produce a ROR that is less than the system ROR. The proposed rate design moves the ROR closer to the system ROR. Another rate design objective is to moderate rate changes to address rate continuity concerns. This objective was considered while setting revenue targets and then again while setting rate elements.

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**Q. WHAT STEPS WERE TAKEN TO DEVELOP THE PROPOSED BASE RATES?**

**A.** The first step to develop the proposed base rates was to establish the overall revenue requirement to be recovered from base rates. The next step was to set revenue targets for each rate class based on the results of the FACOS study, moderated by rate continuity concerns. Rates within each rate class were then designed to recover the revenue targets based on test year bills and deliveries. The class revenue targets are included in NMGC Exhibit TSL-6.

**Q. WHAT IS THE TOTAL REVENUE REQUIREMENT THAT YOU USED AS A STARTING POINT?**

**A.** To determine the total revenue requirement, I relied on the overall cost of service presented in the Direct Testimony of NMGC Witness Erik C. Buchanan, which indicates an overall revenue requirement of \$265.2 million.

**VI. PROPOSED RATE DESIGN**

**Q. WHAT WAS THE PROCESS TO ESTABLISH THE CLASS REVENUE TARGETS FOR EACH RATE CLASS?**

**A.** The starting point for setting class revenue targets was first identifying the revenue changes needed to achieve an equal rate of return (“EROR”) for each rate class. For certain rate classes that yield a ROR less than the system ROR, the proposed rate increases were higher



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than the system average to move the classes closer to the system ROR; however, the movement to EROR for all rate classes was moderated by bill continuity concerns.

Specifically, to address bill continuity concerns the proposed revenue targets for each rate class were based on a 10.00 percent movement toward EROR, as shown in Figure 8 (below).

**Figure 8: Proposed Class Revenue Targets<sup>15</sup>**

Rate Class	Current Base Revenue	Revenue Requirement at EROR	Revenue Requirement at Equal % Increase	Proposed Base Revenues	Proposed Base Revenue Increase	Proposed Base Revenue Percent Change
(A)	(B)	(C)	(D)	(D)	(E)	(H)
<b>Rate Class Revenues</b>		10.0%				
Rate 10 - Residential	\$ 162,202,994	\$ 198,674,176	\$ 199,001,711	\$ 198,968,957	\$ 36,765,963	22.7%
Rate 30 - Irrigation Service	670,593	458,889	822,730	786,346	115,752	17.3%
Rate 31 - Water and Sewer Pumping Service	38,070	26,051	46,707	44,641	6,571	17.3%
Rate 37 - Gas Air Conditioning Service	2,596	3,879	3,185	3,255	658	25.4%
Rate 39 - Compressed Natural Gas Vehicle Fuel	165,278	256,223	202,775	208,120	42,841	25.9%
Rate 54 - Small General Service	38,578,969	44,625,990	47,331,314	47,060,782	8,481,813	22.0%
Rate 56 - Medium General Service	4,908,892	5,933,696	6,022,564	6,013,678	1,104,785	22.5%
Rate 58 - Large General Service	5,190,415	6,853,757	6,367,956	6,416,536	1,226,121	23.6%
Rate 61 - Sales for Resale Service	417,805	988,186	512,592	560,151	142,346	34.1%
Rate 70 - Off-System Transportation	1,976,562	5,433,410	2,424,981	2,725,824	749,262	37.9%
Rate 72 - Compressor Fuel	964,972	957,372	1,183,893	1,161,241	196,269	20.3%
Rate 114 - District Energy System Service	752,512	632,012	923,233	894,111	141,599	18.8%
<b>TOTAL Base Revenues</b>	<b>\$ 215,869,660</b>	<b>\$ 264,843,641</b>	<b>\$ 264,843,641</b>	<b>\$ 264,843,641</b>	<b>\$ 48,973,981</b>	<b>22.7%</b>
Other Revenues (Rate 18)	310,073	310,073	310,073	310,073	-	0.0%
<b>TOTAL Revenues</b>	<b>\$ 216,179,733</b>	<b>\$ 265,153,714</b>	<b>\$ 265,153,714</b>	<b>\$ 265,153,714</b>	<b>\$ 48,973,981</b>	<b>22.7%</b>

Figure 8 shows revenue requirements for each rate class based on three approaches: (1) a full movement to EROR, (2) a uniform increase in revenues, and (3) a partial movement to EROR, which is the Company's proposal. A full movement to EROR would reduce inter-

<sup>15</sup> The Figure is contained in the Company's workpaper, "FACOS Rate Design\_vFinal.xlsx".

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1 class inequities but raise bill continuity concerns for certain classes, such as Off-System  
2 Transportation – Rate 70. A uniform increase would produce a more consistent increase  
3 across rate classes but not reduce inter-class inequities. The Company’s proposed revenue  
4 targets reflect a partial movement to EROR of 10.00 percent.

5  
6 The Company believes a 10.00 percent movement to EROR strikes an appropriate balance  
7 between moving to cost-based rates and addressing bill continuity considerations.

8  
9 **Q. WHAT WAS THE PROCESS TO DERIVE THE PROPOSED ACCESS FEE FOR**  
10 **RESIDENTIAL RATE 10?**

11 **A.** The Company proposes to increase the access fee for residential Rate 10 customers from  
12 \$12.40 per month to \$15.50 per month, as shown in NMGC Exhibit TSL-8. The proposed  
13 access fees reflect a slight improvement in recovery of customer costs through access fees,  
14 subject to bill continuity considerations. Presently, the Company’s access fees recover  
15 47.46 percent of base rate revenues. The Company’s proposed access fees recover 48.36  
16 percent of base rate revenues.

17  
18 While the results of the FACOS study support a higher Residential Rate 10 access fee, as  
19 shown in NMGC Exhibit TSL-7, the Company recommends a lower access fee to address  
20 bill continuity concerns among low-use customers. Specifically, the FACOS study shows  
21 residential Rate 10 customer costs are approximately \$20.00 per month.

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**Q. WHAT WAS THE PROCESS TO DERIVE THE PROPOSED TRANSMISSION AND DISTRIBUTION CHARGES FOR RESIDENTIAL RATE 10?**

**A.** The proposed transmission and distribution charges for residential Rate 10 were designed to recover the class revenue target not recovered through the access fee. The proposed transmission charge is \$0.1253 per therm, and the proposed distribution charge is \$0.2018 per therm. In general, the proposed transmission and distribution charges, respectively, reflect a slight improvement in recovery of transmission and distribution costs through transmission and distribution charges, subject to bill continuity considerations.

The current and proposed Residential access fees and transmission and distribution charges are included in NMGC Exhibit TSL-8.

**Q. WHAT WAS THE PROCESS TO DERIVE THE ACCESS FEES AND TRANSMISSION AND DISTRIBUTION CHARGES FOR THE REMAINING RATE CLASSES?**

**A.** The process to derive access fees and transmission and distribution charges for the remaining rate classes followed a similar process as residential Rate 10. First, the proposed monthly access fees reflect a slight improvement in recovery of customer costs through the access fees, subject to bill continuity considerations. Class revenue targets not recovered through the access fees were then recovered through the transmission and distribution charges. In general, the proposed transmission and distribution charges, respectively,

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1 reflect a slight improvement in recovery of transmission and distribution costs through  
2 transmission and distribution charges, subject to bill continuity considerations.

3  
4 The current and proposed access fees and transmission and distribution charges are  
5 included in NMGC Exhibit TSL-8.

6  
7 **Q. HAVE YOU EXAMINED THE IMPACT OF YOUR PROPOSED CHANGES IN**  
8 **BASE RATES ON CUSTOMERS FOR EACH RATE CLASS?**

9 **A.** Yes. The Company prepared bill impact analyses for the residential and small, medium,  
10 and large C&I rate classes to evaluate the effect of the proposed base rate changes, as  
11 included in NMGC Exhibit TSL-9. The bill impact analyses include other applicable  
12 charges and fees to reflect the customer bill impact of proposed changes in base rates.<sup>16</sup>

13  
14 Overall, the proposed base rates increase monthly bills for a residential customer using 90  
15 therms per month by \$8.99, or 9.20 percent. 90 therms represent the average monthly usage  
16 for residential customers during the peak months of November through March.

17 The proposed base rates increase monthly bills for a residential customer using 25 therms  
18 per month by \$4.98, or 15.80 percent. 25 therms represent the average monthly usage for  
19 residential customers during the off-peak months of April through October.

---

<sup>16</sup> Other charges and fees include: (1) weighted average Cost of Gas of \$0.5403 per therm in peak period (November through March), \$0.3396 per therm in off-peak period (April through October), and \$0.4781 per therm on annual basis; (2) Rate Rider 15 of \$0.0304 per therm; (3) Pipeline Safety Fee of \$0.0800 per month; (4) Franchise Fee of 3.000 percent; and (5) Gross Receipts Tax of 7.625 percent.

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1       The proposed base rates increase monthly bills for a residential customer using 53 therms  
2       per month by \$6.71, or 11.3 percent. 53 therms represent an approximate average of  
3       monthly usage for residential customers during January through December. The customer  
4       bill impacts are presented in NMGC Exhibit TSL-9.

**VII. WEATHER NORMALIZATION ADJUSTMENT MECHANISM**

**7    Q.    WHAT IS THE PURPOSE OF THE COMPANY’S WNA MECHANISM?**

8    **A.**   The Company’s WNA Mechanism addresses the basic misalignment between the structure  
9       of the Company’s costs and its rates. Utility costs are largely fixed and change very little  
10       (at least in the short run) with changes in usage levels. However, utility rates have a  
11       significant variable, or usage-based, component that changes revenues and cost recovery  
12       with changes in usage level.

13  
14       The Company’s WNA partially corrects for this misalignment by breaking or “decoupling”  
15       a portion of the link between revenues and usage by adjusting for differences between the  
16       Company’s actual revenues and its authorized revenues that is related to weather. WNAs  
17       and other forms of revenue decoupling have been approved in numerous jurisdictions  
18       throughout the U.S., as discussed below.

19  
20   **Q.    WHAT WERE THE CIRCUMSTANCES UNDER WHICH THE COMPANY’S**  
21   **WNA WAS APPROVED?**

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1    **A.**    The Company’s WNA Mechanism includes Rate Rider 8 which is governed by NMGC’s  
2           Rule 29. The WNA Mechanism was approved as a “Pilot Program” by the Commission in  
3           Case No. 18-00038-UT as part of an uncontested stipulation. The term of the Pilot Program  
4           is five years, as summarized below.

- 5           •   Year 1:           October 1, 2019 through April 30, 2020
- 6           •   Year 2:           October 1, 2020 through April 30, 2021
- 7           •   Year 3:           October 1, 2021 through April 30, 2022
- 8           •   Year 4:           October 1, 2022 through April 30, 2023
- 9           •   Year 5:           October 1, 2023 through April 30, 2024

10  
11   **Q.    WHICH RATE CLASSES ARE INCLUDED IN THE WNA?**

12   **A.**    The WNA Mechanism is applicable to residential Rate 10 and small general service Rate  
13           54 rate classes. Rate 10 and Rate 54, as shown in Figure 3 (above), are the Company’s  
14           most weather sensitive rate classes.

15  
16   **Q.    WHAT ARE THE PRIMARY BENEFITS OF THE COMPANY’S WNA?**

17   **A.**    There are three primary benefits of the Company’s WNA.

- 18           1.   It partially corrects for the basic misalignment between utility rates and costs;
- 19           2.   It helps stabilize utility cost recovery for variations due to weather; and
- 20           3.   It helps stabilize customer bills for variations due to weather.

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1   **Q.   HOW DOES THE WNA PARTIALLY CORRECT FOR THE BASIC**  
2       **MISALIGNMENT BETWEEN UTILITY COSTS AND RATES?**

3   **A.**   The Company's WNA Mechanism partially corrects for this misalignment by adjusting  
4       actual revenues to match the authorized revenues for that portion of the variation due to  
5       warmer or colder than normal weather.

6       Gas utilities incur three types of costs in providing service to customers:

- 7       • Customer costs – such as meter, billing and a portion of distribution costs that  
8       generally vary by the number of customers;
- 9       • Demand-related costs – such as transmission and distribution costs that generally  
10      vary by demand; and
- 11      • Commodity-related costs – such as gas supply costs that generally vary by  
12      deliveries or usage.

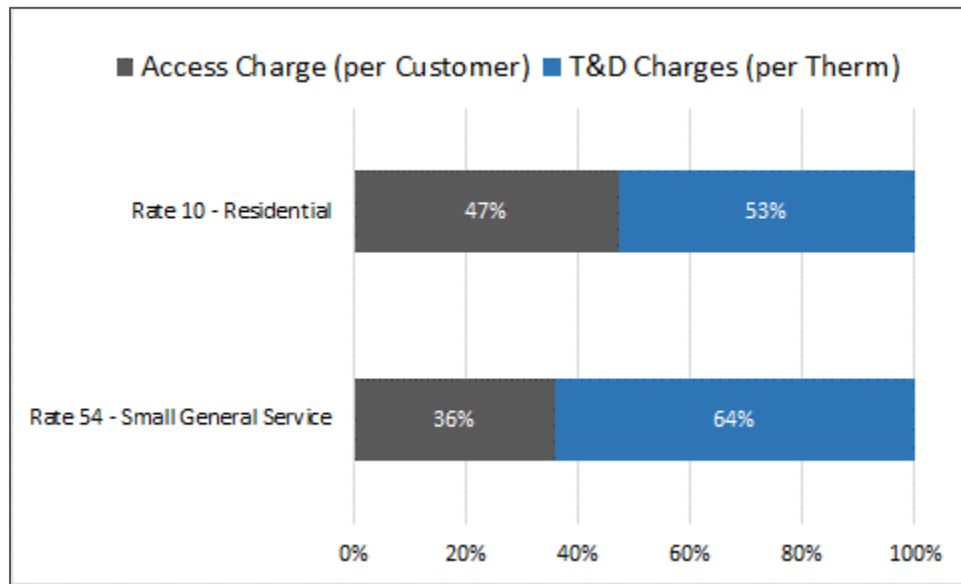
13      Utility revenue requirements and rates are designed to recover all of these costs. However,  
14      a significant portion of the revenue requirement is recovered based on delivery charges that  
15      reflect an assumed level of usage at the time rates are established (i.e., rates are set based  
16      on an assumed level of usage that reflects normal weather). Thus, to the extent actual usage  
17      is significantly lower than the assumed level of usage in rates (due to warmer than normal  
18      weather, for example), utility rates recover less than the authorized revenue requirement.  
19      Conversely, to the extent actual usage is significantly higher than the assumed level of  
20      usage in rates (due to colder than normal weather, for example), utility rates recover more  
21      than the authorized revenue requirements.

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**Q. DO THE COMPANY'S CURRENT RATES EXHIBIT THIS MISALIGNMENT BETWEEN UTILITY COSTS AND RATES?**

**A.** Yes. A significant portion of the Company's residential Rate 10 and small general service Rate 54 revenues are based on usage charges, as shown in Figure 9 (below).

**Figure 9: Consumption Revenues as Percentage of Total Revenues<sup>17</sup>**



The Figure shows 53.00 percent of residential Rate 10 base rate revenues are recovered through usage charges, and 64.00 percent of small general service Rate 54 base rate revenues are recovered through usage charges.

**Q. HAS THE UTILITY INDUSTRY RECOGNIZED THE BENEFITS OF MECHANISMS THAT BREAK OR DECOUPLE THE LINK BETWEEN REVENUES AND USAGE?**

<sup>17</sup> The Figure is contained in the Company's workpaper, "FACOS Rate Design\_vFinal.xlsx".



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1    **A.**    Yes. Revenue decoupling mechanisms that break or decouple the link between revenues  
2           and usage are currently in effect in 37 jurisdictions across the U.S.<sup>18</sup> There are two basic  
3           forms of revenue decoupling:

- 4           • Partial or Limited Revenue Decoupling – this type addresses specific variances  
5           between actual and authorized revenues, such as the impact of weather or energy  
6           efficiency. The Company’s WNA is a form of partial or limited decoupling. In  
7           addition, lost revenue or lost margin recovery mechanisms due to utility energy  
8           efficiency programs are another form of partial or limited decoupling.
- 9           • Full Revenue Decoupling – this type addresses the total variance between actual  
10          and authorized revenues. Variances can be measured based on total revenues, or  
11          revenues per customer (“RPC”).

12          WNAs are currently in effect in 19 regulatory jurisdictions. Full revenue decoupling is  
13          currently in effect in an additional 18 regulatory jurisdictions.

14  
15    **Q.    WHAT IS THE PROCESS IN THE COMPANY’S WNA MECHANISM TO**  
16    **DERIVE WEATHER-RELATED REVENUE VARIANCES?**

17    **A.**    Weather-related revenue variances are derived each month during the October through  
18           April winter heating season. The weather-related revenue variances for each month are  
19           determined by first calculating the difference between actual and normal heating degree  
20           days (“HDD”) and then multiplying the difference by a degree day consumption factor for

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<sup>18</sup> Adjustment Clauses: A state by state overview. S&P Global Market Intelligence. July 18, 2022. Data as of June 2022. Utility tariffs.

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1 the month and a margin revenue factor included in NMGC Rule 29. A weather-related  
2 revenue “excess” occurs when actual HDDs are more than normal HDDs since the  
3 Company’s authorized revenues are based on normal HDDs. A weather-related revenue  
4 “deficiency” occurs when actual HDDs are less than normal HDDs since the Company’s  
5 authorized revenues are based on normal HDDs.

6  
7 Monthly revenue excesses and deficiencies are then accumulated across the October  
8 through April heating season to derive the revenue excess to be refunded to customers or  
9 revenue deficiency to be recovered from customers in the following October through  
10 September period.

11  
12 **Q. HOW ARE REVENUE EXCESSES REFUNDED TO CUSTOMERS AND NET**  
13 **REVENUE DEFICIENCIES RECOVERED FROM CUSTOMERS?**

14 **A.** Revenue excesses are refunded to customers in the following October through September  
15 period through a \$ per therm bill credit. The credit is based on the revenue excess and  
16 projected deliveries. Similarly, revenue deficiencies are recovered from customers in the  
17 following October through September period through a \$ per therm bill charge. The charge  
18 is based on the revenue deficiency and projected deliveries.

19  
20 The bill credits and bill charges are subject to reconciliation to the revenue excesses and  
21 deficiencies through a balancing account.

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1   **Q.    IS THE WNA SUBJECT TO REPORTING REQUIREMENTS?**

2   **A.**Yes. A WNA Factor Statement is filed annually with the Commission no later than June  
3           30. This statement includes a Summary of the WNA Factors, and a determination of the  
4           rates that will be charged for the upcoming rate period including any balancing account  
5           adjustment factor. Additionally, the Company is required to file annually no later than  
6           December 31 a report that summarizes the revenue excesses and deficiencies as well as bill  
7           credits and charges that were recorded in the balancing account. The company also files  
8           monthly reports reflecting the company's best estimate of the rate impact of the WNA  
9           Mechanism.

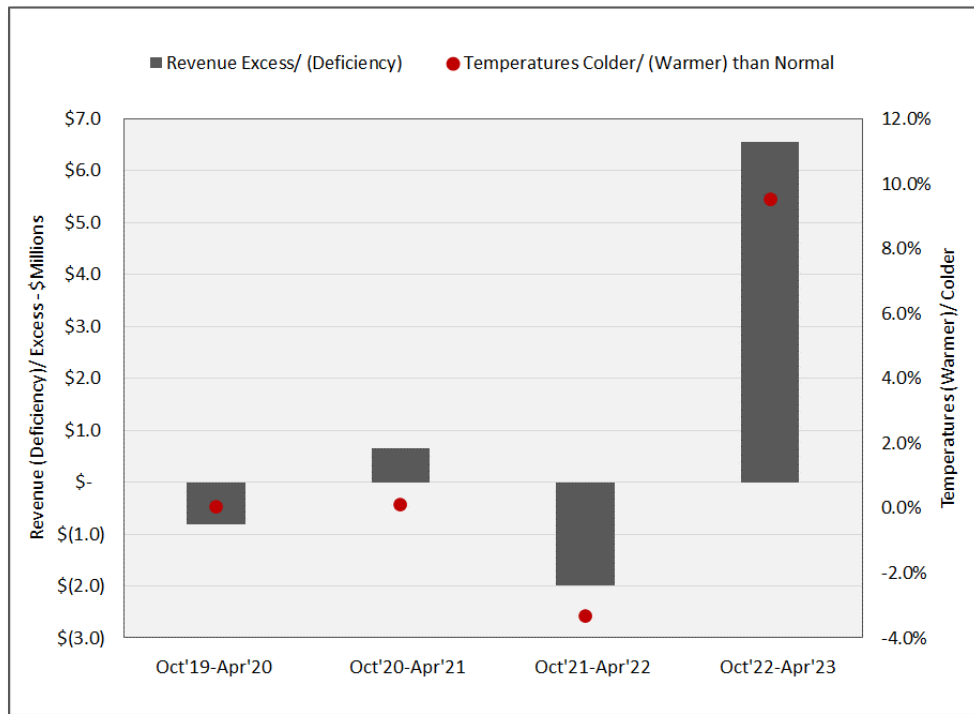
10  
11   **Q.    WHAT HAVE THE REPORTS SHOWN?**

12   **A.**The reports show the WNA mechanism is working as intended, as summarized in Figure  
13           10 (below).

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1

**Figure 10: Results of WNA<sup>19</sup>**



2

3 The Figure shows the Company generally experiences revenue excesses during colder-  
4 than-normal weather and revenue deficiencies during warmer-than-normal weather.

5 As discussed earlier, revenue excesses are refunded to customers via a bill credit, and  
6 revenue deficiencies are recovered from customers via a bill charge.

7

8 **Q. WHAT IS THE COMPANY'S RECOMMENDATION FOLLOWING**  
9 **COMPLETION OF THE 5-YEAR TERM OF THE PILOT PROGRAM?**

10 **A.** The Company recommends continuation of the WNA through Rate Rider No. 8 and Rule  
11 No. 29. The Pro Forma Third Revised Rule 29 is included with my Direct Testimony as  
12 NMGC Exhibit TSL-10. The WNA is working as intended, providing benefits to

<sup>19</sup> The Figure is contained in the Company's workpaper, "WP (WNA) – Analysis.xlsx".

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1 customers through bill credits in colder-than-normal weather conditions (when actual  
2 revenues are higher than authorized revenues) and benefits to the Company through bill  
3 charges in warmer-than-normal weather conditions (when actual revenues are lower than  
4 authorized revenues).

**VIII. CONCLUSION**

7 **Q. DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?**

8 **A.** Yes, it does.