

**Before the
Tennessee Regulatory Authority**

Docket No. 11-_____

**Petition of Piedmont Natural Gas Company, Inc. for an
Adjustment to its Rates, Approval of Changes to Its Rate Design,
Amortization of Certain Deferred Assets, Approval of New
Depreciation Rates, Approval of Revised Tariffs and Service
Regulations, and Approval of a New Energy Efficiency Program
and GTI Funding.**

**Testimony and Exhibits
of
Rodney Myers**

**On Behalf Of
Piedmont Natural Gas Company, Inc.**



September 2, 2011

1 **Q. Please state your name and business address.**

2 A. My name is Rodney Myers. My business address is 4720 Piedmont Row
3 Drive, Charlotte, North Carolina.

4 **Q. By whom and in what capacity are you employed?**

5 A. I am employed by Piedmont Natural Gas Company ("Piedmont" or "the
6 Company") as its Vice President, Engineering and Operations Services.

7 **Q. Please describe your educational and professional background.**

8 A. I have been working in the natural gas industry for over 22 years,
9 predominantly in utility engineering and operations. My educational
10 background includes a Bachelor of Science in Mechanical Engineering
11 from North Carolina State University, Raleigh, NC, and a Masters of
12 Business Administration from Queens University, Charlotte, NC. I am
13 also a registered Professional Engineer.

14 **Q. Have you previously testified before the Tennessee Regulatory**
15 **Authority ("TRA" or "Authority") or any other regulatory**
16 **authority?**

17 A. This is the first time I have presented testimony to the TRA but I have
18 previously presented testimony to the North Carolina Utilities
19 Commission.

20 **Q. Do you hold any positions in professional or trade associations?**

21 A. I have previously served on the American Gas Association (AGA)
22 Transmission Best Practices Benchmarking Committee, as educational
23 Chair of the Geospatial Information Technology Association (GITA), as

1 educational Chair of Professional Engineers of North Carolina (PENC),
2 and on various other association committees.

3 **Q. What is the purpose of your testimony in this proceeding?**

4 A. My testimony supports Piedmont's investment in certain capital
5 expenditures associated with meeting the requirements of federal pipeline
6 safety and integrity regulations.

7 **Q. What pipeline safety and integrity costs are covered by your**
8 **testimony?**

9 A. They are the capital expenditures incurred (and to be incurred) by the
10 Company in inspecting, evaluating, and remediating its transmission
11 system, collectively known as the Company's Transmission Integrity
12 Management Program (TIMP), pursuant to the United States Department
13 of Transportation's ("DOT's") pipeline integrity management regulations
14 set forth in Subpart O of Part 192 of Title 49 of the United States Code of
15 Federal Regulations. This testimony supports capital expenditures related
16 to TIMP that include retrofitting transmission pipelines for inspection and
17 replacement or enhancement of certain components. This testimony also
18 includes the capital expenditures needed to convert certain existing
19 transmission pipelines, predominantly within public road rights of way, to
20 distribution lines operating at a lower pressure and replacing those lines
21 with new transmission facilities located within private rights-of-way
22 controlled by the Company, where this approach is the most feasible way

1 to ensure ongoing pipeline integrity and otherwise meet the requirements
2 of Subpart O of Part 192.

3 **Q. Why is Piedmont singling out its TIMP capital expenditures for**
4 **separate explanatory testimony in this case?**

5 A. Piedmont has always and routinely incurred capital expenditures and
6 operations and maintenance ("O&M") expense related to the inspection,
7 safety and integrity of its natural gas transmission and distribution
8 facilities. These expenditures are typically embedded in the Company's
9 rate base and O&M expense. Ongoing levels of many of these expenses
10 are included in Piedmont's O&M and rate base in this case as well. The
11 level of capital investment required in order to comply with Subpart O of
12 Part 192 is out of the ordinary, however, and we believed it was
13 appropriate to separately identify and discuss the scope and nature of
14 these expenditures in the context of our rate filing so that the Authority
15 would be fully informed as to these expenditures.

16 **Q. Are the Subpart O capital expenditures discussed in this testimony**
17 **included in Piedmont's pro forma rate base in this proceeding?**

18 A. Yes, we have included those capital expenditures in our rate base as they
19 constitute attrition period (and pre-attrition period) capital expenditures
20 the Company has budgeted for and fully intends to place into service.

21 **Q. Is your testimony limited to the Subpart O capital expenditures?**

22 A. Yes. This testimony does not address O&M expenses associated with
23 TIMP, nor does this testimony cover capital expenditures or O&M

1 expense for safety related programs outside of TIMP, such as prospective
2 costs associated with the Company's Distribution Integrity Management
3 Program (DIMP) or other ongoing inspection, operation and maintenance
4 activities that ensure the safe, reliable operation of the transmission and
5 distribution systems and that meet the requirements of other Subparts of
6 Part 192.

7 **Q. What level of capital expenditure related to TIMP does Piedmont**
8 **anticipate incurring during the attrition period in this proceeding?**

9 A. Piedmont is actively executing projects related to TIMP, with capital
10 expenditures budgeted at \$32.9 million during the attrition period for this
11 activity.

12 **Q. Please describe the DOT regulations that require these expenditures.**

13 A. Subpart O, Part 192 of the DOT regulations establishes a mandatory
14 regimen of inspection, assessment, analysis, testing, and remediation
15 applicable to most natural gas transmission facilities in the United States,
16 including those operated by Piedmont in Tennessee. The initial focus of
17 this regimen is in so-called "High Consequence Areas" or HCAs which
18 involve higher degrees of risk to public safety in the event of a pipeline
19 failure or leak. Criteria for determining HCAs are prescribed in the
20 federal regulations. These regulations require extensive inspection,
21 assessment, and remediation, if needed, of transmission facilities. The
22 detailed requirements of Part 192 Subpart O are set out in the regulations
23 but include, in part, the following:

- 1 ▪ Identification of HCAs
- 2 ▪ Identification of threats to covered pipeline segments
- 3 ▪ Development and implementation of baseline assessment
- 4 plans, including inspection of pipeline facilities
- 5 ▪ Establishment of remediation provisions
- 6 ▪ Development of preventive and mitigative measures
- 7 ▪ Record keeping
- 8 ▪ Quality assurance measures
- 9 ▪ Reassessments, including inspections of pipeline facilities

10 **Q. What do the regulations require if Piedmont determines that**
11 **remediation is required of some portions of its transmission lines as a**
12 **result of testing procedures?**

13 A. The DOT regulations are clear that Piedmont must take prompt action to
14 address all anomalous conditions discovered through the pipeline
15 integrity assessment process. Part 192 also requires that risks identified
16 within covered segments (HCAs) be further evaluated in non-covered
17 segments (Part 192.917(5) and 192.473(a)).

18 **Q. What was the genesis of Subpart O of the DOT's Part 192**
19 **regulations?**

20 A. As the Authority may be aware, many parts of the natural gas
21 infrastructure in the United States have been in place for many decades.
22 Given the complex and dynamic operating conditions that these
23 infrastructure assets are subjected to over decades of service, it is not

1 uncommon for damage or degradation to occur to both plastic and steel
2 pipelines. Because the vast majority of the infrastructure assets are
3 underground, any damage or degradation cannot be easily observed or
4 measured. Prior to the issuance of Subpart O, Part 192 of the DOT's
5 regulations there was no mandatory comprehensive testing regimen
6 established for testing, analyzing and remediating natural gas
7 transmission facilities in the United States.

8 **Q. Does this mean transmission facilities were not inspected or**
9 **remediated prior to Part 192?**

10 A. No. Piedmont, as well as other natural gas local distribution companies,
11 has long had inspection, evaluation, and remediation programs in place to
12 ensure the reliability and safety of its natural gas transmission facilities.
13 Prior to Part 192, however, those programs were based on industry best
14 practices and individual company experience.

15 **Q. How is Piedmont's program for meeting the requirements of Part**
16 **192 Subpart O different from Piedmont's prior programs?**

17 A. Subpart O, Part 192 establishes a uniform, mandatory and comprehensive
18 inspection, assessment, and evaluation regime applicable to the vast
19 majority of natural gas transmission lines in the United States. Further,
20 the inspection, assessment, and evaluation regime established by Subpart
21 O, Part 192 requires ongoing identification and evaluation of HCAs and
22 that covered pipeline segments are inspected using the prescribed tools
23 and techniques at least every 7 years.

1 **Q. What tools and techniques does Piedmont intend to use to conduct**
2 **the inspection and evaluation required by Part 192?**

3 A. Part 192 basically requires Piedmont to engage in one or more types of
4 assessment of its transmission facilities in high consequence areas. These
5 three types of assessment are: (1) direct assessments of pipeline
6 segments; (2) internal inspections accomplished through the use of an in-
7 line inspection device commonly referred to as a "smart-pig"; and (3)
8 pressure testing.

9 **Q. What lines will be effected by the Part 192 requirements?**

10 A. Over the course of the testing period described above, 7 years or less, all
11 of Piedmont's transmission lines with HCAs will be assessed. For
12 purposes of the near term (including the attrition period), Piedmont's
13 assessment, evaluation, testing and remediation activities will be focused
14 on different covered segments based on their individual risk ranking and
15 inspection cycles. A map showing the extent of Piedmont's planned
16 evaluation and assessment activities is attached hereto as Exhibit.
17 ____ (RM-1). Dependent upon inspection and evaluation results for HCAs,
18 Part 192 requires operators to incorporate non-covered segments of
19 pipeline into TIMP and to apply the prescribed tools and techniques to
20 those segments as well.

21 **Q. Please describe these facilities and the areas in which they are**
22 **located.**

1 A. A summary table describing these facilities is attached to my testimony as
2 Exhibit___ (RM-2). In brief, pipeline segments subject to assessment,
3 inspection and analysis during the attrition period range in size from 4
4 inches to 20 inches in diameter, are located in the northern, western and
5 southern parts of Nashville, are located on both public and private rights-
6 of-way, and operate at pressures between 390 p.s.i.g. and 780 p.s.i.g.

7 More specifically, Piedmont is (and during the attrition period will
8 be) conducting inspection, assessment, and analysis activities for 7
9 distinct segments of its Nashville pipelines. These lines range from 5 to
10 48 miles in length and collectively add up to approximately 144 miles of
11 transmission pipeline. The total costs for these projects is budgeted at
12 \$84.7 million with \$32.9 million budgeted for expenditure during the
13 attrition period.

14 **Q. What flexibility does Piedmont have with respect to its inspection,**
15 **evaluation and remediation activities regarding these facilities?**

16 A. As noted above, Piedmont is required to utilize one of three assessment
17 techniques to evaluate its facilities based upon the relative risks
18 associated with those facilities. Piedmont has designed each of these
19 projects in compliance with the Part 192 requirements.

20 **Q. What is Piedmont's plan for inspecting, evaluation and remediation**
21 **of these facilities?**

22 A. Each covered segment has a unique baseline assessment plan that details
23 when inspections are due and the type of inspection that is prescribed.

1 The plans may change based on new discoveries of threats, changes that
2 occur to the HCA or changes that occur to the pipeline(s) within the
3 HCA.

4 **Q. What is the rationale for that approach?**

5 A. The identification of covered segments is based on criteria contained in
6 Part 192. The basis for when covered segments are inspected, and the
7 frequency of such inspection, is the individual risk rankings assigned to
8 each segment – determined using Part 192 defined parameters. Risk
9 rankings can change based on changes that may occur within the HCA
10 and the pipeline and as a result of newly discovered of risks. Further, the
11 type of assessment required of individual facilities can vary, including
12 direct inspection, smart pigging, and hydrostatic pressure testing. These
13 techniques, particularly smart pigging, can require significant levels of
14 retrofitting in order to adapt the transmission line for the assessment
15 process.

16 **Q. Does Piedmont believe this is an appropriate approach to meeting its**
17 **Part 192 obligations within the State of Tennessee and, if so, why?**

18 A. We do believe it is an appropriate approach because it balances the need
19 to ensure the safety and compliance of Piedmont's transmission facilities
20 with the real world context in which those facilities are located. It also
21 enhances Piedmont's ability to continue to provide and to expand upon
22 the provision of safe and reliable natural gas service to its Tennessee
23 customers into the future.

1 **Q. Does this conclude your direct testimony?**

2 **A. Yes it does.**

3

EXHIBIT__(RM-1)

EXHIBIT__ (RM-2)

Nashville Transmission System Information						
Pipeline Segments	Description	Approximate Mileage	Pipe Size(s)	Total Project Costs	Current Classification	Future Classification
A	Pipelines from Westernia Interconnect with Tenneco through KP Interconnect and ending at Holts Holder Valve Setting northwest of Nashville	11	8, 10	\$934,608	Transmission	Distribution
B	Pipelines operating between KP Interconnect, Holts Holder Valve Setting, Bordeaux Regulator Station, LNG Plant, WC Weakley Regulator Station, and Madison Regulator Station northwest of Nashville	48	8, 12, 16, 20	\$16,401,404	Transmission	Transmission
C	Pipelines operating between LNG Plant, Chickering Road, Columbia Gulf Interconnect #1, and Texas Eastern Interconnect to the south of Nashville	42	8, 10, 12	\$3,641,218	Transmission / HP Distribution	HP Distribution
D	Proposed Pipeline from a new Columbia Gulf Interconnect to Chickering Road to the south of Nashville	13	20	\$61,251,320	n/a	Transmission
E	Pipeline from Dalmere Junction to Trinity Lane Regulator Station to the north of Nashville	5	8	\$1,775,155	Transmission	Transmission
F	Pipelines operating between Madison Regulator Station, Gallatin Interconnect, and Dupont to the northeast of Nashville	16	4, 6, 8	\$275,368	Transmission / HP Distribution	HP Distribution
G	Pipeline from East Tennessee Interconnect to Stop 30 Road Regulator Station to the northeast of Nashville	9	12	\$500,000	Transmission	Transmission

\$84,779,073