

# NORTH CAROLINA PUBLIC STAFF UTILITIES COMMISSION

August 11, 2021

Ms. A. Shonta Dunston, Chief Clerk North Carolina Utilities Commission 4325 Mail Service Center Raleigh, North Carolina 27699-4300

Re: Docket No. G-9, Sub 722 – Petition for Consolidated Construction/Redelivery Agreement; G-9, Sub 781 – Application for General Rate Increase; and G-9, Sub 786 – Application of Piedmont Natural Gas Company, Inc., for Modifications to Existing Energy Efficiency Program and Approval of New Energy Efficiency Programs

Dear Ms. Dunston:

Attached for filing in the above-referenced docket is the testimony and exhibit(s) of Neha R. Patel, Manager, Natural Gas Section, Energy Division.

By copy of this letter, I am forwarding a copy to all parties of record by electronic delivery.

Sincerely,

Electronically submitted
s/ Elizabeth D. Culpepper
Staff Attorney
elizabeth.culpepper@psncuc.nc.gov

s/ Megan Jost Staff Attorney megan.jost@psncuc.nc.gov

#### Attachment

Executive Director (919) 733-2435

Accounting (919) 733-4279

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Water/Telephone (919) 733-5610

#### BEFORE THE NORTH CAROLINA UTILITIES COMMISSION

DOCKET NO. G-9, SUB 722 DOCKET NO. G-9, SUB 781 DOCKET NO. G-9, SUB 786

DOCKET NO. G-9, SUB 722

In the Matter of Consolidated Natural Gas Construction and Redelivery Services Agreement Between Piedmont Natural Gas Company, Inc., and Duke Energy Carolinas, LLC

DOCKET NO. G-9, SUB 781

In the Matter of Application of Piedmont Natural Gas Company, Inc., for an Adjustment of Rates, Charges, and Tariffs Applicable to Service in North Carolina

DOCKET NO. G-9, SUB 786

In the Matter of Application of Piedmont Natural Gas Company, Inc., for Modification to Existing Energy Efficiency Program and Approval of New Energy Efficiency Programs TESTIMONY OF NEHA PATEL PUBLIC STAFF – NORTH CAROLINA UTILITIES COMMISSION

#### BEFORE THE NORTH CAROLINA UTILITIES COMMISSION

DOCKET NO. G-9, SUB 722 DOCKET NO. G-9, SUB 781 DOCKET NO. G-9, SUB 786

#### TESTIMONY OF NEHA PATEL

# ON BEHALF OF THE PUBLIC STAFF NORTH CAROLINA UTILITIES COMMISSION

#### **AUGUST 11, 2021**

1 Q. PLEASE STATE YOUR NAME, BUSINESS ADDRESS,
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- 2 **PRESENT POSITION.**
- 3 A. My name is Neha Patel. My business address is 430 North Salisbury
- 4 Street, Dobbs Building, Raleigh, North Carolina. I am the Manager
- of the Natural Gas Section of the Energy Division of the Public Staff
- 6 North Carolina Utilities Commission (Public Staff).

#### 7 Q. BRIEFLY STATE YOUR QUALIFICATIONS AND DUTIES.

- 8 A. My qualifications and duties are included in Appendix A.
- 9 Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?
- 10 A. The purpose of my testimony is to present the results of my
- investigation into the application of Piedmont Natural Gas Company,
- 12 Inc. (Piedmont or the Company), for a general rate increase in this
- 13 proceeding.

### 1 Q. WHAT WERE YOUR AREAS OF INVESTIGATIVE

#### 2 RESPONSIBILITY IN THIS CASE?

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My areas of investigation in this case were: (1) determining the Α. appropriate sales and transportation volumes and customer levels, (2) evaluating the proposed weather normalization adjustment for the test period, (3) calculating the appropriate end-of-period level of revenues, (4) updating the current cost of gas, (5) calculating the proposed updated computational factors used in the Margin Decoupling Tracker (MDT) mechanism, (6) reviewing proposed revisions to the Company's tariff, which consists of its various rate schedules and service regulations, (7) evaluating Piedmont's service quality, (8) evaluating Piedmont's request to continue Commission-approved Integrity Management Rider (IMR) mechanism, and (9) evaluating Piedmont's programs to defer operating and maintenance (O&M) expenditures under its Transmission Management (TIMP) Integrity Program and Distribution Integrity Management Program (DIMP).

### WEATHER NORMALIZATION AND CUSTOMER GROWTH

## 19 Q. WHAT IS THE PURPOSE OF ADJUSTING FOR WEATHER

#### 20 **NORMALIZATION AND CUSTOMER GROWTH?**

21 A. Weather normalization attempts to analyze and adjust for the 22 impacts of actual weather conditions over some specified period of

- time (generally, a test year) on energy consumption relative to
  expected "normal" weather conditions (as measured over some
  longer historical period of time).
- The customer growth adjustment adjusts test period revenues by an amount that represents the growth in sales due to the change in the number of customers.
- The Public Staff runs its own weather normalization and customer growth models and compares the results to those included in the Company's general rate case filing.

# 10 Q. PLEASE EXPLAIN HOW YOU CALCULATED YOUR WEATHER 11 NORMALIZATION ADJUSTMENT IN THIS CASE.

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A.

I calculated the weather-normalized usage by taking the test year customer data (i.e., the number of bills and consumption by month) for each Rate Schedule (RS) and comparing it with the monthly actual Heating Degree Days (HDDs) to develop a linear regression that computes both a base load (minimum usage level) and a Heat-Sensitive Factor (HSF). These base load and HSF components are then applied to the normal HDDs for the test year, resulting in a customer class usage level that would have been expected if the weather had been normal during the test year.

# Q. PLEASE EXPLAIN HDDS AND HOW THEY ARE UTILIZED IN YOUR LINEAR REGRESSION.

- A. HDD is a measurement used to quantify the demand for energy needed for space heating. HDDs are calculated by subtracting the average daily temperature from a base or standard temperature of 65 degrees Fahrenheit. For example, a low of 20 degrees and a high of 40 degrees would yield an average of 30 degrees and an HDD of 35 degrees (65 ((20 + 40)/2)). The normal HDDs are determined based on a 30-year historical average.
- For ratemaking purposes of determining customer usage under normal weather conditions, I completed a linear regression to compare the actual customer usage to the actual HDDs to derive the baseload and the heat sensitive factors for the test year period. My completed analysis results in similar regression results to that of the Company.

# 16 Q. WHAT DATA SOURCES DID YOU USE FOR YOUR HEATING 17 DEGREE DAY CALCULATIONS?

18 A. The temperatures used to calculate the HDDs were obtained from
19 the State Climate Office of North Carolina – North Carolina State
20 University. The Company has historically used weather data

<sup>&</sup>lt;sup>1</sup> The use of 65 degrees Fahrenheit is based on an assumption that heating is not needed when the outside temperature is 65 degrees or more.

obtained on an hourly basis, whereas the Public Staff uses a daily average ((high temperature + low temperature)/2). Because Piedmont's service territory is geographically dispersed, temperature data from multiple weather stations are used. Annual therm-weighted percentages<sup>2</sup> for the weather stations provided by the Company in response to a data request were applied to the normal and actual degree days. The weighting percentages are determined by the heat-sensitive customer population, i.e., residential and commercial customers who need more security of service during peak (cold) days than do non-heat-sensitive customers. The final numbers for the normal HDDs and actual HDDs are the combined weighted normal HDDs and actual HDDs used to perform the linear regression analysis for the test period of the 12 months ended December 31, 2020.

# 15 Q. DOES THE COMPANY'S WEATHER NORMALIZATION 16 ADJUSTMENT AGREE WITH THAT OF PUBLIC STAFF?

17 A. The Public Staff's weather normalization adjustments are
18 comparable to the Company's although there are some minor
19 differences. The differences are due to the fact that the Company

<sup>&</sup>lt;sup>2</sup> Piedmont calculates HDDs by taking the daily average temperature for each weather station from 10:00 a.m. to 9:59 a.m. (Eastern Standard Time), which corresponds to the industry's gas day nomination cycle for gas transportation. Once each weather station's average temperature is calculated, the weather station percentages are applied to determine the North Carolina daily weighed average temperature. To calculate the HDDs, the weighted average temperature is then subtracted from 65 degrees.

uses hourly weather data, whereas the Public Staff uses daily averages, as explained above. Based on my review of the Company's weather normalization analysis, I believe it is reasonable for use in this case.

# 5 Q. PLEASE DISCUSS THE PUBLIC STAFF'S GROWTH 6 ADJUSTMENTS TO CUSTOMER BILLS AND CONSUMPTION.

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Typically, the Public Staff compares actual changes in the number of customer bills between the test year and the year immediately prior, by month, to arrive at an average growth rate and then applies this average growth rate to each rate class. Due to the Commission's moratorium on disconnections for non-payment in effect during the test year in response to the COVID-19 pandemic, the Company did not disconnect service for non-payment of bills for a majority of the test period. As a result, the test period reflects a higher number of customer bills as compared to prior years. However, in consideration of the anticipated expiration of the disconnection moratorium, and with new customers being added to the system, the Public Staff applied growth to the Residential, Small General Service, and Medium General Service customer classes, and the Company used the same methodology in their June update actual growth factors from customers billed from 2018 through 2019 (when there was no disconnection moratorium in place) have been applied to the above customer classes. In addition, the Public Staff made adjustments for

1		growth to certain large-volume customers with known and available
2		information.
3	Q.	WHAT TOTAL SALES AND TRANSPORTATION BILLS AND
4		VOLUME DID YOU USE TO CALCULATE END-OF-PERIOD
5		REVENUES?
6	A.	Based on my analysis, I determined that the appropriate level of end-
7		of-period sales and transportation bills is 9,311,987, and total volume
8		is 422,497,534 dekatherms (dts), as shown in Patel Exhibit I.
9	Q.	PLEASE PROVIDE AN EXPLANATION FOR YOUR
10		ADJUSTMENTS SHOWN IN PATEL EXHIBIT I.
11	A.	Columns (4) and (5) of Patel Exhibit I show the per books number of
12		bills and the per books sales and transportation volumes segmented
13		by rate schedule for the test year ended December 31, 2020 weather
14		normalization, which is shown in Column (6), adjusts the volumes for
15		the heat-sensitive customers (Rate Schedules 101, 102, and 152).
16		The Public Staff and the Company agree on the weather
17		normalization calculation methodology. My adjustments are
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. •		comparable to that of the Company's pro forma bills and usage (dts)

#### **END-OF-PERIOD REVENUE CALCULATIONS**

#### 2 Q. WHAT RATES DID YOU USE TO CALCULATE THE END-OF-

#### 3 PERIOD PRO FORMA REVENUE LEVEL?

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A. To calculate the end-of-period pro forma revenue level, I used the rates approved by the Commission in Docket No. G-9, Sub 790, Piedmont's Application for Adjustment of Its Rates and Charges to Track Changes in its Wholesale Costs of Gas that increased Piedmont's benchmark cost of gas from \$2.50 to \$3.25, effective July 1, 2021. I have also used the Company's updated IMR rates as approved by the Commission in Docket No. G-9, Sub 788, effective June 1, 2021. These rates exclude any temporary increments or decrements (temporaries) that were included in rates at that point in time. This calculation produces what is known as "clean rates."

### 14 Q. WHY ARE TEMPORARIES REMOVED FROM RATES FOR RATE

#### **CASE ANALYSIS?**

Temporaries are usually associated with deferred account activities and are not related to revenue generation for the Company. The margins associated with various rate schedules are not affected by temporaries, except when temporaries are associated with fixed gas costs. Temporaries are removed when calculating end-of-period rates and proposed rates to achieve consistency and for ease of understanding. After the Commission determines the proper rates in

- this case, the new billing rates will be adjusted for the then current
- temporaries.

#### 3 Q. WHAT IS YOUR END-OF-PERIOD REVENUE CALCULATION

#### 4 **FOR THE COMPANY?**

5 The Company is proposing total end-of-period revenue of Α. 6 \$1,047,021,735, which is comprised of sale and transportation of gas 7 revenues of \$1,045,885,591 and other operating revenues of 8 \$1,136,144. I have calculated end-of-period revenues of 9 \$1,113,691,010, which is comprised of sale and transportation of gas revenues of \$1,110,660,7113 and other operating revenues as 10 provided by Public Staff witness Julie G. Perry of \$3,030,299. 11

### 12 Q. HOW DID YOU CALCULATE THIS END-OF-PERIOD LEVEL OF

#### 13 **REVENUE FOR THE COMPANY?**

14 A. I calculated the end-of-period revenue level by multiplying the
15 number of customer bills by the facilities charge per bill, to arrive at
16 the total facilities revenues. Similarly, the demand (for certain rate
17 schedules) was multiplied by the demand charge per bill, to arrive at
18 the total demand revenues. Likewise, the volume for each rate
19 schedule was multiplied by the end-of-period rates to arrive at the

<sup>&</sup>lt;sup>3</sup> Sale and Transportation of gas revenues includes the benchmark cost of gas of \$3.25 as approved by the Commission in Docket No. G-9, Sub 790, as well as an updated lost and unaccounted for gas percentage as provided in the Company's response to a Public Staff data request.

total energy revenues. The total facilities charge revenue for a particular rate schedule, plus any demand revenue for that rate schedule, plus the energy revenue for that rate schedule, plus IMR revenues for that rate schedule, plus any Minimum Margin Agreement payment revenues or Compression Charge revenues for that rate schedule equals the total revenue received from customers receiving service under that rate schedule. The sum of the revenues from each rate schedule equals the total end-of-period revenue level as shown on Patel Exhibit II.

10 **GAS COSTS** 

#### 11 Q. DO YOU AGREE WITH THE COMPANY'S PROPOSED LEVEL OF

#### 12 **COST OF GAS?**

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- 13 A. No. I have updated the commodity cost of gas using the benchmark
- 14 cost of gas of \$3.25 as approved by the Commission in Docket No.
- 15 G-9, Sub 790, as well as an updated lost and unaccounted for gas
- percentage as provided in the Company's response to a Public Staff
- 17 data request. My recommended commodity cost of gas is
- 18 \$244,251,000 as compared to the Company's level of \$187,342,806.

#### 19 Q. PLEASE EXPLAIN YOUR ADJUSTMENT TO FIXED GAS COSTS.

- 20 A. The Company reflected annual fixed gas costs of \$116,484,625.
- 21 Based on recent changes in interstate pipeline and storage tariffs
- and secondary market credits, as provided by the Company in

1	response to a Public Staff data request, and an allocation percentage
2	of 83.16% as recommended by Public Staff witness Dustin R. Metz,
3	I arrived at total fixed gas costs of \$122,569,944.
4	I determined that the total commodity and fixed gas cost of
5	\$366,820,944, as shown on Patel Exhibit III, is appropriate for use in
6	this proceeding.

#### MDT MECHANISM

## Q. PLEASE EXPLAIN ANY ADJUSTMENTS REGARDING THE MDT

**MECHANISM**.

Α.

In this proceeding, the Company filed MDT adjustments to the Residential, Small General Service, and Medium General Service rate schedules. I calculated the normalized usage for heat sensitive customers on a monthly basis and determined that the Public Staff's MDT revenue adjustments, the Company's adjustments and the "R" factors using data through May 31, 2021, are similar; thus, I accepted the Company's results. As stated in Piedmont witness Kally A. Couzens' testimony, this adjustment results in an increase to Residential, Small General Service, and Medium General Service total pro forma revenues.

#### **CHANGES TO PIEDMONT'S TARIFF**

# Q. WHAT CHANGES IS PIEDMONT PROPOSING TO ITS NORTH CAROLINA TARIFF?

- Piedmont received approval to eliminate Standby Sales Service in its last general rate case in Docket No. G-9, Sub 743 (Sub 743 rate case) for certain rate schedules. Company witness Pia K. Powers' testimony addresses the proposal to eliminate the reference to Standby Sales Service in certain rate schedules since it no longer exists as part of RS 113.
  - Piedmont proposes to add a requirement that service under RS 113 and RS 114 is contingent upon installation of telemetering equipment that reports daily consumption. Piedmont witness Powers stated in her pre-filed direct testimony that the telemetering equipment is required for Piedmont to properly operate its system, render accurate bills to customers and their agents, and enforce other provisions within its existing tariff. She further testified that customers in the affected rate classes already have the appropriate telemetering equipment, and that the tariff change is being proposed for purposes of transparency.
  - Another change proposed by Piedmont is the elimination of the RS 12 and RS T-12 rate schedules since no customers

were provided or billed for service under either of these two rate schedules during or after the test period, or for several years prior to the test period. The Company also proposes to remove reference to these two rate schedules under RS 143 and Appendix E. Another proposed change under RS 143 is the elimination of reference to the outdated provision for this rate schedule to remain in effect for a period of two years after which continuation of service under this rate schedule requires Commission action.

- In her testimony, Piedmont witness Powers proposes two administrative corrections to Appendix B of Piedmont's Service Regulations: one is to correct typographical errors related to a defined term and the second is to clarify the Company's internal procedures. The second change was proposed in the Sub 743 rate case and no party objected, but the change was not captured in the settlement agreement approved by the Commission.
- Witness Powers has proposed changes to update the Special Contract Credit amounts, margin percentages by rate class, allocation factors, and the annual billing determinants, etc., for the IMR mechanism in Appendix E as is necessary with each

new general rate case proceeding. These changes are discussed in Public Staff witness Perry's testimony.

#### IMR MECHANISM

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# Q. PLEASE PROVIDE A BRIEF OVERVIEW OF FEDERAL GAS PIPELINE SAFETY REQUIREMENTS.

Pipeline operators are required to perform integrity measures on their transmission and distribution pipelines by following certain regulatory requirements imposed by the U.S. Department of Transportation Pipeline and Hazardous Materials Safety Administration (PHMSA) under its TIMP and DIMP. These PHMSA regulations are regularly amended and updated to increase the safety associated with transportation of gas. PHMSA's implementation of Integrity Management (IM) regulations for natural gas transmission and distribution pipelines is intended to improve overall pipeline safety, reliability and integrity. 49 CFR Part 192, Subpart O specifies how pipeline operators must identify, prioritize, repair, and validate the integrity of gas transmission pipelines that could affect High Consequence Areas (HCAs) within their service territories in the event of a leak or failure. HCAs, which include certain populated and occupied areas, are required to be inspected every seven years or less. Pursuant to 49 CFR Part 192, Subpart P, Piedmont is federally mandated to collect data on and have

knowledge of its distribution pipelines, identify and assess existing and potential threats, evaluate and rank risk to the distribution system, identify and implement measures designed to address the risks, measure IM performance, monitor the results and evaluate effectiveness of those measures, develop and implement a process for periodic review and improvement of the program, and report results. Since these distribution lines exist largely in more populated areas while delivering gas to the end user, DIMP focuses on the Company's entire distribution system, not just the HCAs.

The TIMP and DIMP activities are cyclical, are based on timing and intervals of prior assessments, and vary from year to year.

Effective July 1, 2020, PHMSA required all pipeline operators to comply with the new Gas Transmission "Mega Rule," which provides an expansion of the IM requirements for gas transmission pipelines and aims to further increase the level of safety associated with gas transmission pipelines. A significant portion of this rule outlines documentation and requires operators to (1) Verify pipeline material properties and attributes: Operators must have information on the material strength properties for all transmission pipe; (2)

https://www.federalregister.gov/documents/2019/10/01/2019-20306/pipelinesafety-safety-of-gas-transmission-pipelines-maop-reconfirmation-expansion-ofassessment

Reconfirm Maximum Allowable Operating Pressure (MAOP): this applies to those transmission pipelines where pressure test records are not traceable, verifiable and complete (TVC); and (3) Expand IM requirements outside HCA: Periodic assessments of pipelines in populated areas not designated as HCAs to Moderate Consequence Areas (MCAs).<sup>5</sup>

# Q. PLEASE PROVIDE SOME BACKGROUND ON THE COMPANY'S IMR MECHANISM.

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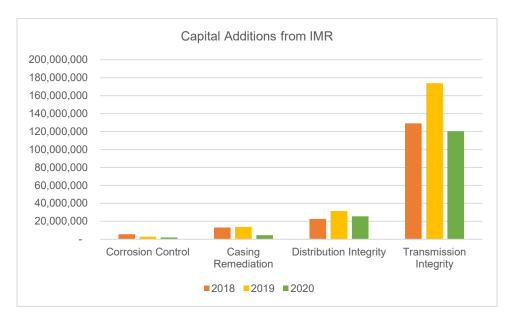
N.C. Gen. Stat. § 62-133.7A authorizes the Commission to approve a rate adjustment mechanism to enable a natural gas local distribution company (LDC) to recover its prudently incurred capital investments and associated costs of complying with federal gas pipeline safety requirements. The Commission approved an IMR mechanism as part of Piedmont's 2013 general rate case (Docket No. G-9, Sub 631) and it is contained in Appendix E to Piedmont's Service Regulations. Based on concerns raised by the Public Staff, in November 2015, the IMR mechanism was revised to provide for changes to the IMR processes and procedures, including the exclusion of certain costs from recovery through the IMR mechanism

<sup>&</sup>lt;sup>5</sup> Moderate Consequence Areas (MCAs) are defined as areas within a potential impact circle containing either five or more buildings intended for human occupancy or any portion of the paved surface, including shoulders, of a designated interstate, freeway, or expressway, or principal arterial roadway with four or more lanes, as defined by the Federal Highway Administration (as compared to 20 buildings which define an HCA).

(Excluded Costs) and the allowance of bi-annual rate adjustments.
The Excluded Costs percentages are intended to reduce the level of
non-pipeline safety costs charged to customers through the IMR
mechanism, but are still eligible for inclusion in recoverable rate base
in Piedmont's next general rate case proceeding. In the Sub 743 rate
case, the Commission authorized the continuation of the IMR
mechanism subject to stipulated clarifications. Piedmont has
included, as part of this proceeding, a proposal to continue operation
of this mechanism for an additional period of four years. Public Staff
witness Perry discusses the IMR mechanism.
Piedmont has applied for and received Commission approval to
implement rate increments to recover its Integrity Management
Revenue Requirement (IMRR). Since the Sub 743 rate case, there
have been five of these rate changes.
The Public Staff reviews and audits Piedmont's monthly IMR reports
filed with the Commission through data requests and follow-up
conference calls with Company personnel regarding project scope,
project need, actual project costs incurred, and the nature of IMR-
associated costs. In addition, the Public Staff files an Annual IMR
Report with the Commission every February 15th in order to discuss
any issues from the monthly audits, or the IMRR, as well as

- summarize the completed IMR projects and the budgeted IMR projects for the next three years.
- Q. PLEASE EXPLAIN YOUR RECOMMENDATION REGARDING
   4 PIEDMONT'S REQUEST TO CONTINUE THE IMR MECHANISM.
- A. Patel Figure 1 below shows the Company's capital additions
   associated with its IMR mechanism for the period 2018 through 2020
   also discussed by Public Staff witness John R. Hinton.

### 8 Patel Figure 1



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Piedmont estimated in its last general rate case that it would spend approximately \$173 million each year from 2019 until 2021, not including any "Mega Rule" compliance commitments. In this case, Piedmont projects it will spend approximately \$277 million each year (gross plant investment) from 2021 through 2023 in addition to expenditures related to anticipated changes in the "Mega Rule."

Based on the importance of pipeline safety in complying with federal safety guidelines to protect Piedmont's customers, employees, contractors and the general public, I recommend the IMR mechanism remain in place.

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# REGULATORY ASSET TREATMENT FOR TIMP-RELATED O&M (PIM-T) COSTS

The Commission has approved regulatory treatment for the Company's TIMP O&M costs incurred due to the pipeline safety regulations promulgated by PHMSA. Under PHMSA, pipeline operators are mandated to identify High Consequence Areas (HCAs) or covered segments in order to identify threats to their pipelines, identify and analyze the risk to help prioritize assessments, remediate conditions found during integrity assessments, maintain records, and implement preventative and mitigative measures. Per PHMSA guidelines, operators must perform pipeline reassessments which drives up the costs added to the rate base while allowing the Company to mitigate threats and risks identified on these pipelines and ensure safely on their transmission lines. I recommend that Piedmont be allowed to continue its deferral mechanism under PIM-D until the resolution of the Company's next general rate case proceeding. I further recommend that the Company continue providing to the Commission program updates, including project scope and the budgeted and actual costs incurred, when it files its

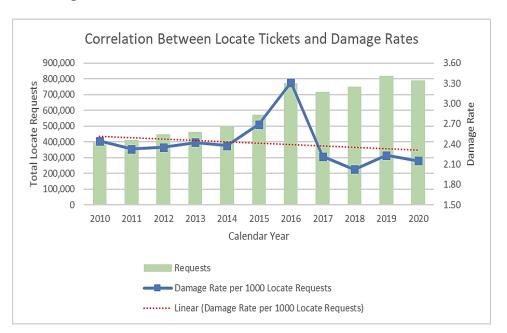
1		annual IMR report. While my area of investigation focused on the
2		necessity of this mechanism, Public Staff accounting witness Feasel
3		discusses how these costs are accounted for.
4		REGULATORY ASSET TREATMENT FOR DIMP-RELATED O&M
5		(PIM-D) COSTS
6	Q.	PLEASE DISCUSS YOUR REVIEW OF THE COMPANY'S
7		REGULATORY ASSET TREATMENT FOR DIMP-RELATED O&M
8		COMPLIANCE COSTS.
9	A.	The Commission has approved regulatory asset treatment for
10		Piedmont's DIMP O&M costs associated with PHMSA regulatory
11		compliance. The DIMP primarily covers the following areas of
12		pipeline safety:
13		1. Damage prevention programs: (a) legacy cross bore, (b) watch
14		and protect, and (c) locatability investigations/repair untoneable
15		assets;
16		2. Records: mapping services in the GIS; and
17		3. Corrosion: close interval surveys on high-pressure distribution
18		lines.
19		In the Sub 743 rate case, the Company projected its five-year (2020-
20		2024) average cost for these five programs to be approximately \$11
21		million annually, and noted that all of the work covered by these

programs would involve external contractors rather than Piedmon
direct labor. However, the Company incurred lower costs thar
anticipated due to delayed implementation of the DIMP programs
approved in the Sub 743 rate case caused by the COVID-19
pandemic.

As part of my investigation in this proceeding, I reviewed data request responses received from the Company regarding the DIMP-related O&M project scope and associated costs. Under damage prevention, I also reviewed data from 2010 to 2020<sup>6</sup> related to the Company's annual damage rates and the relationship to the number of locate requests. Patel Figure 1 below shows the history of locate requests and the associated damage rates per 1000 locate tickets.

https://portal.phmsa.dot.gov/analytics/saw.dll?Portalpages&PortalPath=%2Fshared%2FPDM%20Public%20Website%2F\_portal%2FExcavation%20Damage&Action=Navigate&col1=%22PHP%20-%20Geo%20Location%22.%22State%20Name%22&val1=%22%22

### 1 Patel Figure 2



As reflected in Patel Figure 2, from 2010 to 2014, the Company received approximately 400,000 locate requests in any given year, and the damage rate averaged 2.39 damage incidents annually. After 2014, the damage rate increased, reaching a high of about 3.3, before declining substantially over the last four years with an increase in locate requests.

The Company has implemented measures to reduce third party damages such as mailers to registered excavation companies within the Company's service territory and newspaper, billboard, and social media advertising. Beginning December 1, 2019, the Company implemented three public awareness programs to help reduce third party damage incidents. They are: (1) Risk Ranking "811" tickets,

1	and Watch & Protect Program; (2) Untoneable Repair Program; and
2	(3) Geofencing.
3	The Company received approval to defer expenses for certain
4	programs in the Sub 743 rate case.7 Even though these programs
5	are relatively new, the Company states that they have already had a
6	positive impact on the damage ratio to its infrastructure;
7	nevertheless, the Public Staff will continue to analyze this data to
8	assess the impacts of the programs.
9	In addition to the above list, the Company has adopted the Gold
10	Shovel Standard <sup>8</sup> (GSS) as part of its standard practice. The GSS is
11	a non-profit organization that promotes safe digging practices using
12	standardized performance metrics. As a member of GSS, Piedmont
13	requires all of its contractors to maintain Gold Shovel certification.
14	Regardless of any programs implemented by the Company, it is still
15	third party contractors that are key drivers behind damage events.9
16	As a result, the Company emphasizes its Gas Pipeline Damage
17	Prevention Plan, which provides for monthly interaction contractors

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https://portal.phmsa.dot.gov/analytics/saw.dll?Portalpages&PortalPath=%2Fshared%2FPDM%20Public%20Website%2F\_portal%2FExcavation%20Damage&Action=Navigate&col1=%22PHP%20-%20Geo%20Location%22.%22State%20Name%22&val1=%22%22

 $<sup>^{7}\ \</sup>$  https://starw1.ncuc.net/NCUC/ViewFile.aspx?ld=efc328f2-5820-43c7-8390-c89ebc0df42c

<sup>8</sup> https://goldshovelstandard.org/

1		who are repeat offenders. These meetings involve the review of the
2		specific contractor statistics in an attempt to identify and implement
3		corrective action measures.
4		Under records, mapping services in the GIS program as approved in
5		the Sub 743 rate case help assist pipeline operators and state and
6		federal pipeline regulators ensure the safe, reliable, and
7		environmentally sound operation of the operator's facility. In
8		accordance with Federal requirements, between program approval
9		in the Sub 743 rate case and the present, the Company to date has
10		digitally map about 15% of its distribution mains, services, and
11		related equipment in its GIS, with an anticipated completion date of
12		December 2024.
13		The Corrosion program is another program approved under the
14		DIMP initiative during the last general and involves performing close
15		internal surveys on high pressure distribution pipe on a five-year
16		cycle and remediating anomalies found through the surveys.
17	Q.	WHAT IS YOUR RECOMMENDATION REGARDING THE
18		COMPANY'S DEFERRED DIMP O&M EXPENSES?
19		The issue of pipeline safety, and specifically the testing of LDCs'
20		systems, along with the implementation of safety programs, has

come to the forefront in the past 10 to 15 years. The focus was

initially on transmission systems and now includes distribution

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systems as well. Significant expenditures have been made to address pipeline safety and remain compliant with PHMSA regulations, which have been amended as recently as 2019 to expand obligations.<sup>10</sup>

Company witness Brian R. Weisker noted that much of the cost of compliance with PHMSA regulations is due to the thorough assessments the Company conducts of its transmission facilities through smart-pig inspections, which identify anomalies requiring mitigation. Witness Weisker also noted that the Company's control over the costs of undertaking specific projects is somewhat limited because much of the PHMSA compliance work is conducted by outside contractors who bid for the projects, and high demand for qualified contractors has caused the cost of PHMSA compliance work to become inflated.

The primary cost drivers impacting the Company's forecast include contracted labor to meet safety compliance and documentation per federal DIMP regulatory requirements. The Company has stated that it would be difficult to estimate these costs with much certainty and that doing so would be speculative. It is difficult to put a cost on

<sup>&</sup>lt;sup>10</sup> Direct Testimony of Company witness Weisker at page 7.

- pipeline safety and the prevention of property damage and personal
   injury or death that can occur from a natural gas incident.
  - As stated above, Piedmont got approval for all programs under DIMP in the last general rate case, but due to COVID there was a delay in starting all of the approved programs. The Public Staff should have the opportunity to examine the annual reports and comment on the expenditures. I recommend that Piedmont be allowed to continue its deferral mechanism under PIM-D until the resolution of the Company's next general rate case proceeding, and that the Company provide to the Commission program updates including project scope, and the budgeted and actual costs incurred when it files its annual IMR report. While my area of investigation of focused on the necessity of this mechanism, Public Staff accounting witness Feasel discusses how these costs are accounted for.

### **PIEDMONT'S QUALITY OF SERVICE**

- 16 Q. WHAT FACTORS DID YOU CONSIDER IN YOUR EVALUATION
- 17 OF PIEDMONT'S OVERALL QUALITY OF SERVICE PROVIDED
- 18 **TO ITS CUSTOMERS?**

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19 A. I reviewed the following information in my evaluation of Piedmont's20 quality of service:

1		<ul> <li>Informal complaints and inquiries from Piedmont customers</li> </ul>
2		received by the Public Staff's Consumer Services Division;
3		Consumer statements of position filed in Docket No. G-9, Sub
4		781CS (Sub 781CS docket);
5		Emergency response times;
6		Customer Call Center Monthly Reports filed in Docket No. G-
7		100, Sub 96PNG;
8		Data on pipeline incident and damage rates (see Patel Figure
9		3); and
10		Recent Company initiatives that impact the level of service
11		being provided to customers.
12	Q.	WHAT TYPES OF CUSTOMER COMPLAINTS AND INQUIRIES
13		HAVE BEEN RECEIVED BY THE PUBLIC STAFF'S CONSUMER
14		SERVICES DIVISION?
15	A.	For the period January 2016 through April 2021, the Public Staff's
16		Consumer Services Division received approximately 1,563 contacts
17		from Piedmont customers. Of those contacts, 84% related to billing
18		and payment issues including the establishment or modification of
19		payment arrangements and questions about current bills. The
20		remaining 16% involved rate, service, and meter-related issues.

1	Q.	WHAT TYPES OF CONCERNS WERE INCLUDED IN THE
2		CONSUMER STATEMENTS OF POSITION FILED IN THE SUB
3		781CS DOCKET?
4	A.	As of August 8, 2021, approximately 47 individuals had filed
5		consumer statements in this docket. These statements can be
6		divided into two categories: (1) general opposition to the proposed
7		rate increase and (2) concerns of fixed income customers regarding
8		their ability to afford the rate increase.
9	Q.	PLEASE DESCRIBE THE OTHER DATA USED IN YOUR
9	Q.	FLEASE DESCRIBE THE OTHER DATA OSED IN TOOK
10		REVIEW.
11	A.	The other data used in my review were obtained through Piedmont's
12		Commission-required filings and responses to Public Staff data
13		requests. I was able to analyze the Company's: (1) call center
14		response times to customer inquiries, (2) response times to
15		emergency response calls/events, and (3) the correlation between
16		damage rates and the number of locate request tickets issued to the
17		Company.
18		With regard to the Customer Call Center information filed in Docket
19		No. G-100, Sub 96PNG, from January 2020 to May 2021, the
20		Company and its third party call centers answered 1,711,719 calls

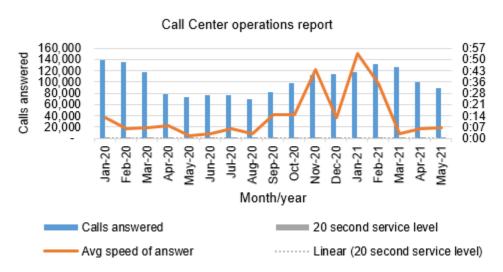
with an answer rate of 98.6%. In addition to the number of calls

answered by customer service representatives, the Company's

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Interactive Voice Response (IVR) answering system handled an additional 1,149,579 calls during this same timeframe. Per G-100, Sub 96PNG Reports, on average, the Company's performance on the "20 second service level" to customer calls has an overall high performance of answering calls within 20 seconds (about 91%) as can be seen from Figure 3 below, while also focusing on improving call response time during the winter months.

#### Patel Figure 3



Q. HOW WOULD YOU RATE PIEDMONT'S SERVICE QUALITY?

Based on my investigation, I believe the overall quality of service provided by Piedmont to its North Carolina customers is adequate at this time.

A.

#### COMPANY'S UPDATE FILING

- 2 Q. WHAT ARE YOUR COMMENTS REGARDING THE COMPANY'S
- 3 UPDATE FILING MADE ON JULY 28, 2021 (JUNE UPDATE)?
- 4 The Public Staff is aware of the June Update; however, given the Α. 5 timing of the update filing and the due date of the Public Staff's 6 testimony, the Public Staff could not reasonably perform its 7 investigation on the Company's updated information in the short 8 amount of time before it was due to file testimony. The Public Staff 9 reserves the right to file supplemental testimony related to the 10 Company's June Update once its investigation of the updated 11 information is completed.
- 12 Q. DOES THIS CONCLUDE YOUR TESTIMONY?
- 13 A. Yes, it does.

**APPENDIX A** 

#### QUALIFICATIONS AND EXPERIENCE

#### **NEHA PATEL**

I graduated from the University Of Mumbai in 1995 with a Bachelor of Science degree in Electronic Engineering. I began working as a Utilities Engineer with the Natural Gas Division of the Public Staff in the spring of 2014. In 2020, I became Manager of the Natural Gas Section of the Energy Division.

I have worked on purchased gas cost adjustment procedures, tariff filings, customer utilization trackers, special contract review and analysis, weather normalization adjustments, customer complaint resolutions, integrity management riders, franchise exchange filings, compressed natural gas special contracts, peak day demand and capacity calculations, fuel and electric usage trackers, gas resellers, annual review of gas costs proceedings, renewable natural gas filings, cost of service studies, general rate case proceedings, and rate design.

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PUBLIC STAFF

### SUMMARY OF VOLUME AND BILL ADJUSTMENT FOR END OF PERIOD

		E A			WEA NORMAI	THER LIZATION	CUSTOMER	R GROWTH	TOTAL	
RATE SCHEDULE (1)	DESCRIPTION (2)	S O N (3)	BILLS/ DEMAND UNITS (4)	VOLUMES (DTS) (5)	ADJUSTMENT (DTS) (6)	TOTAL (DTS) (7) (5) + (6)	ADJUST (BILLS) (8)	TMENT (DTS) (9)	(BILLS) (10) (4) + (8)	(DTS) (11) (7) + (9)
101 Residential Service 101 Residential Service		W S	3,467,266 4,849,056	24,967,801 8,736,958	5,196,435 (173,837)	30,164,236 8,563,121	48,085 67,249	418,330 118,757	3,515,351 4,916,305	30,582,56 8,681,87
43/101 Exp Motor Vehicle Fuel 43/101 Exp Motor Vehicle Fuel		W S	:	:	:	:	-	-	:	:
102 Small General Service 102 Small General Service		W S	358,613 499,882	14,694,162 7,668,230	2,371,941 30,837	17,066,103 7,699,067	2,816 3,925	133,991 60,448	361,429 503,807	17,200,09 7,759,51
143/102 Exp Motor Vehicle Fuel 143/102 Exp Motor Vehicle Fuel		W S	45 63	6,927 4,947	:	6,927 4,947	-	-	45 63	6,92 4,94
152 Medium General Service	First 500 dts	w	2,504	1,103,883	115,210	1,219,093	85	41,340	2,589	1,260,43
152 Medium General Service	Over 500 dts First 500 dts Over 500 dts	W S S	3,517	1,420,122 1,220,714 854,792	148,215 4,688 3,283	1,568,337 1,225,402 858,075	119	53,183 41,554 29,098	3,636	1,621,52 1,266,95 887,17
143/152 Exp Motor Vehicle Fuel	First 500 dts Over 500 dts	w	-	:		:	-		-	
143/152 Exp Motor Vehicle Fuel	First 500 dts Over 500 dts	S	-	:		- :	-		-	
142 Natural Gas Vehicle Fuel - Company Premise		W	:	33,028 45,052	:	33,028 45,052	-	:	-	33,02 45,05
144 Med Gen Transportation Service	First 500 dts Over 500 dts	w	-	-	-	:	-	:	:	:
	First 500 dts Over 500 dts	S	•	•	-				-	
103 Large General Service	Demand	W W W W W S S S S	175.455 387 553	540,463 472,780 166,002 7,041 0 0 657,365 420,922 121,663		540,463 472,780 166,002 7,041 0 0 657,365 420,922 121,663	- dts -	- - - - - -	175,455 dts 387	540.4 472.7 166.0 7,0 657.3 420.9 121.6
43/103 Exp Motor Vehicle Fuel	Next         16,500         dts           Next         30,000         dts           Over         60,000         dts           Demand         First         1,500         dts	s s s	8,419 dts 15	3,058 0 0	-	3,058 0 0		:	8,419 dts 15	3,0 22,5
143/103 Exp Motor Vehicle Fuel	Next 3,000 dts Next 9,000 dts Next 16,500 dts Next 30,000 dts Over 60,000 dts First 1,500 dts Next 3,000 dts	W W W W S S	21	29,515 24,500 - - - 31,500		29,515 24,500 - - - 31,500 45,994	-	- - - -	21	29,5 24,5 - - - 31,5
	Next         9,000         dts           Next         16,500         dts           Next         30,000         dts           Over         60,000         dts	s s s		45,994 40,008 - - -	-	40,008 - - -		:		45,9 40,0
04 Interruptible Service	First 1,500 dts Next 3,000 dts Next 9,000 dts Next 16,500 dts Next 30,000 dts Over 60,000 dts	W W W W	87	126,290 167,195 86,368 -	-	126,290 167,195 86,368	-	:	87	126,2 167,1 86,3
04 Interruptible Service	First 1,500 dts Next 3,000 dts Next 9,000 dts Next 16,500 dts Next 30,000 dts	\$ \$ \$ \$	121	146,785 117,722 34,380 3,243	-	146,785 117,722 34,380 3,243	-	-	121	146,7 117,7 34,3 3,2
	Over 60,000 dts	S			1 -		l	-	I	

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## PUBLIC STAFF SUMMARY OF VOLUME AND BILL ADJUSTMENT FOR END OF PERIOD

		E				THER				
RATE SCHEDULE (1)	DESCRIPTION (2)	A S O N (3)	BILLS/ DEMAND UNITS (4)	VOLUMES (DT) (5)	ADJUSTMENT (DT) (6)	TOTAL (DT) (7) (5) + (6)	CUSTOMER ADJUST (BILLS) (8)		(BILLS) (10) (4) + (8)	(DT) (11) (7) + (9)
43/104 Exp Motor Vehicle Fuel	First 1,500 dts	W	-		-		-	-	-	
	Next 3,000 dts Next 9,000 dts	w		:		:				
	Next 16,500 dts	W			-					
	Next 30,000 dts Over 60,000 dts	W			- :			-		
	First 1,500 dts	S	-	-	-	-	-	-	-	
	Next 3,000 dts Next 9,000 dts	S								
	Next 16,500 dts	S		-	-	-		-		
	Next 30,000 dts Over 60,000 dts	S S								
3 Large General Transportation	213: 33,333	-								
Service	Demand		1,664,818 dts		-		21,604		1,686,422 dts	
	First 1,500 dts Next 3,000 dts	w	1,463	1,999,261 2,707,361	:	1,999,261 2,707,361	5	7,500 15,000	1,468	2,006, 2,722,
	Next 9,000 dts	w		2,984,365		2,984,365		45,000		3,029
	Next 30,000 dts Next 46,500 dts	W		1,907,877 1.654,315	:	1,907,877 1.654.315		82,500 70,125		1,990 1,724
	Over 60,000 dts	w		3,001,054		3,001,054		0		3,001
3 Large General Transportation Service	First 1,500 dts Next 3,000 dts	s s	2,041	2,634,064 3,185,097	-	2,634,064 3,185,097	7	10,500 21,000	2,048	2,644 3,206
Service	Next 9,000 dts	S		3,397,313		3,397,313		63,000		3,460
	Next 16,500 dts Next 30,000 dts	S S		2,302,383 2,100,219	-	2,302,383 2,100,219		113,487 41,590		2,415
	Over 60,000 dts	S		3,512,795		3,512,795		41,590		2,141 3,512
3/113 Exp Motor Vehicle Fuel										
STIP EXPINIOU VOLICO LOG	Demand		44,823 dts				600		45,423 dts	
	First 1,500 dts Next 3,000 dts	W	40	59,894 90,581	-	59,894 90,581	5	7,500 3,905	45	67 94
	Next 9,000 dts	w		58,028	-	58,028		-,		58
	Next 30,000 dts Next 46,500 dts	W		82,500 47,512		82,500 47,512				82 47
	Over 60,000 dts	W			-		_			
3/113 Exp Motor Vehicle Fuel	First 1,500 dts Next 3,000 dts	S S	56	84,000 137,539		84,000 137,539	7	10,500 5,467	63	94 143
	Next 9,000 dts	S		87,207	-	87,207		-		87
	Next 16,500 dts Next 30,000 dts	S S		115,500 79,645		115,500 79,645				115 79
	Over 60,000 dts	S			-	-		-		
Interruptible Transportation Service	First 1,500 dts	w	1,208	1,576,331	-	1,576,331	5	7,500	1,213	1,583
	Next 3,000 dts Next 9,000 dts	w		2,387,296 3,214,190		2,387,296 3,214,190		5,675 (15,281)		2,392 3,198
	Next 16,500 dts	W		2,297,944	-	2,297,944		(49,500)		2,248
	Next 30,000 dts Over 60,000 dts	W		2,222,135 1,372,297	- :	2,222,135 1,372,297		(90,000) (10,161)		2,132 1,362
Interruptible Transportation Service	First 1,500 dts	S	1,676	2,239,062	-	2,239,062	2	3,000	1,678	2,242
	Next 3,000 dts Next 9,000 dts	s s		3,169,572 3,838,369	- :	3,169,572 3,838,369		(7,055) (51,955)		3,162 3,786
	Next 16,500 dts	S		2,788,562	-	2,788,562		(99,000)		2,689
	Next 30,000 dts Over 60,000 dts	S S		2,651,927 1,532,413	-	2,651,927 1,532,413		(177,209) (21,443)		2,474 1,510
3/114 Exp Motor Vehicle Fuel	First 1.500 dts	w								
STATE CONTROL OF THE PROPERTY	Next 3,000 dts	w	-		-		=	-	-	
	Next 9,000 dts Next 16,500 dts	W		:		:		:		
	Next 30,000 dts	w		-				-		
3/114 Exp Motor Vehicle Fuel	Over 60,000 dts First 1,500 dts	W S		:		-		:		
STATE OF MICHOLOGICAL CONTRACTOR	Next 3,000 dts	S	-			-	=	-	-	
	Next 9,000 dts Next 16,500 dts	s s		-		-		-		
	Next 30,000 dts	S			-			-		
	Over 60,000 dts	S		-	-	-		-		
SUBTOTAL	+		6.484	61,518,608		61,518,608	31	(8,355)	6,515	61,510

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#### PUBLIC STAFF

### SUMMARY OF VOLUME AND BILL ADJUSTMENT FOR END OF PERIOD

		S E A S	BILLS/			ATHER ALIZATION	CUSTOME	R GROWTH	TOTAL	
RATE SCHEDULE (1)	DESCRIPTION (2)	O N (3)	DEMAND UNITS (4)	VOLUMES (DT) (5)	ADJUSTMENT (DT) (6)	TOTAL (DT) (7) (5) + (6)	ADJUS (BILLS) (8)	TMENT (DT) (9)	(BILLS) (10) (4) + (8)	(DT) (11) (7) + (9)
105 Outdoor Gaslight Service	Fixtures		5,397			0	- dts		5,397	0
_		W	282	3,593		3,593	-		282	3,593
		S	393	5,042	-	5,042	-	-	393	5,042
			84.000 dts				-		84.000 dts	
T-10 Transportation for Rate 10		W	5	745,667		745,667	-		5	745,667
T-10 Transportation for Rate 10		S	7	514,826	-	514,826	-	-	7	514,826
12 Military Installations In Onslow County		w			-		-	-		
12 Military Installations In Onslow County		S	•	•	-	•	-	-	-	-
T-12 Transportation for Rate 12		w			-		-	-		
T-12 Transportation for Rate 12		S	•	•	-	•	-	-	-	-
Power Generation Contracts		w	76	108,791,607	-	108,791,607	6	8,678,554	82	117,470,161
Power Generation Contracts		S	112	140,453,299	-	140,453,299	-	16,405,242	112	156,858,541
Special Contracts-Municipal		w	16	4,204,171	-	4,204,171	-	-	16	4,204,171
Special Contracts-Municipal		S	21	2,847,562	-	2,847,562	-	-	21	2,847,562
Special Contracts-Large Volume		w	50	2,023,465	-	2,023,465	(4)	88,077	46	2,111,542
Special Contracts-Large Volume		S	58	2,123,266	-	2,123,266	5	453,718	63	2,576,984
Special Contracts-Military		w	15	608,438	-	608,438	-	1,319	15	609,756
Special Contracts-Military		S	21	420,018		420,018	-	4,038	21	424,056
Subtotal			1,056	262,740,952	-	262,740,952	7	25,630,947	1,063	288,371,899
Subtotal w/o Power Generation			9,189,482	139,036,563	7,696,772	146,733,336	122,310	1,435,497	9,311,793	148,168,832
Total			9.189.670	388.281.469	7.696.772	395,978,242	122,316	26.519.293	9.311.987	422,497,534

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101 F	Residential Service		(3)	OF BILLS (4)	FACILITIES CHARGE (5)	DEMAND CHARGE (6)	VOLUMES (DT) (7)	PERIOD RATES (\$/DT) (8)	CHARGE REVENUES (\$) (9)	CHARGE REVENUES (\$) (10)	CHARGE REVENUES (\$) (11)	DECOUPLING ADJUSTMENT (\$) (12)	MARGIN AGREEMENT (\$) (13)	CHARGE REVENUES (\$) (14)	MANAGEMENT RIDER REVENUES (\$) (15)	TOTAL REVENUES (\$) (16)
			Winter Summer	3,515,351 4,916,305	\$10.00 10.00		30,582,566 8,681,878	\$12.1423 \$11.6325	\$35,153,515 \$49,163,047		\$371,342,694 \$100,991,950	\$10,568,439 (606,065)			\$22,127,731	\$417,064,647 \$149,548,931
				8,431,656		_	39,264,445		\$84,316,561	-	\$472,334,644	\$9,962,374	0	0	\$22,127,731	\$588,741,309
102 S	Small General Service		Winter Summer	361,429 503,807	\$22.00 22.00	_	17,200,094 7,759,515	\$9.3880 \$8.9902	\$7,951,429 \$11,083,748	_	\$161,474,487 \$69,759,590	\$5,506,676 6,353,982			9,014,369	\$174,932,592 \$87,197,320
				865,235			24,959,609		\$19,035,177		\$231,234,077	11,860,658				\$271,144,281
	Experimental Motor Vehicle Fuel Small General Service		Winter Summer	45 63	\$22.00 22.00		6,927 4,947	9.3880 8.9902	990 1,386		65,027 44,475	(23091) (18967)				42,925 26,894
			-	108		_	11,874	-	2,376	_	109,502	(42059)			_	69,820
152 M		First 500 dts Over 500 dts	Winter Winter	2,589	\$75.00		1,260,433 1,621,520	\$8.5185 \$8.1875	\$194,168		\$10,736,999 \$13,276,193	\$203,932 \$262,354	65,978		1,253,609	10,940,930 13,538,546
						_	2,881,953			-	\$24,013,191	\$466,285			_	24,673,645
		First 500 dts Over 500 dts	Summer Summer	3,636	\$75.00		1,266,956 887,172	\$8.4609 \$8.1554	\$272,720		\$10,719,584 \$7,235,244	\$1,036,938 \$726,105				11,756,522 7.961,349
						_	2,154,128			-	\$17,954,829	\$1,763,043			<del>-</del>	19,990,592
		Total Rate Schedule 152		6,225		-	5,036,081		\$466,888		\$41,968,020	\$2,229,329			=	45,983,823
		First 500 dts Over 500 dts	Winter Winter	0	\$75.00		0	8.5185 8.1875	0		0	0				0
				0			0		0		0	0				0
		First 500 dts Over 500 dts	Summer Summer	0	\$75.00	_	0	8.4609 8.1554	0	=	0	0			=	0
		Total Rate Schedule 143/152		0			0		SO SO		SO SO	so				\$0
144 N	Medium General Transportation Se			0			0		0		0					
144 N		First 500 dts Over 500 dts	Winter	0	\$75.00		0	5.2685 4.9375	0		0	0				0
				0		-	0		0	-	0	0			=	0
		First 500 dts Over 500 dts	Summer Summer	0	\$75.00		0	5.2109 4.9054	0		0	0				0
				0		_	0		0	-	0	0			-	0
		Total Rate Schedule 144		0		=	0		\$0		\$0	\$0			=	\$0
142 N	Natural Gas Vehilce Fuel Customer Premises		Winter Summer	0	\$22.00 22.00		33,028 45,052	\$9.4934 \$9.4934	\$0 0		\$313,550 \$427,699			312,322	40,990	\$313,550 427,699
				0		_	78,080	•	\$0	-	\$741,248				-	\$1,094,560
S	SUBTOTAL - PAGE 1			9,303,225 E	oills		69,350,088 dt	8	\$103,821,002	\$0	\$746,387,491	\$24,010,302			32,436,697.94	\$907,033,793

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PIEDMONT NATURAL GAS COMPANY. INC.
PUBLIC STAFF END-OF-PERIOD REVENUE LEVEL
Docket G-9. Sub 781

#### END-OF PERIOD RATES (\$/DT) (8) FACILITIES CHARGE REVENUES (\$) (9) COMPRESSION CHARGE REVENUES (\$) (13) INTEGRITY MANAGEMEN RIDER REVENU (\$) (14) DEMAND CHARGE REVENUES (\$) (10) MINIMUM MARGIN AGREEMENT (\$) (13) MONTHLY FACILITIES CHARGE (5) MONTHLY DEMAND CHARGE (6) RATE SCHEDULE (1) 35,732 \$14.95 175,455 540,463 472,780 186,002 7,041 0 0 1,186,286 657,365 420,922 121,663 3,058 . 1,203,009 \$2,623,045 Dema First Next Next Next Next Over Winter Winter Winter Winter Winter 5.0392 4.4065 4.0653 3.9170 3.8765 3.4915 2,723,500 2,083,306 674,846 27,580 0 1,500 dts 3,000 dts 9,000 dts 16,500 dts 30,000 dts 60,000 dts \$5,509,231 \$2,904,634 \$1,722,582 \$468,207 \$11,421 \$0 \$0 5,106,844 10,616,076 \$5,644,681.48 \$2,904,634 \$1,722,582 \$468,207 \$11,421 \$0 \$0 5,300,394 4.4186 4.0924 3.8484 3.7344 3.5663 3.3932 First Next Next Next Next Over 1,500 dts 3,000 dts 9,000 dts 16,500 dts 30,000 dts 60,000 dts Summer Summer Summer Summer Summer \$193,550 2,389,294 Dema First Next Next Next Next Over 8,419 22,500 29,515 24,500 0 0 76,515 31,500 45,994 40,008 0 0 \$125,857 1,500 dts 3,000 dts 9,000 dts 16,500 dts 30,000 dts 60,000 dts 5.0392 4.4065 4.0653 3.9170 3.8765 3.4915 113,382 130,057 99,601 0 \$5,250 113,382 130,057 99,601 0 0 0 \$348,290 139,186 188,225 153,966 0 0 4.4186 4.0924 3.8484 3.7344 3.5663 3.3932 139,186 188,225 153,966 0 0 First Next Next Next Next Over 1,500 dts Summer 3,000 dts Summer 9,000 dts Summer 16,500 dts Summer 30,000 dts Summer 60,000 dts Summer \$7,350 488,727 117,502 481,377 824,417 194,017 First Next Next Next Next Next Over 1,500 dts 3,000 dts 9,000 dts 16,500 dts 30,000 dts 60,000 dts 671,330 852,592 410,629 0 0 671,330 852,592 410,629 0 0 126,290 167,195 86,368 0 0 Winter Winter Winter Winter Winter 5.3158 5.0994 4.7544 4.4772 4.2196 4.0008 379,853 146,785 117,722 34,380 3,243 0 0 302,130 First Next Next Next Next Over 4.9913 4.5274 4.4656 4.3104 4.1915 4.0175 1,500 dts Summer 3,000 dts Summer 9,000 dts Summer 16,500 dts Summer 30,000 dts Summer 60,000 dts Summer \$1,475,479 \$3,471,223 1,500 dts Winter 3,000 dts Winter 9,000 dts Winter 16,500 dts Winter 30,000 dts Winter 60,000 dts Winter 5.3158 5.0994 4.7544 4.4772 4.2196 4.0008

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\$44,243,565

PIEDMONT NATURAL GAS COMPANY. INC.
PUBLIC STAFF END-OF-PERIOD REVENUE LEVEL
PUBLIC STAFF FND-OF-PERIOD REVENUE I EVEL

								PUBLIC STAFF I	ND-OF-PERIOD ocket G-9, Sub 7	D REVENUE LEVEL D REVENUE LEVEL 781							
RATE SCHEDULE (1)		RIPTION (2)		SEASON (3)	NUMBER OF BILLS (4)	MONTHLY FACILITIES CHARGE (5)	MONTHLY DEMAND CHARGE (6)	VOLUMES (DT) (7)	END-OF PERIOD RATES (\$/DT) (8)	FACILITIES CHARGE REVENUES (\$) (9)	DEMAND CHARGE REVENUES (\$) (10)	ENERGY CHARGE REVENUES (\$) (11)	MARGIN DECOUPLING ADJUSTMENT (\$) (12)	MINIMUM MARGIN AGREEMENT (\$) (13)	COMPRESSION CHARGE REVENUES (\$) (14)	INTEGRITY MANAGEMENT RIDER REVENUES (\$) (15)	TOTAL REVENUES (\$) (16)
143/104	Interruptible Sales Service	Next 3 Next 9 Next 16 Next 30	1,500 dts 8,000 dts 8,000 dts 8,500 dts 0,000 dts 0,000 dts	Summer Summer Summer Summer Summer	0	\$350.00	- -	0 0 0 0 0 0 0	4.9913 4.5274 4.4656 4.3104 4.1915 4.0175	\$0		0 0 0 0 0 0					0 0 0 0 0 0
113		Next 3 Next 9 Next 16 Next 30	1,500 dts 8,000 dts 9,000 dts 3,500 dts 0,000 dts 0,000 dts	Winter Winter Winter Winter Winter	1,468	Demand \$350.00	2.9500	1,686,422 2,006,761 2,722,361 3,029,365 1,990,377 1,724,440 3,001,054	1.7892 1.1565 0.8153 0.6670 0.6265 0.2415	513,800	4,974,945	3,590,506 3,148,423 2,469,855 1,327,591 1,080,370 724,769 \$12,341,514		37,655		765,145	\$0 3,590,506 3,148,423 2,469,855 1,327,591 1,090,370 724,769 \$12,855,314
		Next 3 Next 9 Next 16 Next 30	1,500 dts 3,000 dts 3,000 dts 3,500 dts 0,000 dts 0,000 dts	Summer Summer Summer Summer	2,048	\$350.00	-	2,644,564 3,206,097 3,460,313 2,415,870 2,141,810 3,512,795	1.1686 0.8424 0.5984 0.4844 0.3163 0.1432	\$716,800		\$3,090,450 \$2,700,831 \$2,070,668 \$1,170,259 \$677,465 \$503,049 \$10,212,722				-	\$3,090,450 \$2,700,831 \$2,070,668 \$11,170,259 \$677,465 \$503,049 \$10,929,522
	Minimum Margin Agreement Paym	ents															
		Total Rate Schedule 113			3,516		_	31,855,807		1,230,600	\$4,974,945	\$22,554,236					\$29,562,581
143/113		First 1 Next 3 Next 9 Next 16 Next 16	1,500 dts 3,000 dts 3,000 dts 3,500 dts 0,000 dts 0,000 dts	Winter Winter Winter Winter Winter	45	Demand \$350.00	2.9500	45,423 67,394 94,486 58,028 82,500 47,512 0	1.7892 1.1565 0.8153 0.6670 0.6265 0.2415	\$15,750	133,999	120,581 109,273 47,310 55,028 29,767 0		10,988	1,096,104	-	\$0 120,581 109,273 47,310 55,028 29,767 0
		Next 3 Next 9 Next 16 Next 30	1,500 dts 3,000 dts 3,000 dts 3,500 dts 0,000 dts 0,000 dts	Summer Summer Summer Summer Summer	63	\$350.00	-	94,500 143,006 87,207 115,500 79,645 0	1.1686 0.8424 0.5984 0.4844 0.3163 0.1432	\$22,050		110,433 120,469 52,185 55,949 25,192 0				-	110,433 120,469 52,185 55,949 25,192 0
	Minimum Margin Agreement Paym						_										
		Total Rate Schedule 113			108			869,778		\$37,800	\$133,999	\$726,187					\$2,005,078
114	Service	Next 3 Next 9 Next 16 Next 30	1,500 dts 3,000 dts 3,000 dts 3,500 dts 0,000 dts 0,000 dts	Winter Winter Winter Winter Winter Winter	1,213	\$350.00	-	1,583,831 2,392,971 3,198,909 2,248,444 2,132,135 1,362,136 12,918,426	1.8932 1.3060 1.0013 0.6624 0.4953 0.2783	\$424,550		2,998,516 3,125,231 3,203,083 1,489,380 1,056,056 379,089 \$12,251,356		822,409		758,314	2,998,516 3,125,231 3,203,083 1,489,380 1,056,056 379,089 \$12,675,905.88

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PIEDMONT NATURAL GAS COMPANY. INC.
PUBLIC STAFF END-OF-PERIOD REVENUE LEVEL
Docket G-9. Sub 781

									ocket G-9. Sub	781							
RATE SCHEDULE (1)	<u> </u>	ESCRIPTION (2)		SEASON (3)	NUMBER OF BILLS (4)	MONTHLY FACILITIES CHARGE (5)	MONTHLY DEMAND CHARGE (6)	VOLUMES (DT) (7)	END-OF PERIOD RATES (\$/DT) (8)	FACILITIES CHARGE REVENUES (\$) (9)	DEMAND CHARGE REVENUES (\$) (10)	ENERGY CHARGE REVENUES (\$) (11)	MARGIN DECOUPLING ADJUSTMENT (\$) (12)	MINIMUM MARGIN AGREEMENT (\$) (13)	COMPRESSION CHARGE REVENUES (\$) (14)	INTEGRITY MANAGEMENT RIDER REVENUES (\$) (15)	TOTAL REVENUES (\$) (16)
114	Interruptible Transportation Service	First Next Next Next Next Over	1,500 dts 3,000 dts 9,000 dts 16,500 dts 30,000 dts 60,000 dts	Summer Summer Summer Summer	1,678	\$350.00	_	2,242,062 3,162,517 3,786,414 2,689,562 2,474,718 1,510,970	1.20310 0.72720 0.61380 0.48210 0.33740 0.19260	\$587,300		2,697,436 2,299,797 2,324,119 1,296,651 834,982 291,020 \$9,744,004				-	2,697,436 2,299,797 2,324,119 1,296,651 834,982 291,020 \$10,331,304,27
	Minimum Margin Agreement I		e Schedule 114		2.891		_	28.784.669		\$1.011.850		\$21,995,360				-	\$24.587.933
		Total Rat	e Schedule 114		2,891			28,784,669		\$1,011,850		\$21,995,360					\$24,587,933
143/114	Experimental Motor Vehicle F Interrupible Transportation Service	First Next Next Next Next Next Over	1,500 dts 3,000 dts 9,000 dts 16,500 dts 30,000 dts 60,000 dts	Winter Winter Winter Winter Winter Winter Winter	0	\$350.00 \$350.00	_	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	1.8932 1.3060 1.0013 0.6624 0.4953 0.2783	\$0 \$0		0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0				-	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
		Next Next Next Over	9,000 dts 9,000 dts 16,500 dts 30,000 dts 60,000 dts	Summer Summer Summer			_	0 0 0	0.7272 0.6138 0.4821 0.3374 0.1926			0				_	0 0 0 0
	Minimum Margin Agreement I				0		_	0								-	\$0
		Total Rat	e Schedule 143/114		0			0		\$0	\$0	\$0					\$0
105	Outdoor Gaslight Service (		5,397 fixtures )	Winter Summer	282 393 675	\$18.93 18.93	/fixture /fixture	3,593 5,042 8,635		\$0		\$102,158 \$102,158				=	\$102,158
					675					90		\$102,156					\$102,100
T-10	Transportation For Military Bases			Winter Summer	5 7	\$0.00 0.00	\$10.00	84,000 745,667 514,826	1.44700 0.53700	\$0 0	\$840,000	\$1,078,983 \$276,464				64,901	\$1,078,983 276,464
					12			1,260,492		\$0	\$840,000	\$1,355,447					\$2,260,348
T-12	Transportation For Military Bases In Onslow County	,		Winter Summer	0	\$0.00 0.00		0	2.9157 2.3768	\$0 \$0	\$0 \$0	\$0 \$0					\$0 \$0
					0		-	0		\$0	\$0	\$0				-	\$0
12	Sales For Military Bases In Onslow County	,		Winter Summer	0	\$0.00 0.00		0	6.1657 5.6268	\$0 \$0	\$0 \$0	\$0 \$0					\$0 0
					0		-	0		\$0	\$0	\$0				-	\$0
	SUBTOTAL - PAGE 3				2.365	hills		17.135.370 dt	fe.	\$587.300	\$0	\$11.201.610	\$0				\$12,693,811

	PIEDMONT NATURAL GAS COMPANY, INC. PUBLIC STAFF END OF PERIOD REVENUE LEVEL Docket G-S, Suz 7st														Patel Exhibit II Page 5 of 5
RATE SCHEDULE (1)	DESCRIPTION (2)	SEASON (3)	NUMBER OF BILLS (4)	MONTHLY FACILITIES CHARGE (5)	MONTHLY DEMAND CHARGE (6)	VOLUMES (DT) (7)	END-OF PERIOD RATES (\$/DT) (8)	FACILITIES CHARGE REVENUES (\$) (9)	DEMAND CHARGE REVENUES (\$) (10)	ENERGY CHARGE REVENUES (\$) (11)	MARGIN DECOUPLING ADJUSTMENT (\$) (12)	MINIMUM MARGIN AGREEMENT (\$) (13)	COMPRESSION CHARGE REVENUES (\$) (14)	INTEGRITY MANAGEMENT RIDER REVENUES (\$) (15)	TOTAL REVENUES (\$) (16)
	Special Contracts-Power Generation	Winter Summer	82 112	\$0.00 \$0.00		117,470,161 156,858,541 274,328,702		\$0	\$0	\$44,300,413 \$61,998,863 \$106,299,276		-			\$44,300,413 \$61,998,863 106,299,276
	Special Contracts-Municipal	Winter Summer	16 21	\$0.00 \$0.00		4,204,171 2,847,562		\$0	\$0	\$4,213,561 \$5,484,045					\$4,213,561 \$5,484,045
	Special Contracts-Large Volume	Winter Summer	37 46 63	\$0.00 \$0.00		7,051,733 2,111,542 2,576,984		\$0	\$0 \$0	\$9,697,606 \$1,410,572 \$1,720,776				_	\$9,697,606 \$1,410,572 \$1,720,776
			109			4,688,525				\$3,131,348				-	\$3,131,348
	Special Contracts-Military	Winter Summer	15 21	\$0.00 \$0.00		609,756 424,056		\$0	\$0 \$0	\$3,708,501 3,988,097					\$3,708,501 \$3,988,097
			36			1,033,812	-		\$0	\$7,696,598				-	\$7,696,598
	SUBTOTAL - PAGE 5		376 1	oills		287.102.772 di	s	\$0	\$0	\$126.824.828					\$126.824.828
	TOTAL COMPANY		9,311,987	oills		422,497,534 di	s	\$106,515,652	\$8,697,845	\$934,753,881	\$24,010,302			34,158,275	\$1,110,660,712
						OTHER OPERATING R	EVENUES								\$3,030,299
						TOTAL OPERATING R	EVENUES								\$1,113,691,011
						Sales Transportation Total Sales & Transpo Special contracts-Lra Electric Gen Municipal Sub Total Other Operating Rever	Vol								\$930.829.224 \$60.703.258 \$991.532.482 \$3.131.348 \$106.299.276 \$9.697.606 \$1,110.660,711 \$1,3030.299 \$1,113.691,010

#### PURCHASED GAS EXPENSE Piedmont Natural Gas, Inc. Docket G-9, Sub 781

			Doc	et G-9, Sub 781		1			
Line No.	DESCRIPTION	NUMBER OF DAYS	DAILY DEMAND UNITS (Dts)	ANNUAL QUANTITY (Dts)	DAILY UNIT COST (\$/DT)	MONTHLY AMOUNT (\$)	TOTAL ANNUAL AMOUNT (\$)	NC/SC ALLOCATION (%)	NC ANNUAL AMOUNT (\$)
1	I. Commodity Costs:								
2	Sales			72,615,382	\$3.2500		\$235,999,990	100.00%	\$235,999,990
3	Unaccounted For Gas			1,958,090	3.2500		6,363,791	100.00%	6,363,791
4	Commodity Costs - Power Generation & Special Contracts						1,887,218		1,887,218
5	Total Commodity Gas Cost			74,573,471			244,251,000		<u>\$244,251,000</u>
6	II. Fixed Costs: Transportation Demand Charges:								
_	Transco:								
7 8	FT Zone 1 to Zone 5: Year Round FT Zone 2 to Zone 5: Year Round	365 365	51,173 75,254	18,678,145 27,467,710	0.48232 0.46885	\$750,737 1,073,186	\$9,008,843 12,878,236	<b>83.16%</b> 83.16%	\$7,491,754 10,709,541
9	FT Zone 3 to Zone 5: Year Round	365	174,589	63,724,985	0.43362	2,302,702	27,632,428	83.16%	22,979,127
10	FT (Incremental) Zone 1 to Zone 5: Year Round	365	1,095	399,675	0.48232	16,064	192,771	83.16%	160,309
11	FT (Incremental) Zone 2 to Zone 5: Year Round	365	1,610	587,650	0.46885	22,960	275,520	83.16%	229,122
12	FT (Incremental) Zone 3 to Zone 5: Year Round	365	3,735	1,363,275	0.43362	49,262	591,143	83.16%	491,595
13 14	FT (Peaking Service) Zone 1 to Zone 5: Dec - Feb FT (Peaking Service) Zone 2 to Zone 5: Dec - Feb	90 90	1,073 1,579	96,570 142,110	0.87487 0.85082	7,041 10,075	84,486 120,910	83.16% 83.16%	70,259 100,549
15	FT (Peaking Service) Zone 3 to Zone 5: Dec - Feb	90	3.662	329.580	0.78792	21,640	259.683	83.16%	215.952
16	FT Southeast Expansion Zone 4 to Zone 5: Year Round	365	129,485	47,262,025	0.38126	1,501,593	18,019,120	83.16%	14,984,700
17	FT Southern Expansion Zone 4 to Zone 5: Nov & Mar	61	65,251	3,980,311	0.38126	126,461	1,517,533	83.16%	1,261,981
18	FT Southern Expansion Zone 4 to Zone 5: Dec - Feb	90	72,502	6,525,180	0.38126	207,316	2,487,790	83.16%	2,068,846
19 20	FT Sunbelt Expansion - Zone 3 to Zone 5: Year Round FT Sunbelt Expansion - Zone 4 to Zone 5: Year Round	365 365	32,199 9.201	11,752,635 3,358,365	0.23815	233,241 51,061	2,798,890 612,734	83.16% 83.16%	2,327,557 509.549
21	FT Zone 6 to Zone 6: Year Round	365	13,232	4,829,680	0.12790	51,476	617,716	83.16%	513,693
22	FT Zone 6 to Zone 4: Year Round (Leidy Southeast Expansion)	365	100,000	36,500,000	0.55449	1,686,574	20,238,885	83.16%	16,830,657
23	FT Zone 6 to Zone 5: Year Round (Virgina Southside Expansion)	365	20,000	7,300,000	0.46949	285,606	3,427,277	83.16%	2,850,124
24 25 26	Texas Eastern: FT-1: Nov - Mar Dominion:	151	5,067	3,825,285	0.20834	159,395	796,976	83.16%	662,765
27 28	FT-GSS: Nov - Mar Columbia:	151	2,666	2,012,830	0.16285	65,557	327,791	83.16%	272,591
29	Columbia Gulf: FTS: Year Round	365	32.801	11.972.365	0.41849	417,526	5.010.287	83.16%	4,166,555
30	Columbia Gulf: NTS: Year Round	365	10,000	3,650,000	0.42444	129,100	1,549,200	83.16%	1,288,315
31	Columbia Gulf: SST: Oct - Mar: 6 Months	182	86,368	15,718,976	0.41960	549,646	6,595,751	83.16%	5,485,027
32	Columbia Gulf: SST: Apr - Sep: 6 Months	183	43,184	7,902,672	0.41960	276,333	3,297,876	83.16%	2,742,513
33 34	Hardy/Columbia:	365	68.835	05 404 775	0.44040	070.000	40.544.400	83.16%	0.740.700
35	Hardy/Columbia TPS: Year Round Cardinal:	365	68,835	25,124,775	0.41849	876,202	10,514,409	83.16%	8,743,782
36	FT Zone 1A to Zone 1A: Year Round	365	62,100	22,666,500	0.02549	48,147	577,769	100.00%	577,769
37	FT Zone 1A to Zone2: Year Round	365	41,400	15,111,000	0.08102	102,024	1,224,293	100.00%	1,224,293
38	FT Zone 1A to Zone2: Year Round - Cardinal Expansion	365	149,000	54,385,000	0.08102	367,189	4,406,273	100.00%	4,406,273
39 40	East Tennessee: FT-A: Year Round	365	45,000	16,425,000	0.35846	490,635	5,887,620	83.16%	4,896,145
41	Midwestern:	303	45,000	16,425,000	0.35646	490,035	5,007,020	03.10%	4,090,145
42	Midwestern FT-A: Year Round	365	20,000	7,300,000	0.06000	36,500	438,000	83.16%	364,241
43	Midwestern FT-B: Year Round	365	20,000	7,300,000	0.08650	52,621	631,450	83.16%	525,114
45 46	Subtotal - Demand Cost					11,967,870	142,021,660		119,150,698
47	Storage Charges:								
48	Pine Needle:								
49	Pine Needle LNG-1 Capacity	365	263,400	96,141,000	0.07707	617,466	7,409,587	83.16%	6,161,812
50 51	Transco: General Storage Service (GSS) Demand	365	77.475	28.278.375	0.10548	248.567	2.982.803	83.16%	2.480.499
52	General Storage Service (GSS) Capacity	365	4,293,463	1,567,113,995	0.00063	82,273	987,282	83.16%	821,024
53	Washington Storage Service (WSS) Demand	365	96,069	35,065,185	0.03102	90,644	1,087,722	83.16%	904,550
54	Washington Storage Service (WSS) Capacity	365	9,126,563	3,331,195,495	0.00033	91,608	1,099,295	83.16%	914,173
55 56	Liquified Natural Gas (LNG) Demand Liquified Natural Gas (LNG) Capacity	365 365	8,643 44,754	3,154,695 16,335,210	0.10316	27,120 27,062	325,438 324,744	83.16% 83.16%	270,635 270,057
57	Eminence Storage Service (ESS) Demand	365	150,430	54,906,950	0.01988	114,389	1,372,674	83.16%	1,141,515
58	Eminence Storage Service (ESS) Capacity	365	1,261,622	460,492,030	0.00346	132,775	1,593,302	83.16%	1,324,990
59	Columbia:							Ì	
60	Columbia Gas FSS Demand	365	86,368	31,524,320	0.12263	322,153	3,865,832	83.16%	3,214,826
61 62	Columbia Gas FSS Capacity Hardy/Columbia:	365	5,137,358	1,875,135,670	0.00221	345,231	4,142,765	83.16%	3,445,124
63	Hardy HSS Demand	365	70,600	25,769,000	0.16632	357,166	4,285,985	83.16%	3,564,225
64	Hardy HSS Capacity	365	4,950,965	1,807,102,225	0.00237	356,617	4,279,416	83.16%	3,558,762
65	Dominion:								
66 67	Dominion GSS NE Storage Demand Dominion GSS NE Storage Capacity	365 365	13,330 799,800	4,865,450 291,927,000	0.06034 0.00097	24,463 23,514	293,559 282,169	83.16% 83.16%	244,123 234.652
01		303	1 33,000	201,321,000	0.00037			33.1076	
68	Subtotal - Storage Costs					2,861,048	34,332,573	Ì	28,550,967
69	Piedmont LNG Capitalization						796,773	83.16%	662,596
71 72	Subtotal - Storage Cost					5,722,096	35,129,346		29,213,563
73 74	Secondary Market Credits						(25,794,317)	100.00%	(25,794,317)
75 // 78	Total Fixed Gas Costs (Demand Charges)					<u>17,689,966</u>	185,689,262		\$122,569,944
79 80	III. Total Gas Cost					\$29.657.836	\$429,940,262		\$122,569,944 \$366,820,944
30						#E-9,1001,000	¥743,340,404	Ì	**************************************
			•	l l				•	