BEFORE THE TENNESSEE REGULATORY AUTHORITY
NASHVILLE, TENNESSEE

April 12, 1999

IN RE:)
)
NASHVILLE GAS COMPANY, a Division of) **Docket No. 99-00068**
PIEDMONT NATURAL GAS COMPANY)
INCENTIVE PLAN ACCOUNT (IPA) AUDIT)

NOTICE OF FILING BY ENERGY AND WATER DIVISION OF THE TENNESSEE REGULATORY AUTHORITY

Pursuant to Tenn. Code Ann. §§ 65-4-104, 65-4-111 and 65-3-108, the Energy and Water Division of the Tennessee Regulatory Authority (hereafter "Energy and Water") hereby gives notice of its filing of the Nashville Gas Company Incentive Plan Account (hereafter "IPA") Audit Report in this docket and would respectfully state as follows:

1. The present docket was opened by the Authority to hear matters arising out of the audit of Nashville Gas Company's (hereafter the "Company") IPA for the years ended June 30, 1997, and 1998.

2. The Company's IPA filing for the first year of the Performance Incentive Plan (hereafter "Incentive Plan") was received on September 29, 1997. The IPA filing for the second year of the Incentive Plan was received on October 6, 1998. The Staff completed its audit of the two years on April 12, 1999.

3. The Audit did not result in any material findings by the Authority.

4. The Audit Report is attached hereto as Exhibit A and is fully incorporated herein by this reference.

5. The Energy and Water Division hereby files its Report with the Tennessee Regulatory Authority for deposit as a public record and approval of the same.

Respectfully Submitted:

William H. Novak, Chief
Energy and Water Division
Tennessee Regulatory Authority

CERTIFICATE OF SERVICE

I hereby certify that on this 12 day of April, 1999, a true and exact copy of the foregoing has been either hand-delivered or delivered via U.S. Mail, postage pre-paid, to the following persons:

Mr. K. David Waddell
Executive Secretary
Tennessee Regulatory Authority
460 James Robertson Parkway
Nashville, TN 37243

Mr. Bill R. Morris
Director - Rates
Piedmont Natural Gas Company
PO Box 33068
Charlotte, NC 28233

Mr. Paul C. Gibson
Vice President - Rates
Piedmont Natural Gas Company
PO Box 33068
Charlotte, NC 28233

William H. Novak

COMPLIANCE AUDIT REPORT
OF

NASHVILLE GAS COMPANY'S
INCENTIVE PLAN ACCOUNT

Docket No. 99-00068

PREPARED BY

TENNESSEE REGULATORY AUTHORITY

ENERGY AND WATER DIVISION

APRIL 12, 1999

**TENNESSEE REGULATORY AUTHORITY'S
COMPLIANCE AUDIT
of
NASHVILLE GAS COMPANY'S
INCENTIVE PLAN ACCOUNT**

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I. INTRODUCTION

The subject of this compliance audit is the initial two year experimental period of the Performance Incentive Plan (hereafter "Incentive Plan") of Nashville Gas Company (hereafter "Nashville Gas" or the "Company"), a division of Piedmont Natural Gas Company. The objective of the audit was to determine whether the balances in the Incentive Plan Account as of June 30, 1997, and 1998, were calculated in conformance with the terms of the Incentive Plan and to verify that all factors utilized in the calculations were supported by appropriate source documentation. The Incentive Plan consists of two mechanisms which are more fully described in Section II below.

The following chart summarizes the results of each year of the experimental period of the Incentive Plan:

	Year Ended 6/30/97	Year Ended 6/30/98
Total Actual City Gas Purchases	$ 60,122,494	$ 57,187,799
Total Annual Benchmark	$ 60,230,986	$ 57,388,234
Percentage Actual Purchases to Benchmark	99.82%	99.65%
Total Incentive Savings from:		
Gas Procurement	$ 147,360	$ 308,187
Capacity Management	$ 1,232,017	$ 1,032,771
Total Incentive Savings	$ 1,379,377	$ 1,340,958
Incentive Savings retained by Ratepayers:		
Gas Procurement	$ 108,025	$ 162,382
Capacity Management	$ 816,525	$ 692,918
Total Incentive Savings to Ratepayers	$ 924,550	$ 855,300
Incentive Savings retained by Company:		
Gas Procurement	$ 39,335	$ 145,805
Capacity Management	$ 415,399	$ 339,852
Total Incentive Savings to Company	$ 454,734	$ 485,657

The results of the audit indicate that during the two year period the Company's calculations were in conformance with the terms of the Incentive Plan and all factors utilized in the calculations have been substantiated by the Company. Sections III and IV of this report further describes the actual results of each year.

II. DESCRIPTION OF PERFORMANCE INCENTIVE PLAN

On May 31, 1996, the Tennessee Public Service Commission (hereafter the "TPSC"), the predecessor to the Authority, issued an order in Docket Number 96-00805 approving the Incentive Plan for Nashville Gas. The specific details of the Incentive Plan were included in Nashville Gas' Service Schedule No. 14 tariff entitled Performance Incentive Plan which was issued on April 22, 1996, and was effective July 1, 1996. A copy of this tariff is attached hereto as Attachment 1. The underlying theory of the Incentive Plan was to produce rewards for both the Company's customers and its shareholders while producing improvements in the procurement activities of Nashville Gas.

The experimental period began July 1, 1996, and ended June 30, 1998. At the conclusion of the first year of the Incentive Plan, the May 31, 1996, Order required Nashville Gas to notify the TPSC if it intended to continue the Incentive Plan for a second year. By letter dated March 31, 1997, Nashville Gas informed the Authority of its desire to continue the Incentive Plan without modification for the second year of the experimental period and requested that the Authority approve the same. On June 30, 1997, the Authority issued an order granting Nashville Gas' request to continue the Incentive Plan for the second year.

On March 31, 1998, the Company filed an Application for Extension of the Performance Incentive Plan which would allow the incentive plan to continue on an annual basis. An order was issued by the Authority on March 11, 1999, which modified the Incentive Plan and authorized the Company to continue to operate under the modified Incentive Plan, in such a manner that the Incentive Plan will automatically rollover for an additional plan year on each July 1st, beginning July 1, 1998, and will continue until the Incentive Plan is either (a) terminated at the end of a Plan year by not less than 90 days notice by Nashville Gas to the Authority or (b) the Incentive Plan is modified, amended or terminated by the Authority.

The Incentive Plan consists of two mechanisms: (1) the Gas Procurement Incentive Mechanism and (2) the Capacity Management Incentive Mechanism. Under the Gas Procurement Mechanism, Nashville Gas retains 50% of the savings on gas purchased below 99% of a pre-determined index. Should the Company purchase gas at 101% of the same pre-determined index, the Company would be penalized for 50% of the excess. The Capacity Management Incentive Mechanism is tied to the Company's total annual demand cost and the sharing ratio is a sliding scale with Nashville Gas earning a larger percentage the higher the level of cost savings. Interest is accrued on the outstanding balance due the Company using the same computation as is provided for in the Authority's Purchased Gas Adjustment Rule 1220-4-7-.03(vii). A more detailed explanation of each mechanism can be found in Attachment 1, the Company's Service Schedule No. 14 which governed the two year experimental period.

III. PERFORMANCE INCENTIVE PLAN YEAR ENDED JUNE 30, 1997

On September 29, 1997, Nashville Gas submitted a rate adjustment to recover the balance in the Incentive Plan Account (hereafter the "IPA") as of June 30, 1997, the end of the first year of the experimental period of the Incentive Plan. According to the filing, the Incentive Plan generated during the first year total savings through both mechanisms of $1,393,947 of which the $924,550 was retained by the ratepayers and $469,397 accrued to the Company. The Company's share of the savings resulted in a rate increment of $.00234 per therm. The Company implemented this surcharge to its customers on November 1, 1997. Of the $469,397 retained by the Company, $39,335 was generated from the Gas Procurement Mechanism, $415,399 was derived from the Capacity Management Incentive Mechanism, and interest of $14,663 was accrued on the balance of the IPA during the year.

The detail provided for the Gas Procurement Mechanism revealed that during five months of the initial year of the Incentive Plan the Company was able to purchase gas at less than 100% of the benchmark. However, only during one month was the Company able to purchase gas at less than the 99% deadband, the level at which the Company begins participating in any savings. During October, 1996, the Company's gas purchases were 97.33% of the benchmark which was 1.67% less than the 99% deadband. Nashville Gas, therefore, was entitled to retain $39,335 of the $111,608 in gains generated by the Gas Procurement Mechanism during that month. The total actual city gate purchases for the first year averaged 99.82% of the total annual benchmark.

The Capacity Management Incentive is calculated as a percent of Nashville Gas' annual demand costs. The Company does not participate in this mechanism until the total capacity release revenue, together with any transportation or storage margin associated with off-system sales, exceeds 1% of the Company's total annual demand costs. The Company's total demand costs for the year ended June 30, 1997, was $17,436,000. Therefore, Nashville Gas did not participate in this mechanism until its capacity release revenue exceeded $174,360. In accordance with the terms of the Incentive Plan, the Company receives 10% of the capacity release revenue between 1% and 2% of the total annual demand costs or $174,360 to $348,720; 25% of the capacity release revenue between 2% and 3% of the total annual demand costs or $348,720 to $523,080; any capacity release revenue in excess of $523,080 is shared equally between the Company and its ratepayers. The Capacity Management Incentive produced total earnings of $1,232,017 of which $989,210 was generated from capacity release and $242,807 was generated from off-system sales. Nashville Gas retained $415,399 of the $1,231,017 earned through this mechanism.

The audit of the first year results revealed two instances in which Nashville Gas had used incorrect fuel retention factors and one instance in which the monthly total of off-system sales had been understated. As the net effect of these three errors (an under-recovery of $510) is immaterial in relation to the total incentive earnings retained by the Company of $469,397, no official findings have been issued for the year ended June 30, 1997.

IV. PERFORMANCE INCENTIVE PLAN YEAR ENDED JUNE 30, 1998

Nashville Gas submitted, on October 6, 1998, its rate adjustment for the second year of the experimental period which ended June 30, 1998. During the second year, the Incentive Plan produced total savings of $1,340,957 of which $855,300 benefited the ratepayers and $485,657 was retained by the Company. Adding the $485,657 to the unrecovered balance of the first year's results, and computing interest thereon, increased the balance in the IPA to $606,305. The Incentive Plan rate increment, therefore, increased by $0.00079 to $0.00313 per therm. This revised surcharge became effective November 1, 1998.

The Company was able to purchase gas at less than the benchmark during only four of the twelve months of the second year. In three of those four months, the Company participated in savings from the Gas Procurement Mechanism. This was due to the total monthly purchases for each of the three months being, not only less than the benchmark, but also less than the deadband of 99%. The total actual city gate purchases averaged 99.65% of the total annual benchmark for the second year of the Incentive Plan. Of the $308,187 earned through the Gas Procurement Mechanism, the Company retained $145,805.

The Capacity Management Incentive Mechanism generated a total of $1,032,771 during the second year of which $494,437 was due to capacity release and $538,334 was generated from off-system sales. The Company's total actual demand costs for the second year were $15,350,674; therefore, the Company did not participate in any savings until said savings exceeded $153,507. Per the Company's second year filing, the Company retained $339,852 of the incentive earnings from the Capacity Management Incentive Mechanism.

Like the first year of the experimental period, the audit of the second year resulted in findings which, when netted together, were immaterial when compared to the total incentive earnings. In March, 1998, the Company overstated the amount of capacity release which resulted in an over-recovery. The Company also used incorrect rates when computing the monthly interest accrual during the second year. However, the net of these two findings is an over-recovery of only $169. Therefore, no official findings have been issued for the year ended June 30, 1998.

V. <u>JURISDICTION OF THE TENNESSEE REGULATORY AUTHORITY</u>

Tennessee Code Annotated (hereafter "T.C.A.") gave jurisdiction and control over public utilities to the Tennessee Regulatory Authority (hereafter the "Authority" or "TRA"). T.C.A. § 65-4-104 states:

> The Authority has general supervisory and regulatory power, jurisdiction, and control over all public utilities, and also over their property, property rights, facilities, and franchises, so far as may be necessary for the purpose of carrying out the provisions of this chapter.

Further, T.C.A. § 65-4-105 grants the same power to the Authority with reference to all public utilities within its jurisdiction as chapters 3 and 5 of Title 65 of the T.C.A. has conferred on the Department of Transportation's oversight of the railroads or the Department of Safety's oversight of transportation companies. By virtue of T.C.A. § 65-3-108, said power includes the right to audit:

> The department is given full power to examine the books and papers of the said companies, and to examine, under oath, the officers, agents, and employees of said companies... to procure the necessary information to intelligently and justly discharge their duties and carry out the provisions of this chapter and chapter 5 of this title.

The Authority's Energy and Water Division is responsible for auditing those companies under the Division's jurisdiction to insure that each company is abiding by the rules and regulations of the TRA. This audit was performed by Laura J. Foreman of the Energy and Water Division.

SERVICE SCHEDULE NO. 14
Performance Incentive Plan

APPLICABILITY
The Performance Incentive Plan replaces the current reasonableness or prudence review of Nashville Gas Company's (Nashville) gas purchasing activities overseen by the Commission. The plan is designed to provide incentives to Nashville in a manner that will produce rewards for its customers and its shareholders and improvements in Nashville's gas procurement activities. Each plan year will begin July 1. The annual provisions and filings herein would apply to this annual period.

OVERVIEW OF STRUCTURE
Nashville's Performance Incentive Plan is comprised of two interrelated components.

- Gas Procurement Incentive Mechanism
- Capacity Management Incentive Mechanism

The Gas Procurement Incentive Mechanism establishes a predefined benchmark index to which Nashville's commodity cost of gas is compared. It also addresses the recovery of gas supply reservation fees, the treatment of off-system sales and wholesale interstate sale for resale transactions, and the use of financial or private contracts in managing gas costs. The net incentive benefits or costs will be shared between the Company's customers and the Company on a 50% / 50% basis.

The Capacity Management Incentive Mechanism is designed to encourage Nashville to actively market off-peak unutilized transportation and storage capacity on upstream pipelines in the secondary market. The net incentive benefits or costs will be shared between the Company's customers and the Company utilizing a graduated sharing formula, with sharing percentages for Nashville ranging between zero and fifty percent.

The Company will have a cap on incentive gains and losses. During the initial plan year, Nashville's overall gains or losses cannot exceed $1.6 million annually. Also as a part of the Performance Incentive Plan, Nashville submitted a Three Year Supply Plan and will obtain additional firm gas supply related thereto. Included in the Three Year Supply Plan is support for a capacity reserve margin.

GAS PROCUREMENT INCENTIVE MECHANISM
The Gas Procurement Incentive Mechanism addresses the following areas:

- Commodity Costs
- Gas Supply Reservation Fees

Attachment 1

- Off-System Sales and Sale for Resale Transactions
- Use of Financial Instruments or Other Private Contracts

COMMODITY COSTS

Each month Nashville will compare its *total city gate commodity cost of gas*[1] to a benchmark dollar amount. The benchmark gas cost will be computed by multiplying total actual purchase quantities for the month by a price index. The monthly price index is defined as

$$I = F_f(P_0K_0+P_1K_1+P_cK_c+...P_mK_m)+F_oO+F_dD;\text{ where}$$

$$F_f+F_o+F_d= 1;\text{ and}$$

I = the monthly city gate commodity gas cost index.

F_f = the fraction of gas supplies purchased in the first-of-the-month market which are transported to the city gate under Nashville's FT service agreements.

P = the *Inside FERC Gas Market Report* price index for the first-of-the-month edition for a geographic pricing region, where subscript 0 denotes Tennessee Gas Pipeline (TGP) Rate Zone 0; subscript 1 denotes TGP Rate Zone 1; subscript C denotes Columbia Gas Transmission (CGT), Louisiana, plus applicable transportation and fuel charges in CGT's FT tariff to Rayne, and

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1 Gas purchases under Nashville's existing supply contract on the Tetco system are excluded from the incentive mechanism. Nashville will continue to recover 100 percent of these costs through its PGA with no profit or loss potential. Extension or replacement of such contract shall be subject to the same competitive bidding procedures that will apply to other firm gas supply agreements. In addition, Nashville's gas procurement incentive mechanism will measure storage gas supplies against the benchmark index during the months such quantities are purchased for injection. For purposes of comparing such gas purchase costs against the monthly city gate index price, Nashville will exclude any commodity costs incurred downstream of the city gate to storage so that Nashville's actual costs and the benchmark index are calculated on the same basis.

subscript $\propto$ denotes new incremental firm services to which Nashville may subscribe in the future.[2] The commodity index prices will be adjusted to include the appropriate pipeline maximum firm transportation (FT) commodity transportation charges and fuel retention to the city gate under Nashville's FT service agreements.

K = the fraction (relative to total maximum daily contract entitlement) of Nashville's total firm transportation capacity under contract in a geographic pricing region, where the subscripts are as above.[3]

F_o = the fraction of gas supplies purchased in the first-of-the-month spot market which are delivered to Nashville's system using transportation arrangements other than Nashville's FT contracts.

O = the weighted average of *Inside FERC Gas Market Report* first-of-the-month price indices, plus applicable maximum IT rates and fuel retention, from the source of the gas to the city gate, where the weights are computed based on actual purchases of gas supplies purchased by Nashville and delivered to Nashville's system using transportation arrangements other than Nashville's FT contracts.

F_d = the fraction of gas supplies purchased in the daily spot market.

D = the weighted average of daily average index commodity prices taken from *Gas Daily* for the appropriate geographic pricing regions, where the weights are computed based on actual purchases made during the month. The

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2 To the extent that Nashville renegotiates existing reservation fee supply contracts or executes new reservation fee supply contracts with commodity pricing provisions at a discount to the first-of-the-month price index, Nashville would modify the monthly commodity price index to reflect such discount.

3 Because the aggregate maximum daily contract quantities in Nashville's FT contract portfolio vary by month over the course of the year, the weights would be recalculated each month to reflect actual contract demand quantities for such month. The contract weights, and potentially the price indices used, would also vary as Nashville renegotiates existing or adds new FT contracts. As new contracts are negotiated, Nashville would modify the index to reflect actual contract demand quantities and the commodity price indices appropriate for the supply regions reached by such FT agreements.

commodity index prices will be adjusted to include the appropriate maximum transportation commodity charges and fuel retention to the city gate.

If the actual total commodity gas purchase cost in a month is within one percent of the benchmark dollar amount, then there will be no incentive gains or losses. If the actual total commodity gas purchase cost varies from the benchmark dollar allowance by more than one percent, then the variance in excess of the one percent threshold shall be deemed incentive gains or losses under the plan. Such gains or losses will be shared 50/50 between the Company and the ratepayers.

Gas Supply Reservation Fees

Nashville will continue to recover 100% of gas supply reservation fee costs through its PGA with no profit or loss potential. For new contracts and/or contracts subject to renegotiation during the Plan year, Nashville will solicit bids for gas supply contracts containing a reservation fee.

Off-System Sales And Sale For Resale Transactions

Margin on off-system sales and wholesale sale-for-resale transactions using Nashville's firm transportation and capacity entitlements (the costs of which are recovered from Nashville's ratepayers) shall be credited to the commodity gas cost component of the Gas Procurement Incentive Mechanism and will be shared with ratepayers. Margin on such sales will be defined as the difference between the sales proceeds and the total variable costs incurred by Nashville in connection with the transaction, including transportation and gas costs, taxes, fuel, or other costs. For purposes of gas costs, Nashville 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. The difference between Nashville's actual costs and such index price is taken into account elsewhere under the plan. As to transportation costs, Nashville will impute such costs up to the transporting pipeline's maximum interruptible transportation (IT) rate. The difference between the maximum IT rate and Nashville's actual transportation commodity costs will be treated as capacity release margin under the Capacity Management Incentive Mechanism. After deducting the total transaction costs from the sales proceeds, any remaining margin will be credited to commodity gas costs and shared on a 50/50 basis with ratepayers.

Use Of Financial Instruments Or Other Private Contracts

To the extent Nashville uses futures contracts, financial derivative products, storage swap arrangements, or other private agreements to hedge, manage or reduce gas costs, it will flow through gains or losses through the commodity cost component of the Gas Procurement Incentive Mechanism.

CAPACITY MANAGEMENT INCENTIVE MECHANISM

To the extent Nashville is able to release transportation or storage capacity, or generate transportation or storage margin associated with off-system or wholesale sales-for-resale, the associated cost savings shall be shared by Nashville and customers according to the following sharing formula:

Capacity Management Incentive cost savings as a percent of Nashville's annual transportation and storage demand costs.	Sharing percentages Nashville/Customers. (Percent)
Less than or equal to 1 percent	0/100
Greater than 1 percent but less than or equal to 2 percent	10/90
Greater than 2 percent but less than or equal to 3 percent	25/75
Greater than 3 percent	50/50

The sharing percentages shall be determined based on the actual demand costs incurred by Nashville (exclusive of credits for capacity release) for transportation and storage capacity during the plan year, as such costs may be adjusted due to refunds or surcharges from pipeline and storage suppliers. Any incentive gains or losses resulting from adjustments to the sharing percentages caused by refunds or surcharges shall be recorded in the current Incentive Plan Account (IPA).

DETERMINATION OF SHARED SAVINGS

The calculations and recording of incentive gains or losses under the various elements of the Gas Procurement Incentive Mechanism and the Capacity Management Incentive Mechanism shall be performed in accordance with the benchmark formulas approved by the Commission in Docket No. 96-00805. Nashville will compute the gain or loss using the approved formulas monthly.

During a plan year, Nashville will be limited to overall gains or losses totaling $1.6 million. Such gains or losses 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.

Each month during the term of plan, Nashville will compute any gains or losses under the plan. If Nashville earns a gain, a separate Incentive Plan Account (IPA) will be debited with such gain. If Nashville incurs a loss, that same IPA will be credited with such loss. Interest shall be computed on balances in the IPA using the same interest rate and methods as used in Nashville's Actual Cost Adjustment (ACA) account. The offsetting entries to IPA gains or losses will be recorded to income or expense, as appropriate. At its option, however, Nashville may temporarily record any monthly gains in a non-regulatory deferred credit balance sheet account until results for the entire plan year are available.

Each year, effective November 1, the rates for all customers, excluding interruptible transportation customers who receive no direct benefit from any gas cost reductions resulting from the plan, will be increased or decreased by a separate rate increment or decrement designed to amortize the collection or refund of the June 30 IPA balance over the succeeding twelve month period. The increment or decrement will be established by dividing the June 30 IPA balance by the appropriate volumetric billing determinants for the twelve months ended June 30. During the twelve month amortization period, the amount collected or refunded each month will be computed by multiplying the billed volumetric determinants for such month by the 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.

FILING WITH THE COMMISSION

The Company will file calculations of shared savings and shared costs quarterly with the Commission not later than 60 days after the end of each interim fiscal quarter and will file an annual report not later than 60 days following the end of each plan year.

PERIODIC REVIEW

Because of the experimental nature of the Performance Incentive Plan, it is anticipated that the indices utilized, and the composition of the utility's purchased gas portfolio may change. The Company shall, within 30 days of identifying a change to a significant component of the mechanism, provide notice of such change to the Commission Staff.