IN THE TENNESSEE REGULATORY AUTHORITY
NASHVILLE, TENNESSEE

IN RE:	)	
	)	
UNITED CITIES GAS COMPANY, a	)	
Division of ATMOS ENERGY	)	Consolidated Docket Nos. 01-00704 and
CORPORATION, PETITION TO	)	02-00850
AMEND THE PERFORMANCE	)	
BASED RATEMAKING	)	
MECHANISM RIDER	)	

2008 DIRECT TESTIMONY OF FRANK H. CREAMER

Q: Please state your name, place of employment and title.

A: I am a management consultant specializing in business performance, and regulatory matters for gas and electric utilities. I work through my own company, Barrington Associates Inc., located at 178 Old Wick Lane, Inverness, IL 60067. I am Director of the company.

Q: Please describe your educational background

A: I received a Bachelor of Science degree in Petroleum Engineering at the University of Oklahoma in 1973. I also received a Masters of Business Administration with honors specializing in Finance, International Business Economics and Statistics from the University of Chicago in 1989.

Q: Please describe your work experience

A: I have thirty-five years of energy experience worldwide, with the last fifteen years focused exclusively in the natural gas and electric utility business sectors. I have directed or advised on projects to utilities involving commission mandated audits, rate-design, affiliated interests reviews, gas supply planning and procurement, privatization preparation, M&A, shared services assessments, and regulatory compliance in the US, Canada, and overseas.

From 1973-1978, as Senior Engineer with Amoco Production and Amoco International Oil Company, I was responsible for certain exploration and production activities in the US and Middle East. From 1978-1981, as Second Vice President with the Northern Trust Bank, I was responsible for the valuation of the energy-based portfolio of loans. From 1981-1989, as Chief Engineer with Craddock Engineering, I was responsible for the engineering design and operations of the exploration and production activities of AGIP's (ENI) oil and gas operations. From 1989-1995, as Principal and director of the Natural Gas Practice for Theodore Barry & Associates (now PA Consulting), I participated in nuclear retrospective prudency audits, cost-of-service audits, general management audits, gas procurement audits, business redesign projects, gas supply designs, and gas marketing programs. From 1994-1995, as a Principal with Computer Science Corp (CSC), I participated in projects that included supply chain reengineering, and T&D reengineering development. From 1995 to 2002, as an Associate Partner with Accenture in the North America Utility Business Unit, I participated in projects that included business restructuring, energy marketing, gas supply planning, regulatory strategy, rate design, operational improvements, transformation outsourcing and shared services, including the PBR programs of Hydro One, Enbridge Gas Company, and BC Gas.

Since 2002, as Director of Barrington Associates, I have advised on regulatory structure and PBR framework for the countries of the Philippines and India, performed PBR reviews for Atmos, prepared for the Kentucky PSC a white paper on the Western Kentucky's Gas Supply Business Model, advised on a gas sourcing model for a Western Gas Utility, prepared for an Australian gas utility an analysis of automated meter reading options, advised on regulatory requirements of shared services outsourcing, and assessed the organization readiness of a Midwestern combo utility in adapting to market pricing.

Q: What is the purpose of your testimony in this matter?

A: I have been retained by Atmos Energy Corporation (Atmos or Company), to provide an updated opinion regarding the proposed Transportation Index Factor (TIF) Tariff amendments, including further discussion regarding the use of maximum FERC rates as benchmarks, and the sharing percentages. I also will discuss the impact of more recent experience in the gas transportation market.

Q: Would you benefit financially and/or be compensated differently based on the outcome of this proceeding?

A: No.

Q: Have you ever been employed as a consultant by the Tennessee Regulatory Authority?

A: Yes. As a consultant to the Tennessee Regulatory Authority (TRA), I directed Gas Purchase Prudency Audits for United Cities Gas (Atmos), Nashville Gas, and Chattanooga Gas in 1993-1994; prepared an analysis of Atmos' first year experimental Performance Based Ratemaking (PBR) program in 1995-1996; prepared an analysis of Atmos' second year experimental PBR program in 1996-1997; in 1998, served as the TRA's witness in the remand of the 1996 Phase One proceeding wherein the TRA considered continuing the PBR mechanism; and also in 1998, served as the TRA's witness for the Phase Two proceeding to determine whether to continue the PBR mechanism beyond its second year on a permanent basis.

Q: Have you previously provided testimony in this matter?

A: Yes. In 2002, I provided an affidavit on the behalf of UCG (Atmos) in regard to the TRA's staff compliance audit of Atmos' PBR mechanism for the plan year April 1, 2000 – March 31, 2001, dated April 10, 2002. The objective of the audit was to determine whether the balance in the Incentive Plan Account (IPA) as of March 31, 2001 was calculated in conformance with the terms of the PBR mechanism and to verify that the factors utilized in the calculations were supported by appropriate source documentation. I also provided the affidavit in response to both the CAD's Memorandum in Support of Motion for Partial Summary Judgment (CAD's Memorandum) and which included the affidavit of Stephen N. Brown, Ph.D., both dated July 17, 2002, and the TRA Staff's Brief in Support of the Motion for Summary Judgment (Staff's Brief) dated July 31, 2002, which included the affidavits of Pat Murphy dated July 31, 2002 and Stephen N. Brown dated July 26, 2002.

In 2004, I provided testimony on behalf of Atmos to provide an opinion as to the following: (1) how the savings Atmos has obtained through negotiated discounts on certain transportation contracts should be treated under the Company's current PBR program; (2) how savings from the Company's NORA contract should be treated under the Company's current PBR program; and (3) how the new tariff proposed in Docket No. 02-00850 would operate.

Also in 2004, I provided rebuttal testimony to respond to portions of the direct testimony of Consumer Advocate and Protection Division (CAPD) witnesses Dan McCormac and Dr. Stephen Brown.

Specifically, I gave my opinions on the treatment of transportation costs as one of Atmos' city-gate cost components in the commodity portion of the PBR mechanism, and on a PBR rate structure that would be inclusive of all components of the City Gate price of gas.

Q: How might the PBR plan be more inclusive of the total gas commodity gas costs as "seen" by the consumer?

A: It is my opinion that the PBR plan would be more inclusive by capturing those transportation costs that are paid by the consumer to move the gas commodity from the gas pipeline receipt point to the City Gate. The addition of a specific transportation cost component to the PBR plan, as discussed more fully below, enables the PBR to fully capture all components of the Gas Commodity Costs as "seen" by the consumer, e.g. total cost of gas at the City Gate.

Q: Please define "City Gate".

A: The term "City Gate" refers to any location where Atmos' distribution system connects to one of the interstate gas pipelines serving the Tennessee area. There are approximately 20 different City Gates for Atmos' Tennessee system. Atmos has the option of purchasing gas at a pipeline receipt point (upstream) and then arranging for transportation of that gas from the pipeline receipt point to the City Gate (downstream) and/or or purchasing the gas directly at the City Gate.

Q: Please define "downstream" transportation costs.

A: The gas commodity is priced and delivered to a number of pipeline receipt points. The cost of moving that gas commodity from the pipeline delivery or receipt point to Atmos' City Gate is termed "downstream" transportation cost.

Q: Do these downstream transportation costs include any costs associated with moving the gas from the City Gate to the consumer?

A: No. The cost of moving the gas from the City Gate to the consumer is a utility charge referred to as a distribution cost and is separate and distinct from the downstream transportation cost.

Q: Are all of Atmos' gas purchases made at the City Gate?

A: Yes. Atmos makes its gas purchases through its asset manager, Atmos Energy Marketing ("AEM"). AEM arranges for Atmos' full requirements of gas to be delivered directly to the City Gate.

Atmos does not dictate where AEM should take delivery of the gas or how the gas should be transported to Atmos' City Gate other than stipulating that AEM meet the requirement in the Atmos' operational plans to deliver the gas at the lowest cost feasible, taking into consideration both commodity and transportation.

The total price that Atmos pays AEM for the gas that is delivered to the City Gate includes both the commodity charge and the cost for transporting the gas from the receipt point to the City Gate, e.g. the downstream transportation costs.

Q: Are Atmos' City Gate purchases therefore "bundled"?

A: Yes. Since Atmos' purchases are delivered and paid for at the City Gate, and are billed through charges that includes both commodity and downstream transportation costs, Atmos' purchases are indeed City Gate, bundled purchases.

Q: Who owns these transportation contracts that move gas from the pipeline receipt point to the City Gate, AEM or Atmos?

A: Atmos holds capacity on the interstate pipelines that serve its markets in Tennessee and, in conjunction with the new asset management agreement, that capacity has been released to AEM through the applicable pipeline's capacity release mechanism. AEM may also hold its own direct capacity on any one or more of these pipelines or utilize capacity released to AEM by other AEM customers. Using any one or more of these capacity assets within its portfolio, AEM will, and remains obligated to, ensure that it holds sufficient capacity on the applicable pipelines to transport its gas that it sells to Atmos at the City Gate. If it costs more for AEM to make deliveries to the City Gate at any given time, then that is AEM's risk. If it costs less for AEM to make deliveries to the City Gate at any given time, then that is part of AEM's optimization rights. AEM's selected means of effecting City Gate sales/deliveries has no impact upon Atmos because Atmos is billed according to the "logical" path for its delivered supply that it would have used had it been utilizing its capacity itself instead of through an asset manager.

For example, if Atmos would have effected supply deliveries into East Tennessee Natural Gas (ETNG) off upstream capacity held on Tennessee Gas Pipeline (TGP), but AEM was able to instead effect deliveries to the City Gate off ETNG via AEM capacity on Southern Natural Gas (Sonat), then, so long as the required supply showed up at Atmos' ETNG City Gate, AEM would bill Atmos for transportation per the applicable TGP transportation contract rate between Atmos and TGP.

Q: If AEM is able to effect deliveries to Atmos' City Gate using alternative transportation or supply assets or combination thereof, then should Atmos receive transportation billings according to what it actually costs AEM to effect the deliveries?

A. No. That is not the structure of the current supply/asset management agreement. Under the structure of the current agreement, AEM pays Atmos a significant, guaranteed up-front payment that is not subject to offset or deduction. In this manner, all risks associated with asset optimization are shifted to AEM, and AEM pays the upfront payment regardless of

whether is actually generates revenue associated with its use of the Atmos' capacity assets. Conversely, AEM retains any upside benefit associated with asset optimization. The current structure, as opposed to a savings sharing between Atmos and AEM on avoided or reduced capacity costs, provides an immediate and significant quantifiable benefit to Atmos' ratepayers that yields a guaranteed annual return of over 7% on the investment in upstream capacity assets.

Q: Since Atmos owns the downstream transportation contracts, does Atmos also negotiate and/or renegotiate these contracts?

A: Yes. This right is expressly reserved to Atmos under the terms of the supply/asset management agreement.

Q. Do these downstream transportation discounts benefit the consumer?

A: Yes. These downstream transportation discounts (and the incentive plan that supports the pursuit of these discounts) benefit the consumer by incenting Atmos to aggressively pursue cost reductions on an increasingly important component of the bundled price of gas at the City Gate, the downstream transportation costs.

Q: Why does Atmos need an incentive to seek lower transportation costs?

A: To provide an incentive to Atmos to aggressively pursue and obtain discounts to the maximum FERC rate for the transport of gas from the pipeline receipt point to the City Gate.

Such an incentive would align benefits to the consumer with Atmos' practices and to provide a measurable standard against which Atmos' performance, and, therefore, consumer benefits, can be measured.

Q: Why not let AEM handle the gas pipeline renegotiations?

A: Since the downstream transportation costs to the City Gate are a pass-through, AEM lacks incentive to negotiate a discount on the maximum FERC rate. Furthermore, Atmos' internal planning process prior to contract negotiations between the planning department and

operations ensures that proper supply requirements are met. The transportation contracts are the vehicle or means to ensure reliability. Atmos would not rely on a third party asset manager, such as AEM, for that critical planning function.

Q: Are downstream transportation discounts routinely available, e.g. just for the asking?

A: No. Atmos holds transportation contracts with 27 interstate pipelines, but has been able to obtain discounts from only two of the pipelines on all of their contracts. Nine of the pipelines have agreed to discounts on some, but not all of the contracts. Atmos has not yet been able to obtain discounts from the majority of the available pipelines. Atmos' Tennessee service territory is served by five pipelines, none of which have discounts on ***all*** of Atmos' contracts. Three pipelines serving Atmos' territory have some contracts that are discounted. Half of Atmos' pipelines serving Atmos' territory have no discounted contracts[1]. Atmos held a total of 11 contracts on the five pipelines servicing its Tennessee territory, of which 9 were undiscounted and priced at the maximum FERC rate.[2] The number of undiscounted contracts that remain demonstrates that discounts have not been routinely or easily granted, and that Atmos will be required to actively seek and negotiate discounts if they are to be obtained in the future.

Q: Please provide a summary of the current PBR plan.

A: The TRA, in approving the experimental PBR mechanism in 1995, noted that the agency should begin to look to incentive programs and more streamlined regulation to improve efficiency and hold down costs to consumers[3]. Consistent with the TRA objective, the TRA

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1 East Tennessee, Columbia Gulf, and Tennessee Gas have some discounted contracts; Texas Gas, and Southern Natural, have no discounted contracts

2 UCG held two contracts on Tennessee Gas. One of these contracts was a partially discounted contract. This partially discounted contract provided a transportation rate that moves the commodity from Zone 0-1 at the maximum FERC rate, whereas the transportation rate that then moves the gas through Zone 1-1 to UCG's City Gate is at a discount off maximum FERC rate. The other Tennessee Gas contract is priced at the maximum FERC rate. UCG also holds three contracts on Columbia Gulf, only.

3 United Cities Gas Company, Second-Year Review of Experimental Performance-Based Ratemaking Mechanism: April 1, 1995 - November 30, 1996, 2/28/97, p. 7

adopted a PBR program that was intended to span the entire spectrum of gas procurement, storage, and capacity activities. My testimony during the 1998 proceeding [4] confirms this intent, and notes that these gas cost related activities, which directly impact the ultimate price paid by the consumer, were initially captured through five separate and distinct PBR mechanisms[5], namely:

1. Gas Procurement
2. Seasonal Pricing Differential
3. Storage Gas Commodity
4. Transportation Capacity Cost
5. Storage Capacity Cost

In making the PBR plan permanent in 1999, the Authority did not revise either the intent or the scope of the plan, but did simplify the PBR mechanism by collapsing the above five mechanisms into two, as follows[6]:

1. Gas Commodity Cost
2. Capacity Release Sales

Q: During the initial PBR timeframe, how were transportation costs accounted for?

A: During the experimental PBR timeframe, Atmos' actual transportation costs for moving the gas from the pipeline receipt point to Atmos' city-gate ("downstream") were at the applicable undiscounted, published FERC tariffed rate. These rates included both the pipeline demand and volumetric costs associated with natural gas pipeline transportation services. [7]

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4 Vol. 1 p 61, lines 6-9

5 Order of the Tennessee Public Service Commission dated May 12, 1995

6 Final Order Phase II, TRA Docket 97-01464, 8/16/99, p. 28

7 FERC rates were comprised of three components: 1) Tariffed Transportation Demand Rate: the applicable, undiscounted, published FERC tariffed Transportation Demand Rate (TDR) was multiplied by the Demand Quantities (DQ) contracted for by UCG from its applicable pipeline transportation provider to determine the fixed cost portion of the transportation service; 2) Tariffed Transportation Commodity Rate: the applicable, undiscounted, published FERC tariffed Transportation Commodity Rate (TCR) is to be multiplied by the Actual Volumes (AV) delivered at the UCG's City Gate by its applicable transportation provider for the month to determine the variable cost portion of the

Subsequent to the experimental PBR timeframe, discounted downstream transportation contracts for moving gas from the respective pipeline receipt points to a City Gate became a feature of the downstream gas transportation marketplace; however, the PBR plan did not reflect this fundamental change in the marketplace.

Q: Does the Capacity Release Sales component of the PBR plan capture any downstream transportation costs of delivery of gas commodity to the City Gate?

A: No. One has nothing to do with the other. The Capacity Release Sales component of the PBR plan was comprised of the release of Atmos' firm capacity on a short-term or long-term basis. Firm capacities were and are fixed assets that are made up of firm transportation capacity that Atmos maintained on upstream pipelines and/or storage. Atmos released this capacity by marketing to third parties the unused capacity, thereby generating revenues shared between the Atmos and its ratepayers.

With the advent of asset management arrangements in the middle to late 1990s, however, it became more efficient for gas utilities (rather than engaging in periodic, recallable capacity release transactions) to allow asset managers, who had more requisite knowledge, experience and a better asset mix, to optimize excess capacity in return for their providing the utility a discounted commodity, a periodic up-front payment, an optimization revenue sharing component, or combination thereof. Therefore, the Capacity Release Sales component of the PBR, while still an integral part, is not as large a factor as it may have been when the PBR first originated.

Q: Does the Gas Commodity Sales component of the PBR plan capture actual downstream transportation costs of delivery of gas commodity to the City Gate?

A: No. The PBR Gas Commodity Cost component relies upon a basket of widely published indices that measures the commodity cost effectiveness of Atmos' gas purchasing decisions, as follows:

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transportation service; and 3) Surcharges and Direct Bills: Surcharges and Direct Bills, and other applicable amounts (S&DB) approved by FERC would include surcharges, direct bills, cashouts, take-or-pay amounts, Gas Supply Realignment and other Order 636 transition costs

1. Inside FERC -- First day of the month for one month or longer purchases

2. NYMEX – Monthly close price for one month or longer purchases

3. Natural Gas Intelligence - Bid week average published index price for one month or longer purchases

4. Gas Daily – First day of the transaction price for mid month or incremental purchases

The above indices include only the upstream transportation cost to get the gas from the well head to the pipeline receipt point (which is Henry Hub for Atmos) and do not include Atmos' downstream cost of transporting the gas from the pipeline receipt point to the city-gate. For example, Inside FERC tracks first-of-the-month bid week price reports for monthly spot gas delivered to 46 locations on 25 pipelines. Reported for each pipeline receipt point are a price range and an index price. Therefore, the index price is an assessment of the price at which the majority of deal making occurred for the pipeline at that pipeline's delivery location.

Q: **Do these gas commodity indices serve as a proxy for the marketplace?**

A: Only in part. The commodity indices do indeed serve as a proxy for the marketplace, but only for commodity purchases at upstream pipeline receipt points (i.e. at the Henry Hub). These indices do not measure the market price for the total cost of gas at the City Gate, which is the cost that the consumer actually "sees."

Q: What are the components of a PBR plan that fully capture the total cost of gas that a ratepayer "sees"?

A: My opinion is that an all encompassing PBR plan would be based on the City Gate cost and include the following City Gate cost components:

- Gas Commodity Cost (upstream)
- Capacity Release Sales
- Gas Commodity Downstream Delivery Cost

As a result of including these cost components, the PBR plan would capture all of the unbundled costs associated with buying and delivering the gas commodity to the Atmos City Gate.

These unbundled costs, specifically the Gas Commodity Costs and the Gas Commodity Downstream Delivery Cost can then be compared to a relevant set of agreed performance measures, or benchmarks, to assess Atmos' performance.

Q: Does a published index exist for downstream transportation costs against which Atmos' performance can be measured?

A: No. A published index for transportation costs did not exist when I prepared the initial gas prudency audit in 1993-1994, or when I testified in this matter in 2002 and 2004. Nor does it exist now.

FERC has required pipelines to file Discount Transportation Reports since 1996, which provide particular information regarding discounted rates, either firm or interruptible. But such reports are not a reliable source of information regarding firm transportation arrangements. My review of the reports per my 2004 testimony indicated that certain transportation transactions that were reported were found to be capacity release, even though a pipeline was not required to file this information if the discount was related to the release of capacity. Nonetheless, the reported discounted transportation arrangements were not differentiated between firm, forward haul, backhaul, interruptible and/or winter only service. Consequently, prices would have been found to vary widely when making an apples-to-oranges comparison between firm, interruptible, and capacity release arrangements.

Q: Has your opinion changed since 2004?

A: No. The market for commodity costs and the market for downstream transportation costs continue to be separate and distinct. To compare the two was and continues to be comparing apples and oranges.

Q: How should the market index for downstream transportation costs be compared to other markets, such as gas commodity costs?

A: An index for any market must, of course, reflect the actual marketplace that it is attempting to replicate, not some other marketplace with a totally different structure. Since the gas commodity cost marketplace contains a population of multiple transactions each with different paired values, without price ceilings or floors, the market proxy for that marketplace would be the numerical average of the multiple market transactions reported during the measurement window. Therefore, some of these market transactions, by definition, would be above the resulting market index and some of the market transactions would below the market index. Atmos' gas commodity purchases would be expected to reflect this marketplace, with gas commodity purchase transactions both above the market index and below the market index.

However, since the downstream transportation marketplace contains unique transactions between a buyer and a seller, has a price ceiling (e.g. maximum FERC rate), and contains unique contract terms and conditions, the proxy for this marketplace certainly cannot include prices higher than "seen" in the marketplace, nor should it include a numerical average of all transactions in the marketplace.

Q: As applicable here, what are the key differences between the commodity and transportation marketplaces.

A: The commodity purchase marketplace does not have regulated price ceilings ("maximum rate"), whereas the interstate transportation pipeline marketplace does ("maximum FERC rate").

Q: Please define maximum FERC rate?

A: Each pipeline seeks and receives an approved FERC rate, the maximum the pipeline transportation provider is allowed to charge. These maximum-approved rates are for firm, long-term transportation arrangements, not for short-term, interruptible service. Each approved FERC rate is unique to a pipeline, and to a pipeline's receipt point and delivery point. These prices are specific to the contract type (e.g. delivery/receipt point, volume, seasonality, and duration).

Q: Why should Atmos rely upon the maximum FERC rate as the benchmark rate?

A: The gas pipelines used to deliver gas to the Atmos City Gate cross state lines and, therefore, fall under the jurisdiction of FERC. Consequently, these pipelines' rates and terms of service are governed by FERC approved tariffs, e.g. the maximum rate. However, FERC does not prohibit a carrier from discounting off the maximum rate; FERC only prohibits pricing above the maximum rate. Furthermore, the maximum FERC rate would be the benchmark of prudence under any management audit of transportation costs.

Q: Does the absence of a published index for transportation costs preclude establishing a market proxy for the Gas Commodity Downstream Delivery Costs?

A: No. The maximum FERC rate has historically served and continues to serve as the market proxy for downstream transportation costs on a contract-by-contract basis.

- The approved, maximum FERC rate has been accepted elsewhere in the industry as a true market indicator of a long-term, firm transportation costs. [8]

- And, as noted above, the maximum FERC rate would serve as the benchmark for any PGA audit or prudence review. If, for example, the downstream, firm transportation costs were excluded in the PBR, the TRA would be required to

[8] PBR plans for LG&E, and Western Kentucky Gas

establish a basis for comparing actual firm transportation costs to a standard of prudence, e.g. approved, maximum FERC rates.

Q: Why would the maximum FERC rate that serves as a market proxy apply to measuring Atmos' performance in securing discounted transportation contracts?

A: Since Atmos negotiates each firm, long term transportation contract based on a discount off of the maximum FERC approved rate, Atmos' performance in securing discounted transportation contracts should be compared to the market proxy – the maximum FERC rate, which serves as a market indicator for downstream transportation costs.

Additionally, the approved NORA arrangement, per the existing PBR plan, relied on the maximum FERC rate in calculating the transportation cost adjustor to the commodity market indexes.

The approved FERC transportation rates serve as the most objective benchmark for assessing the Company's success in obtaining downstream transportation discounts. The best measure of its success is the Company's ability to:

1. Obtain discounts below the FERC maximum approved price;
2. Sustain these discounts upon renewal or renegotiation;
3. Maximize the discount off the approved price that Atmos receives from its pipeline transportation provider for the specific and unique pipeline transportation paths, e.g. receipt point to City Gate.

Q: Since the maximum FERC rate is the cost ceiling for any transportation contract, what are Atmos' down side risks?

A: This is really not the right question. The issue is whether the consumer will benefit from a transportation cost incentive given to Atmos to fully exploit any opportunities that arise in the transportation market. Atmos does dedicate scarce and limited resources, both human and physical assets, to obtain these discounts. To the extent that Atmos is unsuccessful in

negotiating a discount, Atmos has lost an opportunity cost relative to the utilization of those assets elsewhere.

Q. Can posted releases for pipeline or storage capacity release be utilized as a proxy of the market rate for transportation or storage instead of the maximum FERC rate?

A. Not in my opinion. What this entails is an examination of the secondary capacity market, which evolved after FERC issued its Order 636. Specifically, holders of primary capacity on interstate pipelines or storage facilities can release all or any part of their capacity into a "secondary" market through some predefined means and basically under any term or condition they desire, so long as it comports with FERC's requirements. For example, a primary capacity holder could enter into a short-term, discounted rate release with a predetermined counterparty for a period of 31 days or less and all that it required it that it be posted on the applicable pipeline's electronic bulletin board ("EBB"). Alternatively, the primary capacity holder could post the capacity as available for bid on the EBB and the capacity would be awarded to the highest bidder or alternatively matched by a prearranged bidder. The primary capacity holder could also post the capacity as a term prearranged release (short or long-term) without the necessity of bidding at the maximum FERC rate. The releasing capacity holder, especially a gas utility, may attach conditions to any type of these releases, such as the capacity is fully recallable at any time, that the capacity is not available for re-release, etc. Firm capacity that is released by a utility or other direct capacity holder on a fully recallable basis does not retain its initial character of firm held directly with the pipeline, but instead becomes a type of alternative firm that is more closely analogous to interruptible transportation service on the pipeline. Other factors may also affect the market value of secondary capacity such as segmentation opportunities, delivery point restrictions or constraints, the length of the transport path (*e.g.* intra-zone or between or across multiple pipeline zones), whether the pipeline is fully subscribed, alternative transport options (such as interruptible service), the existence of liquid market points or other interstate pipeline or storage interconnects proximate to the released capacity, whether the release also includes associated storage, applicable pipeline

restrictions on released capacity (*e.g.* no-notice service applicable to the direct firm may not apply to the released capacity) and any number of other factors. In my opinion, secondary capacity market release rates on a pipeline simply cannot be used as an effective benchmark for valuing direct firm capacity on that pipeline.

Q: How would the different Gas Commodity Cost and Downstream Transportation markets affect the design of the appropriate and relevant performance indexes, or levels of performance?

A: The Gas Commodity Cost marketplace and the Downstream Transportation marketplace, as noted above, are separate and distinct, each with its own separate measures of performance. However, what is common between the two marketplaces is that the consumer would benefit if the PBR program provided incentives for Atmos to engage in innovative sourcing behaviors (both commodity and transportation) to "beat the market" and maximize cost savings opportunities. This is certainly consistent with the principle that guided the TRA when the PBR was implemented in 1995 - "to look to incentive programs and more streamlined regulation to improve efficiency and hold down costs to consumers."

The crucial component of the PBR is not whether the transportation marketplace has pricing penalties that are similar to the pricing penalties that exist in the commodity marketplace, but rather does the consumer benefit when the PBR mechanism provides for an agreed standard of performance that reflects each individual and unique marketplace against which Atmos' sourcing performance (both commodity and transportation) can be determined.

The intent of any PBR program is to benefit the consumer by incenting Atmos to pursue and exploit aggressively any and all cost saving opportunities. Transportation discounts, as a feature of the marketplace, present cost saving opportunities. The discounts must be pursued aggressively, and as previously noted above, are not routinely available just for the asking.

Q: Please describe how the new tariff proposed in Docket No. 02-00850 would operate if approved?

A: If the tariff proposed in Docket No. 02-00850 is approved, the PBR program will be amended to include a slightly different and more detailed formula for the calculation of transportation cost savings that will more explicitly reflect current market conditions. The tariff adds a third incentive mechanism to the two existing cost mechanisms (Gas City Cost or "GCC" and Capacity Release Sales or "CRS"). This third mechanism a separate mechanism solely for Transportation costs and would be labeled a Transportation Index Factor ("TIF").

With the addition of the new TIF, the PBR formula would be represented as follows:

A. The Performance-Based Ratemaking Mechanism consists of three components:

1. Gas Procurement Incentive Mechanism (GP)
2. Capacity Management Incentive Mechanism (CM)
3. Transportation Index Factor Incentive Mechanism (TIF)

B. The PBRM would be computed in accordance with the following formula:

1. PBRM = GP + CM + TIF

The Gas Procurement Incentive Mechanism (GP) is designed to benefit the consumer by establishing a predefined benchmark index to which the Atmos' commodity cost of gas is compared. It also addresses the use of financial instruments or private contracts in managing gas costs. The net incentive savings or costs will be shared between the Atmos' customers and the Atmos on a 50% / 50% basis with a 2% deadband.

The Capacity Management Incentive Mechanism (CM) is also designed to benefit the consumer by encouraging Atmos to market off-peak unutilized transportation and storage capacity on upstream pipelines in the secondary market. The net incentive benefits will be shared between the Atmos' customers and the Atmos on a 90% /10% basis.

The Transportation Index Factor Incentive Mechanism (TIF) is also designed to encourage the Atmos to actively negotiate transportation discounts on the Atmos' pipeline suppliers. The TIF establishes a predefined standard of performance to which the Atmos' actual discounted

transportation costs from the discounted contracts are compared. The net incentive savings, if any, shall be shared between the Atmos' customers and the Atmos on a 50% / 50% basis.

Q: Are Atmos' portion of the savings subject to a cap?

A: Yes. Atmos' is subject to a cap of $1.25 million annually.

Q: Please provide an example of the TIF calculation.

A: The values are hypothetical, but representative of actuals. An example of the TIF calculation is as follows:

Pipeline	Invoice Price	Reservation Invoice Value	SOP FERC Maximum Rate	SOP FERC Demand Value	Avoided Costs Rate	Avoided Costs Demand
Pipeline 1	$7.11	$374,324	$7.16	$376,957	$0.05	$2,632
Pipeline 2	$0.4227	$89,424	$0.5988	$126,678	$0.1761	$37,255
Storage 1	$1.92	$17,925	$2.02	$18,859	$0.10	$934
Total		$481,673		$522,494		$40,821

Using the hypothetical numbers above, benefits equal $40,821, and subject to the 50/50% sharing formula and the $1.25 million cap. The consumer and Atmos would each earn $20,410.50.

Q: How have market conditions since 2004 for downstream transportation marketplace affected your findings?

A: The downstream transportation marketplace has generally tightened since 2004 and has made downstream transportation costs even more important to managing the total cost of gas at the City Gate.

Q: What are the factors affecting the pipeline capacity and storage markets since 2004?

A: They are:

- Generally, historically high energy prices in real dollars, with no relief insight.
- Base load growth continuing at historic levels (1 – 1.5% per year)
- Continuing growth in gas for electric generation
- Some major pipeline expansion projects, focusing primarily on west to east flows, with none directly affecting Tennessee
- Expansion or construction of new liquefied natural gas (LNG) terminals
- Some expansion in storage capacity, but none directly affecting Tennessee
- Pipelines serving Tennessee are long line pipes serving both the Midwest and Northeast, where natural gas is the fuel of choice for incremental electric generation

Q. What are the implications of those factors for Tennessee?

A. Tighter capacity and storage markets will exert upward pressure on prices, which in turn will reduce pipeline discounts and allow pipelines to demand longer term contracts. This heightens the need for aggressive pursuit of discounts from the maximum FERC rate on downstream transportation contracts, and, therefore, the benefit of providing appropriate financial incentives to the utility to pursue such activities. The proposed TIF tariff is one such mechanism.

Q. How does natural gas flow into Tennessee?

A. Exhibit 1 shows those gas flows as categorized by the US Energy Information Administration (EIA), and depicts 11 primary corridors for gas flow. The Southwest to Midwest Corridor extends from East Texas, Louisiana and Arkansas through Tennessee and Kentucky, and to a lesser extent through Missouri, to the Midwest Region. That corridor is virtually the only route for gas to come to Tennessee.

Q. What changes in pipeline capacity have occurred along that corridor since 2004?

A. The changes have been minimal. EIA compiles various statistics regarding regional, interstate, and state gas flows, including gas flows into individual states. As shown in Exhibit 2, there has been only a very modest increase in capacity to Tennessee from 1998 through 2002 (approximately 4.5%) a very slight increase (a few tenths of a per cent) from 2003 to 2004, and no change for the period 2004 through the end of March 2008.

Q. Please describe the storage capacity available to Tennessee.

A. Exhibit 2 also addresses storage availability. Storage along the Southwest to Midwest Corridor is located at either end of the corridor, but little is available along the midsection. Given Tennessee's location, storage is limited to the production area end of the corridor.

Q. Are there any new pipeline construction projects that may benefit Tennessee?

A. The primary construction efforts are focused on west to east pipeline routes, primarily to bring gas from the Rocky Mountain area eastward, and on LNG terminals. The major activity is the Rockies Express pipeline, a 1,663-mile pipeline system capable of transporting 1.8 BCF/day, which is currently under construction. The first segment of that system, a 327-mile segment within Colorado was completed in 2007. In 2008, the second segment is expected to be completed, with the entire pipeline scheduled for completion in 2010. This pipeline is expected to provide gas to Midwestern and Northeastern markets.

The Rockies Express system will not benefit Tennessee directly, but may provide indirect benefits by displacing other gas, which may then flow to Tennessee. FERC generally classifies projects as "Approved, Major Pending Projects, or Major Projects on the Horizon". The current status of those projects is:

- Approved Projects (2008 to date): Four, one in Missouri and Arkansas, one in Texas, Oklahoma and Louisiana and two in the Northeast (New York and Connecticut).

- Major Pending Projects (as of May 2008): Twenty-two projects, of which 16 are either LNG facilities, compression, or short haul segments, and none of the 22 directly affecting the Southwest to Midwest corridor.

- Major Projects on the Horizon (as of April 2008): FERC lists 17 projects of various types in the Southeast Region. None of those projects involve new pipe to Tennessee, but some do involve compression, which may increase throughput available to Tennessee. However, those projects are uncertain at this time, as they have not submitted applications to FERC and may never do so. At best, they are several years off.

Q. Are there any new major storage fields planned that will benefit Tennessee?

A. No.

Q: Why should downstream transportation costs be included in the PBR program?

A. A fundamental requirement of any PBR program is to incent proper business decisions. In order to satisfy this design principle, the PBR program must encompass transportation costs, which are an important component of the final cost of gas to consumers. For example, if transportation costs were excluded from any PBR performance calculations, Atmos could pass on to the ratepayer relatively high transportation costs arrangements that were obtained in order to secure relatively lower commodity costs and thereby earn benefits under a PBR formula that relied on pure commodity costs alone. The failure to encompass transportation costs would be a hole in the PBR – which it must be recalled was designed before the marketplace for negotiated transportation contracts had developed. Including this important component of delivered gas cost is necessary to implement the intent of the PBR program.

Q: Please summarize your findings regarding enhancements to the PBR plan.

A: In summary:

1. The cost to deliver the gas from the pipeline receipt point (upstream) to the city-gate (downstream) can be captured by enhancing the PBR through the addition of the TIF;

2. Each component of the total bundled cost at the City Gate, e.g. commodity and transportation, can be compared to its respective, unique market indices to completely reflect the price the consumer "sees;"

3. The commodity portion of the total cost that the consumer "sees" should continue to be compared to the unique market indexes currently noted in the current PBR;

4. The FERC approved rate can be used as the benchmark to measure Atmos' effectiveness in negotiating downstream transportation cost discounts.

Q: Does this conclude your testimony?

A: Yes

Respectfully submitted,

Frank H. Creamer
Director
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178 Old Wick Lane
Inverness, IL 60067

Dated: 5/20/08

Sworn and subscribed before
me this 20 day of May 2008

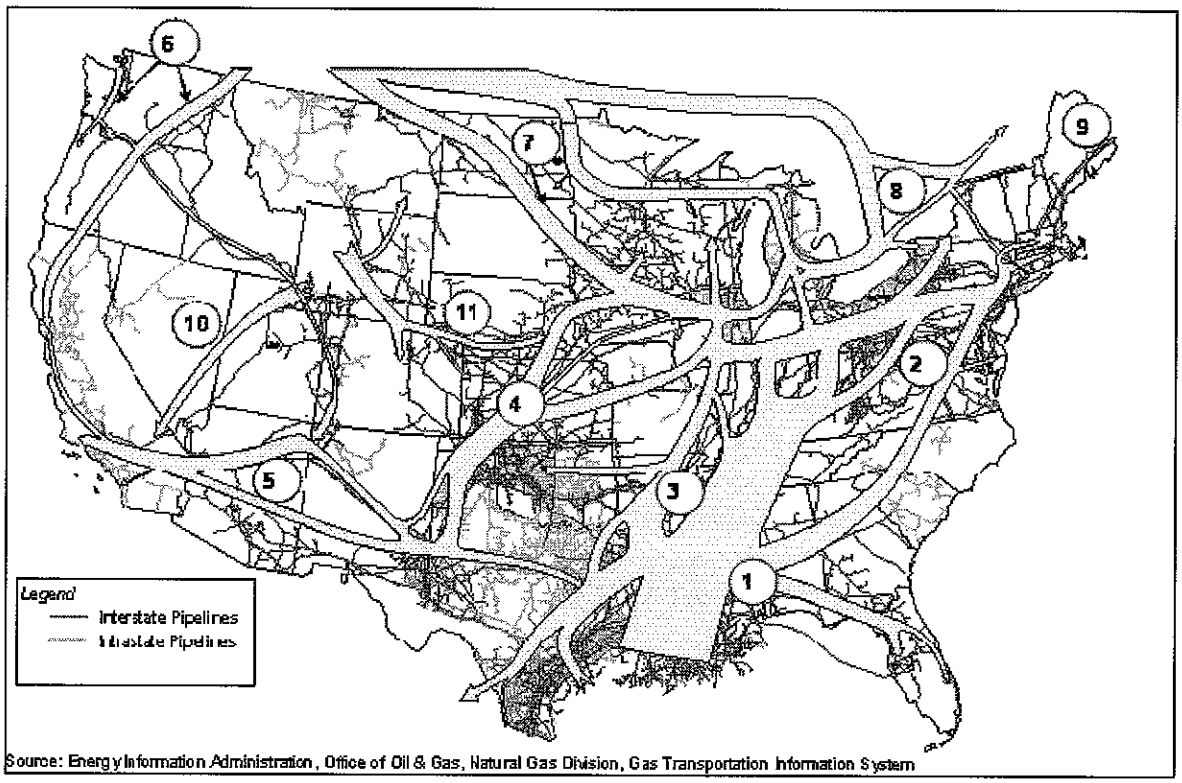
NOTARY PUBLIC

My commission expires:

CYACELLIA A FAISON
Notary Public - Michigan
Wayne County
My Commission Expires Sep 5, 2013
Acting in the County of Wayne

Exhibit 1
Natural Gas Flows in the Continental Unites States

The United States Energy Information Administration defines 11 *Major Natural Gas Transportation Corridors* for gas flow in the continental US, as shown on the following map.[1]



EIA defines Corridor #3 on the above map as *Southwest – Midwest, from East Texas, Louisiana, the Gulf of Mexico and Arkansas to the Midwest.* That corridor extends from East Texas, Louisiana and Arkansas through Tennessee and Kentucky, and to a lesser extent through Missouri, to the Midwest Region. As may be seen from the map, this is virtually the only route for gas to come to Tennessee. The principal pipelines along this route are:

- ANR Pipeline Company (ANR)
- Midwestern Gas Transmission Company (via Tennessee Pipeline Company)
- Natural Gas Pipeline company of America (NGPL)
- Texas Gas Transmission Company (TGT)
- Texas Eastern Transmission Company (TETCO)
- Trunkline Gas Company

Exhibit 2
Pipeline and Storage Capacity into Tennessee

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[1] http://www.eia.doe.gov/pub/oil_gas/natural_gas/analysis_publications/ngpipeline/transcorr.html

EIA compiles various statistics regarding regional, interstate, and state gas flows, including gas flows into individual states. The following table depicts gas flows into Tennessee for the 10 year period 1998 through 2007.[i]

Year	Year-End Capacity (MMcf/d)
1998	13,991
1999	14,298
2000	14,533
2001	14,278
2002	14,628
2003	14,628
2004	14,685
2005	14,685
2006	14,685
2007	14,685
2008*	14,685

* Through March 31

As may be seen from the table, there has been only a very modest increase in capacity from 1998 through 2002 (approximately 4.5%) a very slight increase (a few tenths of a per cent) from 2003 to 2004 and no change fro the period 2004 through the end of March 2008.

Storage Availability

EIA notes that there are significant amounts of storage at either end of the Southeast – Midwest corridor, but that little is located along the midsection. As of the beginning of 2008, the total storage available in the Southeast Region is located in Alabama, Kentucky, Mississippi and Tennessee) and totaled 7,665 Mmcf daily withdrawal capability, or approximately 8.7% of total US withdrawal capability. However, 4,915 Mmcf/day of that amount is located in Mississippi, most of which is salt cavern storage in the southern part of the state, and only 20 Mmcf/day is located in Tennessee, at one site.[ii]

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[i] http://www.eia.doe.gov/pub/oil_gas/natural_gas/analysis_publications/ngpipeline/StatetoState.xls#'Data 4'!A1

[ii] http://www.eia.doe.gov/pub/oil_gas/natural_gas/analysis_publications/ngpipeline/UGTable.html?title=&product=&submit2=A-Z+List+of+publications

CERTIFICATE OF SERVICE

I hereby certify that a copy of the foregoing has been served, via the method(s) indicated below, on the following counsel of record, this the 20th day of May, 2008.

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