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May 22, 2025

VIA ELECTRONIC FILING

Staff
Tennessee Public Utility Commission
502 Deadrick Street, Fourth Floor
Nashville, TN 37242

RE: *Atmos Energy Corporation's Response to Exeter's Triennial PBRM Audit Final Report,* Docket No. 16-00028

Dear Staff:

Atmos Energy Corporation ("Atmos Energy" or "Company") hereby provides its response to the recommendations in Exeter's final report ("Report") on Atmos Energy's Performance Based Ratemaking Mechanism Tariff Rider ("PBRM") for the period of April 1, 2020, through March 31, 2023:

- In its recommendation regarding the Avoided Cost Incentive Mechanism ("ACIM") criteria, Exeter notes that it "has not encountered a gas cost incentive mechanism in another jurisdiction that provided for a sharing of savings associated with demand charge discounts." Atmos Energy cannot speak to Exeter's experience, but this mechanism is not unique to either the Company or to its Tennessee operations. The Company has performance incentive mechanisms like the one used here in several additional jurisdictions, including Kansas, Kentucky, Louisiana, and Mississippi. Like the mechanism in Tennessee, the mechanisms in those states also provide for a sharing of savings associated with demand charge discounts. Other utilities in those jurisdictions have such mechanisms as well. Also, the negotiation of discounts may require Atmos Energy to consider and weigh the tradeoffs of accepting less desirable primary receipt points. Atmos Energy believes that an incentive mechanism should be comprehensive and cover all forms of upstream gas costs, as leaving a type of cost out simply incentivizes the shifting of costs to that area.

- Atmos Energy agrees that maintaining the $2 million cap is appropriate at this time, but over time, some adjustment for inflation may be required in order to keep the GPIM meaningful for both the Company and its customers. This is particularly true because the $2 million cap was approved in 2016—nearly a decade ago.

There are two other points made in the Report that Atmos Energy would like to address, even though they are not formal "Recommendations" made by Exeter in its Report. First, in Sections 6.2.1 and 7.2, Exeter discussed whether the use of Asset Management Arrangements which provide discounted commodity prices as opposed to a fixed fee may circumvent the intent of the sharing provisions included in the PBRM approved in Docket No. 16-00028. To be clear, Atmos Energy commonly uses both types of arrangements (discounted commodity prices and fixed fee) throughout its eight-state service territory. Currently, Atmos Energy's RFPs provide flexibility for how respondents bid, meaning AMAs may pick between the two types of arrangements. In those bids, value for asset optimization may be proposed in the form of a discount to index pricing and/or a fixed upfront or periodic payment/credit. Ultimately, the Company selects the bid that provides the overall greatest benefit to its customers. While Exeter states that it is uncertain as to whether Staff and the Consumer Advocate were aware that the AMA in place at the time included the commodity index price discounts rather than an AMA fee when this issue was approved in Docket 16-00028, later developments make that uncertainty moot. Even if the other parties were unaware during the original approval, the AMA approved in Docket No. 19-00050 *also* included a commodity index price discount. Nevertheless, it was selected by the Company and approved by the Commission in Docket No. 19-00050 because it provided the greatest overall benefit to the Company's customers. The Company suggests that the adoption of a single PBR sharing percentage applied to the overall PBR savings may alleviate the consultant's concern with the current PBRM that applies different sharing percentages depending on the mechanism that gives rise to the savings.

Second, in Section 5.3, Exeter discussed the Company's peak day experienced during winter 2022-2023 and stated that the Company's design day model may not adequately account for differences in the requirements of sales customers under more extreme weather conditions. Atmos Energy has a design day forecast model (linear regression) which forecasts load on the coldest day in any 30-year period. Atmos Energy also has a short-term forecast that consists of four separate statistical models (Boosted Tree, Neural Net, Random Forest and Linear Regression) that forecast usage for the next seven days. Each year, Atmos Energy reviews the past winter historical usage against the short-term forecast models. As noted at page 48 of the Report, Atmos Energy has made modifications where it now recommends a different model (Boosted Tree, Neural Net, Random Forest and Linear Regression) for each predicted HDD whereas prior it was one model for each area. This process has been reviewed by outside consultants. The Company believes it is sufficiently covered on a design day and does not believe there to be any deficiencies.

Sincerely,

Erik C. Lybeck

CC: David Foster
Joe Shirley
Michelle Mairs
Shilina Brown, Consumer Advocate (by email)

NON -CONFIDENTIAL

ATMOS ENERGY CORPORATION

REVIEW OF PERFORMANCE BASED RATEMAKING MECHANISM TARIFF RIDER

Prepared for:

TENNESSEE PUBLIC UTILITY COMMISSION AUDIT STAFF

CONSUMER ADVOCATE AND PROTECTION DIVISION OF THE TENNESSEE ATTORNEY GENERAL

June 2025

Prepared by:

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1. INTRODUCTION AND SCOPE OF INVESTIGATION

Atmos Energy Corporation (Atmos or "Company") has operated under a Performance Based Ratemaking Mechanism Tariff Rider (PBRM) for gas costs since April 1, 1999. On September 26, 2007, the Tennessee Regulatory Authority (TRA), predecessor to the Tennessee Public Utility Commission (TPUC or Commission), opened Docket No. 07-00225 to evaluate the Company's gas purchasing activities and the PBRM.[1] The Company, Audit Staff of the TRA (TRA Staff), and the Consumer Advocate Division of the Tennessee Attorney General (CAD) (collectively, the "Settling Parties") subsequently filed a Stipulation and Settlement Agreement in Docket No. 07-00225 ("2013 Settlement") that was approved by the TRA in an order issued August 6, 2013.

The 2013 Settlement provided for a triennial comprehensive review of Atmos' capacity planning and gas purchasing activities under the PBRM by an independent consultant. The review period established by the 2013 Settlement was April 1, 2011 through March 31, 2014. Exeter Associates, Inc. (Exeter) was selected by the Settling Parties through a request for proposal (RFP) process to perform the independent review provided for under the 2013 Settlement. In a final report issued in August 2015 (2015 PBRM Report), Exeter presented its findings and conclusions concerning the PBRM for the review period and recommended certain changes to Atmos' PBRM.

On March 15, 2016, in response to Exeter's 2015 PBRM Report, Atmos filed a Petition to revise its PBRM to reflect Exeter's recommended changes (Docket No. 16-00028). On December 20, 2016, prior to the commencement of hearings in Docket No. 16-00028, TRA Staff, CAD, and the Company filed for approval of a Settlement Agreement ("2016 Settlement") that revised the PBRM tariff effective April 1, 2016. On March 28, 2017, the TRA issued an order approving the 2016 Settlement effective April 1, 2016. Included in the 2016 Settlement was a provision providing for a triennial review of Atmos' transactions and activities under the PBRM starting in September 2021, and for triennial reviews to be conducted once every three years thereafter. Exeter was selected through an RFP process to perform the first triennial review provided for under the 2016 Settlement in Docket No. 16-00028. The first triennial review period established by the 2016 Settlement was April 1, 2017 through March 31, 2020. Exeter issued its final report for the first triennial review in June 2022 ("2022 PBRM Report"). Exeter has also been selected through an RFP process to perform the second triennial review provided for under the 2016 settlement. Exeter has previously been selected to perform similar independent reviews of the performance-based gas procurement incentive mechanisms of both Piedmont Natural Gas Company (Piedmont) and Chattanooga Gas Company (Chattanooga). The second review period established by the 2016 Settlement is April 1, 2020 through March 31, 2023. The purpose of Exeter's second triennial review is to examine and report on all transactions and activities by Atmos under the PBRM including, but not limited to: (a) natural gas procurement; (b) capacity management; (c) storage management; (d) hedging; (e) reserve margins; and (f) off-system sales. The specific tasks to be accomplished in the review were described in the Statement of Work included with the RFP. The Statement of Work included in the RFP is presented as Appendix A to this Report.

[1] In 2017, legislation was passed that officially renamed the Tennessee Regulatory Authority as the Tennessee Public Utility Commission.

A draft report presenting the findings, results, and conclusions of Exeter's review was provided to TPUC Staff, CAD, and the Company on March 11, 2025. On April 14, 2025, Atmos provided its comments on the draft report. Atmos' comments were intended to clarify certain facts regarding its PBRM as well as respond to several findings set forth in the draft report. Exeter has incorporated the Company's comments into this final report (Report), as Exeter deemed appropriate.

Exeter's Report consists of six sections in addition to this introductory section. Section 2 identifies the pipeline companies serving Atmos and describes the services the Company purchases from each pipeline. In addition, Section 2 discusses the Company's review period gas supply arrangements and Asset Management Agreements (AMAs). Also included in Section 2 is a description of the Atmos system and the markets it serves, statistical data identifying the number of customers served, and usage by customer class. Finally, Section 2 identifies the city gate metering stations serving Atmos' Tennessee service territory.

Section 3 summarizes and evaluates Atmos' gas procurement activities and performance under the PBRM. Section 3 also assesses Atmos' decision not to engage in price hedging during the review period.

Section 4 evaluates Atmos' storage management activities. Section 5 analyzes the reasonableness of the Company's capacity portfolio. This includes an evaluation of Atmos' design peak day forecasting model.

Section 6 begins with a comparison of Atmos' PBRM with the performance-based gas procurement incentive mechanisms of Piedmont and Chattanooga. Next, the overall balance of the incentives between Atmos and ratepayers under the PBRM is addressed. Finally, Section 7 presents Exeter's findings of fact, summary of conclusions, and recommendations.

2. ATMOS SYSTEM AND MARKETS

Atmos Energy Corporation operates six natural gas distribution divisions. Those divisions and the number of customers served by each division as of September 30, 2023 are as follows:

Division	Service Areas	Customer Meters
Mid-Tex	Texas, including the Dallas/ Fort Worth Metroplex	1,856,356
Kentucky/Mid-States	Kentucky	185,630
	Tennessee	165,267
	Virginia	25,083
Louisiana	Louisiana	378,483
West Texas	Amarillo, Lubbock, Midland	330,490
Mississippi	Mississippi	273,586
Colorado-Kansas	Colorado	129,197
	Kansas	142,292

In Tennessee, Atmos provides natural gas sales and distribution service to three physically and geographically separated service territories: West Tennessee, Middle Tennessee, and East Tennessee. The Company's West Tennessee service territory consists of Union City and the adjacent areas in Obion County. The Middle Tennessee service territory consists of Columbia, Franklin, Murfreesboro, Nolensville, and the adjacent areas in Maury, Rutherford, and Williamson counties. The East Tennessee service territory consists of Johnson City, Elizabethton, Greenville, Kingsport, Shelbyville, Lynchburg, Maryville-Alcoa, Morristown, Bristol, and adjacent areas in Bedford, Moore, Blount, Hamblen, Sullivan, Carter, Washington, and Greene counties. The gas supply and transportation contracts serving the East Tennessee service territory also serve customers in Virginia, and the Bristol distribution system straddles the state line serving customers in both Tennessee and Virginia. For gas supply procurement purposes, the West Tennessee and Middle Tennessee service territories are internally referred to by the Company as "Area I," and the East Tennessee/Virginia service territory is internally referred to as "Area II." Atmos' purchased gas costs are recovered through a Purchased Gas Adjustment Rider (PGA Rider). Separate PGA Riders are applicable for the West Tennessee service territory and the Middle/East Tennessee service territories.

Atmos contracted for firm transportation and storage services from seven interstate pipelines during the review period:

Pipeline	Services
Texas Gas Transmission, LLC (Texas Gas)	Firm Transportation/Storage
Columbia Gulf Transmission, LLC (Columbia Gulf)	Firm Transportation
Texas Eastern Transmission, LP (Texas Eastern or Tetco)	Firm Transportation/Storage
Eastern Gas Transmission and Storage, Inc. (EGTS)	Storage
Tennessee Gas Pipeline, LLC (TGP)	Firm Transportation/Storage
Southern Natural Gas, LLC (SONAT)	Firm Transportation
East Tennessee Natural Gas, LLC (ETNG)	Firm Transportation/Storage

Atmos is physically interconnected with four interstate pipelines: Texas Gas, Columbia Gulf, Texas Eastern, and ETNG. Figure 1, Figure 2, and Figure 3 present maps of the Company's three service territories and the interstate pipelines serving each service territory. The interstate pipeline services purchased by Atmos during the review period are described in Section 2.1. In addition to purchasing services from these seven interstate pipelines, the Company also purchased storage services from the Saltville Gas Storage Company, LLC (Saltville Storage), the Monroe Gas Storage Company, LLC (Monroe Storage), and the Jefferson Island Storage & Hub Company, LLC (Jefferson Island Storage), and utilized the Barnsley Storage facility located in Kentucky which is owned and operated by Atmos Pipeline & Storage, LLC. These storage services and facilities are also discussed in Section 2.1. Section 2.2 describes Atmos' review period AMAs. Under its AMAs, Atmos assigned its interstate pipeline transportation and storage services and the storage services purchased from Saltville Storage, Monroe Storage and Jefferson Island Storage to an Asset Manager, and purchased all of its gas supplies from the Asset Manager.[2] Section 2.3 addresses Atmos' AMA gas supply delivery arrangements. Section 2.4 summarizes the jurisdictional services provided by Atmos, the number of customers served, and annual throughput volumes. Finally, Section 2.5 identifies Atmos' city gate metering stations.

[2] Assignments to the Asset Manager were accomplished either by the direct release of capacity to the Asset Manager or by designating the Asset Manager as Atmos' agent.

Figure 1. Atmos West Tennessee Service Territory

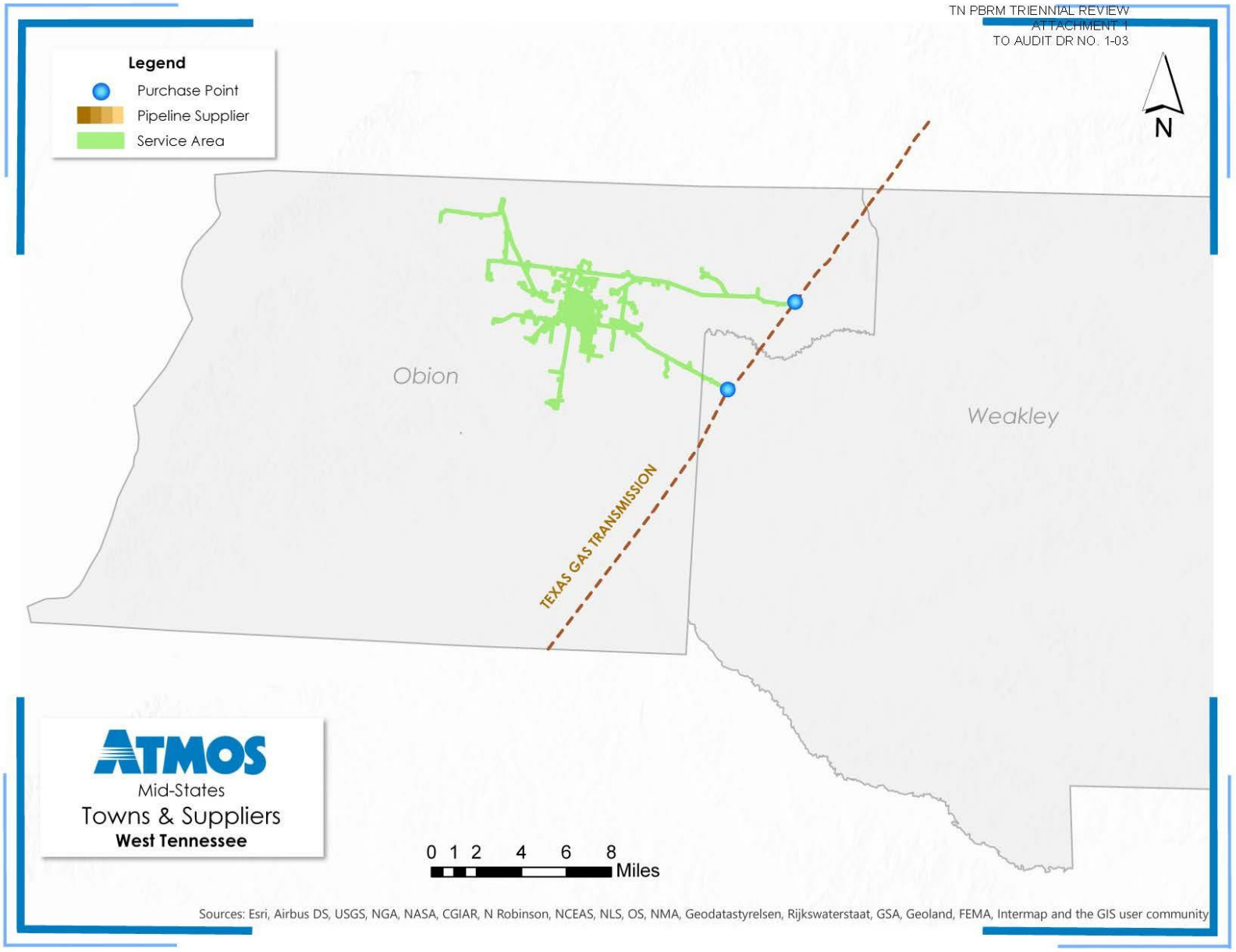


Figure 2. Atmos Middle Tennessee Service Territory

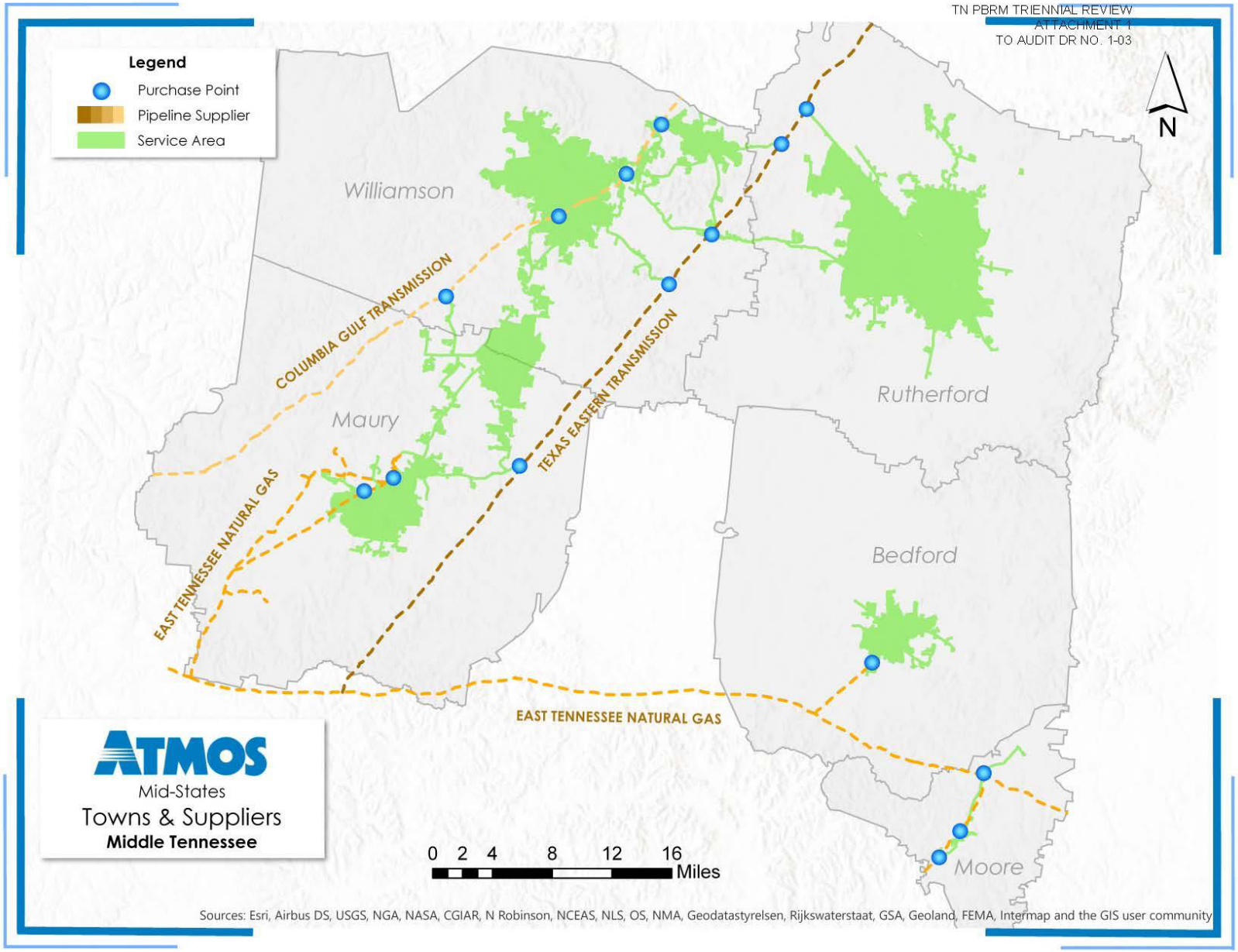
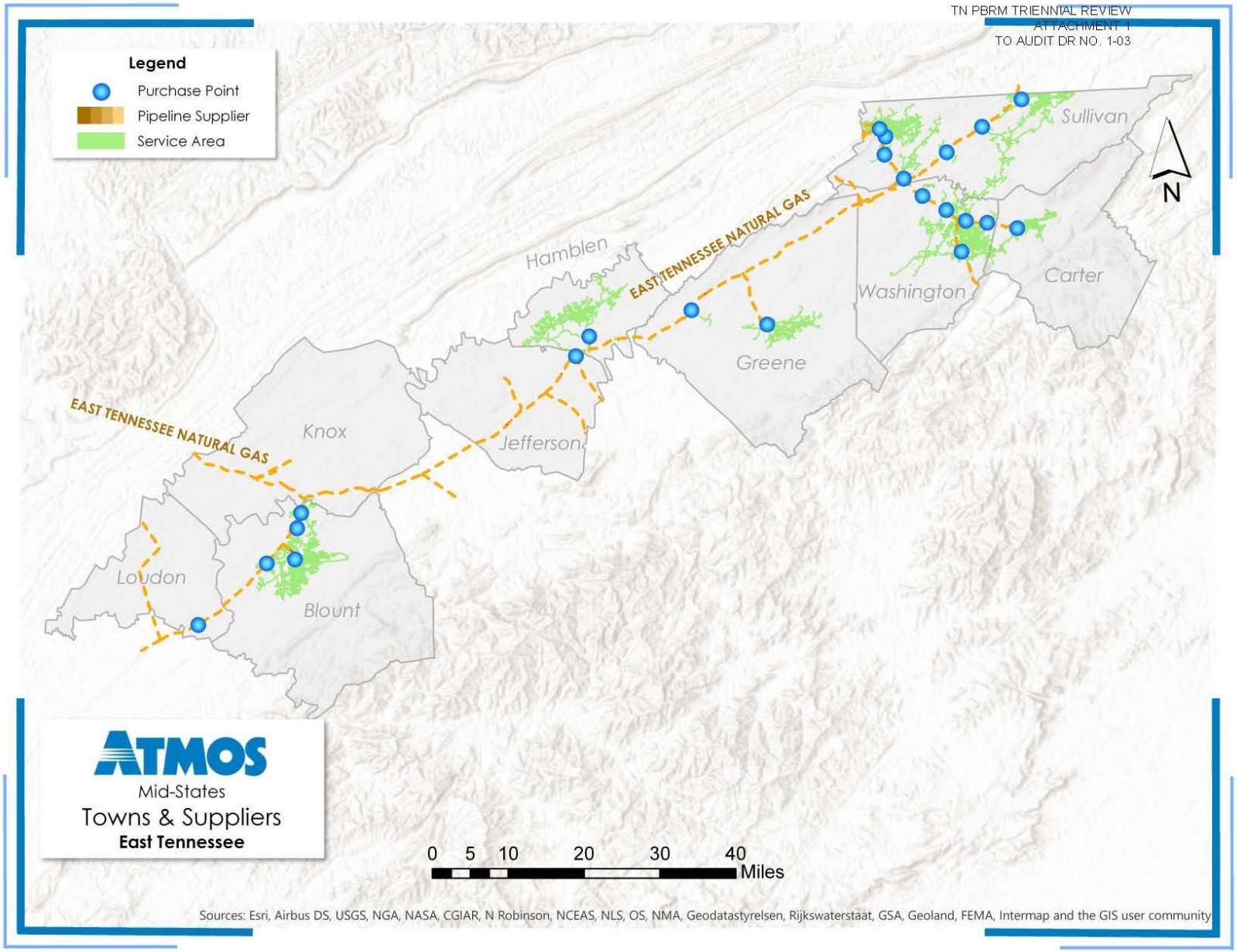


Figure 3. Atmos East Tennessee Service Territory



2.1 Interstate Pipeline and Storage Services

During the review period, Atmos' firm transportation arrangements with Texas Gas and ETNG provided for the delivery of gas supplies directly to Atmos' distribution systems (city gate), while TGP and SONAT provided for the upstream delivery of gas to ETNG. Atmos maintained a number of transportation arrangements with Columbia Gulf and Texas Eastern during the review period that provided for the direct delivery of gas supplies to Atmos' distribution system, and/or the upstream delivery of gas supplies to ETNG. Gas supplies delivered to Atmos under these interstate pipeline transportation arrangements were generally purchased in the Gulf Coast production region. The demand charges associated with the firm interstate pipeline arrangements that serve the East Tennessee service territory were allocated between the Tennessee and Virginia jurisdictions based on forecasted design day demands.[3]

2.1.1 Texas Gas Transmission

The Texas Gas system, which originates in Southern Louisiana (SL) and extends to Lebanon, Ohio, consists of five rate zones (Zones SL and 1-4). Zone SL consists of the lower half of Louisiana and provides access to the Gulf Coast production region. Zone 1 includes the upper half of Louisiana and extends to just south of Atmos' West Tennessee service territory. Zone 1 provides Atmos with access to Fayetteville and Haynesville Shale gas production. The West Tennessee service territory is located in Texas Gas Zone 2.

Atmos maintained two contracts with Texas Gas during the review period that provided for the delivery of gas to the West Tennessee service territory. Under Contract No. G0750, Atmos purchased a bundled firm transportation and storage service that provided for no-notice service under Rate Schedule SGT (Small General Transportation service).[4] This contract provided for a maximum daily delivered quantity (MDQ) of 7,495 dekatherms (Dth) per day during the months of October through March. Of this quantity, 5,108 Dth/day was available as no-notice service (up to 3,576 Dth/day in October), and the remaining 2,387 Dth/day (up to 4,120 Dth/day in October) was available to deliver nominated flowing supplies. The maximum winter season no-notice quantity was 239,576 Dth. Contract No. G0750 also provided for the delivery of nominated supplies of 4,120 Dth/day during the months of May through September. For April, this contract had a maximum daily deliverability of 7,424 Dth/day with up to 4,120 Dth/day available from nominated supplies and up to 2,554 Dth/day available from no-notice service.

Atmos purchased firm transportation service from Texas Gas under Rate Schedule STF (Short Term Firm) during the review period (Contract No. 21483). During the review period, the MDQ under Contract No. 21483 was 1,000 Dth/day during the winter months and 250 Dth/day during the

[3] For the period April 2020 through June 2021, demand charges were allocated 69.0% to the Tennessee jurisdiction and 31.0% to the Virginia jurisdiction. For the period July 2021 through June 2022, demand charges were allocated 68.8% to the Tennessee jurisdiction and 31.2% to the Virginia jurisdiction. For the period July 2022 through March 2023, demand charges were allocated 67.7% to the Tennessee jurisdiction and 32.3% to the Virginia jurisdiction.

[4] A no-notice service allows a shipper (transporter) such as Atmos to physically take delivery of actual quantities greater than or less than the quantity purchased and nominated for delivery. Differences between nominated and actual deliveries are accommodated by storage injections or withdrawals.

summer months. Atmos' firm transportation agreements with Texas Gas specify primary receipt point entitlements by rate zone.

2.1.2 Columbia Gulf Transmission

The interstate pipeline facilities of Columbia Gulf extend from the Gulf Coast production region in Louisiana to Leach, Kentucky at the Kentucky/West Virginia border. Atmos maintained nine firm transportation contracts with Columbia Gulf under Rate Schedule FTS-1 during the review period (Contract Nos. 23188, 23481, 142156, 168971, 211462, 158165, 215235, 254303 and 273042). With the exception of Contract No. 142156, the primary receipt points for each Columbia Gulf firm transportation contract were in the Gulf Coast region. The primary receipt point under Contract No. 142156 was the interconnect between Columbia Gulf and Columbia Gas Transmission, LLC (Columbia Gas) in Leach, Kentucky. Therefore, the delivery path under Contract No. 142156 was Leach, Kentucky south to the Gulf Coast region. Atmos released the segment of the delivery path under Contract No. 142156 that was downstream of the Company's Middle Tennessee distribution system to its affiliate, Trans Louisiana Gas Pipeline, during the review period.

Contract Nos. 23188, 23481, 142156, 168971, 211462 and 274303 provided for the delivery of gas directly to the Company's Middle Tennessee service territory. The MDQ for each contract providing for the delivery of gas directly to the Company's Middle Tennessee service territory at the conclusion of the review period was as follows:

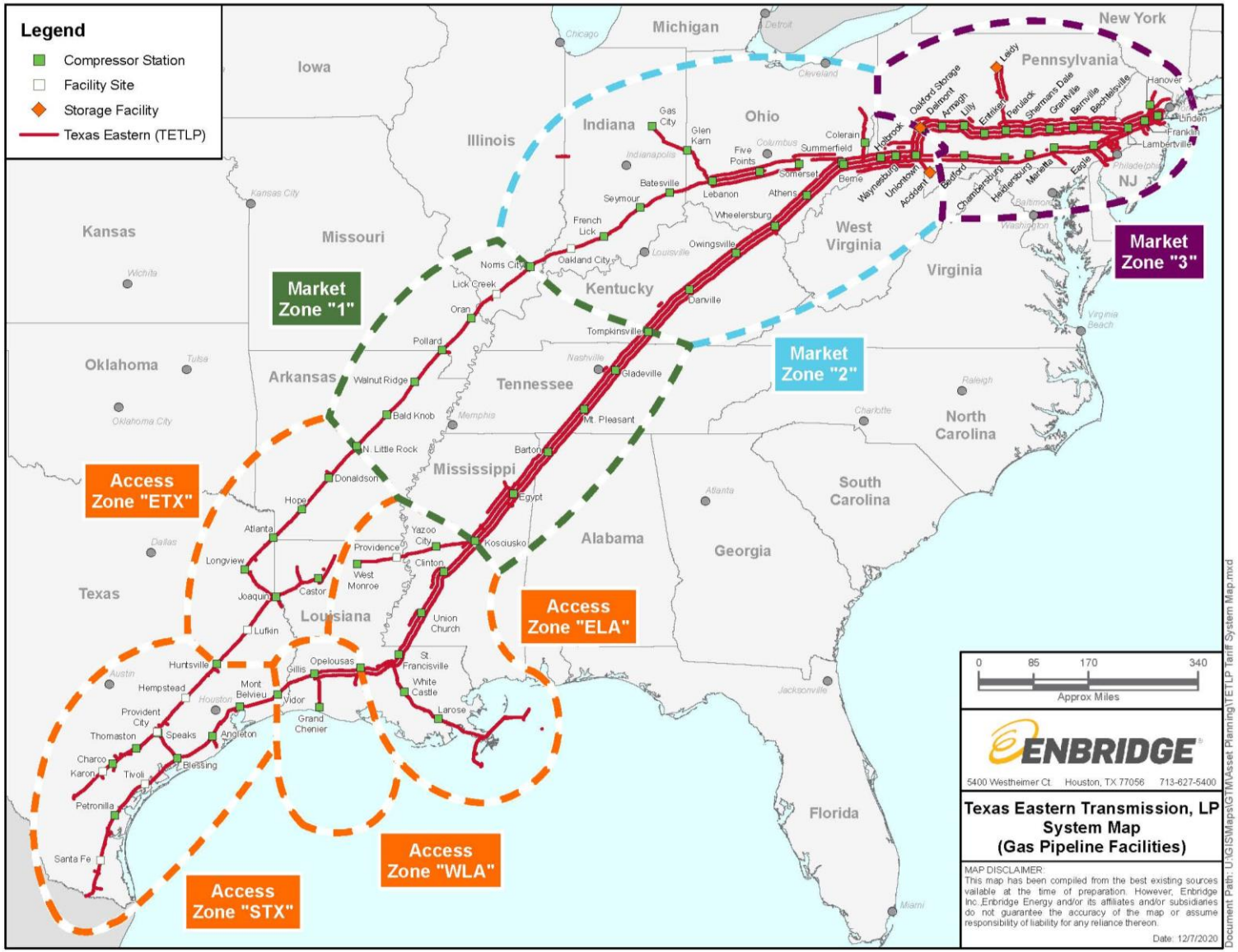
Contract No.	MDQ (Dth)
23188	15,000
23481	22,500
142156	12,500
168971	10,000
211462	12,000
273042	10,000

Contract No. 273042 was a winter-only contract effective November 1, 2022 through March 31, 2023. For the period November 1, 2021 through March 31, 2022, Atmos maintained a Columbia Gulf firm transportation contract with an MDQ of 4,000 Dth (Contract No. 254303). Contract Nos. 158165 and 215235 provided for the upstream delivery of gas to ETNG for subsequent delivery to Atmos' East Tennessee service territory. The MDQ under each contract was 10,000 Dth/day during the review period.

2.1.3 Texas Eastern Transmission

The Texas Eastern system originates in the Gulf Coast production region and extends to the New York City area. Texas Eastern consists of four Gulf Coast production region rate zones (East Louisiana [ELA], West Louisiana [WLA], South Texas [STX], and East Texas [ETX]) and three market area rate zones (Zones M-1, M-2, and M-3). A map of Texas Eastern's rate zones is presented in Figure 4.

Figure 4. Texas Eastern Rate Zones



Atmos maintained seven service arrangements with Texas Eastern during the review period. At the conclusion of the audit period, Atmos maintained two firm transportation contracts with Texas Eastern under Rate Schedule FT-1 that provided for the delivery of Gulf Coast produced gas supplies in Zone ELA to Atmos' Middle Tennessee service territory in Zone M1 (Contract Nos. 911195 and 911839). Contract No. 911995 had an MDQ of 5,000 Dth/day and was in effect the entire review period. Contract No. 911839 also had an MDQ of 5,000 Dth/day and replaced Contract No. 911762 which expired March 31, 2022.

Texas Eastern Rate Schedule FT-1 Contract No. 911803 provided for the delivery of Gulf Coast produced supplies in Zone ELA to the Middle Tennessee service territory. Gas supplies delivered under Contact No. 911803 were subsequently delivered to Atmos' city gate by ETNG. Contract No. 911803 had an MDQ of 2,300 Dth and became effective November 1, 2021.

Texas Eastern Rate Schedule FT-1 Contract No. 911193 was a segmented release acquired from Atmos' Mississippi Division. Contract No. 911193 provided for the delivery of gas from Texas Eastern Zone M-1, had an MDQ of 15,000 Dth/day, and provided for the delivery of 5,000 Dth/day to the Company's Middle Tennessee service territory and 10,000 Dth/day to the East Tennessee/Virginia service territory. Gas supplies delivered under Contract No. 911193 to the East Tennessee/Virginia service territory were subsequently delivered to Atmos' city gate by ETNG.

Texas Eastern Rate Schedule FT-1 Contract No. 910800 provided for the delivery of gas to Atmos' Middle Tennessee service territory. Contract No. 910800 was a backhaul arrangement providing for the delivery of gas withdrawn under Atmos' subsequently discussed EGTS storage arrangement. The EGTS storage facility under contract to Atmos is located in Texas Eastern Zone M-2 (see Section 2.1.7). Texas Eastern Zone M-2 is located in the Marcellus Shale production region in the Appalachian region which is currently the most prolific gas producing region in the United States. Marcellus Shale produced supplies are generally lower cost than Gulf Coast production region gas supplies. When not required to deliver supplies withdrawn from EGTS storage, Atmos used Texas Eastern Contract No. 910800 to deliver Marcellus Shale purchased supplies to its distribution system. The MDQ under Texas Eastern Contract No. 910800 was 5,000 Dth/day.

Texas Eastern Contract No. 400244 provided for bundled storage and transportation service under Texas Eastern Rate Schedule SS-1. The maximum daily withdrawal quantity (MDWQ) under the SS-1 contract was 3,000 Dth/day, and the maximum winter season withdrawal quantity was 180,000 Dth. Contract No. 400244 provided service to the Company's Middle Tennessee service territory. Marcellus Shale supplies were purchased by Atmos to fill SS-1 storage.

2.1.4 Tennessee Gas Pipeline

The TGP system originates in the Gulf Coast natural gas production region and extends to New England. In the production region, the TGP system consists of three primary transmission lines, referred to as the 100, 500, and 800 Legs. The TGP system is also divided into eight zones (Zones 0, L, and 1-6) for rate purposes. The State of Texas is designed as Zone 0, Zone L consists largely of the State of Louisiana, and Zone 1 extends from the Texas border with Northern Louisiana to the Kentucky/Tennessee border. A map of the TGP system is provided in Figure 5. Gas supplies purchased for delivery on TGP are delivered to Atmos by ETNG in TGP Zone 1 at the Lobelville and

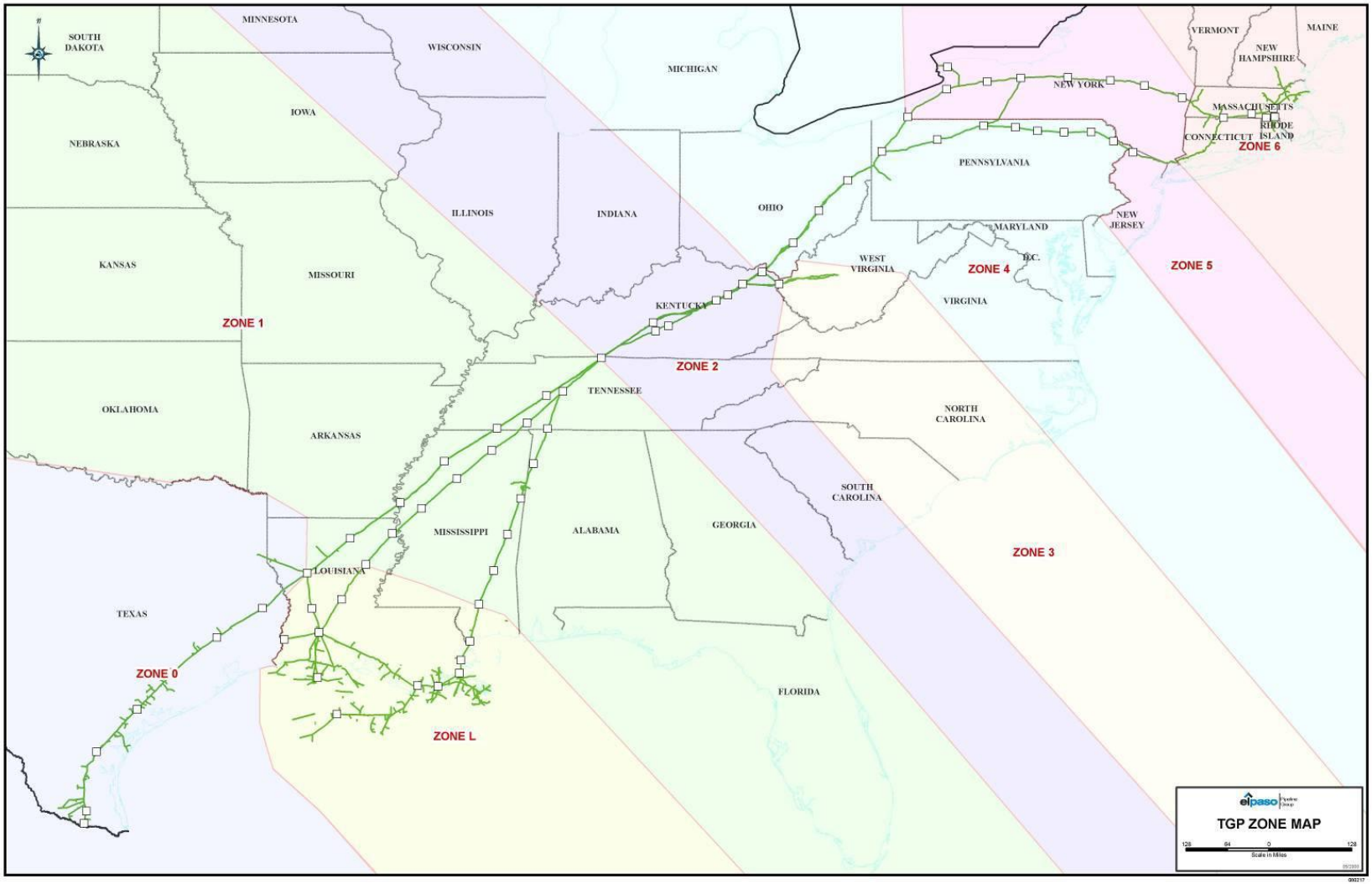
Ridgetop receipt points. These receipt points are identified in Figure 6 which is presented in Section 2.1.6.

During the review period, Atmos maintained two firm transportation service arrangements with TGP under Rate Schedule FT-A to serve the Company's East Tennessee service territory (Contract Nos. 69218 and 92725). FT-A Contract No. 69218 provided for the delivery of Gulf Coast supplies to ETNG and had an MDQ of 35,000 Dth/day during the review period. The Company's receipt point capacity under TGP Contract No. 69218 at the conclusion of the review period was subdivided by zone and leg, as shown in Table 1.

Table 1. Tennessee Gas Pipeline Capacity, Contract No. 69218

Zone – Leg	MDQ (Dth)
Zone 0 – 100 Leg	15,000
Zone L/1 – 500 Leg	9,000
Zone L/1 – 800 Leg	7,500
Zone 1 – 100 Leg	2,500
Zone L/1 – 800 Leg	1,000
Total:	**35,000**

Figure 5. Tennessee Gas Pipeline System Map



TGP FT-A Contract No. 92725 also provided for the delivery of Gulf Coast supplies to ETNG. The MDQ associated with Contract No. 92725 was 10,000 Dth/day, with receipt points of 5,000 Dth/day in TGP Zone 0 – 100 Leg and 5,000 Dth/day in TGP Zone L - 500 Leg. During the review period, Atmos released a 5,000 Dth segment of the TGP Zone 0 - 100 Leg capacity to its Louisiana Division and a 5,000 Dth segment of the TGP Zone L - 500 Leg capacity to its Mississippi Division. Atmos used the unreleased segments under Contract No. 92725 to deliver gas supplies purchased in TGP Zone 1 to ETNG.

Atmos maintained a market area firm storage service arrangement with TGP that provided for no-notice service under Rate Schedule FS-MA (Contract No. 3981). Gas was delivered to and from storage under Atmos' FT-A firm transportation arrangements with TGP. The MDWQ associated with Contract No. 3981 was 10,000 Dth/day, and the maximum winter season withdrawal entitlement was 417,837 Dth.

Atmos also maintained a TGP production area firm storage service arrangement under Rate Schedule FS-PA (Contract No. 309552) that provided for no-notice service. The MDWQ and maximum winter seasonal withdrawal entitlement under Contract No. 309552 was identical to those under FS-MA Contract No. 3981, and gas was also delivered to and from storage under Atmos' FT-A firm transportation arrangements with TGP.

2.1.5 Southern Natural Gas Company

The SONAT system originates in the Gulf Coast production region in Louisiana and extends across the southeast United States. Atmos maintained a firm transportation service arrangement with SONAT under Rate Schedule FT during the review period (Contract No. FSNG239). This arrangement provided for the upstream delivery of Gulf Coast-sourced supplies to ETNG for subsequent delivery to the Company's East Tennessee service territory. The MDQ associated with the Company's SONAT FT arrangement was 7,658 Dth/day.

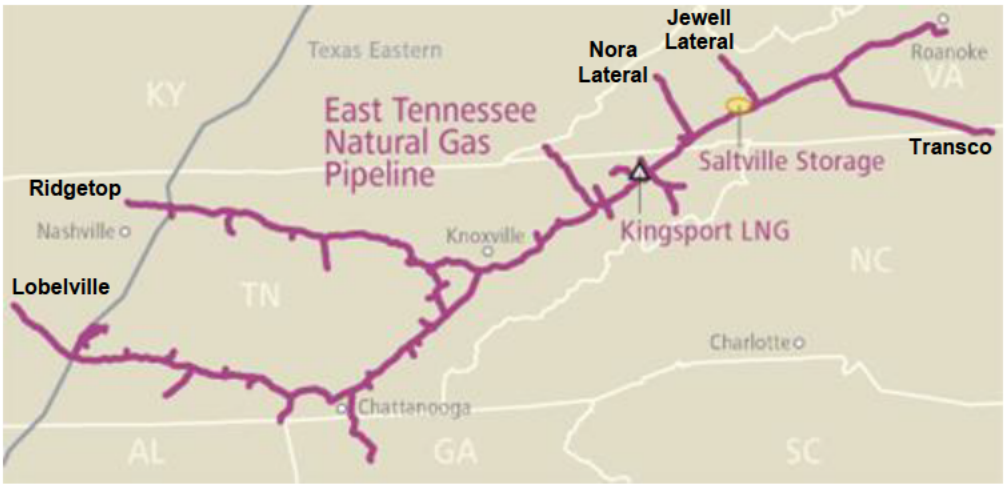
2.1.6 East Tennessee Natural Gas

ETNG consists of two mainline systems in Central Tennessee that converge near Knoxville and extend to an area just south of Roanoke, Virginia. ETNG provides for, among other things, the delivery of upstream gas supplies delivered under certain Atmos firm transportation contracts with Columbia Gulf, Texas Eastern, TGP, and SONAT to Atmos' Middle and East Tennessee service territories. ETNG is also interconnected with Transcontinental Gas Pipe Line, LLC (Transco) at Cascade Creek in Rockingham County, North Carolina. A map of the ETNG system is presented in Figure 6.

During the review period, Atmos maintained nine arrangements for firm transportation service with ETNG. Of these nine arrangements, five were under Rate Schedule FT-A, three were under Rate Schedule FT-APT, and one was under Rate Schedule FT-ART. Rate Schedule FT-APT was established for the firm transportation services made available as a result of ETNG's incremental Patriot expansion project which received Federal Energy Regulatory Commission (FERC) approval in 2002. Rate FT-ART was established for the firm transportation services made available as a result of ETNG's incremental Rocky Top expansion project. The firm transportation services provided under Rate Schedules FT-A, FT-APT, and FT-ART are the same. However, initially during the review period, the demand changes under Rate FT-APT and FT-ART were higher than the demand charges under Rate FT-A, reflecting the higher incremental costs associated with the Patriot and Rocky Top

expansion project facilities. During the review period, FERC approved a settlement in ETNG Docket No. RP20-980 which provided for roll-in rate treatment of Rate FT-APT and FT-ART with Rate FT-A.

Figure 6. East Tennessee Natural Gas System Map



The MDQ for each of Atmos' nine ETNG contracts at the commencement and conclusion of the review period are summarized in Table 2. Also identified is the upstream pipeline initially delivering gas to ETNG under each arrangement or the upstream receipt point. Additional relevant information for certain contracts identified in Table 2 is subsequently discussed.

Table 2. East Tennessee Natural Gas – Summary of Review Period Firm Transportation Contracts

Rate Schedule	Contract No.	Service Territory	Maximum Daily Contract Quantity (Dth)		End of Review Period Upstream Pipeline or Receipt Point (Dth)
			Begin	End	
FT-A	30774	East Tennessee	86,088	86,088	43,521 TGP
					10,000 Texas Eastern
					12,567 Nora Lateral
					20,000 Columbia Gulf
FT-A	30777	East Tennessee/ Middle Tennessee	36,633	36,633	ETNG LNGS Storage
FT-A	410549	East Tennessee	3,323	3,323	Saltville Storage
FT-A	410660	Middle Tennessee	1,500	1,500	TGP
FT-A	410685	Middle Tennessee	0	2,300	Texas Eastern
FT-ART	34538	East Tennessee	27,500	27,500	4,000 Nora Lateral
					7,500 SONAT
					10,000 Jewell Lateral
					6,000 Saltville Storage
FT-APT	410274	East Tennessee	1,500	1,500	Saltville Storage
FT-APT	410334		20,000	20,000	
FT-APT	410527	East Tennessee	1,600	1,600	Transco
Total:			**178,144**	**180,444**	

As indicated in Table 2, ETNG FT-A Contract No. 30774 provided for the delivery of gas from TGP, Texas Eastern, and Columbia Gulf to Atmos' East Tennessee service territory. The contract also provided capacity for the delivery of gas on ETNG's Nora Lateral, located in Dickenson County in southwest Virginia (see Figure 6 above). Atmos purchased gas from its Asset Manager on a delivered-to-Nora Lateral basis during the review period.

Atmos purchased winter-period liquefied natural gas (LNG) unbundled storage service from ETNG under Rate Schedule LNGS (Liquefied Natural Gas Storage Service) during the review period. Atmos maintained ETNG FT-A Contract No. 30777 to provide for the delivery of gas from ETNG's LNG facility. The ETNG LNG facility is located near Kingsport, Tennessee. Contract No. 30777 only provided for service during the winter months of November through March. The MDQ associated with Contract No. 30777 was 36,633 Dth/day. The MDWQ associated with the ETNG LNGS arrangement (Contract No. 33245) was 52,633 Dth/day and the maximum winter season withdrawal entitlement was 339,900 Dth. During the review period, for the winters of 2020-2021 and 2021-2022, the Company planned on utilizing 100% of the MDQ of Contract No. 30777 to meet the design day requirements of the East Tennessee service territory. For the winter of 2022-2023, the Company planned on utilizing 4,200 Dth/day of the MDQ of Contract No. 30777 to meet the design day requirements of the Middle Tennessee service territory, and the remaining 32,433 Dth/day to meet the design day requirements of the East Tennessee service territory.

ETNG FT-A Contract No. 410549 with an MDQ of 3,323 Dth/day provided for the delivery of gas from the Saltville Storage facility located in southwest Virginia (see Figure 6). Atmos' Saltville Storage arrangement is discussed in greater detail in Section 2.1.8.

ETNG FT-A Contract No. 410660, with an MDQ of 1,500 Dth/day, served the Middle Tennessee service territory. Gas supplies purchased for delivery under this arrangement were delivered to ETNG by TGP. ETNG FT-A Contract No. 410685, with an MDQ of 2,300 Dth/day, served the Middle Tennessee service territory. Gas supplies purchased for delivery under this arrangement are delivered to ETNG under Texas Eastern Contract No. 911803. ETNG FT-A Contract No. 410685 and Texas Eastern Contract No. 911803 both became effective November 1, 2021.

ETNG FT-ART Contract No. 34538 provided for the delivery of up to 27,500 Dth/day to Atmos' East Tennessee service territory. This included the delivery of 7,500 Dth/day from SONAT under Contract No. FSNG239; 4,000 Dth/day for the delivery of gas supplies purchased from Atmos' Asset Manager delivered to the interconnect of the ETNG mainline and Nora Lateral interconnect (see Figure 6); 6,000 Dth/day for the delivery of gas withdrawn from Saltville Storage; and 10,000 Dth/day for the delivery of gas on ETNG's Jewell Ridge Lateral in Tazewell and Smyth counties, Virginia that was purchased from Atmos' Asset Manager on a delivered-to-Jewell Ridge lateral basis (see Figure 6).

ETNG FT-APT Contract Nos. 410274 and 410334 provided for the delivery of gas withdrawn from Saltville Storage to Atmos' East Tennessee service territory. The MDQs associated with these arrangements were 1,500 Dth/day and 20,000 Dth/day, respectively.

ETNG FT-APT Contract No. 410527 provided for the delivery of Transco-sourced gas supplies purchased by Atmos from its Asset Manager on a delivered-to-ETNG basis at the interconnect of

ETNG and Transco in Cascade Creek, North Carolina (see Figure 6). The MDQ associated with Contract No. 410527 was 1,600 Dth/day.

2.1.7 Eastern Gas Transmission and Storage

The EGTS system is located in the Appalachia region. Atmos purchased unbundled storage service from EGTS under Rate Schedule GSS (General Storage Service) to serve the Company's Middle Tennessee service territory during the review period (Contract No. 600047). The EGTS storage facility is located in Oakford, Pennsylvania and gas withdrawn from GSS storage is delivered to Atmos by backhaul under Texas Eastern FT-1 Contract No. 910800. The MDWQ under the EGTS GSS arrangement was 4,880 Dth/day and the maximum winter season withdrawal entitlement was 411,765 Dth.

2.1.8 Saltville Gas Storage Company

Saltville Storage is owned and operated by Enbridge, Inc., which also owns ETNG and Texas Eastern. The Saltville Storage facility is located in Smyth County, Virginia and is directly connected to ETNG (see Figure 6). Atmos purchased unbundled storage service under two arrangements with Saltville Storage under Rate Schedule FSS during the review period (Contract Nos. 420009 and 420040). The MDWQ associated with Saltville Storage Contract No. 420009 was 35,000 Dth/day. The MDWQ associated with Contract No. 420040 was 7,000 Dth/day. The total maximum winter season withdrawal entitlement under these arrangements was 413,500 Dth. Gas withdrawn from Saltville Storage was generally delivered to Atmos under ETNG FT-A Contract No. 410549, FT-APT Contract Nos. 410274 and 410334, and FT-ART Contract No. 34538.

2.1.9 Barnsley Storage

The Barnsley Storage field, located in Hopkins County, Kentucky, is owned and operated by Atmos Pipeline & Storage, LLC, a wholly-owned subsidiary of Atmos Energy Holdings, Inc. The costs associated with owning and operating Barnsley Storage are allocated to Atmos and included in the Company's base rates. During the audit period, the MDWQ from Barnsley Storage was 27,000 Dth/day and the maximum winter season withdrawal entitlement was 1,300,000 Dth. Barnsley Storage is not physically interconnected with the Company's distribution systems. Gas withdrawn from Barnsley Storage was delivered to Atmos through various exchange arrangements provided under the Company's AMAs. That is, gas withdrawn from Barnsley Storage was delivered to other markets served by the Asset Manager and like quantities were delivered to Atmos to serve the Company's West and Middle Tennessee service territories. Exchange deliveries may be delivered to Atmos by Texas Gas, Columbia Gulf, and Texas Eastern.

2.1.10 Monroe Gas Storage Company

The Monroe Storage facility is located in Monroe County, Missouri. Atmos purchased storage service from Monroe Storage during the review period under a contract with an MDWQ of 10,360 Dth and a maximum winter season withdrawal entitlement of 350,000 Dth. Gas supplies withdrawn from Monroe Storage can be delivered to Atmos' East Tennessee service territory by TGP and Texas Eastern and subsequently ETNG, and directly to Atmos' Middle Tennessee service territory by Texas Eastern.

2.1.11 Jefferson Island Storage & Hub

The Jefferson Island Storage facility is located in Iberia Parish, Louisiana. Atmos purchased storage service from Jefferson Island Storage during the review period under a contract with an MDWQ of 25,000 Dth and a maximum winter season withdrawal entitlement of 250,000 Dth. Gas supplies withdrawn from Jefferson Island Storage can be delivered to Atmos' East Tennessee service territory by TGP and Columbia Gulf and subsequently ETNG, and directly to Atmos' Middle Tennessee service territory by Columbia Gulf.

2.2 Asset Management Agreements

Atmos operated under two AMAs during the second triennial review period provided for under the 2016 Settlement. The terms and conditions for service under both AMAs were similar. Both AMAs were selected through an RFP process. In Docket No. 05-00253, the TRA approved RFP procedures for Atmos' selection of an Asset Manager. These procedures were established because the Company had a marketing affiliate that routinely submitted responses to RFPs for asset management services to ensure that no conflicts of interest occurred during the RFP process. These procedures were included in Atmos' PBRM tariff.

During the first triennial review period required under the 2016 Settlement, Atmos issued an RFP for AMA services for the period April 1, 2016 through March 31, 2019 and the AMA was awarded to an [redacted] Effective January 3, 2017, [redacted] was sold and acquired by [redacted] a non-affiliate. The first AMA in effect during the second triennial review period under the 2016 Settlement was awarded to [redacted] through an RFP issued for the period April 1, 2019 through March 31, 2022.

Atmos filed for TPUC approval of its AMA with [redacted] on May 15, 2019. At that time, the RFP procedures approved in Docket No. 05-00253 required the Company to file for TPUC approval of a new AMA no later than December 1 of each year for an AMA to be implemented the following April 1. In its filing, the Company indicated that it believed that since the AMA [redacted] the need to file with the TPUC for approval of the AMA before the effective date was no longer required. Nevertheless, the TPUC approved the AMA with [redacted] on October 7, 2019. In June 2020, [redacted]

With the sale of [redacted] Atmos no longer had a natural gas marketing affiliate and, therefore, the only responses to RFPs for AMA services would come from unaffiliated third parties. Therefore, on September 3, 2021, in TPUC Docket No. 21-00104, Atmos filed a petition with the TRA to remove the RFP procedures included in its PBRM tariff related to the selection of an Asset Manager that were approved in TRA Docket No. 05-00253. The TPUC approved Atmos' petition on November 29, 2021.

The second AMA in effect during the second triennial review period required under the 2016 Settlement was awarded to [redacted] through an RFP issued for the period April 1, 2022 through March 31, 2025. Since the requirement that the Company file for TPUC approval of a new AMA was eliminated in TPUC Docket No. 21-00104, Atmos did not file for TPUC approval of the AMA with [redacted]

Under the AMAs in effect during the second triennial review period, when provided for under the service provider's tariff, Atmos released its firm transportation and storage service contracts, or assets, to the Asset Manager at zero cost. For those service providers whose tariffs did not provide for the release of the transportation or storage services, the Asset Manager was designated as Atmos' agent, and was responsible for the nomination and scheduling of those services. During the review period, all of Atmos' firm transportation and storage services were released to the Asset Manager except for the Texas Gas no-notice service under Rate Schedule SGT, Barnsley Storage, and Jefferson Island Storage. The AMAs also provided that Atmos would purchase its gas supplies from the Asset Manager. Unlike the AMAs typically utilized by gas distribution utilities like Atmos, Atmos was not paid a fee by the Asset Manager for the ability to utilize Atmos' assets and to be Atmos' gas supplier. Instead of being paid a fee by the Asset Manager, the gas supplies purchased by Atmos from the Asset Manager were generally priced at a discount to average market (index) prices.

In the natural gas industry, gas supply commodity purchases are generally categorized as either monthly baseload or daily purchases. Monthly baseload purchases are generally arranged on a monthly basis, and the same quantity of gas is delivered on each day during the month. All other purchases are generally considered daily purchases and, as the term implies, are typically made on a day-to-day basis. Frequently, daily purchases are made that flow for several consecutive days. Gas industry publications report average market prices, referred to as "index prices," on a monthly basis for monthly baseload purchases and on a daily basis for daily purchases. The industry standard publication utilized for price comparison purposes for monthly baseload purchases is S&P Global Platts' *Inside FERC's Gas Market Report* (*Inside FERC*). The industry standard publication utilized for price comparison purposes for daily purchases is S&P Global Platts' *Gas Daily* (*Gas Daily*). These publications were used to price Atmos' gas supply purchases under its review period AMAs. The discount to index prices for AMA gas supply purchases is discussed in greater detail in Section 2.3 of this Report.

Under the AMAs, Atmos determined how its pipeline transportation and storage assets should be used on a daily basis to meet its customers' gas supply requirements (referred to as "virtual dispatch"). On a daily basis, the Asset Manager was entitled to use Atmos' assets in the manner determined by virtual dispatch, use the assigned assets in a different manner, or use other assets that the Asset Manager had available to satisfy Atmos' daily gas supply requirements so long as the Asset Manager met Atmos' daily requirements. The billing arrangements under the AMAs provided that Atmos would continue to be responsible for the demand charges associated with the released assets. The Asset Manager was billed for the variable transportation and storage charges incurred under the released assets. Those charges incurred by the Asset Manager to provide service to Atmos pursuant to virtual dispatch were billed to Atmos by the Asset Manager.

2.3 AMA Gas Supply and Delivery Arrangements

As stated above, Atmos purchased its gas supplies from the Asset Manager under AMAs pursuant to Atmos' virtual dispatch instructions. Supplies purchased utilizing the assets released to the Asset Manager were based on index prices for the gas production location accessed by the released firm transportation assets, generally adjusted for the previously indicated AMA discount. However, a commodity adder was applicable to certain purchases. For example, gas supplies nominated for

purchase by Atmos through virtual dispatch in Texas Gas Zone 1 were priced based on Texas Gas Zone 1 published index prices. Index pricing applied to purchases delivered to Atmos under its Texas Gas SGT and STF, Columbia Gulf FTS-1, Texas Eastern FT-1, TGP FT-A, and SONAT FT firm transportation arrangements. The index price location utilized to price Atmos' gas supply purchases under the AMAs and the applicable commodity adders and discounts are identified later in this section of the Report.

In addition to upstream purchases, Atmos also purchased gas supplies from its Asset Manager on a delivered-to-ETNG and city gate basis during the review period. For these purchases, the Asset Manager arranged for the delivery of gas supplies using assets other than those released to it by Atmos. The delivered-to-ETNG arrangements included an arrangement that provided for the delivery of 16,567 Dth/day into ETNG's Nora Lateral, an arrangement that provided for the delivery of 10,000 Dth/day into ETNG's Jewell Lateral, and an arrangement that provided for the delivery of 1,600 Dth/day into ETNG's interconnect with Transco at Cascade Creek during the months of November through March.

In addition to these delivered-to-ETNG supply arrangements which served the East Tennessee service territory, the AMAs included a peak winter period (December through February) arrangement that provided for the delivery of up to 25,000 Dth/day of Columbia Gulf and Texas Eastern-sourced gas supplies directly to the Middle Tennessee service territory. Purchases under this arrangement were priced based on a production area index price applicable for Gulf Coast gas supplies accessed by Columbia Gulf or Texas Eastern, as applicable, plus a commodity adder.

Atmos' review period gas supply arrangements under the AMAs also included arrangements that provided for the purchase and delivery of baseload gas supplies to fill GTS GSS and Barnsley Storage during the summer period (April through October). The EGTS GSS storage fill arrangement had an MDQ of 2,288 Dth/day, and the gas purchased was priced based on EGTS Appalachia published index prices less a commodity discount. The Barnsley Storage fill arrangement was for 12,250 Dth/day, and the gas purchased was priced based on Texas Gas index prices less a discount which varied by the service territory served. Texas Gas is the only physical interconnect with Barnsley Storage. The Barnsley Storage fill arrangement had an MDQ of 5,467 Dth/day.

Finally, as indicated previously in Section 2.1.9, gas supplies withdrawn from Barnsley Storage cannot physically be delivered to any of the Company's Tennessee service territories. Under the AMAs, these withdrawals were delivered to the West or Middle Tennessee service territories by displacement (exchange). The AMAs provided for Barnsley Storage exchange deliveries by either Texas Gas, Columbia Gulf, or Texas Eastern. Atmos was charged a variable charge of [redacted]/Dth for the delivery of Barnsley Storage withdrawals.

Table 3 summarizes the Company's interstate pipeline upstream and direct transportation, storage, and AMA delivery arrangements by service territory at the conclusion of the review period. Table 4 summarizes the index price locations and commodity discounts and adders that were applicable under the review period AMAs. Exeter's review found the index locations utilized to price gas supply purchases under the AMAs to be reasonable and appropriate.

Table 3. Summary of Capacity and Gas Supply Delivery Arrangements, 2022-2023 Winter Season (Dth)

Pipeline/Provider – Service	Contract No.	Tennessee Territory	MDQ Winter	MDQ Summer	Winter Entitlement	Annual Entitlement	Contract Expiration
CITY GATE RESOURCES							
East Tennessee Natural Gas							
Firm Transportation (FT-A)	30774	East[1]	86,088	86,088	12,999,288	31,422,120	3/31/2024
Firm Transportation (FT-A)	30777	East[1]	36,633	0	5,531,583	5,531,583	3/31/2024
Firm Transportation (FT-A)	410549	East[1]	3,323	3,323	501,773	1,212,895	3/31/2026
Firm Transportation (FT-A)	410660	Middle	1,500	1,500	226,500	547,500	3/31/2025
Firm Transportation (FT-ART)	410685	East[1]	2,300	2,300	347,300	839,500	3/31/2024
Firm Transportation (FT-APT)	34538	East[1]	27,500	27,500	4,152,500	10,037,500	3/31/2025
Firm Transportation (FT-APT)	410274	East[1]	1,500	1,500	226,500	547,500	10/31/2026
Firm Transportation (FT-APT)	410334	East[1]	20,000	20,000	3,020,000	7,300,000	4/30/2025
Firm Transportation (FT-APT)	410527	East[1]	1,600	1,600	241,600	584,000	3/31/2025
Texas Eastern Transmission							
Firm Transportation (FT-1)	910800	Middle	5,000	5,000	755,000	1,825,000	3/31/2026
Firm Transportation (FT-1)	911195	Middle	5,000	5,000	755,000	1,825,000	3/31/2027
Firm Transportation (FT-1)	911193-MTN	Middle	5,000	5,000	755,000	1,825,000	3/31/2023
Firm Transportation (FT-1)	911839	Middle	5,000	5,000	755,000	1,825,000	3/31/2024
Storage Service (SS-1)	400244	Middle	3,000	0	180,000	0	3/31/2025
Columbia Gulf Transmission							
Firm Transportation (FTS-1)	23188	Middle	15,000	15,000	2,265,000	5,475,000	3/31/2024
Firm Transportation (FTS-1)	23481	Middle	22,500	22,500	3,397,500	8,212,500	3/31/2025
Firm Transportation (FTS-1)	142156	Middle	12,500	12,500	1,887,500	4,562,500	3/31/2025
Firm Transportation (FTS-1)	168971	Middle	10,000	10,000	1,510,000	3,650,000	3/31/2024
Firm Transportation (FTS-1)	211462	Middle	12,000	12,000	1,812,000	4,380,000	3/31/2024
Firm Transportation (FTS-1)	273042	Middle	10,000	0	1,510,000	1,510,000	3/31/2023
Texas Gas Transmission							
No-Notice Transportation (SGT)	G0750	West	7,495	4,120	1,131,745	2,112,545	10/31/2024
Firm Transportation (STF)	21483	West	1,000	250	151,000	204,500	3/31/2023
Asset Manager							
Delivered Columbia Gulf/Texas Eastern	AMA	Middle	25,000	0	2,070,000	2,070,000	3/31/2025
Barnsley Exchange (Columbia Gulf, Texas Gas, Texas Eastern)	AMA	Middle/West	27,000	0	1,300,000	0	3/31/2025
Total City Gate Resources:			**345,939**	**240,181**	**47,481,789**	**97.499,643**	

Table 3. (cont'd)

Pipeline/Provider – Service	Contract No.	Tennessee Territory	MDQ Winter	MDQ Summer	Winter Entitlement	Annual Entitlement	Contract Expiration
UPSTREAM RESOURCES							
East Tennessee Natural Gas							
Storage Service (LNGS)	33245	East[1]	52,633	0	339,000	0	3/31/2024
Tennessee Gas Pipeline							
Firm Transportation (FT-A)	69218	East[1]	35,000	35,000	5,285,000	12,775,000	3/31/2025
Firm Transportation (FT-A)	92725	East[1]	10,000	10,000	1,510,000	3,650,000	3/31/2025
Storage Service (FS-MA)	3981	East[1]	10,000	0	417,837	0	3/31/2025
Storage Service (FS-PA)	309552	East[1]	10,000	0	417,837	0	3/31/2025
Southern Natural Gas							
Firm Transportation (FT)	FSNG450438	East[1]	7,658	7,658	1,156,358	2,795,170	3/31/2024
Columbia Gulf Transmission							
Firm Transportation (FTS-1)	158165	East[1]	10,000	10,000	1,510,000	3,650,000	3/31/2024
Firm Transportation (FTS-1)	215235	East[1]	10,000	10,000	1,510,000	3,650,000	3/31/2024
Texas Eastern Transmission							
Firm Transportation (FT-1)	911803	East[1]	2,300	2,300	347,300	839,500	3/31/2024
Firm Transportation (FT-1)	911193-ETN	East[1]	10,000	10,000	1,510,000	3,650,000	3/31/2023
Eastern Gas Transmission and Storage							
Storage Service (GSS)	600047	Middle	4,880	0	411,765	0	3/31/2026
Monroe Storage							
Storage Service (FSS)	ATMOS00814S	Middle/East[1]	10,360	0	350,000	0	3/31/2024
Saltville Storage							
Storage Service	420009	East[1]	35,000	0	343,500	0	4/30/2024
Storage Service	420040	East[1]	7,000	0	70,000	0	4/30/2027
Barnsley Storage							
Storage Service	UCG-10924	Middle/West	27,000	0	1,300,000	0	4/30/2027
Jefferson Island Storage							
Storage Service	AMD-311JF-001	Middle/East[1]	25,000	0	250,000	0	3/31/2025
Asset Manager							
Nora Lateral into ETNG	AMA	East[1]	16,567	16,567	2,501,617	6,046,955	3/31/2025
Jewell Lateral into ETNG	AMA	East[1]	10,000	10,000	1,510,000	3,650,000	3/31/2025
Transco into ETNG	AMA	East[1]	1,600	0	241,600	241,600	3/31/2025
Barnsley Injection	AMA	Middle/West	0	12,250	1,300,000	0	3/31/2025
EGTS GSS Storage Injection	AMA	Middle	0	2,288	411,765	0	3/31/2025
Total Upstream Resources:			**294,998**	**126,063**	**22,693,579**	**40,948,225**	

[1] Contracts serving the East Tennessee service territory were allocated 67.7% to the Tennessee jurisdiction and 32.3% to the Virginia jurisdiction during the period July 2022 through March 2023.

Table 4. Summary of Asset Management Agreement – Gas Supply Index Pricing Provisions

Svc. Terr.	Pipeline/ Provider	Service	Contract No.	Monthly Pricing - *Inside FERC*[1] ($/Dth)		Daily Pricing - *Gas Daily*[1] ($/Dth)	
				AMA 1[1]	AMA 2[2]	AMA 1[1]	AMA 2[2]
West	Texas Gas Transmission	Firm Transportation SGT	G0750	[redacted]	[redacted]	[redacted]	[redacted]
		Firm Transportation STF	21483				
Middle	Columbia Gulf Transmission	Firm Transportation FTS-1	23188	[redacted]	[redacted]	[redacted]	[redacted]
			23841	[redacted]	[redacted]	[redacted]	[redacted]
			142156	[redacted]	[redacted]	[redacted]	[redacted]
			168971	[redacted]	[redacted]	[redacted]	[redacted]
			211462	[redacted]	[redacted]	[redacted]	[redacted]
			254303	[redacted]	[redacted]	[redacted]	[redacted]
			273042	[redacted]	[redacted]	[redacted]	[redacted]
Middle	Texas Eastern Transmission	Firm Transportation FT-1	910800	[redacted]	[redacted]	[redacted]	[redacted]
			911195	[redacted]	[redacted]	[redacted]	[redacted]
			911762/911839	[redacted]	[redacted]	[redacted]	[redacted]
			911193MTN	[redacted]	[redacted]	[redacted]	[redacted]
West	Asset Manager	Barnsley Injection	AMA	[redacted]	[redacted]	[redacted]	[redacted]
Middle				[redacted]	[redacted]	[redacted]	[redacted]
Middle	Asset Manager	Eastern Gas Transmission and Storage Injection Delivered Supply	AMA	[redacted]	[redacted]	[redacted]	[redacted]
Middle	Asset Manager	Columbia Gulf Delivered Supply	AMA	[redacted]	[redacted]	[redacted]	[redacted]
		Texas Eastern Delivered Supply			[redacted]	[redacted]	[redacted]

Table 4 (cont'd)

Svc. Terr.	Pipeline/ Provider	Service	Contract No.	Monthly Pricing - *Inside FERC*[1] ($/Dth) AMA 1[1]	Monthly Pricing - *Inside FERC*[1] ($/Dth) AMA 2[2]	Daily Pricing - *Gas Daily*[1] ($/Dth) AMA 1[1]	Daily Pricing - *Gas Daily*[1] ($/Dth) AMA 2[2]
East	Columbia Gulf Transmission	Firm Transportation FTS-1	158165	[redacted]	[redacted]	[redacted]	[redacted]
			215235				
East	Tennessee Gas Pipeline	Firm Transportation FT-A	69218/ 92725	[redacted]		[redacted]	[redacted]
East	Texas Eastern Transmission	Firm Transportation FT-1	911193ETN	[redacted]	[redacted]	[redacted]	[redacted]
			911803	[redacted]	[redacted]	[redacted]	[redacted]
East	Southern Natural Gas	Firm Transportation FT	FSNG239	[redacted]	[redacted]	[redacted]	[redacted]
East	Asset Manager	Nora/Jewell Lateral into ETNG Delivered Supply	AMA	[redacted]	[redacted]	[redacted]	[redacted]
East	Asset Manager	Transco into ETNG Delivered Supply	AMA	[redacted]	[redacted]	[redacted]	[redacted]

Note: Positive amounts are commodity adders; amounts in parentheses are discounts.
[1] Asset Management Agreement 1 effective April 1, 2019 through March 31, 2022.
[2] Asset Management Agreement 2 effective April 1, 2022 through March 31, 2025.
[3] Contract effective November 1, 2021 through March 31, 2022.
[4] Contract effective November 1, 2022 through March 31, 2023.

2.4 Markets Served by Atmos

Atmos provided firm bundled utility sales service during the review period, and also provided transportation service from its city gates to a customer's premises for those customers who acquire their own gas supplies on the interstate markets and separately arrange for the delivery of those supplies to Atmos' city gates. Table 5 summarizes the number of Atmos customers served and annual throughput by class during the review period. As shown in Table 5, Atmos has been experiencing moderate customer growth. This customer growth has been most significant in the Company's Middle Tennessee service territory.

Table 5. Annual Customers and Throughput by Class (12 months ended March 31)

Class	2021	2022	2023
CUSTOMERS BY CLASS			
Residential	135,379	138,080	140,242
Commercial	17,139	17,419	17,550
Industrial	351	346	345
Public Authority	739	680	659
Compressed Natural Gas	1	1	1
Transportation	129	128	127
TOTAL Customers:	153,738	156,655	158,923
VOLUMES BY RATE SCHEDULE (Dth)			
Residential	8,380,841	8,123,385	7,777,887
Commercial	5,453,686	5,572,484	5,492,326
Industrial	1,707,038	2,083,501	2,304,012
Public Authority	51,839	52,095	50,017
Compressed Natural Gas	3,074	3,250	1,755
Transportation	11,541,366	11,722,244	11,604,166
TOTAL Volumes:	27,137,843	27,556,959	27,230,163

2.5 City Gate Metering Stations

The Statement of Work for this investigation provides for the identification of Atmos' city gate metering stations serving its Tennessee service territories at which the Company receives natural gas from each interstate pipeline and identification of the meters measuring the amount of gas flowing into Atmos' Tennessee service territories from those pipelines. Table 6 identifies Atmos' active city gate meter stations by interstate pipeline, state, and service territory.

Table 6. Interstate Pipeline City Gate Station Meters				
Pipeline	State	Svc. Terr.	Meter No.	Meter Name
TEXAS GAS TRANSMISSION	TN	West	1836	Union City Aggregation Meter
COLUMBIA GULF TRANSMISSION	TN	Middle	404901	UCG-Williamson
			405601	UCG-Burwood
			405602	
			405603	
			411701	UCG-Triune Connector
			411702	
			418201	UCG-Governor's Club
TEXAS EASTERN TRANSMISSION	TN	Middle	70102	Murfreesboro
			70396	Franklin
			71430	Nolensville
			73025	Williamson
			73076	Columbia
EAST TENNESSEE NATURAL GAS	TN	East	59026	UCG Columbia West
			59027	UCG Morristown
			59028	UCG Johnson City East
			59046	UCG Maryville
			59048	UCG Maryville East
			59049	UCG Greenville
			59050	UCG Johnson City West
			59051	UCG Kingsport South
			59055	UCG Columbia North
			59059	Rockford
			59061	UCG Shelbyville
			59067	UCG Kingsport North
			59070	UCG Elizabethton
			59083	UCG Lynchburg
			59103	UCG Rockford North
			59104	UCG Lynchburg Portable
			59112	UCG Foothills Pointe
			59115	UCG Lowland
			59124	UCG Kingsport Regional
			59125	UCG Morton
			59126	UCG Gray
			59127	UCG Tri Cities
			59128	UCG Miller Park
			59129	UCG Boones Creek
			59145	UCG Maryville West
			59155	United Cities Morristown South
			59169	Mohawk
			59250	Bobo Hollow Road
EAST TENNESSEE NATURAL GAS	TN/VA	East	59002	UCG Bristol
			59071	UCG Blountville
			59074	UCG Bristol North
EAST TENNESSEE NATURAL GAS	VA	East	59010	UCG Blacksburg
			59013	UCG Pulaski
			59022	UCG Radford
			59069	UCG Wytheville
			59075	UCG Marion
			59076	UCG Abingdon West
			59077	UCG Dublin
			59116	UCG Marion East
			59117	UCG Abingdon East
			59119	UCG Glade Springs
			59120	UCG Marion North
			59121	UCG Chilhowie
			59122	UCG Rural Retreat
			59130	UCG Abingdon
			59185	UCG Glade Highlands
			59193	UCG Progress Park Wythe Co.
			59196	Roanoke West Salem
			59247	New Radford East

3. PERFORMANCE BASED RATEMAKING MECHANISM TARIFF RIDER

This section of Exeter's Report summarizes and evaluates Atmos' gas procurement activities and performance under the Performance Based Ratemaking Mechanism Tariff Rider. The PBRM is designed to encourage the Company to perform its gas purchasing activities at minimum cost, consistent with efficient operations and service reliability. The PBRM replaces the reasonableness or prudence review of the Company's gas purchasing activities overseen by the TPUC in accordance with Rule 1220-4-7-.05, Audit of Prudence of Gas Purchases. A complete copy of Atmos' current PBRM tariff is included as Appendix B of this report.

Section 3.1 describes the structure of the PBRM. Sections 3.2 through 3.5 discuss Atmos' review period performance under each of the four components of the PBRM. Atmos' review period PBRM savings calculations are addressed in Section 3.6. Finally, discussed and evaluated in Section 3.7 is Atmos' decision not to engage in hedging activity to mitigate the volatility of its gas cost rates during the review period.

3.1 PBRM Structure

The PBRM consists of four components:

- Gas Procurement Incentive Mechanism (GPIM)
- Capacity Management Incentive Mechanism (CMIM)
- Avoided Cost Incentive Mechanism (ACIM)
- Off-System Sales Revenue Incentive Mechanism (OSIM)

The GPIM establishes a predefined benchmark index to which Atmos' commodity cost of gas is compared. It also addresses the use of financial instruments or private contracts in managing gas costs. For commodity costs, on a monthly basis, Atmos' commodity cost of gas is compared to a benchmark amount. The benchmark amount is determined by multiplying actual monthly and daily purchase quantities in a month by the appropriate monthly and daily published index prices. The GPIM provides for a 75% sales customer and 25% Atmos sharing of the difference between actual and benchmark costs.

Under the CMIM, to the extent Atmos is able to release transportation or storage capacity, the associated revenues are shared by Atmos' sales customers and Atmos on a 75% / 25% basis, respectively. The CMIM also addresses the sharing of AMA fees which are shared between sales customers and Atmos on a 90% / 10% basis, respectively.

The ACIM is designed to encourage Atmos to explore ways to reduce upstream fixed and variable capacity costs associated with the transportation of gas supplies. Avoided costs can be achieved through delivered services, transportation discounts obtained from pipelines, the acquisition of discounted released capacity, variation from an existing transportation delivery path, or the acquisition of seasonal capacity that avoids year-round demand charges.

Under the ACIM, Avoided Costs are equal to Total Benchmark Transportation Cost less Total Actual Transportation Cost. Total Benchmark Transportation Cost is equal to the total demand and variable

transportation costs to purchase transportation services for the Company's peak day requirement plus reserve margin at maximum FERC tariff rates using the Benchmark Path. The initial Benchmark Path is the path followed by Atmos' contracts set forth in the Settlement Agreement in Docket No. 16-00028. If Atmos changes the path or capacity on any of the contracts that form the Benchmark Path, then one year from the effective date of the change, the path and capacity from the new contract will become part of the Benchmark Path. During that one-year period, savings will be determined by comparing the actual transportation cost of the new contract with the cost using the path for the old contract (priced at maximum FERC tariff rates for the old contract's path); provided, however, that if the total capacity of the new contract exceeds that of the old contract, then the old contract's path will be used for comparison only up to the capacity of the old contract, and above that capacity, the new contract's path will be used for comparison. Following that one-year period, savings on the new contract will be determined by comparing the actual transportation cost for the new contract against the cost for the new contract's path and capacity priced at maximum FERC tariff rates. The capacity amounts in the Benchmark Path may be adjusted by the Company to account for any change in the Company's peak-day requirement plus reserve margin, with such changes to be filed no later than 60 days after such adjustment. Resulting changes to the Benchmark Path shall become effective coincident with the effective date of the incremental transportation agreement, and the actual path and capacity of the incremental transportation agreement will become part of the Benchmark Path. Total Actual Transportation Cost equals the Company's actual annual total demand and variable transportation costs. For avoidance of doubt, whenever savings are calculated under the ACIM, the benchmark price used for comparison will always be the maximum FERC tariff rate. ACIM savings are shared between sales customers and Atmos on an 85% / 15% basis, respectively.

The OSIM is designed to encourage the Company to generate revenue from the off-system sale of gas supplies. The net margins on off-system sales are determined based on published index prices and are shared between sales customers and the Company on a 75% / 25% basis, respectively. Atmos' total share of savings under the PBRM are capped at $2.0 million per year. Atmos' share of PBRM savings was limited by the $2.0 million cap during each year reviewed in this Report.

An Incentive Plan Account Filing (IPA Filing) is submitted by Atmos to the TPUC for each Plan Year. TPUC Staff audits each IPA Filing and presents its findings in a Compliance Audit Report (Audit Report). TPUC Staff's Audit Reports for the review period identified no material findings. Table 7 summarizes Atmos' performance under the PBRM during the review period as reported in the Company's annual IPA Filings.

Table 7. Detail of Review Period Performance Based Ratemaking Mechanism Results				
	Year Ended March 31			
	2021	2022	2023	Total
INCENTIVE MECHANISM SAVINGS				
Gas Procurement	[redacted]	[redacted]	[redacted]	[redacted]
Capacity Management	[redacted]	[redacted]	[redacted]	[redacted]
Avoided Cost	[redacted]	[redacted]	[redacted]	[redacted]
Off-System Sales	0	0	0	0
TOTAL Incentive Mechanism Savings:	**$11,767,739**	**$12,420,906**	**$11,905,600**	**$36,094,245**
SAVINGS ALLOCATION				
Ratepayers				
Gas Procurement (75%)	[redacted]	[redacted]	[redacted]	[redacted]
Capacity Management (75%)[1]	[redacted]	[redacted]	[redacted]	[redacted]
Avoided Cost (85%)	[redacted]	[redacted]	[redacted]	[redacted]
Off-System Sales (85%)	0	0	0	0
Subtotal Ratepayers:	$9,600,899	$10,141,832	$9,752,878	$29,495,610
Cap Adjustment	166,840	279,074	152,722	598,635
Total Adjusted Ratepayers:	$9,767,739	$10,420,906	$9,905,600	$30,094,245
Company				
Gas Procurement (25%)	[redacted]	[redacted]	[redacted]	[redacted]
Capacity Management (25%)[1]	[redacted]	[redacted]	[redacted]	[redacted]
Avoided Cost (15%)	[redacted]	[redacted]	[redacted]	[redacted]
Off-System Sales (15%)	0	0	0	0
Subtotal Company:	$2,166,840	$2,279,074	$2,152,722	$6,598,635
Cap Adjustment	(166,840)	(279,074)	(152,722)	(598,635)
Total Adjusted Company:	$2,000,000	$2,000,000	$2,000,000	$6,000,000
TOTAL Savings Allocation:	**$11,767,739**	**$12,420,906**	**$11,905,600**	**$36,094,245**

[1] All review period CMIM savings were attributable to the release of transportation capacity and are shared between sales customers and Atmos on a 75% / 25% basis, respectively. No AMA fees, which are shared on a 90/10% customer/Atmos basis, respectively, were realized during the review period.

3.2 Gas Procurement Incentive Mechanism

Atmos' audit period gas supply commodity purchases by pipeline index location or service for the East Tennessee and Virginia service territory are identified in Table 8, and purchases for the Middle and West service territories are identified in Table 9. Table 10 provides an audit period comparison of monthly baseload *Inside FERC* index prices for the locations and services that were available to Atmos to purchase gas supplies under the AMAs in effect during the review period. Also identified are average city gate variable delivered prices that reflect the pipeline variable and fuel costs associated with the delivery of gas to Atmos' city gate. *Gas Daily* index prices for the locations and services identified in Table 10 exhibited the same relative relationship as the monthly *Inside FERC* prices reflected in Table 9 during the review period.

Table 11 and Table 12 identify the GPIM savings realized by Atmos during the review period for each purchase location and service for the East Tennessee and Virginia service territory and the Middle and West service territories, respectively. The GPIM savings presented in Table 12 reflect relatively minor differences in the savings calculated and reported by Atmos due to Exeter's correction of

Company calculation errors.[5] As subsequently discussed, Atmos' purchases during the review period appear to have been consistent with least-cost procurement. The Columbia Gulf cashout purchases identified in Table 12 reflect differences between Atmos' actual monthly purchase nominations and the actual monthly deliveries to the Company. Nominations in excess of actual deliveries and deliveries in excess of actual nominations are resolved via cashout settlement by the Asset Manager. Cashout purchases are priced based on Columbia Gulf index prices. In Table 12, positive purchase quantities are cashout purchases by Atmos and negative purchase quantities are cashout purchases by the Asset Manager. Differences between actual monthly purchase nominations and actual monthly deliveries on the other interstate pipelines directly serving Atmos are addressed through no-notice service injections and withdrawals and are not subject to cashout. Cashout quantities are largely attributable to factors over which Atmos has little control, such as weather variances, and are not currently included by the Company in the GPIM. Exeter finds the exclusion of cashout purchases from the GPIM to be reasonable since they are largely attributable to factors beyond the Company's control.

[5] Atmos' savings calculation for October 2021 was overstated by $52 and the savings calculation for October 2022 was understated by [redacted] As shown in Table 7, these corrections would not have impacted Atmos' share of savings under the PBRM since Atmos' share of savings under the PBRM during each month of the review period was limited to the $2 million dollar cap.

Table 8. East Tennessee & Virginia Service Territory – Summary of Commodity Purchases by Pipeline Index Location/Service (Dth)

	TENNESSEE GAS			TEXAS EASTERN		COLUMBIA GULF	SONAT	AMA DELIVERED SUPPLY	
MONTH	100 Leg	500 Leg	800 Leg	ELA	Zone M-1	ONSHORE	LA	Nora/Jewell	Transco
APR 2020	413,836	0	0	0	0	0	0	0	0
MAY	407,795	18,001	11,674	0	14,972	22,322	0	0	0
JUN	353,672	0	0	0	15,809	11,279	0	0	0
JUL	305,460	16,003	0	0	0	11,384	0	0	0
AUG	306,383	0	30,918	0	16,329	26,368	11,172	0	0
SEP	134,753	0	27,675	0	14,784	32,165	164,785	0	0
OCT	229,902	77,130	0	0	12,320	22,115	161,471	0	0
NOV	155,552	53,944	171,101	0	183,821	29,770	0	0	0
DEC	484,214	199,529	183,378	0	189,695	53,638	0	0	0
JAN 2021	461,258	299,200	183,644	0	182,448	154,344	0	0	0
FEB	398,801	106,230	75,981	0	167,277	269,000	0	0	0
MAR	387,594	141,121	182,925	0	52,515	0	0	0	0
Subtotal:	*4,039,220*	*911,158*	*867,296*	*0*	*849,970*	*632,386*	*337,427*	*0*	*0*
APR 2021	434,458	107,714	54,703	0	54,642	61,998	5,481	0	0
MAY	215,241	2,014	0	0	17,638	10,393	142,111	0	0
JUN	270,612	0	13,604	0	18,296	13,044	14,745	0	0
JUL	349,679	6,634	14,580	0	17,537	12,520	8,565	0	0
AUG	276,025	206,340	19,354	0	0	0	0	0	0
SEP	357,712	13,633	212,071	0	0	0	0	26,130	0
OCT	277,465	0	17,526	0	17,369	12,627	0	304,798	0
NOV	463,965	82,007	241,937	10,363	71,008	28,532	0	0	0
DEC	384,264	0	306,361	51,162	193,773	0	0	0	0
JAN 2022	479,642	181,668	295,945	33,056	164,905	197,820	13,300	0	0
FEB	436,719	5,908	190,289	45,000	193,896	0	0	0	0
MAR	397,798	0	0	48,979	212,032	0	0	0	0
Subtotal:	*4,343,579*	*605,918*	*1,366,370*	*188,560*	*961,096*	*336,934*	*184,202*	*330,928*	*0*
APR 2022	468,370	50,205	12,044	14,272	179,773	0	0	0	0
MAY	276,897	0	14,168	51,358	18,039	0	136,524	0	0
JUN	287,923	0	12,514	1,735	50,281	0	0	0	0
JUL	409,867	0	11,742	0	18,531	0	0	0	0
AUG	528,167	0	13,321	0	29,920	0	0	0	0
SEP	440,642	0	12,843	1,334	28,151	0	0	0	0
OCT	469,599	29,936	33,805	14,654	146,011	0	9,823	0	0
NOV	419,351	9,822	36,931	31,509	195,149	0	0	0	0
DEC	487,040	12,403	76,968	49,733	199,467	176,735	169,136	6,753	0
JAN 2023	494,636	39,727	188,383	50,507	219,015	157,336	0	0	0
FEB	407,956	10,701	1,559	46,052	199,699	28,089	0	0	0
MAR	458,869	25,899	58,638	16,626	76,723	25,182	8,139	0	0
Subtotal:	*5,149,317*	*178,694*	*472,917*	*277,779*	*1,360,759*	*387,342*	*323,622*	*6,753*	*0*
Total:	**13,532,116**	**1,695,770**	**2,706,582**	**466,340**	**3,171,825**	**1,356,662**	**845,251**	**337,681**	**0**

Note: Commodity purchases prior to allocation to Virginia.

Table 9. Middle & West Tennessee Service Territory – Summary of Commodity Purchases by Pipeline Index Location/Service (Dth)

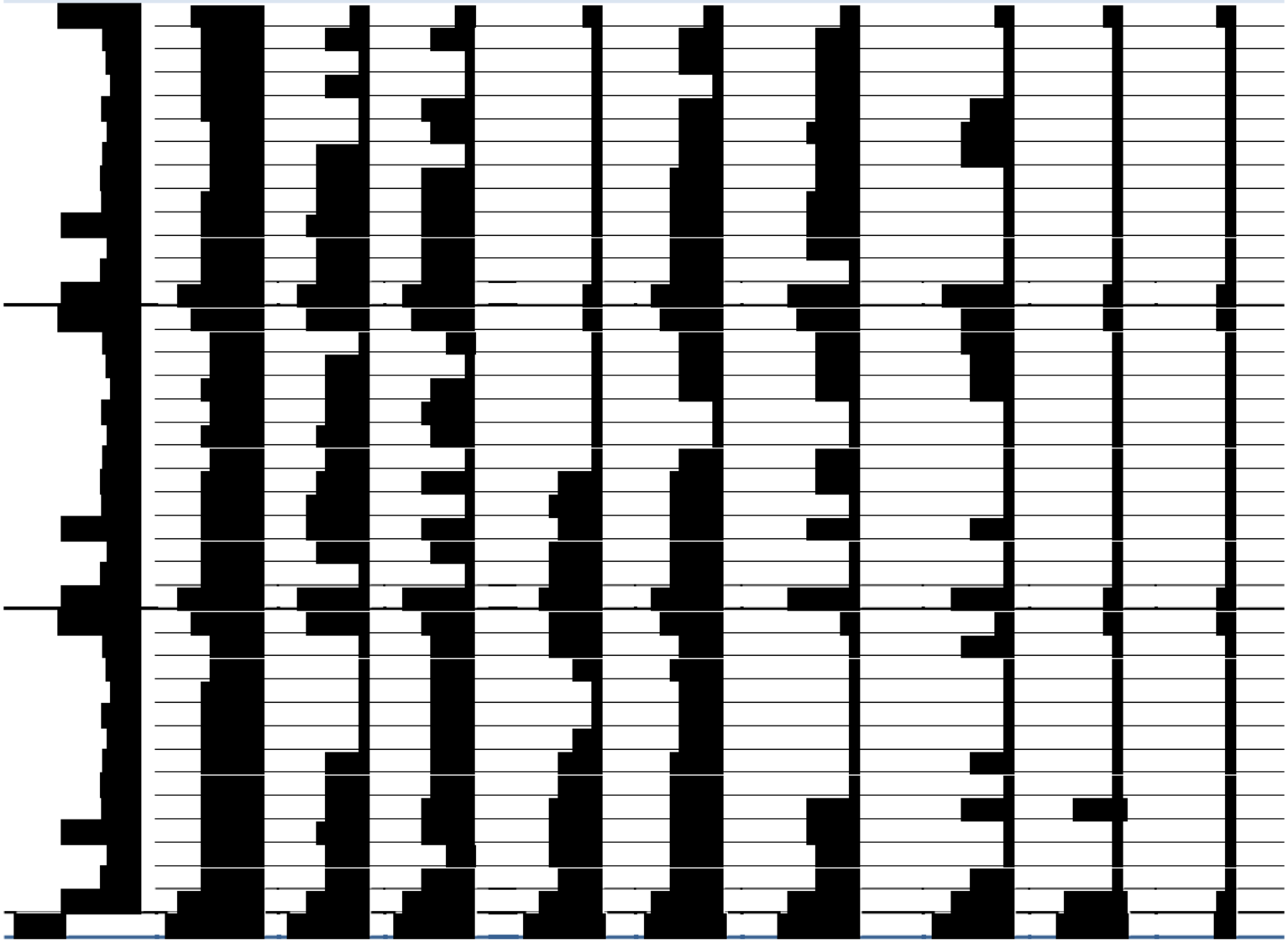
	TEXAS EASTERN				COLUMBIA				AMA DELIVERED		BARNSLEY INJECTION		TOTAL
MONTH	ELA	Zone M-1	Zone M-2	EGTS STORAGE	Mainline	Onshore	Cash-out	TEXAS GAS Zone 1	Columbia Gulf	Texas Eastern	Middle	West	(Table 8 + Table 9)
APR 2020	0	43,380	152,040	53,610	367,967	0	22,078	30,360	0	0	0	2,550	1,085,821
MAY	0	44,826	157,108	55,397	172,667	0	34,981	35,123	0	0	163,835	2,635	1,141,336
JUN	0	43,440	152,280	53,610	70,977	0	5,751	48,510	0	0	158,550	2,550	916,428
JUL	0	45,415	147,064	59,861	53,909	0	18,609	41,664	0	0	162,967	2,604	864,940
AUG	0	55,056	157,356	53,010	66,328	0	4,216	50,282	0	0	149,482	2,604	929,503
SEP	0	103,920	152,280	54,570	52,920	0	(4,733)	53,460	0	0	167,100	2,520	956,199
OCT	0	180,296	157,356	54,560	91,605	0	16,186	61,670	0	0	167,090	2,604	1,234,305
NOV	0	0	111,060	0	447,840	0	37,300	19,565	0	0	0	0	1,209,953
DEC	0	245,923	74,989	0	605,535	0	81,065	27,652	0	0	0	0	2,145,618
JAN 2021	0	272,056	50,158	0	818,493	0	47,082	13,113	0	0	0	0	2,481,796
FEB	164,381	193,760	48,545	0	360,364	306,073	(45,093)	45,346	0	0	0	0	2,090,665
MAR	0	149,229	97,030	0	400,892	0	(5,231)	15,407	0	0	0	0	1,421,482
Subtotal:	*164,381*	*1,377,301*	*1,457,266*	*384,618*	*3,509,497*	*306,073*	*131,707*	*442,152*	*0*	*0*	*969,024*	*18,067*	*16,397,543*
APR 2021	214,290	64,869	152,190	50,280	161,066	0	4,819	50,760	0	0	155,100	2,520	1,669,490
MAY	2,041	24,025	157,263	34,875	215,253	0	(27,339)	36,301	0	0	160,270	2,604	1,041,257
JUN	0	41,704	152,190	53,880	66,065	0	7,628	32,220	0	0	155,100	2,520	916,583
JUL	0	79,794	157,263	53,537	56,668	0	3,661	38,409	0	0	160,270	2,604	900,649
AUG	6,632	59,302	157,263	57,381	75,217	0	(6,302)	45,601	0	0	160,270	2,604	866,839
SEP	0	44,760	152,190	53,430	113,830	0	(7,991)	46,020	0	0	155,100	2,520	916,945
OCT	15,306	55,509	157,263	54,684	198,929	0	7,069	62,924	0	0	160,270	2,604	1,293,920
NOV	99,257	121,991	113,490	0	516,300	53,261	13,171	47,621	0	0	0	0	1,985,455
DEC	23,084	234,857	73,935	0	464,427	0	(9,088)	23,188	0	0	0	0	2,109,757
JAN 2022	150,469	221,867	4,309	0	533,231	240,350	(18,004)	41,805	0	39,286	0	0	2,221,048
FEB	92,512	212,240	58,464	0	481,628	0	26,677	16,688	0	174,475	0	0	1,810,044
MAR	18,120	22,560	83,483	0	467,697	6,312	(7,129)	15,035	0	19,551	0	0	1,309,426
Subtotal:	*621,711*	*1,183,478*	*1,419,303*	*358,067*	*3,350,311*	*299,923*	*(12,828)*	*456,572*	*0*	*233,312*	*1,106,380*	*17,976*	*17,041,413*
APR 2022	29,115	121,883	150,780	38,940	344,460	0	(720)	50,580	0	0	133,860	2,640	1,596,203
MAY	6,024	52,624	155,806	49,786	125,829	0	4,241	49,073	0	0	154,907	2,635	1,097,911
JUN	0	104,927	150,780	49,440	19,307	0	3,497	42,270	0	0	154,320	2,430	879,424
JUL	0	48,050	155,806	53,630	68,457	0	5,173	40,610	0	0	167,741	2,635	982,242
AUG	0	45,787	155,806	54,312	80,445	0	3,743	42,129	0	0	167,772	2,635	1,124,037
SEP	0	45,810	150,780	54,330	115,271	0	(1,371)	56,020	0	0	167,790	2,610	1,074,210
OCT	18,571	109,780	155,806	54,281	292,979	4,062	(432)	67,474	0	0	167,772	2,635	1,576,757
NOV	32,379	253,915	110,190	0	388,945	0	48,626	23,066	51,961	15,024	0	0	1,616,867
DEC	147,343	279,468	38,127	0	401,899	31,270	163,750	51,620	99,550	117,633	0	0	2,508,896
JAN 2023	77,950	279,465	19,565	0	401,884	58,607	9,648	15,314	154,450	9,516	0	0	2,176,003
FEB	112,504	252,420	14,473	0	279,666	32,926	(44,509)	0	0	0	0	0	1,341,537
MAR	26,484	205,608	60,574	0	63,266	46,684	(18,533)	0	0	0	0	0	1,054,158
Subtotal:	*450,370*	*1,799,737*	*1,318,493*	*354,719*	*2,582,408*	*173,549*	*(47,312)*	*438,156*	*305,961*	*142,173*	*1,114,162*	*18,220*	*16,807,818*
Total:	**1,236,462**	**4,360,516**	**4,195,062**	**1,097,404**	**9,442,216**	**779,545**	**71,567**	**1,336,880**	**305,961**	**375,485**	**3,189,566**	**54,263**	**50,246,775**

Table 10. Summary of *Inside FERC* Index Prices

	TENNESSEE GAS			TEXAS EASTERN				COLUMBIA GULF						
MONTH	100 Leg East	500 Leg East	800 Leg East	ELA Middle	Zone M-1 Middle	Zone M-1 East	Zone M-2 Middle	Onshore East	Mainline East	Mainline Middle	SONAT LA EAST	AMA TRANSCO ZONE 5 EAST	TEXAS GAS ZONE 1 WEST	EGTS APPALACHIA EAST
APR 2020	$1.50	$1.57	$1.54	$1.53	$1.53	$1.53	$1.17	$1.55	$1.42	$1.42	$1.57	$3.18	$1.43	$1.19
MAY	1.69	1.73	1.71	1.73	1.72	1.72	1.42	1.71	1.65	1.65	1.74	3.14	1.66	1.45
JUN	1.59	1.65	1.61	1.64	1.58	1.58	1.24	1.63	1.55	1.55	1.65	3.25	1.57	1.27
JUL	1.37	1.42	1.40	1.42	1.40	1.40	1.12	1.41	1.33	1.33	1.44	3.09	1.37	1.16
AUG	1.77	1.80	1.78	1.80	1.77	1.77	1.18	1.77	1.71	1.71	1.81	3.01	1.73	1.27
SEP	2.45	2.50	2.47	2.47	2.44	2.44	1.00	2.46	2.33	2.33	2.51	2.98	2.35	1.11
OCT	1.95	1.99	1.89	1.95	1.92	1.92	0.65	1.95	1.75	1.75	2.02	2.99	1.77	1.00
NOV	2.84	2.85	2.84	2.85	2.85	2.85	1.57	2.85	2.68	2.68	2.89	2.83	2.74	1.71
DEC	2.75	2.77	2.77	2.77	2.75	2.75	1.60	2.77	2.57	2.57	2.80	3.67	2.62	1.62
JAN 2021	2.35	2.39	2.39	2.27	2.35	2.35	1.93	2.37	2.28	2.28	2.42	5.58	2.31	1.89
FEB	2.68	2.69	2.68	2.64	2.63	2.63	2.39	2.68	2.59	2.59	2.71	9.98	2.64	2.32
MAR	2.78	2.79	2.77	2.65	2.65	2.65	2.30	2.79	2.71	2.71	2.82	2.87	2.72	2.29
Annual Avg.:	2.14	2.18	2.15	2.14	2.13	2.13	1.46	2.16	2.05	2.05	2.20	3.88	2.08	1.52
AMA Adj.:	[redacted]													
Variable Adj.:	[redacted]													
Effective Cost:	[redacted]													
APR 2021	$2.44	$2.52	$2.48	$2.34	$2.42	$2.42	$1.88	$2.50	$2.33	$2.33	$2.53	$2.59	$2.37	$1.91
MAY	2.85	2.85	2.83	2.78	2.78	2.78	2.08	2.84	2.63	2.63	2.87	2.93	2.74	2.17
JUN	2.85	2.91	2.87	2.82	2.78	2.78	2.27	2.90	2.70	2.70	2.92	3.02	2.79	2.30
JUL	3.47	3.52	3.50	3.51	3.53	3.53	2.59	3.54	3.27	3.27	3.54	3.69	3.40	2.69
AUG	3.85	3.93	3.89	3.91	3.89	3.89	2.79	3.97	3.49	3.49	3.95	4.13	3.73	2.92
SEP	4.19	4.30	4.25	4.19	4.17	4.17	3.40	4.30	3.95	3.95	4.29	4.45	4.11	3.44
OCT	5.55	5.77	5.74	5.63	5.58	5.58	4.48	5.77	5.08	5.08	5.78	5.90	5.52	4.56
NOV	6.03	6.16	6.13	5.94	5.94	5.94	5.40	6.14	5.73	5.73	6.15	6.47	6.00	5.45
DEC	5.28	5.37	5.39	5.22	5.30	5.30	4.83	5.40	5.16	5.16	5.44	8.26	5.27	4.83
JAN 2022	3.99	3.97	3.96	3.80	3.80	3.80	3.17	3.96	3.79	3.79	4.02	8.57	3.92	3.15
FEB	6.17	6.25	6.21	6.12	6.17	6.17	5.73	6.23	6.06	6.06	6.28	11.15	6.17	5.70
MAR	4.29	4.48	4.46	4.29	4.32	4.32	3.79	4.49	4.21	4.21	4.49	4.82	4.23	3.80
Annual Avg.:	4.25	4.34	4.31	4.21	4.22	4.22	3.53	4.34	4.03	4.03	4.36	5.50	4.19	3.58
AMA Adj.:	[redacted]													
Variable Adj.:	[redacted]													
Effective Cost:	[redacted]													
APR 2022	$4.94	$5.23	$5.21	$4.94	$4.95	$4.95	$4.40	$5.23	$4.86	$4.86	$5.25	$5.38	$4.91	$4.47
MAY	6.93	7.19	7.17	6.87	6.92	6.92	6.32	7.17	6.80	6.80	7.21	7.36	6.90	6.39
JUN	8.58	8.88	8.86	8.51	8.51	8.51	7.86	8.82	8.45	8.45	8.87	9.39	8.52	7.93
JUL	6.13	6.74	6.45	6.19	6.24	6.24	5.57	6.43	5.99	5.99	6.74	8.63	6.18	5.69
AUG	8.18	8.83	8.55	8.43	8.40	8.40	7.70	8.63	8.14	8.14	12.44	14.63	8.20	7.76
SEP	8.54	9.37	9.02	8.56	8.55	8.55	7.82	9.19	8.41	8.41	9.84	10.60	8.47	7.90
OCT	5.08	6.68	6.34	5.40	5.40	5.40	4.37	6.74	5.24	5.24	7.01	7.21	5.22	4.54
NOV	4.41	5.02	5.02	4.71	4.69	4.69	3.70	5.04	4.50	4.50	5.32	5.68	4.56	3.80
DEC	6.00	6.59	6.48	6.23	6.23	6.23	5.90	6.61	6.16	6.16	6.97	11.40	6.22	0.00
JAN 2023	3.90	4.63	4.56	4.36	4.36	4.36	3.79	4.57	4.28	4.28	4.82	15.18	4.38	0.00
FEB	2.45	2.98	2.95	2.72	2.72	2.72	2.55	2.94	2.80	2.80	3.15	7.48	2.85	0.00
MAR	2.07	2.27	2.30	2.22	2.22	2.22	2.00	2.35	2.24	2.24	2.43	2.77	2.26	2.03
Annual Avg.:	5.60	6.20	6.08	5.76	5.77	5.77	5.17	6.14	5.66	5.66	6.67	8.81	5.72	5.61
AMA Adj.:	[redacted]													
Variable Adj.:	[redacted]													
Effective Cost:	[redacted]													

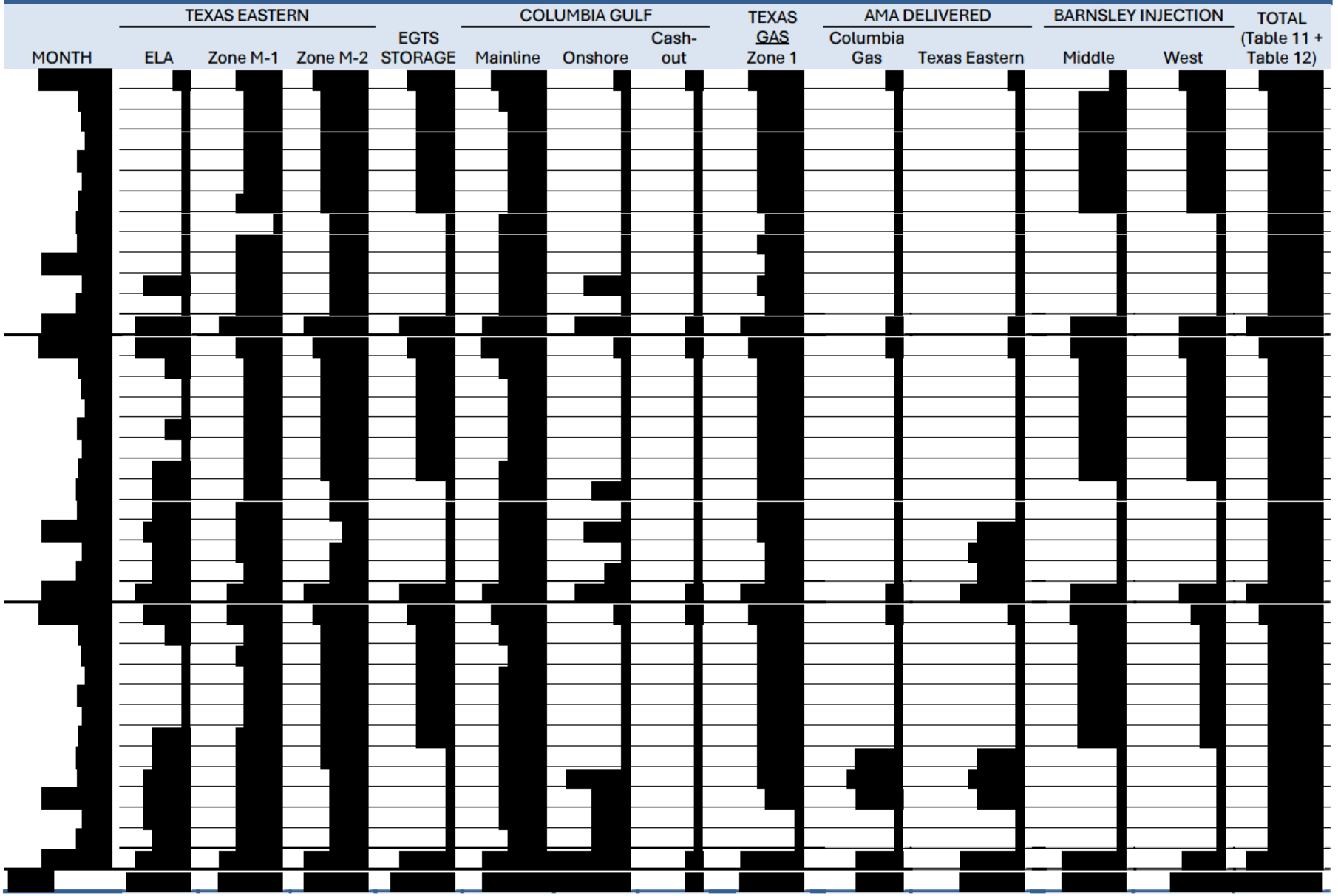
Table 11. East Tennessee & Virginia Service Territory – Summary of PBRM Gas Procurement Incentive Mechanism Savings by Pipeline Index Location/Service

MONTH	TENNESSEE GAS			TEXAS EASTERN		COLUMBIA GULF	SONAT	AMA DELIVERED SUPPLY	
	100 Leg	500 Leg	800 Leg	ELA	Zone M-1	ONSHORE	LA	Nora/Jewell	Transco



Note: Savings prior to allocation to Virginia.

Table 12. Middle & West Tennessee Service Territory – Summary of PBRM Gas Procurement Incentive Mechanism Savings by Pipeline Index Location/Service



Atmos' West Tennessee service territory can only be served by Texas Gas. Applicable index purchase locations for Texas Gas supplies are Zone SL and Zone 1. Index prices are not consistently reported for Zone SL. The AMAs in effect during the review period provided for the pricing of Texas Gas delivered supplies based on Zone 1 index prices. Exeter's 2022 Report noted that Texas Gas Zone 1 supplies typically had a slightly lower delivered cost than Zone SL delivered supplies.

Atmos' Middle Tennessee service territory is primarily served by Columbia Gulf under firm transportation arrangements that provide for the direct delivery of Gulf Coast production region supplies. In addition, the Middle Tennessee service territory can be served by Texas Eastern under firm transportation arrangements with gas sourced in Texas Eastern Zones ELA, M-1 or M-2. The Middle Tennessee service territory requirements can also be met with delivered-to-city gate supplies available under the Company's AMAs. These delivered-to-city-gate supplies can be sourced on Columbia Gulf or Texas Eastern. Daily deliveries from Texas Eastern are generally required to meet certain operational requirements of the Middle Tennessee service territory. As shown in Table 10, Columbia Gulf sourced supplies were slightly lower cost than Texas Eastern Zone M-1 sourced supplies during the review period, and as shown in Table 9, Columbia Gulf sourced supply purchases significantly exceeded Texas Eastern Zone M-1 sourced supply purchases. Texas Eastern Zone M-2 sourced supplies, which are delivered under Contract No. 910800, were available at lower cost than either Columbia Gulf or Texas Eastern Zone ELA of M-1 sourced supplies during the review period and Atmos maximized the purchase of these supplies when Contract No. 910800 was not required to deliver EGTS storage withdrawals. Delivered-to-city-gate Columbia Gulf and Texas Eastern-sourced supplies are priced based on Gulf Coast index prices that are nearly identical. However, the price for these delivered-to-city-gate supplies included a commodity adder which resulted in a variable delivered cost that exceeded the cost of firm transportation delivered supplies. Therefore, Atmos only purchased delivered-to-city-gate supplies to serve the Middle Tennessee service territory during peak demand periods.

Atmos' East Tennessee service territory is only served by ETNG. Operationally, most of the gas delivered by ETNG must be delivered to ETNG by TGP. Applicable index purchase locations for TGP supplies are Zone 0 – 100 Leg, Zone 1 – 500 Leg, and Zone 1 – 800 Leg. As shown previously in Table 10, Zone 0 sourced supplies were consistently the lowest cost, and as indicated by Table 9, approximately 75% of the Company's TGP sourced gas supply purchases were Zone 0 purchases. SONAT sourced supplies can be delivered to ETNG for the East Tennessee service territory, but these supplies had a higher delivered cost than TGP sourced supplies during the review period, as shown in Table 10, and were generally only purchased during planned maintenance or testing outages on certain portions of the ETNG system or to meet demands during peak periods. The AMAs in effect during the review period entitled Atmos to purchase Nora Lateral, Jewell Lateral and Transco delivered-to-ETNG supplies to serve the East Tennessee service territory. The costs of these delivered-to-ETNG supplies were generally higher than supplies delivered to ETNG by TGP and, therefore, were also generally only purchased during planned maintenance or testing outages on the ETNG system or to meet demands during peak periods.

3.3 Capacity Management Incentive Mechanism

Atmos released segments of four pipeline firm transportation contracts via prearranged biddable arrangements during the audit period. During each month of the audit period, Atmos released 5,000 Dth/day of TGP Contract No. 92725 to the Louisiana Division and 5,000 Dth/day of TGP Contract No. 92725 to the Mississippi Division. For each month of the audit period, Atmos released 11,500 Dth/day of Columbia Gulf Contract No. 142156 to Trans Louisiana Gas Pipeline. For the period November 2020 through October 2021, Atmos released 3,000 Dth/day of Texas Eastern Contract No. 91176 to the Mississippi Division. Effective November 1, 2021, the amount of Contract No. 911762 released to the Mississippi Division was increased to 4,000 Dth/day until Contract No. 911762 expired on March 31, 2022. Atmos replaced Contract No. 911762 with Texas Eastern Contract No. 911839 effective April 1, 2022, and Atmos released 4,000 Dth/day of Contract No. 911839 to the Mississippi Division through April 30, 2023.

TGP Contract No. 92725 and Texas Eastern Contract Nos. 911762 and 911839 were discounted-rate contracts, and the releases of these contracts were made at less than the discounted rate. Columbia Gulf Contract No. 142156 was a maximum FERC tariff rate contract, and the release of this capacity was made at less than the maximum rate. The capacity release revenues realized by Atmos during the audit period are summarized in Table 13.

Table 13. Audit Period Capacity Release Revenues

Pipeline	Contract No.	MDQ (Dth)	Party	Revenues[1]
Tennessee Gas Pipeline	92725	5,000	Louisiana Division	$375,635
Tennessee Gas Pipeline	92725	5,000	Mississippi Division	281,730
Columbia Gulf Transmission	142156	11,500	Trans Louisiana Gas Pipeline	1,019,872
Texas Eastern Transmission				
April 2020 – March 2022	911762	3,000	Mississippi Division	84,950
April 2022 – March 2023	911839	4,000	Mississippi Division	73,000
Total:				**$1,835,186**

[1] Prior to Virginia allocation.

In addition to providing for the sharing of capacity release revenues, the CMIM also provided for the sharing of AMA fees. Typically, under an AMA, the Asset Manager would pay the party releasing the assets a fee. Atmos' audit period AMAs did not provide for the payment of a fee by the Asset Manager. Atmos received compensation for releasing its assets to the Asset Manager by purchasing gas under the AMAs at discounts to market index prices.

3.4 Avoided Cost Incentive Mechanism

The ACIM revenues realized by Atmos during the review period were almost entirely attributable to obtaining discounts from the maximum FERC-approved demand charges under the Company's firm transportation contracts or the avoidance of demand and variable charges under the AMA delivered services. ACIM revenues were also realized during the review period due to variations from an existing transportation delivery path. No review period ACIM revenues were realized as a result of the acquisition of seasonal capacity that avoided year-round demand changes. Audit period ACIM revenues, as reported by Atmos, are summarized by pipeline and delivered service in Table 14.

Exeter's review found that Atmos' ACIM revenue calculations for February and March 2022 for Texas Eastern firm transportation Contract Nos. 911193, 911195 and 911762 were based on Texas Eastern demand charge rates that were subject to a refund in FERC Docket No. RP21-1188. On November 30, 2022, FERC approved a settlement in Docket No. RP21-1188 which revised the demand charges for Contract Nos. 911193, 911195 and 911762 retroactively beginning February 2022. Since February and March 2022 had already been included in its PBRM Report for the period April 2021 – March 2022 and the PBRM Report had been filed and audited by TPUC Staff, the Company did not revise its ACIM revenue calculations to reflect the revised demand charges for February and March 2022. Had the Company revised its ACIM revenue calculations, PBRM savings for the period April 2021 – March 2022 would have been reduced by $32,507. However, as indicated previously in Table 7, Atmos' share of savings for the period April 2021 – March 2022 were reduced by $279,074 as a result of the $2 million PBRM cap. Therefore, had Atmos revised its ACIM revenue calculations to reflect the revised Texas Eastern demand charges for February and March 2022, its share of savings under the PBRM for the period April 2021 – March 2022 would not have been affected.

Table 14. Summary of Audit Period Avoided Demand and Variable Costs

Pipeline/Provider - Service	Contract No.	Tennessee Territory	Avoided Demand	Avoided Variable
CITY GATE RESOURCES				
[redacted]				

Table 14 (cont'd)

Pipeline/Provider - Service	Contract No.	Tennessee Territory	Avoided Demand	Avoided Variable
[redacted]				

[1] Costs prior to the Virginia jurisdictional allocation.

3.5 Off-System Sales Revenue Incentive Mechanism

Under the audit period AMAs, the Asset Manager managed all of Atmos' firm transportation and storage assets. Therefore, Atmos was unable to use those assets to engage in off-system sales during the audit period and realized no off-system sales revenue to share under the OSIM.

3.6 Assessment of PBRM Review Period Calculations and Savings

With two minor exceptions, Exeter's review found that the PBRM savings identified by Atmos for the review period were determined consistent with the provisions of the Company's PBRM tariff. As previously discussed in Section 3.2, Atmos incorrectly calculated GPIM savings for the months of

October 2021 and October 2022. As previously discussed in Section 3.4, the Company did not revise its ACIM revenue calculation for the months of February and March 2022 to reflect the revised Texas Eastern demand charges approved by the FERC in Docket No. RP21-1188. Neither exception would have modified Atmos' share of savings under the PBRM during the review period and, therefore, there were no adverse impacts on Atmos' customers associated with the two exceptions.

3.7 Hedging Activity

Atmos did not use futures contracts, financial instruments, or private contracts to manage, hedge, or otherwise reduce the volatility of its gas costs during the review period. Under the PBRM, the gains or losses associated with hedging activity would have been reflected in the calculation of GPIM savings or costs. As initially discussed in Section 2 and subsequently discussed in Section 4, Atmos purchased storage service under a number of arrangements during the audit period. Storage service allows Atmos to purchase and inject gas supplies during the summer months when gas prices are typically lower, and withdraw those gas supplies to service its sales customers during the winter months when gas prices are typically higher. Therefore, storage service assists in reducing the volatility of Atmos' gas costs. During the review period, in Docket No. 23-00026, Atmos filed with the TPUC to adopt a hedging program. After the conclusion of the review period, a hedging program was approved by the TPUC for Atmos on April 11, 2023.

4. STORAGE ACTIVITY

The Statement of Work for this investigation, as stated in the RFP, requires the review of Atmos' actual gas procurement transactions and costs. The Company's gas supply purchase transactions were reviewed in Section 3 of the Report and found to be reasonable. Section 4 of the Report reviews Atmos' storage activity; specifically, the Company's storage arrangements are discussed in Section 4.1 and storage planning guidelines are discussed in Section 4.2.

4.1 Storage Arrangements and Activity

As discussed in greater detail in Section 2 of the Report, Atmos purchased bundled storage service from Texas Gas under Rate Schedule SGT and from Texas Eastern under Rate Schedule SS-1. Atmos purchased unbundled storage service from EGTS under Rate Schedule GSS; from TGP under Rate Schedules FS-PA and FS-MA; from ETNG under Rate Schedule LNGS; from Saltville Storage under Rate Schedule FSS; from Monroe Storage under Rate Schedule FSS, and from Jefferson Island under Rate Schedule FSS. The Texas Gas SGT and TGP FS-PA and FS-MA storage arrangements also provide Atmos with no-notice service. The Company also had access to the Barnsley Storage field. Atmos' storage arrangements during the review period are summarized in Table 15.

Table 15. Summary of Review Period Storage Service Arrangements (Dth)

Service	Rate Schedule	Maximum Withdrawal Quantity	
		Daily	Seasonal
Texas Gas Transmission	SGT	5,108	239,576
Texas Eastern Transmission	SS-1	3,000	180,000
Eastern Gas Transmission and Storage	GSS	4,880	411,765
Tennessee Gas Pipeline	FS-PA	10,000	417,837
Tennessee Gas Pipeline	FS-MA	10,000	417,837
East Tennessee Natural Gas	LNGS	52,633	339,900
Saltville Storage	FSS	42,000	413,500
Monroe Storage	FSS	10,360	350,000
Jefferson Island Storage	FSS	25,000	250,000
Barnsley Storage	-	27,000	1,300,000
Total:		**189,981**	**4,320,415**

Table 16 and Table 17 identifies the monthly storage activity (injections/withdrawals) and the inventory balances under Atmos' storage arrangements at the conclusion of each month of the review period. Also identified in Table 16 and Table 17 are Atmos' storage inventory balances as a percent of the Company's maximum seasonal contract quantity. The storage activity presented in these tables reflects Atmos' virtual dispatch use of storage, and not the actual physical use of storage by Atmos' Asset Managers.

Table 16. Summary of Review Period Storage Activity (Dth)									
	TEXAS GAS SGT			BARNSLEY			TGP - FS-PA		
MONTH	Activity	Inventory	239,576 Capacity %	Activity	Inventory	1,3000,000 Capacity %	Activity	Inventory	417,837 Capacity %
MAR 2020		115,321	48%		1,150,734	89%		413,199	99%
APR	1,895	117,216	49%	(3)	1,150,731	89%	0	413,199	99%
MAY	56,414	173,630	72%	(23,894)	1,126,837	87%	0	413,199	99%
JUN	16,503	190,133	79%	(3)	1,126,834	87%	4295	417,494	100%
JUL	9	190,142	79%	0	1,126,834	87%	0	417,494	100%
AUG	2,726	192,868	81%	(2)	1,126,832	87%	0	417,494	100%
SEP	26,839	219,707	92%	202,210	1,329,042	102%	0	417,494	100%
OCT	12,791	232,498	97%	42,582	1,371,624	106%	0	417,494	100%
NOV	(12,402)	220,096	92%	(31)	1,371,593	106%	0	417,494	100%
DEC	(21,473)	198,623	83%	(303,934)	1,067,659	82%	0	417,494	100%
JAN 2021	(49,692)	148,931	62%	(16,784)	1,050,875	81%	(281,331)	136,163	33%
FEB	(45,448)	103,483	43%	(383,316)	667,559	51%	(73,487)	62,676	15%
MAR	(9,198)	94,285	39%	(45)	667,514	51%	0	62,676	15%
APR 2021	15,597	109,882	46%	(16,803)	650,711	50%	75,538	138,214	33%
MAY	21,349	131,231	55%	299,836	950,547	73%	84,971	223,185	53%
JUN	7,816	139,047	58%	109,095	1,059,642	82%	823	224,008	54%
JUL	13,947	152,994	64%	0	1,059,642	82%	0	224,008	54%
AUG	14,511	167,505	70%	(10)	1,059,632	82%	0	224,008	54%
SEP	59,346	226,851	95%	80,902	1,140,534	88%	60,540	284,548	68%
OCT	(393)	226,458	95%	220,950	1,361,484	105%	130,440	414,988	99%
NOV	(5,356)	221,102	92%	(37)	1,361,447	105%	2,786	417,774	100%
DEC	(11,255)	209,847	88%	(40)	1,361,407	105%	0	417,774	100%
JAN 2022	(68,988)	140,859	59%	(304,303)	1,057,104	81%	(308,595)	109,179	26%
FEB	(44,205)	96,654	40%	(163,208)	893,896	69%	(11,546)	97,633	23%
MAR	8,472	105,126	44%	(45)	893,851	69%	36,894	134,527	32%
APR 2022	76,967	182,093	76%	(24)	893,827	69%	64692	199,219	48%
MAY	20,822	202,915	85%	6,731	900,558	69%	66,864	266,083	64%
JUN	20,388	223,303	93%	6,651	907,209	70%	4,745	270,828	65%
JUL	298	223,601	93%	0	907,209	70%	0	270,828	65%
AUG	8,751	232,352	97%	0	907,209	70%	0	270,828	65%
SEP	96	232,448	97%	127,433	1,034,642	80%	13675	284,503	68%
OCT	2,192	234,640	98%	262,303	1,296,945	100%	133,334	417,837	100%
NOV	(6,731)	227,909	95%	0	1,296,945	100%	0	417,837	100%
DEC	(17,455)	210,454	88%	(135,821)	1,161,124	89%	(33,372)	384,465	92%
JAN 2023	(27,347)	183,107	76%	(72)	1,161,052	89%	(100,932)	283,533	68%
FEB	(36,575)	146,532	61%	72,706	1,233,758	95%	(62,000)	221,533	53%
MAR	(40,611)	105,921	44%	(208,700)	1,025,058	79%	58,506	280,039	67%

Table 16 (cont'd)

	TGP - FS-MA			EGTS GSS			ETNG LNGS		
MONTH	Activity	Inventory	417,837 Capacity %	Activity	Inventory	411,765 Capacity %	Activity	Inventory	339,900 Capacity %
MAR 2020		377,620	90%		409,511	99%		305,472	90%
APR	3,367	380,987	91%	0	409,511	99%	0	305,472	90%
MAY	0	380,987	91%	(10,350)	399,161	97%	2,601	308,073	91%
JUN	5,572	386,559	93%	0	399,161	97%	31,752	339,825	100%
JUL	1,704	388,263	93%	11,420	410,581	100%	75	339,900	100%
AUG	17,850	406,113	97%	882	411,463	100%	0	339,900	100%
SEP	11,310	417,423	100%	0	411,463	100%	0	339,900	100%
OCT	0	417,423	100%	0	411,463	100%	0	339,900	100%
NOV	0	417,423	100%	0	411,463	100%	0	339,900	100%
DEC	408	417,831	100%	(47,920)	363,543	88%	(6,837)	333,063	98%
JAN 2021	(287,952)	129,879	31%	(132,308)	231,235	56%	(6,160)	326,903	96%
FEB	(67,203)	62,676	15%	(117,152)	114,083	28%	(111,532)	215,371	63%
MAR	0	62,676	15%	0	114,083	28%	0	215,371	63%
APR 2021	79,489	142,165	34%	(35,366)	78,717	19%	0	215,371	63%
MAY	84,971	227,136	54%	70,711	149,428	36%	0	215,371	63%
JUN	2,741	229,877	55%	57,000	206,428	50%	0	215,371	63%
JUL	0	229,877	55%	59,551	265,979	65%	0	215,371	63%
AUG	(31,000)	198,877	48%	61,969	327,948	80%	122,581	337,952	99%
SEP	111,975	310,852	74%	57,750	385,698	94%	0	337,952	99%
OCT	104,535	415,387	99%	25,437	411,135	100%	1,948	339,900	100%
NOV	0	415,387	99%	0	411,135	100%	0	339,900	100%
DEC	0	415,387	99%	0	411,135	100%	0	339,900	100%
JAN 2022	(190,040)	225,347	54%	(24,036)	387,099	94%	(26,917)	312,983	92%
FEB	(96,856)	128,491	31%	(70,032)	317,067	77%	0	312,983	92%
MAR	206,724	335,215	80%	(82,130)	234,937	57%	(22,123)	290,860	86%
APR 2022	0	335,215	80%	0	234,937	57%	36,675	327,535	96%
MAY	(11,693)	323,522	77%	42,040	276,977	67%	0	327,535	96%
JUN	2,786	326,308	78%	46,976	323,953	79%	0	327,535	96%
JUL	0	326,308	78%	44,974	368,927	90%	12,365	339,900	100%
AUG	0	326,308	78%	0	368,927	90%	0	339,900	100%
SEP	8,358	334,666	80%	10,127	379,054	92%	0	339,900	100%
OCT	83,171	417,837	100%	30,008	409,062	99%	0	339,900	100%
NOV	0	417,837	100%	215	409,277	99%	0	339,900	100%
DEC	(99,716)	318,121	76%	(15,103)	394,174	96%	(60,031)	279,869	82%
JAN 2023	49,768	367,889	88%	394	394,568	96%	0	279,869	82%
FEB	(184,986)	182,903	44%	285	394,853	96%	(44,326)	235,543	69%
MAR	59,954	242,857	58%	203	395,056	96%	(9,350)	226,193	67%

Table 17. Summary of Review Period Storage Activity (Dth)

	SALTVILLE 420040			SALTVILLE 420009			JEFFERSON ISLAND			TEXAS EASTERN SS-1			MONROE		
MONTH	Activity	Inventory	70,000 Capacity %	Activity	Inventory	343,500 Capacity %	Activity	Inventory	250,000 Capacity %	Activity	Inventory	180,0000 Capacity %	Activity	Inventory	350,000 Capacity %
MAR 2020		43,588	62%		262,742	76%		243,719	97%		179,748	100%		298,017	85%
APR	0	43,588	62%	(6,961)	255,781	74%	0	243,719	97%	0	179,748	100%	0	298,017	85%
MAY	10,500	54,088	77%	44,199	299,980	87%	0	243,719	97%	(342)	179,406	100%	0	298,017	85%
JUN	15,906	69,994	100%	43,477	343,457	100%	0	243,719	97%	(72)	179,334	100%	0	298,017	85%
JUL	0	69,994	100%	0	343,457	100%	0	243,719	97%	(72)	179,262	100%	0	298,017	85%
AUG	6	70,000	100%	43	343,500	100%	0	243,719	97%	(72)	179,190	100%	0	298,017	85%
SEP	0	70,000	100%	0	343,500	100%	5,910	249,629	100%	0	179,190	100%	0	298,017	85%
OCT	0	70,000	100%	0	343,500	100%	(286)	249,343	100%	(144)	179,046	99%	40,039	338,056	97%
NOV	0	70,000	100%	0	343,500	100%	0	249,343	100%	(72)	178,974	99%	0	338,056	97%
DEC	(42)	69,958	100%	(13,225)	330,275	96%	0	249,343	100%	(72)	178,902	99%	0	338,056	97%
JAN 2021	(10,557)	59,401	85%	(81,792)	248,483	72%	(16,476)	232,867	93%	(36)	178,866	99%	0	338,056	97%
FEB	(31,776)	27,625	39%	(117,278)	131,205	38%	(196,700)	36,167	14%	(36)	178,830	99%	(161,964)	176,092	50%
MAR	24,500	52,125	74%	24,500	155,705	45%	92,955	129,122	52%	(36)	178,794	99%	79,208	255,300	73%
APR 2021	0	52,125	74%	47,500	203,205	59%	2,000	131,122	52%	(36)	178,758	99%	0	255,300	73%
MAY	0	52,125	74%	35,546	238,751	70%	34,475	165,597	66%	(36)	178,722	99%	2,064	257,364	74%
JUN	0	52,125	74%	64,470	303,221	88%	70,967	236,564	95%	(36)	178,686	99%	0	257,364	74%
JUL	0	52,125	74%	28,483	331,704	97%	0	236,564	95%	(36)	178,650	99%	0	257,364	74%
AUG	0	52,125	74%	(8,125)	323,579	94%	(156,200)	80,364	32%	0	178,650	99%	0	257,364	74%
SEP	0	52,125	74%	(6,978)	316,601	92%	99,000	179,364	72%	(72)	178,578	99%	0	257,364	74%
OCT	10,500	62,625	89%	21,900	338,501	99%	70,636	250,000	100%	(36)	178,542	99%	81,487	338,851	97%
NOV	7,375	70,000	100%	(22,323)	316,178	92%	0	250,000	100%	(36)	178,506	99%	10,824	349,675	100%
DEC	0	70,000	100%	27,322	343,500	100%	0	250,000	100%	(54)	178,452	99%	0	349,675	100%
JAN 2022	(51,132)	18,868	27%	(136,060)	207,440	60%	(109,421)	140,579	56%	(54)	178,398	99%	(132,370)	217,305	62%
FEB	(8,026)	10,842	15%	(67,027)	140,413	41%	(62,232)	78,347	31%	(54)	178,344	99%	(158,820)	58,485	17%
MAR	(10,842)	-	0%	(15,241)	125,172	36%	66,987	145,334	58%	(54)	178,290	99%	(58,485)	0	0%
APR 2022	35,000	35,000	50%	159,961	285,133	83%	0	145,334	58%	(53)	178,237	99%	254,568	254,568	73%
MAY	35,000	70,000	100%	58,367	343,500	100%	0	145,334	58%	(53)	178,184	99%	90,410	344,978	99%
JUN	0	70,000	100%	(95,009)	248,491	72%	77,022	222,356	89%	(53)	178,131	99%	(3,346)	341,632	98%
JUL	0	70,000	100%	95,009	343,500	100%	(124,340)	98,016	39%	0	178,131	99%	0	341,632	98%
AUG	0	70,000	100%	(57,786)	285,714	83%	15,265	113,281	45%	0	178,131	99%	0	341,632	98%
SEP	0	70,000	100%	2,059	287,773	84%	(27,969)	85,312	34%	(159)	177,972	99%	1,273	342,905	98%
OCT	0	70,000	100%	35,077	322,850	94%	103,405	188,717	75%	(53)	177,919	99%	0	342,905	98%
NOV	0	70,000	100%	20,650	343,500	100%	23,839	212,556	85%	(53)	177,866	99%	0	342,905	98%
DEC	(8,612)	61,388	88%	(83,411)	260,089	76%	(133,888)	78,668	31%	(89)	177,777	99%	(58,420)	284,485	81%
JAN 2023	8,612	70,000	100%	83,411	343,500	100%	129,680	208,348	83%	(89)	177,688	99%	0	284,485	81%
FEB	0	70,000	100%	(1,317)	342,183	100%	15,652	224,000	90%	(89)	177,599	99%	(50,400)	234,085	67%
MAR	0	70,000	100%	894	343,077	100%	0	224,000	90%	(89)	177,510	99%	88,886	322,971	92%

4.2 Storage Planning Guidelines

Atmos has established general storage planning guidelines that identify the inventory levels the Company plans to maintain. Atmos plans to fill its storage on a ratable basis during the summer injection period (April through October) (i.e., inject the same quantity each day of the 214-day April through October summer period). During the winter storage withdrawal season (November through March), excluding ETNG LNGS service, Atmos generally plans to maintain winter withdrawal storage inventory balances as follows:

November 1	95%	February 1	40%
December 1	85%	March 1	20%
January 1	65%	April 1	5%

In the 2015 PBRM Report, Exeter noted that Atmos was applying its general winter storage inventory balance planning criteria to ETNG LNGS service. Exeter expressed a concern with applying the criteria to ETNG LNGS service because at the time, a fuel retainage charge of approximately 16% was assessed for LNGS service on all gas delivered for liquefaction. That is, 16% of the gas delivered to ETNG for liquefaction is retained by ETNG and used to operate the liquefaction facilities. This added significantly to the cost of LNGS service. Exeter recommended that Atmos limit the use of LNGS service to only those occasions when operationally necessary to meet customer requirements, rather than depleting LNGS inventory to 5% of capacity as the Company had planned under its other storage services. In its comments on Exeter's draft 2015 PBRM Report, the Company agreed to modify the way it used ETNG LNGS service and limit withdrawals to those occasions when operationally necessary rather than to deplete LNGS inventory to 5% of capacity. As shown in Table 16, the Company's use of ETNG LNGS service during the audit period was consistent with its prior agreement.

Atmos' current review period actual and planned inventory balances are summarized in Table 18. As shown, actual storage inventory balances were generally consistent with planned balances at the start of the winter storage withdrawal season on November 1, but were significantly in excess of planned balances at the conclusion of the storage withdrawal season on March 31. Actual inventory balances significantly exceed planned balances due to end-of-winter weather during the review period that was warmer than normal.

Table 18. Planned and Actual Storage Inventory

	March 31		November 1	
Year	Planned	Actual[1]	Planned	Actual[1]
2020	5%	83%	95%	97%
2021	5%	40%	95%	96%
2022	5%	50%	95%	93%
2023	5%	76%		

[1] Excludes ETNG's LNGS storage inventory balances.

Exeter's review found that Atmos' storage inventory planning criteria were generally reasonable, consistent with the criteria used by other gas distribution companies, and the Company generally adhered to those criteria. Therefore, Atmos' review period storage activity generally appears reasonable.

5. EVALUATION OF CAPACITY PORTFOLIO

Section 5.1 addresses the design day criteria Atmos utilizes for capacity planning purposes. Section 5.2 examines Atmos' design day forecasting model. The actual peak day demands experienced by Atmos during the review period are discussed in Section 5.3. Section 5.4 examines the balance between Atmos' capacity resources and its customers' requirements. Finally, potential modifications to Atmos' capacity portfolio are addressed in Section 5.5.

5.1 Design Day Criteria

Atmos secures sufficient capacity resources to meet the forecasted design day requirements of its sales customers. The Company prepares separate design day forecasts for each of the towns or areas identified in Table 19. Also identified in Table 19 is the design day heating degree day (HDD) and wind speed criteria utilized by Atmos for the 2022-2023 winter season and the measuring weather station utilized for each town or area.

Table 19. Design Day Criteria

Town/Area	Tennessee Service Territory	Weather Station	HDD	Wind Speed (mph)
Bristol	East	Tri-City Airport	68.3	13.6
Kingsport	East	Tri-City Airport	68.3	13.6
Johnson City	East	Tri-City Airport	68.3	13.6
Greenville	East	Tri-City Airport	68.3	13.6
Morristown	East	Tri-City Airport	68.3	13.6
Maryville	East	Knoxville	64.1	11.6
Shelbyville	East	Nashville	68.9	12.4
Columbia/Franklin/Marlboro	Middle	Nashville	68.9	12.4
Union City	West	Dyersburg	64.1	11.1

Prior to 2016, it was the Company's standard methodology to use the coldest temperatures since 1970 as its design day HDD criteria for each weather station. For the wind speed criteria, Atmos generally utilized the actual wind speed on the coldest day. In Exeter's 2015 PBRM Report, Exeter found Atmos' design day criteria to be somewhat conservative compared to the criteria utilized by other gas distribution companies. Exeter's 2015 PBRM Report noted that a American Gas Association (AGA) survey found that other gas distribution companies generally utilized a design day criteria with a probability of occurrence of once in 30 years or less.[6] Exeter's 2015 PBRM Report recommended that Atmos investigate selecting less conservative design day criteria.

In 2016, in response to Exeter's design day criteria recommendation in the 2015 PBRM Report, Atmos began using design day criteria with a probability of occurrence of once in 30 years to forecast the design day requirements of its sales customers. To determine the appropriate once-in-30-year criteria to utilize in its design day forecast, Atmos engaged Marquette Energy Analytics Gas Day Lab

[6] American Gas Association, LDC Supply Portfolio Management During the 2011-12 Winter Heating Season, (EA 2012-14), July 31, 2012.

(Gas Day) (formerly Marquette University Gas Day Lab). To determine the once-in-30-year criteria for each of the weather stations identified in Table 19, Gas Day fitted a probability distribution function to historical HDD adjusted for wind speed for each weather station since 1950. The temperature and wind speed criteria reflected in Gas Day's analysis is based on hourly average temperatures observed during the gas day which is 9 A.M. to 9 A.M. in the Central time zone in which Atmos is located. Atmos engaged Gas Day to determine the appropriate design day criteria for each year of the review period using weather data since 1950. Therefore, the specific design day criteria used by Atmos varied during the review period; however, those variations were not material. Exeter finds Atmos' review period design day criteria selection process to be reasonable and consistent with industry practice.

5.2 Design Day Forecast

Atmos develops a linear regression model from daily historical data to develop its design day forecasts for each of the towns or areas identified previously in Table 19. The dependent variable in the Company's models is daily firm sales sendout, and the independent variables include:

- Current-day HDD
- Current-day weather variable
- Prior-day HDD
- Prior-day sendout
- Current-day wind speed
- Day of the week
- Winter month

The current-day weather variable is calculated in the same manner as current-day HDD, but with a base temperature different than 65°F. The variable is selected iteratively as that temperature which results in the highest overall model R-squared. The net effect of this independent variable is that it allows for a bend in the temperature versus demand curve, providing for a better fit for colder temperatures in the data set and, therefore, a better model for use at design day conditions.

A separate regression model is developed to forecast prior-day sendout. The design day forecast reflects the estimate of the linear regression model plus a margin of error. The margin of error is developed using the standard error of each forecast and a 95% confidence interval. Table 20 summarizes Atmos' design day forecasts for the review period. Also identified are the total capacity resources maintained by the Company to meet forecasted design day requirements and the effective reserve margin. Table 20 includes the forecasted design day demands and capacity resources for the Virginia portion of the East Tennessee service territory. Atmos' current tariff provides that the Company may maintain a 7.5% reserve margin.

Table 20. Summary of Review Period Design Day Forecasts (Dth)			
Tennessee Service Territory	Winter Season		
	2020-2021	2021-2022	2022-2023
Design Day			
East	174,174	174,922	168,953
Middle	144,224	148,853	155,618
West	7,599	7,588	7,812
TOTAL:	325,997	331,363	332,383
Available Capacity			
East	176,644	176,644	172,444
Middle	146,500	150,500	165,000
West	8,495	8,495	8,495
TOTAL:	331,639	335,639	345,939
Reserve Margin			
East	2,470	1,722	3,491
Middle	2,276	1,647	9,382
West	896	907	683
TOTAL:	5,642	4,276	13,556
Reserve Margin – Percentage			
East	1.4%	1.0%	2.1%
Middle	1.6%	1.1%	6.0%
West	11.8%	12.0%	8.7%
TOTAL:	1.7%	1.3%	4.1%

5.3 Actual Peak Day Demands

Table 21 summarizes the natural gas requirements of Atmos' sales customers on the actual peak day observed during each winter season of the review period. Also presented is a comparison of actual peak day sales requirements and projected requirements under actual weather conditions using the Company's design day forecasting model, both exclusive and inclusive of the standard error. This provides an indication of the predictive capability of Atmos' design day forecasting model. Table 21 reveals that on the peak day experienced during the winter of 2020-2021 and the winter of 2021-2022, exclusive of the standard error, the difference between the requirements of sales customers projected by the Company's design day model based on actual weather conditions and the actual requirements of sales customers was less than 5%, which Exeter finds to be reasonable. However, for the winter of 2022-2023, the actual requirements of sales customers exceeded the requirements of sales customers projected by the Company's design day model by nearly 15%. Exeter notes that since the conclusion of the review period, Atmos claims that it has modified its design day model which has increased the forecasting accuracy of the model. Exeter recommends that the forecasting accuracy of the Company's modified design day model be evaluated during the next review period to evaluate whether further modifications to the Company's design day model are appropriate.

Table 21. Comparison of Projected and Actual Peak Day Sales Requirements											
						Excluding Standard Error (Dth)			Including Standard Error (Dth)		
Town/Area	Service Territory	Current-Day HDD	Prior-Day HDD	Current-Day Wind Speed	Actual Firm Sales Sendout (Dth)	Projected Firm Sales Sendout	Deviation	Percent	Projected Firm Sales Sendout	Deviation	Percent
2020-2021 WINTER SEASON - FEBRUARY 16, 2021											
Bristol	East	40.0	19.2	6.9	15,325	13,475	(1,850)	-12.1%	14,471	(854)	-5.6%
Kingsport	East	40.0	19.2	6.9	6,825	5,930	(895)	-13.1%	6,437	(388)	-5.7%
Johnson City	East	40.0	19.2	6.9	17,491	15,702	(1,789)	-10.2%	16,719	(772)	-4.4%
Greenville	East	40.0	19.2	6.9	5,128	4,256	(872)	-17.0%	4,704	(424)	-8.3%
Morristown	East	40.0	19.2	6.9	8,098	7,188	(910)	-11.2%	7,895	(203)	-2.5%
Maryville	East	41.8	28.7	6.5	18,662	16,374	(2,288)	-12.3%	17,290	(1,372)	-7.4%
Shelbyville	East	48.9	46.0	5.0	6,505	6,290	(215)	-3.3%	6,869	364	5.6%
Columbia/Franklin/Marlboro	Middle	48.9	46.0	5.0	105,873	105,283	(590)	-0.6%	111,369	5,496	5.2%
Union City	West	51.4	57.1	4.4	5,422	6,000	578	10.7%	6,347	925	17.1%
Total:					**189,329**	**180,498**	**(8,831)**	**-4.7%**	**192,101**	**2,772**	**1.5%**
2021-2022 WINTER SEASON - JANUARY 7, 2022											
Bristol	East	45.6	34.6	3.1	16,562	15,877	(685)	-4.1%	16,902	340	2.1%
Kingsport	East	45.6	34.6	3.1	7,031	6,934	(97)	-1.4%	7,441	410	5.8%
Johnson City	East	45.6	34.6	3.1	17,923	17,880	(43)	-0.2%	19,000	1,077	6.0%
Greenville	East	45.6	34.6	3.1	4,627	4,639	12	0.3%	5,115	488	10.5%
Morristown	East	45.6	34.6	3.1	8,721	8,414	(307)	-3.5%	9,145	424	4.9%
Maryville	East	41.0	36.6	4.8	16,768	16,344	(424)	-2.5%	17,396	628	3.7%
Shelbyville	East	44.5	44.6	4.2	5,851	6,164	313	5.4%	6,819	968	16.5%
Columbia/Franklin/Marlboro	Middle	44.5	44.6	4.2	86,567	94,241	7,674	8.9%	100,269	13,702	15.8%
Union City	West	42.0	45.7	5.2	3,672	4,484	812	22.1%	4,857	1,185	32.3%
Total:					**167,722**	**174,978**	**7,256**	**4.3%**	**186,944**	**19,222**	**11.5%**
2022-2023 WINTER SEASON - DECEMBER 23, 2022											
Bristol	East	60.2	26.7	15.6	23,330	21,078	(2,252)	-9.7%	22,138	(1,192)	-5.1%
Kingsport	East	60.2	26.7	15.6	10,093	8,837	(1,256)	-12.4%	9,339	(754)	-7.5%
Johnson City	East	60.2	26.7	15.6	26,106	24,059	(2,047)	-7.8%	25,185	(921)	-3.5%
Greenville	East	60.2	26.7	15.6	6,416	5,908	(508)	-7.9%	6,383	(33)	-0.5%
Morristown	East	60.2	26.7	15.6	11,946	10,992	(954)	-8.0%	11,712	(234)	-2.0%
Maryville	East	58.8	30.0	13.4	28,099	22,577	(5,522)	-19.7%	23,635	(4,464)	-15.9%
Shelbyville	East	59.4	38.0	8.1	7,612	7,263	(349)	-4.6%	7,877	265	3.5%
Columbia/Franklin/Marlboro	Middle	59.4	38.0	8.1	150,216	123,558	(26,658)	-17.7%	129,705	(20,511)	-13.7%
Union City	West	56.2	47.5	11.1	6,458	6,204	(254)	-3.9%	6,721	263	4.1%
Total:					**270,276**	**230,475**	**(39,801)**	**-14.7%**	**242,695**	**(27,581)**	**-10.2%**

5.4 Balance of Capacity Resources and Customer Requirements

Atmos' PBRM tariff provides that a capacity reserve margin of 7.5% or less is presumed to be reasonable. As shown previously in Table 20, the capacity resources available to meet design day demands and the forecasted design day demands for the Middle and East Tennessee service territories were in relative balance during the review period. For the West Tennessee service territory, as shown in Table 20, capacity resources exceeded forecasted design day demands during the review period by more than 7.5%. The West Tennessee service territory is served exclusively by Texas Gas. During the review period, Atmos maintained 7,495 Dth of Texas Gas capacity under Rate Schedule SGT and 1,000 Dth of Texas Gas capacity under Rate Schedule STF to meet the design day demands of sales customers in its West Tennessee service territory. No demand charges are assessed by Texas Gas under Rate Schedule SGT. Therefore, Exeter finds that maintaining a reserve margin in excess of 7.5% for the West Tennessee service territory is not a concern.[7] As shown in Table 20, even with the capacity reserve margin in the West Tennessee service territory, Atmos' total capacity reserve margin was less than 7.5% during the review period. The Company has indicated that for planning purposes, it will typically maintain a capacity reserve margin of between 0% and 5%, depending on whether the demand in a particular service territory is increasing, stable, or decreasing.

As shown in Table 20 and just explained, with the exception of the West Tennessee service territory, Atmos' design day capacity resources and requirements were in relative balance during the review period. However, the Company maintains capacity resources in excess of its requirements during all other times of the year. Atmos' total firm sales requirements during the winter of 2022-2023 were approximately 14,680,000 Dth.[8] Atmos' capacity resources for the winter of 2022-2023 totaled approximately 37,500,000 Dth.[9] Atmos' total projected firm sales requirements during the year ended March 31, 2023 were approximately 19,335,000 Dth.[10] Atmos' annual capacity resources total approximately 80,000,000 Dth.[11] The potential for Atmos to adjust its capacity resources to better match its load requirements is addressed in Section 5.5 of this Report.

5.5 Capacity Portfolio Modifications

The RFP Statement of Work for Exeter's evaluation included examination and identification of: (a) the cost of year-round firm transportation and seasonal firm transportation capacity utilized by Atmos during the review period to meet design peak day demands; (b) the potential cost of meeting peak demand with more seasonal firm transportation and less year-round firm transportation; and (c) the potential cost of meeting peak demand with more year-round firm transportation and less seasonal firm transportation. The Statement of Work also required examination of the availability of seasonal

[7] While no demand charges are assessed under Rate Schedule SGT, Texas Gas' FERC tariff provides for a Minimum Contribution to Fixed Costs (MCFC) for SGT customers by rate zone. If the MCFC for a particular zone is not met on an annual basis, SGT customers in that zone are billed for the deficiency. Thus, while Atmos' use of SGT capacity will affect its MCFC charges, use of SGT capacity by other customers also affects Atmos' MCFC charges. During the review period, Atmos was billed [redacted] in MCFC deficiency charges.

[8] Based on the response to discovery request Set No. 3, Question No. 3-10.

[9] See Table 3 in Section 2.3.

[10] Based on the response to discovery request Set No. 3, Question No. 3-10.

[11] See Table 3 in Section 2.3.

firm transportation, the term lengths offered, and the associated benefits and risks. Exeter interprets this aspect of the Statement of Work as requiring an evaluation of whether Atmos' annual interstate pipeline transportation demand charges can be reduced by modifying the Company's current capacity portfolio. Exeter also evaluated the costs associated with the various storage services purchased by Atmos.

The demand charges associated with each interstate pipeline firm transportation service contract in effect and each AMA delivered service available at the conclusion of the review period that was not exclusively utilized in conjunction with a storage service is summarized in Table 22. As shown in Table 22, these charges currently total approximately [redacted] per year. As indicated previously, Atmos maintains excess year-round firm transportation capacity. If possible, the Company could potentially reduce its pipeline demand charges by decreasing year-round capacity and placing greater reliance on winter season capacity or delivered firm supply services.

Atmos has indicated that it has discussed the availability of multi-year, winter-only capacity with representatives of each of the interstate pipelines serving the Company's Tennessee service territories. Texas Gas was the only pipeline that would make a multi-year commitment to providing winter-only firm transportation under its STF service tariff, which Atmos is currently utilizing in its West Tennessee service territory. The Company has indicated that other pipelines may offer winter-only service one winter at a time when they have capacity at the end of the summer season that they would not be able to otherwise market. However, this does not provide for the long-term reliable service Atmos requires.

A natural gas utility such as Atmos cannot ensure service reliability by deferring contracting decisions until just prior to the beginning of a winter season. TGP, Texas Eastern, and Columbia Gulf have indicated that they do not offer new multi-year, winter-only capacity. Atmos currently reserves winter-only capacity on ETNG under FT-A Contract No. 30777. However, the use of this capacity is limited to the delivery of LNGS storage withdrawals under Contract No. 33245. Currently, there is no additional winter-only capacity available on ETNG. The Company's claims concerning the unavailability of winter season arrangements are consistent with Exeter's experience.

As previously discussed in Section 3.4 of the Report, Atmos has obtained discounts from the maximum FERC-approved demand charges under a number of the Company's firm transportation contracts. Therefore, Atmos is currently charged less for capacity under a number of its firm transportation contracts than the FERC-approved maximum charges. This is equivalent to paying the FERC-approved maximum charges for less than the entire year. For example, at the conclusion of the review period, the discounts applicable under Texas Eastern Contract No. 91193 and TGP Contract No. 69218 for Zone 0 to Zone 1 capacity were nearly equivalent to paying the FERC-approved maximum rates for winter-only capacity.

The charges associated with each of Atmos' contract storage arrangements at the conclusion of the review period are summarized in Table 23. Also, where applicable and exclusively used for the delivery of gas to and/or from storage, the costs of the associated firm transportation contracts are identified.

Table 22. Summary of Annual Transportation Demand Charges at the Conclusion of the Audit Period

Pipeline/Provider – Service	Contract No.	Tennessee Territory	MDQ (Dth) Winter	MDQ (Dth) Summer	Demand Charge Winter	Demand Charge Summer	Annual Demand Charges
CITY GATE RESOURCES							

[1] Charges prior to Virginia jurisdictional allocation
[2] Daily rate converted to monthly rate

Table 23. Summary of Annual Contract Demand Storage Charges at the Conclusion of the Audit Period

			Storage Service			Transportation Service	
Pipeline/Provider - Service	Contract No.	Service Territory	Seasonal Capacity (Dth)	Annual Cost	Unit Cost ($/Dth)	Annual Cost	Unit Cost ($/Dth)
[redacted]							

[1] Service bundled with transportation service.
[2] No demand charges. Transported under Texas Gas SGT arrangement that also provides for the delivery of non-storage supplies.
[3] Delivered under ETNG FT-LNGS transportation Contract No. 30777.
[4] Charges prior to Virginia jurisdictional allocation.
[5] Transported under TGP FT-A arrangements that also provide for the delivery of non-storage supplies.
[6] Transported under Texas Eastern FT-1 Contract No. 91800 that also provides for the delivery of non-storage supplies.
[7] Delivered to the East Tennessee service territory by TGP and subsequently ETNG, and to the Middle Tennessee service territory by Texas Eastern.
[8] Transported under ETNG FT-A arrangements that also provide for the delivery of non-storage supplies.
[9] Delivered by exchange by the Asset Manager via Texas Gas, Columbia Gulf, and Texas Eastern. Costs associated with this storage service are recovered through Atmos' base rates.
[10] Delivered to the East Tennessee service territory by TGP and subsequently ETNG, and to the Middle Tennessee service territory by Columbia Gulf.

6. ASSESSMENT OF PBRM INCENTIVES AND DESIGN

Section 6 of Exeter's Report begins with a comparison of Atmos' PBRM with the gas procurement incentive mechanisms of Piedmont Natural Gas Company (Piedmont) and Chattanooga Gas Company (Chattanooga). This comparison is provided for informational purposes as well as to assist in addressing several aspects of Atmos' PBRM identified in the RFP Statement of Work. In addition to Tennessee, Exeter's experience in reviewing PBRM-type mechanisms in other jurisdictions includes the now terminated programs of Nicor Gas Company in Illinois; Vectren North, Vectren South, and Citizens Gas & Coke Utility in Indiana; and the ongoing program of Northern Indiana Public Service Company. In a number of jurisdictions in which Exeter performs gas cost procurement reviews, capacity release revenues, off-system sales margins, and AMA fees are subject to sharing with the utility. These jurisdictions include Delaware, Louisiana, Massachusetts, Ohio, and Pennsylvania. Section 6.2 examines the balance of incentives and cap under the PBRM.

6.1 Comparison of Atmos PBRM with Similar Incentive Mechanisms of Other Tennessee Natural Gas Distribution Companies

6.1.1 Atmos Performance Based Ratemaking Mechanism

Atmos' PBRM consists of a Gas Procurement Incentive Mechanism, a Capacity Management Incentive Mechanism, an Avoided Cost Incentive Mechanism, and an Off-System Sales Revenue Incentive Mechanism. The GPIM establishes a predefined benchmark index to which Atmos' actual commodity cost of gas is compared. On a monthly basis, Atmos' actual commodity cost of gas is compared to a benchmark amount. The benchmark amount is determined by multiplying actual monthly and daily purchase quantities in a month by the appropriate monthly and daily published index prices. The GPIM provides for a 75% sales customer and 25% Atmos sharing of the difference between actual and benchmark costs.

Under the CMIM, to the extent Atmos is able to release transportation or storage capacity, the associated revenues are shared by Atmos' sales customers and Atmos on a 75% / 25% basis, respectively. The CMIM also addresses the sharing of AMA fees which are shared between sales customers and Atmos on a 90% / 10% basis, respectively.

The ACIM is designed to encourage Atmos to explore ways to reduce upstream fixed and variable capacity costs associated with the transportation of gas supplies. Avoided costs can be achieved through delivered services, transportation discounts obtained from pipelines, the acquisition of discounted released capacity, variation from an existing transportation delivery path, or the acquisition of seasonal capacity that avoids year-round demand charges. ACIM savings are shared between sales customers and Atmos on an 85% / 15% basis, respectively.

The OSIM is designed to encourage the Company to generate revenue from the off-system sale of gas supplies. The net margins on off-system sales are determined based on published index prices and are shared between sales customers and the Company on a 75% / 25% basis, respectively. Atmos' total share of savings under the PBRM are capped at $2.0 million per year. Atmos' share of PBRM savings was limited by the $2.0 million cap during each year of the review period evaluated in the Report.

An Incentive Plan Account Filing (IPA Filing) is submitted by Atmos to the TPUC for each Plan Year. TPUC Staff audits each IPA Filing and presents its findings in a Compliance Audit Report (Audit Report). TPUC Staff's Audit Reports for the review period identified no material findings. Table 7, presented in Section 3.1, summarized Atmos' performance under the PBRM during the review period.

6.1.2 Piedmont Performance Incentive Plan

The incentive mechanism under which Piedmont operates is referred to as the gas cost Performance Incentive Plan (PIP). Piedmont's PIP consists of three components: (1) a commodity procurement cost component; (2) a supplier reservation fee component; and (3) a capacity management component. Under the commodity procurement cost component of the PIP, Piedmont's actual total monthly city gate (delivered) commodity cost of gas is compared to a monthly benchmark cost. The actual total city gate commodity cost of gas includes the amount paid for gas supply commodity purchases, plus the applicable pipeline fuel and variable transportation charges associated with delivering gas from the purchase (receipt) point to Piedmont's system. The commodity procurement cost component provides for a 75% ratepayer and 25% Piedmont sharing of the difference between actual and benchmark costs.

Under the commodity procurement cost component of the PIP, separate benchmarking procedures are used for first-of-the-month (FOM) and daily purchases. FOM benchmark costs are based on a price that reflects published index prices weighted by the amount of interstate pipeline receipt point capacity Piedmont reserves at each of its purchase locations. For example, if 60% of Piedmont's interstate pipeline capacity portfolio consisted of TGP capacity and the remaining 40% was Columbia Gulf capacity, Piedmont's FOM benchmark costs would be based on a 60% / 40% weighting of TGP and Columbia Gulf published FOM index prices, respectively. Daily spot market purchases are benchmarked against actual daily published index prices at the purchase location, similar to the approach used for Atmos' daily spot market purchases. City gate purchases are benchmarked in the same manner as daily spot market purchases, with the exception that the maximum interruptible pipeline transportation charges are included in the benchmark rather than only including variable firm transportation charges. During Exeter's most recent completed review of Piedmont's PIP, which encompassed the period July 1, 2020 through June 30, 2023, all of the rewards realized by Piedmont under the commodity procurement cost component were generated by FOM and city gate purchases.

Under the supplier reservation fee component of the PIP, Piedmont is entitled to recover 100% of its gas supply reservation fees with no gain or loss potential. Piedmont operated under AMAs during the period most recently reviewed by Exeter, and the supplier reservation fees incurred by Piedmont were *de minimis*.

The capacity management component of Piedmont's PIP provides that the revenues (margins) realized from capacity release and off-system sales activities, as well as AMA fees, be subject to the same 75% ratepayer and 25% Piedmont sharing procedures as commodity procurement cost component savings/losses. Piedmont's PIP includes a $1.6 million sharing cap. During the three-year period most recently reviewed by Exeter, the $1.6 million sharing cap limited Piedmont's reward under the PIP in one year by a relatively insignificant amount.

6.1.3 Chattanooga Performance Based Ratemaking Mechanism

The gas cost incentive plan under which Chattanooga operates is also referred to as the Performance Based Ratemaking Mechanism. Chattanooga also operates under a separate Interruptible Margin Credit Rider (IMCR) that addresses the sharing of revenues (margins) generated from capacity release and off-system sales activities, as well as AMA fees.

Under Chattanooga's PBRM, each month, Chattanooga's actual commodity cost of gas is compared to a monthly benchmark amount. For FOM and daily purchases, the benchmark amount is based on the applicable published index price for the location at which the gas was purchased. For city gate purchases, Chattanooga's PBRM provides for the inclusion of the avoided transportation charges that would have been paid if upstream capacity were purchased versus the demand charges paid to the supplier.[12] If Chattanooga's total actual commodity gas costs for a plan year do not exceed the total benchmark amount by 1%, Chattanooga's gas costs are deemed prudent and the audit required by TPUC Administrative Rule 1220-4-7-.05 is waived. If, during any month of a plan year, Chattanooga's commodity gas costs exceed the benchmark amount by greater than 2%, Chattanooga is required to file a report with the TPUC fully explaining why costs exceeded the benchmark. There is no sharing of any savings or losses under Chattanooga' PBRM. Exeter's most recent review of Chattanooga's PBRM encompassed the period April 1, 2019 through March 31, 2022. For this review period, Chattanooga's actual gas costs were less than benchmark costs and did not exceed 1% during any plan year.

Chattanooga's IMCR provides for a 50% ratepayer, 50% company sharing of the revenues (margins) generated from capacity release and off-system sales activities, as well as AMA fees. There is no cap on the amounts eligible for sharing under the IMCR.

6.2 Atmos PBRM Balance of Incentives and PBRM Cap

6.2.1 Gas Procurement Incentive Mechanism

The GPIM provided for a 75% sales customer and 25% Atmos sharing of the difference between actual and benchmark costs. Under the PBRM that existed prior to the existing PBRM which was approved in Docket No. 16-00028, the GPIM provided for a 50% sales customer and 50% Atmos sharing. In its 2015 PBRM Report issued in August 2015 for the review period April 1, 2011 through March 31, 2014, Exeter found that the 50% / 50% sharing of the difference between actual and benchmark costs provided a reasonable balance of incentives and was consistent with the sharing procedures adopted in other jurisdictions. However, as initially explained in Section 2.2, Atmos was able to generate savings under the GPIM as a result of the commodity index price discounts provided under the review period AMAs (see Table 4 in Section 2.3). Typically, AMAs provide for the payment of a fee by the Asset Manager rather than commodity index price discounts. The fees paid by an Asset Manager are subject to a 90% sales customer and 10% Atmos sharing under the CMIM component of the PBRM.

[12] Chattanooga has interpreted upstream transportation charges to include variable charges, while Atmos has interpreted this provision to include demand charges. Inclusion of avoided demand charges in Chattanooga's PBRM calculation would not have changed Chattanooga's PBRM results.

Exeter finds that the review period AMAs which provided for commodity index price discounts rather than the payment of a fee by the Asset Manager may have circumvented the intent of the sharing provisions included in the PBRM approved in Docket No. 16-00028. However, it is not Exeter's position that Atmos structured its review period AMAs to circumvent the intent of the PBRM sharing provisions. The RFPs issued by Atmos for AMA services provided potential bidders the opportunity to offer commodity price discounts, a fixed fee, or a combination of the two, and Atmos selected the AMAs providing the greatest benefit to its customers. Exeter recognizes that the AMA that was in effect during the period April 1, 2016 through March 31, 2019, went into effect prior to the PBRM approved in Docket No. 16-0028. Exeter is uncertain as to whether TRA Staff and CAD, which were parties to Docket No. 16-00028 and the settlement in that docket, were aware that the AMA in place at the time included the commodity index price discounts rather than an AMA fee. Absent the savings resulting from the commodity index price discounts, Exeter finds the 75% / 25% sharing provisions under the GPIM provide less of an incentive compared to similar incentive mechanisms in other jurisdictions. If the commodity index price discounts were shared on the same 90% / 10% basis as AMA fees, Atmos' share of PBRM review period savings would have been reduced by approximately [redacted]

6.2.2 Capacity Management Incentive Mechanism

Capacity release revenues are shared by sales customers and Atmos on a 75% / 25% basis, respectively. AMA fees are shared on a 90% / 10% basis, respectively. Exeter's 2015 and 2022 PBRM Reports found that the CMIM capacity release and AMA fee sharing percentages reasonable and consistent with the sharing percentages adopted in other jurisdictions. That finding remains unchanged in this report.

6.2.3 Avoided Cost Incentive Mechanism

ACIM savings are shared between sales customers and Atmos on an 85% / 15% basis, respectively. ACIM savings accounted for nearly 70% of total review period PBRM savings, and approximately 40% of the ACIM savings were associated with discounts from the FERC-approved maximum demand charges under Atmos' interstate pipeline firm transportation contracts. Demand charge discounts were not included in the PBRM reviewed by Exeter in its 2015 PBRM Report. Demand charge savings associated with delivered supplies were included in the PBRM reviewed in Exeter's 2015 PBRM Report, and are also included in the current PBRM.

Exeter has not encountered a gas cost incentive mechanism in another jurisdiction that provided for a sharing of savings associated with demand change discounts. It is Exeter's experience that gas utilities actively pursue demand charge discounts without an incentive providing for the sharing of savings. The incentive programs of Piedmont and Chattanooga do not provide for a sharing of demand charge discount savings. Exeter previously conducted a review of the gas purchasing practices of another gas utility that was able to obtain demand charge discounts on an interstate pipeline that were identical to the discounts obtained by Atmos. The incentive program under which the other utility operated did not provide for the sharing of demand charge discounts. Interstate pipelines must offer demand charge discounts on a non-discriminatory basis.

An ongoing daily level of effort is not required to realize demand charge discount savings under contracts with multi-year terms. With respect to achieving a balance of incentives between ratepayers and the Company for discounted demand charges, an alternative sharing approach may be appropriate.

Currently under the ACIM, if Atmos replaces a current Benchmark Path transportation arrangement with a lower-cost arrangement, the Company is entitled to share these savings for a one-year period. Exeter believes similar sharing provisions for discounted demand charge savings would provide a more reasonable balance of incentives between Atmos and its ratepayers.

6.2.4 Off-System Sales Revenue Incentive Mechanism

Under the OSIM, net margins from off-system sales are shared between customers and the Company on a 75% / 25% basis, respectively. During the review period, Atmos operated under AMAs which provided for the assignment of all of its interstate pipeline capacity to an Asset Manager and, therefore, Atmos did not maintain pipeline capacity to engage in off-system sales activities. Nevertheless, consistent with findings in the 2015 PBRM Report, Exeter finds the current OSIM sharing percentages reasonable and consistent with those approved in other jurisdictions.

6.2.5 Performance Based Ratemaking Mechanism Cap

The current PBRM provides for a $2.0 million annual cap on Atmos' share of savings. During each year of the review period, Atmos' share of PBRM savings was limited by approximately 10% due to the $2.0 million cap. Exeter's review did not find that $2.0 million cap reduced Atmos' incentive or efforts to realize rewards under the PBRM, nor did it identify cost-savings opportunities that were not pursued by Atmos. In addition, as discussed above, the AMA commodity rate discounts and associated savings realized by Atmos during the review period may have been inconsistent with the intent of the 2016 Settlement in Docket No. 16-00028, and the demand charge discount savings would have likely been realized by Atmos even if they were not included in the ACIM. For these reasons, Exeter recommends that the $2.0 million cap be maintained.

7. FINDINGS OF FACT, SUMMARY OF CONCLUSIONS, AND RECOMMENDATIONS

7.1 Findings of Fact

Exeter's review period findings of fact are as follows:

- Atmos purchased firm transportation and storage services from Texas Gas Transmission, Columbia Gulf Transmission, Texas Eastern Transmission, Eastern Gas Transmission and Storage, Tennessee Gas Pipeline, Southern Natural Gas Company, East Tennessee Natural Gas, Saltville Storage Company, Monroe Gas Storage Company, and Jefferson Island Storage & Hub Company during the review period.
- Atmos operated under two Asset Management Agreements during the review period that were selected through an RFP process.
- Atmos served an average of 156,440 sales and transportation customers during the review period, and annual throughput averaged nearly 27,300,000 Dth.
- PBRM savings during the review period totaled $36.1 million, and Atmos' share of PBRM savings was $6.0 million.
- Atmos assigned all of its interstate pipeline capacity to its Asset Managers during the review period and did not engage in off-system sales activity.
- Atmos did not engage in financial hedging activities to mitigate the volatility of its gas costs during the review period.

7.2 Summary of Conclusions

Exeter's investigation of Atmos' review period gas procurement activity under the PBRM has reached the following conclusions:

- Exeter's review found the published index prices utilized to price gas supplies purchased under Atmos' review period AMAs and the published index prices used in the calculation of the benchmarks under the PBRM to be reasonable and appropriate.
- Exeter's review found that the PBRM savings identified by Atmos for the review period were determined consistent with the provisions of the Company's PBRM tariff, with two minor exceptions. First, Atmos incorrectly calculated GPIM savings for the months of October 2021 and October 2022. In addition, the Company did not revise its ACIM revenue calculation for the months of February and March 2022 to reflect the revised Texas Eastern demand charges approved by FERC in Docket No. RP21-1188. Neither exception would have modified Atmos' share of savings under the PBRM during the review period because of

the $2 million cap on Atmos' share of the savings and, therefore, there were no adverse impacts on Atmos' customers associated with the two exceptions.

- The exclusion of Columbia Gulf cashout purchases from the GPIM is reasonable since they are largely attributable to factors beyond the Company's control.

- Atmos' gas supply commodity purchases during the review period were consistent with least-cost procurement standards.

- Exeter finds Atmos' review period design day criteria selection process to be reasonable and consistent with industry standards.

- Exeter finds that Atmos' review period AMAs, which provided for commodity index price discounts rather than the payment of a fee by the Asset Manager, may have circumvented the intent of the sharing provisions included in the PBRM approved in Docket No. 16-00028. However, it is not Exeter's position that Atmos structured its review period AMAs to circumvent the intent of the PBRM sharing provisions. The RFPs issued by Atmos for AMA services provided potential bidders the opportunity to offer commodity price discounts, a fixed fee, or a combination of the two, and Atmos selected the AMAs providing the greatest benefit to its customers. Exeter recognizes that the AMA that was in effect during the period April 1, 2016 through March 31, 2019, went into effect prior to the PBRM approved in Docket No. 16-00028. Exeter is uncertain as to whether TRA Staff and CAD, which were parties to Docket No. 16-00028 and the settlement in that docket, were aware that the AMA in place at the time included the commodity index price discounts rather than an AMA fee. Excluding the savings resulting from the commodity index price discounts, Exeter finds the 75% / 25% sharing provisions under the GPIM provide less of an incentive than similar incentive mechanisms in other jurisdictions. If the review period commodity index price discounts were shared on the same 90% / 10% basis as AMA fees, Atmos' share of PBRM review period savings would have been reduced by approximately [redacted]

- On the peak day experienced during the winter of 2020-2021 and the winter of 2021-2022, exclusive of the standard error, the difference between the requirements of sales customers projected by the Company's design day model based on actual weather conditions and the actual requirements of sales customers was less than 5%, which Exeter finds to be reasonable. However, for the winter of 2022-2023, the actual requirements of sales customers exceeded the requirements of sales customers projected by the Company's design day model by nearly 15%. Exeter notes that since the conclusion of the review period, Atmos claims that it has modified its design day model which has increased the forecasting accuracy of the model. Exeter recommends that the forecasting accuracy of the Company's modified design day model be evaluated during the next review period to assess whether further modifications to the Company's design day model are appropriate.

- Atmos' design day capacity resources and requirements are in relative balance. Atmos maintains capacity resources in excess of its requirements during all other times of the year.

- Although a portion of Atmos' capacity portfolio currently consists of delivered supply services, Atmos could reduce its interstate demand charges by decreasing year-round pipeline capacity and placing greater reliance on firm delivered supply services or winter seasonal capacity; however, winter seasonal capacity alternatives to year-round capacity arrangements are not currently available. It should be recognized that Atmos has obtained discounts from the maximum FERC-approved demand charges under a number of the Company's firm transportation contracts. Therefore, Atmos is currently charged less for capacity under a number of its firm transportation contracts than the FERC-approved maximum charges. This is equivalent to paying the FERC-approved maximum charges for less than the entire year. For example, at the conclusion of the review period, the discounts applicable under Texas Eastern Contract No. 91193 and TGP Contract No. 69218 for Zone 0 to Zone 1 capacity were nearly equivalent to paying the FERC-approved maximum rates for winter-only capacity.

- Exeter finds the current Off-System Sales Revenue Incentive Mechanism sharing percentages to be reasonable and consistent with those approved in other jurisdictions.

- Exeter's review found that Atmos' storage inventory planning criteria were generally reasonable, consistent with the criteria used by other gas distribution companies, and the Company generally adhered to those criteria. Therefore, Atmos' review period storage activity generally appears reasonable.

7.3 Recommendations

Exeter's recommendations concerning Atmos' PBRM are as follows:

- Avoided Cost Incentive Mechanism savings are shared between sales customers and Atmos on an 85% / 15% basis, respectively. ACIM savings accounted for nearly 70% of total review period PBRM savings, and approximately 40% of the ACIM savings were associated with discounts from the FERC-approved maximum demand charges under Atmos' interstate pipeline firm transportation contracts. Exeter has not encountered a gas cost incentive mechanism in another jurisdiction that provided for a sharing of savings associated with demand charge discounts. It is Exeter's experience that gas utilities actively pursue demand charge discounts without an incentive providing for the sharing of savings. The incentive programs of Piedmont and Chattanooga do not provide for a sharing of demand charge discount savings. Exeter previously conducted a review of the gas purchasing practices of another gas utility that was able to obtain demand charge discounts on an interstate pipeline that were similar to the discounts obtained by Atmos. The incentive program under which the other gas utility operated did not provide for the

sharing of demand charge discounts. Interstate pipelines must offer demand charge discounts on a non-discriminatory basis. An ongoing daily level of effort is not required to realize demand charge discount savings under contracts with multi-year terms. With respect to achieving a balance of incentives between ratepayers and the Company for discounted demand charges, an alternative sharing approach may be appropriate. Currently under the ACIM, if Atmos replaces a current Benchmark Path transportation arrangement with a lower-cost arrangement, Atmos is entitled to share these savings for a one-year period. Exeter believes similar sharing provisions for discounted demand charge savings would provide a more reasonable balance of incentives between Atmos and its ratepayers.

- The current PBRM provides for a $2.0 million annual cap on Atmos' share of savings. During each year of the review period, Atmos' share of PBRM savings was limited by approximately 10% due to the $2.0 million cap. Exeter's review did not find that the $2.0 million cap reduced Atmos' incentive or efforts to realize rewards under the PBRM, nor did it identify cost-savings opportunities that were not pursued by Atmos. In addition, as discussed above, the AMA commodity rate discounts and associated savings realized by Atmos during the review period may have been inconsistent with the intent of the 2016 Settlement in Docket No. 16-00028, and the interstate pipeline demand charge discount savings would have likely been realized by Atmos even if they were not included in the PBRM. For these reasons, Exeter recommends that the $2.0 million cap be maintained.

APPENDIX A – RFP Statement of Work

Statement of Work for Review of Atmos Energy Corporation's Performance Based Ratemaking Mechanism Rider

The settling parties to Tennessee Public Utility Commission ("TPUC") Docket No. 16-00028 ("Settling Parties") provide the following Statement of Work relative to their Request for Proposals ("RFP") for independent consultant assistance in reviewing and analyzing the operations and results of the Atmos Energy Corporation ("Atmos") Performance Based Ratemaking Mechanism Rider ("PBRM") for the period April 1, 2020 through March 31, 2023 ("Review Period"). The RFP and this Statement of Work is being provided to designated consultants determined to be qualified to provide the requested assistance in order to allow such consultants to prepare and submit bids to provide the requested services. The review process provided for hereunder is the result of a settlement in TRA Docket No. 16-00028 between the TPUC Audit Staff ("Staff'), Atmos, and the Consumer Advocate Division of the Tennessee Attorney General ("CAD"), providing for the periodic review of activities related to Atmos' PBRM as set forth in Atmos' Tariff Sheet Nos. 45.7-45.8.

Consultant's bid should anticipate provision of the following services:

1. Review and analysis of the transactions and activities undertaken by Atmos during the Review Period under the PBRM including, but not limited to, the following areas of transactions and activities: (a) natural gas procurement; (b) capacity management; (c) storage; (d) hedging; (e) reserve margins; and (f) off-system sales.

2. Identification of Atmos' city gates serving its Tennessee service area consisting of the points and measuring stations at which Atmos receives natural gas from each respective pipeline transmission company and identification of the meters measuring the amount of gas flowing into Atmos' Tennessee systems from those pipeline transmission companies.

3. Review and examination of the levels of peak and non-peak, as well as design day and non-design day, firm capacity under Atmos' pipeline transmission company contracts and assessment as to whether such capacity levels are reasonably appropriate in light of both actual and projected demand requirements.

4. Review, identification, and comparison of the transportation costs charged to Atmos' Tennessee customers with the costs charged to Atmos under its pipeline transmission company contracts.

5. Examination and identification of: (a) the manner in which Atmos forecasts its design day demand; (b) Atmos' forecast of peak demand for its Tennessee service area for the Review Period; and (c) actual peak demand for its Tennessee service area for the Review Period as metered at Atmos' city gates.

6. Examination and identification of the various transportation commodity costs charged under each pipeline transmission company service contracted for by Atmos during the Review

Period and the relationship between such tariff transportation commodity costs and the transportation commodity costs billed to Atmos' Tennessee ratepayers.

7. Examination and identification of: (a) the cost of year-round firm transportation and seasonal firm transportation utilized by Atmos during the Review Period to meet peak demand; (b) the potential cost of meeting peak demand with more seasonal firm transportation and less year-round firm transportation; and (c) the potential cost of meeting peak demand with more year-round firm transportation and less seasonal firm transportation. Also examine the availability of seasonal firm transportation, the term lengths offered, and the associated benefits and risks.

8. Review of the published indexes used in the calculation of the benchmarks in Atmos' PBRM.

9. The appropriateness and calculation of any adjustments made for avoided transportation costs for city gate purchases (if any) versus the demand charges actually paid to suppliers.

10. Evaluation of the balance of incentives between consumers and Atmos under the PBRM.

11. Preparation and submission of a written report regarding the foregoing activities and conclusions, which shall include findings of fact, and which shall also identify and describe areas of concern and improvement, if any, that in the consultant's opinion warrant further consideration. The consultant shall not, however, propose changes to the structure of the PBRM itself either in its report or otherwise. The consultant's report shall be provided to Staff, the CAD, and Atmos no later than June 1, 2025.

In conducting the foregoing activities, Atmos shall make available records and materials appropriate and necessary for consultant's work hereunder. Staff and/or CAD may also provide relevant materials to consultant, provided that such materials are simultaneously provided to Atmos.

Consultant shall be required to treat its work hereunder and all materials and information disclosed to it in conjunction with such work as confidential in nature.

APPENDIX B – Atmos Energy Corporation – Performance Based Ratemaking Mechanism Rider Tariff

PERFORMANCE BASED RATEMAKING MECHANISM RIDER

Applicability

The Performance-Based Ratemaking Mechanism (the PBRM) replaces the reasonableness or prudence review of the Company's gas purchasing activities overseen by the Tennessee Public Utility Commission (the Commission) in accordance with Rule 1220-4-7-.05, Audit of Prudence of Gas Purchases. This PBRM is designed to encourage the utility to optimize its gas purchasing activities consistent with efficient operations and service reliability, and will provide for sharing of benefits or costs between the Company and the Company's customers. Each plan year will begin April 1. The annual provisions and filings herein will apply to this annual period. The PBRM will continue until it is either (a) terminated at the end a plan year by not less than 90 days' notice by the Company to the Commission or (b) modified, amended or terminated by the Commission. T T

Overview of Structure

The Performance-Based Ratemaking Mechanism consists of four parts;

A. Gas Procurement Incentive Mechanism
B. Capacity Management Incentive Mechanism
C. Avoided Cost Incentive Mechanism
D. Off System Sales Revenue Incentive Mechanism

Gas Procurement Incentive Mechanism

The Gas Procurement Incentive Mechanism (the GPIM) establishes a predefined benchmark index to which the Company's commodity cost of gas is compared. For commodity costs, on a monthly basis, the Company will compare its commodity cost of gas to the appropriate benchmark amount. The benchmark amount will be computed by multiplying actual purchase quantities for the month, including quantities purchased for injection into storage, by the appropriate price index. For monthly baseload purchases, the price index will be the appropriate *Inside FERC Gas Market Report* first of the month price for that particular month. For incremental swing purchases, the published *Platts's Gas Daily daily mid-point price* for the business day of gas flow will be used as the index. The net incentive benefits or costs from the GPIM will be shared between the Company's customers and the Company on a 75%/25%basis.

Capacity Management Incentive Mechanism

The Capacity Management Incentive Mechanism (the CMIM) is designed to encourage the Company to market off-peak unutilized transportation and storage capacity on upstream pipelines in the secondary market. It includes all credits the Company receives through its transportation invoice from the release of portions of its transportation contracts via pipelines' electronic bulletin boards/customer activity websites. Net incentive benefits or costs from capacity release will be shared between the Company's customers and the Company on a 75%/25% basis. It also addresses the sharing of asset management fees paid by asset managers, and other forms of compensation received by the Company for the release and/or utilization of the company's transportation and storage assets by third-parties. The net incentive benefits from asset management fees will be shared between the Company's customers and the Company on a 90% /10%basis.

Avoided Cost Incentive Mechanism

The Avoided Cost Incentive Mechanism (the ACIM) is designed to encourage the Company to explore ways to reduce upstream fixed and variable capacity costs associated with the transportation of gas commodity. Avoided cost can be accomplished through delivered service, transportation discounts obtained directly with the pipeline, indirectly through the acquisition of discounted released capacity, through variation from the Benchmark Path, or through the acquisition of seasonal capacity that avoids year round demand charges. Avoided Cost equals, on an annual basis, Total Benchmark Transportation Cost less Total Actual Transportation Cost. Total Benchmark Transportation Cost equals the total demand and variable transportation costs to purchase transportation services for the Company's peak day requirement plus reserve margin at tariff max rates using the Benchmark Path. The initial Benchmark Path is the path followed by Atmos Energy's current contracts and is set-forth in the Settlement Agreement in Docket No. 16- 00028. If Atmos Energy changes the path or capacity on any of the contracts that form the Benchmark Path, then one year from the effective date of the change the path and capacity from the new contract will become part of the Benchmark Path. During that one year period, savings will be determined by comparing the actual transportation cost of the new contract with the cost using the path for the old contract (priced at published FERC tariff max rates for the old contract's path); provided, however, that if the total capacity of the new contract exceeds that of the old contract, then the old contract's path will be used for comparison only up to the capacity of the old contract, and above that the new contract's path will be used for comparison. Following that one year period, savings on the new contract will be determined by comparing the actual transportation cost for the new contract against the cost for the new contract's path and capacity priced at published FERC tariff max rates. The capacity amounts in the Benchmark Path may be adjusted by the Company to account for any change in the Company's peak day requirement plus reserve margin, with such changes to be filed no later than 60 days after such adjustment. Resulting changes to the Benchmark Path shall become effective coincident with the effective date of the incremental transportation agreement; and the actual path and capacity of the incremental transportation agreement will become part of the Benchmark Path. Total Actual Transportation Cost equals the Company's actual annual total demand and variable transportation costs. For avoidance of doubt, whenever savings are calculated under the ACIM, the benchmark price used for comparison will always be the published FERC tariff max rate. Net savings under this mechanism shall be shared between the Company's customers and the Company on an 85%/15% basis.

Off-system Sales Revenue Incentive Mechanism

The Off-system Sales Revenue Incentive Mechanism (the OSIM) is designed to encourage the Company to generate revenue from off-system sales of excess natural gas commodity. Off-system sales occur after the gas requirements of Atmos' sales customers have been met and include direct sales of gas to third parties who are not subject to gas cost adjustment under the Purchased Gas Adjustment Clause in the Company's tariff. Net Margin on such off-system sales will be defined as the difference between the sales proceeds and the total variable costs incurred by the Company in connection with the transaction, including transportation and gas costs, taxes, fuel or other costs. For this calculation, in computing gas costs the Company will impute such costs for its related supply purchases at the benchmark first-of-the-month or daily index, as appropriate, on the pipeline and in the zone in which the sale takes place. Net Margin will be shared between the Company's customers and the Company on a 75%/25% basis.

Affiliate Transactions

The following guidelines present the minimum conditions deemed necessary to ensure that affiliate transactions between the Company and its affiliate(s) do not result in a competitive advantage over others providing similar services. These guidelines will remain in effect as long as the Company is operating under a performance based ratemaking plan. These guidelines may fail to anticipate certain specific methods by which such advantages may be conferred by the Company on its marketing affiliates. All Parties should be aware that to the extent such instances arise in the future, they will be judged according to this stated intent.

Definitions:

Terms used in these guidelines have the following meanings:

1. Affiliate, when used in reference to any person in this standard, means another person who controls, is controlled by, or is under common control with, the first person.

2. Control (including the terms "controlling", "controlled by", and "under common control with"), as used in this standard, includes, but is not limited to, the possession, directly or indirectly and whether acting alone or in conjunction with others, of the authority to direct or cause the direction of the management or policies of a company. Under all circumstances, beneficial ownership of more than ten percent (10%) of voting securities or partnership interest of an entity shall be deemed to confer control for purposes of these guidelines of conduct.

3. Marketing, as used in this standard, means selling or brokering natural gas to any person or entity, including the Company, by a seller that is not a local distribution company.

Standards of Conduct:

The Company must conduct its business to conform to the following standards:

1. If there is discretion in the application of tariff provisions, then the Company must apply such provisions relating to any service being offered in a consistent manner to all similarly situated entities.

2. The Company must strictly enforce a tariff provision for which there is no discretion in the application of the provision.

3. The Company must process all similar requests for services in the same manner and within the same period of time.

4. The Company may not give its marketing affiliate preference over nonaffiliated companies in natural gas supply procurement activities.

5. The Company may not give its marketing affiliate preference over nonaffiliated companies in its upstream capacity release activities.

6. The Company may not disclose to its marketing affiliate any information that the local distribution company receives from a non-affiliated marketer, unless the prior written consent of the parties to which the information relates has been voluntarily given.

7. To the extent the Company provides information related to its natural gas supply activities and upstream capacity release activities, it must do so contemporaneously to all nonaffiliated marketers that have submitted a written request for such information to the Company.

8. To the extent the Company provides information related to natural gas services being offered to a marketing affiliate, it must do so contemporaneously to all non-affiliated marketers that have submitted a written request for such information to the Company.

9. In transactions that involve either the purchase or receipt of information, assets, goods or services by the Company from an affiliated entity, the Company shall document both the fair market price of such information, assets, goods, and services and the fully distributed cost to the Company to produce the information, assets, goods or services for itself.

10. When the Company purchases information, assets, goods or services from an affiliated entity, the Company shall either obtain competitive bids for such information, assets, goods or services or demonstrate why competitive bids were neither necessary nor appropriate.

11. To the maximum extent practicable, the Company's operating employees and the5 operating employees of its marketing affiliate must function independently of each other. For the purposes of these guidelines, operating employees are those who are in any way involved in identifying and contracting with customers, locating gas supplies, making any and all arrangements with intervening pipelines and in any way managing or facilitating those contracted services.

12. The Company must maintain its books of accounts and records separately from those of its affiliate.

13. If the Company offers a discount to an affiliated marketer, it must make a comparable offer contemporaneously available to all similarly situated non-affiliated marketers.

14. The Company may not condition or tie its agreement to release its dedicated, stored, inventoried or optioned gas or supply contracts or upstream transportation and storage contracts to an agreement with a producer, customer, end-user or shipper relating to any service by its marketing affiliate, any services offered by the Company on behalf of its marketing affiliate, or any services in which its marketing affiliate is involved.

15. Prearranged, non-posted, capacity release transactions may not be entered into with any affiliate of the Company in any two consecutive thirty-day periods.

16. The Company must maintain a written log of tariff provision waivers which it grants. It must provide the log to any person requesting it within 24 hours of request. Any waivers must be granted in the same manner to the same or similar situated persons.

17. The Company shall maintain sufficiently detailed records that compliance with these guidelines can be verified at any time.

Complaints:

Any party may file a complaint relating to violations of these guidelines.

1. Any customer, marketer, or other interested third-party may file a complaint with the Authority relating to alleged violations of the affiliate standards set forth in these guidelines. At or before the time of filing, the complainant shall serve a copy of the complaint on the Company.

2. Within 10 business days of service of the complaint upon the Company, the Company shall file a written response to the complaint with the Authority with a simultaneous copy provide to the Consumer Advocate.

3. The Commission may hold hearings on any complaint filed or may take such other action (as it may deem appropriate), including requesting further information from the parties or dismissing the complaint. The Consumer Advocate may participate in these hearings should it so elect. T

4. After notice and opportunity for a hearing, should the Commission find that the Company has violated the standards contained in these guidelines, the Commission may impose any penalty or remedy provided for by law. T

Reserve Margin

The Company may maintain a reserve of natural gas in excess of its projected peak day requirement and recover the cost of the reserve from their customers through the purchased gas adjustment (PGA). The projected peak day requirement shall be based upon a 1-in-30 weather condition (the coldest temperature expected in any 30-year period). All firm peak day capacity contracted for by the Company shall be considered as gas available to meet peak day demand. "Contract demand" shall be the amount of firm peak day capacity the Company is entitled to on a daily basis, pursuant to contract. The maximum peak day firm demand of the projected heating season shall form the base period demand to establish the Company's maximum peak day firm demand. A reserve margin of 7.5% or less in excess of the base period firm demand adjusted for specific gain or loss of customers and/or throughput on a specific case by case basis will be presumed reasonable.

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All capacity available to meet the peak day demand in excess of an amount needed to meet the base period peak day demand plus a 7.5% reserve margin must be shown by the Company to be necessary to meet its customers' requirements before it can be included in the PGA. All capacity available to meet demand less than an amount of base period demand plus a 7.5% reserve margin is presumed to be reasonable unless a factual showing to the contrary is made.

Determination of Shared Savings

Each month during the term of the PBRM, the Company will compute any savings or costs in accordance with the PBRM. If the Company earns any savings, a separate below the line Incentive Plan Account (IPA) will be debited with such savings. If the Company incurs any costs, that same IPA will be credited with such costs.

Interest shall be computed on balances in the IPA using the same interest rate and methods as used in the Company's Actual Cost Adjustment (ACA) account. The offsetting entries to IPA savings or costs will be recorded to income or expense, as appropriate.

Savings or costs accruing to the Company under the PBRM will form the basis for a rate increment or decrement to be filed and placed into effect separate from any other rate adjustments to recover or refund such amount over a prospective twelve-month period. Total annual (April 1 through March 31) savings shall be capped at $2 million. For the avoidance of doubt, such net savings or costs shall not be included as revenue or costs in connection with, or otherwise impact the operations of, the Company's Annual Review Mechanism Tariff; provided, however, that this provision shall not limit consideration of any issue in the Company's next (or any subsequent) general rate case proceeding.

Each year, effective July 1, the rates for all sales customers will be increased or decreased by a separate rate increment or decrement designed to amortize the collection or refund of the March 31 IPA balance over the succeeding twelve month period. The rate increment or decrement will be established by dividing the March 31 IPA balance by the appropriate sales billing determinants for the twelve months ended March 31. During the twelve-month amortization period, the amount collected or refunded each month will be computed by multiplying the sales billing determinants for such month by the rate increment or decrement, as applicable. The product will be credited or debited to the IPA, as appropriate. The balance in the IPA will be tracked as a separate collection mechanism. Each July 1 the unamortized amount of the previous year's IPA balance will be trued-up in the new rate increment or decrement.

Filing with the Commission T

The Company will file calculations of shared savings and shared costs quarterly with the Commission and a simultaneous copy to the Consumer Advocate not later than 60 days after the end of the quarter and will file an annual report not later than May 31. The Company will file calculations annually to verify the reasonableness of its reserve margin. T

Review Process

A comprehensive review of the transactions and activities covered by this PBR Tariff shall be conducted by an outside independent consultant. The next such review shall begin in September 2021, with the consultant's final report to be completed by July 1, 2022. Subsequent reviews shall be completed every 3 years thereafter unless otherwise ordered by the TPUC. T

The consultant shall be selected as follows. The TPUC Staff, the Consumer Advocate, and Atmos shall make an effort to maintain a list of no less than 5 mutually agreeable independent consultants or consulting firms qualified to conduct the aforementioned initial review. Any dispute concerning whether an independent consultant shall be added to the list shall be resolved by the TPUC Staff, after consultation with Atmos and the Consumer Advocate. For the review, the TPUC Staff shall select 3 prospective independent consultants from that list. Each such consultant shall possess the experience and expertise necessary to conduct the initial review. The TPUC Staff shall provide the list of prospective independent consultants to Atmos and the Consumer Advocate via electronic mail. Atmos and the Consumer Advocate shall each have the right, but not the obligation, to eliminate 1 of the prospective independent consultants from the list by identifying the consultant to be eliminated in writing to the TPUC Staff within 30 days from the date the list is e- mailed. The TPUC Staff shall select the independent consultant from those remaining on the list after Atmos's and the Consumer Advocate's rights to eliminate have expired. The cost of the review shall be reasonable in relation to its scope. Any and all relationships between the independent consultant and Atmos, the TPUC Staff and/or the Consumer Advocate shall be fully disclosed and the independent consultant shall have had no prior relationship with either Atmos, the TPUC Staff, or the Consumer Advocate for at least the preceding 5 years unless Atmos, the TPUC Staff and Consumer Advocate agree in writing to waive this requirement. The TPUC Staff, the Consumer Advocate and Atmos may consult amongst themselves during the selection process; provided, however, that all such communications between the Parties shall be disclosed to each Party not involved in such communication in advance so that each Party may participate fully in the selection process. T

The scope of the review may include all transactions and activities covered by this PBR Tariff, and such additional matters as may be reasonably identified by Atmos, the TPUC Staff, or the Consumer Advocate. T

Atmos, the TPUC Staff, or the Consumer Advocate may present documents and information to the independent consultant for the independent consultant's review (and subsequent reviews) and consideration. Copies of all such documents and information shall be presented simultaneously to the independent consultant and all other Parties. T

The independent consultant shall complete and issue a written report of its findings and conclusions by the date ordered by the TPUC. The report deadlines may be waived by the written consent of the TPUC Staff, Atmos, and the Consumer Advocate. The independent consultant shall make findings of fact, as well as identify and describe areas of concern and improvement, if any, that in the consultant's opinion warrant further consideration. Atmos, the TPUC Staff, and/or the Consumer Advocate may cite the independent consultant's report to the Authority in support of recommendations or proposed changes, and the TPUC Staff, Atmos, or the Consumer Advocate may support or oppose such recommendations or proposed changes. T

The independent consultant's findings and/or recommendations shall not be binding on any Party or on the Commission, and in any proceeding in which the consultant's findings or recommendations may be considered, the Commission shall give all issues *de novo* consideration. Any changes to the Asset Management Agreement, the bidding process, the assets under management, or otherwise, whether adopted by agreement or pursuant to a ruling of the Commission, shall be implemented on a prospective basis only, and following the normal expiration of any affected agreements. T

The reasonable and prudent cost of the independent consultant's review shall be paid initially by Atmos and recovered through the ACA account. In any subsequent proceeding in which discovery or testimony from the consultant is sought concerning the consultant's review or findings, reasonable and prudent fees paid to the consultant for such discovery or testimony shall similarly be paid initially by Atmos and recovered through the ACA account. The TPUC Staff may continue its annual audits of the performance-based ratemaking (PBR) and the Annual Cost Adjustment (ACA) account, and the review shall not in any way limit the scope of such annual audits. T