# 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 Exhibit
# of
# Rhonda Watts

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


**September 2, 2011**

**BEFORE THE**
**TENNESSEE REGULATORY AUTHORITY**

**PREPARED DIRECT TESTIMONY**
**OF**
**RHONDA WATTS**

**IN RE:**
**PIEDMONT NATURAL GAS COMPANY, INC.**
**DOCKET NO. 11-_____**

**Q. PLEASE STATE YOUR NAME, BUSINESS ADDRESS AND POSITION.**

A. My name is Rhonda Watts. My business address is 1410 Avenue K, Suite 1105B, Plano, Texas 75074. I am a Senior Consultant of Alliance Consulting Group ("Alliance").

**Q. FOR WHOM ARE YOU PROVIDING TESTIMONY?**

A. I am providing testimony on behalf of Piedmont Natural Gas Company ("Piedmont" or "the Company").

**Q. PLEASE DESCRIBE YOUR EDUCATIONAL BACKGROUND.**

A. I hold a Bachelor of Science degree in Business Administration from the University of Nevada at Las Vegas with emphasis in Accounting and Finance.

**Q. PLEASE OUTLINE YOUR EXPERIENCE IN THE FIELD OF DEPRECIATION.**

A. Since graduation from college in 1989, I have worked for and consulted in the area of utility accounting and depreciation. I have been exposed to various areas of regulated utility accounting, depreciation and regulatory issues over the past 21 years as an employee of a regulated utility and as a consultant. Specifically related to depreciation studies and issues, I have participated in the preparation of over 50 depreciation studies for approximately 20 different utility companies.

Currently, my duties at Alliance Consulting Group related to depreciation studies include the assembly and analysis of historical and simulated data, conducting field reviews, determining service life and net salvage estimates, calculating annual depreciation expense accruals and rates, presenting recommended depreciation rates to utility management for its

consideration, and supporting such rates before regulatory bodies. Since joining Alliance in June 2009, I have participated in conducting and/or assisted in regulatory support for over 15 depreciation studies.

My prior employment from 1996 to 2009 was with Deloitte & Touche LLP ("Deloitte"). During my tenure with Deloitte, I was a key participant and/or responsible for, among other things, conducting depreciation studies for Deloitte's utility clients. I served as a Senior Manager and assisted in serving clients on other engagements in addition to my depreciation responsibilities.

I worked for Nevada Power Company ("NPC") from 1990-1996. My tenure with NPC included experience in plant accounting, rates and regulatory and general accounting. My specific experience included updates and participation in a depreciation study, customer account reconciliations, multiple rate filings, including two general and a fuel recovery case, and monthly fuel accounting, account reconciliations, budget variances and other internal reporting activities, respectively.

I am Past President of the Society of Depreciation Professionals ("SDP") and have held numerous other Executive Board and Committee positions in the SDP. I am also an active participant in the Edison Electric Institute ("EEI") and American Gas Association ("AGA") Property and Accounting Valuation Group.

Additionally, I have conducted several depreciation training sessions as well as participated in the updates on depreciation to several industry textbooks.

**Q. HAVE YOU PREVIOUSLY TESTIFIED BEFORE ANY REGULATORY AGENCY?**

A. Yes, I have testified before the Tennessee Regulatory Authority ("TRA") on behalf of Chattanooga Gas Company in Docket # 09-00183 and before the Georgia Public Service Commission on behalf of Atlanta Gas Light Company in Docket # 31647.

**Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?**

A. I conducted a depreciation study of the depreciable gas properties of Piedmont as of October 31, 2009, and I make recommendations for revised depreciation rates for inclusion in

Piedmont's revenue requirement. The purpose of my testimony is to present the results of the depreciation study, describe the depreciation study process, and recommend appropriate depreciation rates for use by Piedmont reflecting depreciation accounting principles and regulatory rules. I will show that my study produces fair and reasonable levels of depreciation expense utilizing sound accounting practices and principles.

**Q. ARE YOU SPONSORING ANY EXHIBITS?**

A. Yes, I am. I am sponsoring Exhibit __(RW-1). Exhibit __(RW-1) is the depreciation study prepared for Piedmont as of October 31, 2009. The depreciation study discusses depreciation accounting principles, describes the methodology employed for the study, summarizes the results of the study, and makes recommendations relating to depreciation rates and depreciation accounting.

**Q. WERE THE EXHIBITS YOU ARE SPONSORING PREPARED BY YOU OR UNDER YOUR DIRECT SUPERVISION?**

A. Yes, they were.

**Q. WHAT PROPERTY IS INCLUDED IN THE DEPRECIATION STUDY?**

Piedmont has four classes, or functional groups, of gas depreciable property: Storage, Transmission, Distribution and General Plant property. The Storage functional group primarily consists of facilities that store liquefied natural gas ("LNG") for use as needed. The Transmission function consists of land rights, and approximately 90 miles, primarily cathodically protected steel, of generally large diameter and higher pressure pipeline that connects to Piedmont's distribution assets. The Distribution functional group consists of over 3100 miles of lines and approximately 174,000 services and other associated facilities used to distribute gas to the areas served by Piedmont. Last, General Plant property is not location specific but is used to support all the services to its customers.

**Q. WHAT DEFINITION OF "DEPRECIATION" HAVE YOU USED FOR THE PURPOSES OF CONDUCTING A DEPRECIATION STUDY AND PREPARING TESTIMONY?**

A. The term "depreciation," as used herein, is considered in the accounting sense; that is, a system of accounting that distributes the cost of assets, less net salvage (if any), over the estimated useful life of the assets in a systematic and rational manner. Depreciation is a process of allocation, not valuation. Depreciation expense is systematically allocated to accounting periods over the life of the properties. The amount allocated to any one accounting period does not necessarily represent the loss or decrease in value that will occur during that particular period. Thus, depreciation is considered an expense or cost, rather than a loss or decrease in value. The Company accrues depreciation based on the original cost of all property included in each depreciable plant account. On retirement, the full cost of depreciable property, less the net salvage amount, if any, is charged to the depreciation reserve.

**Q. PLEASE DESCRIBE YOUR DEPRECIATION STUDY APPROACH.**

A. I conducted the depreciation study in four phases as shown in my Exhibit ___(RW-1). The four phases are: Data Collection, Analysis, Evaluation, and Calculation. During the initial phase of the study, I collected historical data to be used in the analysis. After the data was assembled, I performed analyses to determine the life and net salvage percentage for the different property accounts being studied. As part of this process, I conferred with field personnel, engineers, and managers responsible for the installation, operation, and removal of the assets to gain their input into the operation, maintenance, and salvage of the assets. The information obtained from field personnel, engineers, and managerial personnel, combined with the study results, were then evaluated to determine how the results of the historical asset activity analysis, in conjunction with the Company's expected future plans should be applied. Using all of these resources, I then calculated the depreciation rate for each account.

**Q. WHAT DEPRECIATION SYSTEM DID YOU USE?**

A. The straight-line, Average Life Group ("ALG") remaining-life depreciation system was employed to calculate annual accrued depreciation expense in this study. The ALG

remaining-life depreciation system is the same approach that was used to develop the existing depreciation rates approved by the TRA.

**Q. HOW ARE THE DEPRECIATION RATES DETERMINED USING THE ALG PROCEDURE?**

A. In this system, the annual depreciation expense for each account is computed by dividing the original cost of the asset, less actual (allocated depreciation reserve); less estimated net salvage, by its respective average life group remaining life. The resulting annual accrual amounts of all depreciable property within an account were accumulated, and the total was divided by the original cost of all depreciable property within the account to determine the depreciation rate. The calculated remaining lives and annual depreciation accrual rates were based on the attained ages of the plant in service, the estimated service life, and the net salvage characteristics of each depreciable group. The annual depreciation rates from these calculations are shown in Appendix A of my Exhibit ___(RW-1).

**Q. WHAT TIME PERIOD DID YOU USE TO DEVELOP THE PROPOSED DEPRECIATION RATES?**

A. The account level depreciation rates were developed based on the depreciable property recorded on the Company's books at October 31, 2009, with the exception of four accounts. Two accounts in the Distribution Plant function, Accounts 381.1 Meter Accessories and 381.2 ERTs and Accessories, had Tennessee specific balances and reserves that were transferred from Corporate and reflected in the depreciation study. The other two accounts are in the General Plant function. Due to the unique circumstances in Account 390, Structures & Improvements and Account 392.01 and 392.02, adjustments were made to reflect known changes that were recorded in Piedmont's fiscal year 2010 and prior to the completion of the depreciation study. These adjustments were reflected to accurately calculate depreciation rates, which are applied prospectively, to the assets expected to be in service going forward. Those amounts are included in the balances shown on Appendix A and also noted in the Life Analysis section, both of which are contained in Exhibit ___(RW-1).

**Q. DID YOU PERFORM AND PREPARE THE DEPRECIATION STUDY IN ACCORDANCE WITH THE PROCESS THAT YOU HAVE DESCRIBED IN YOUR STUDY AND TESTIMONY?**

A. Yes, I did.

**Q. IS THIS THE STUDY UPON WHICH PIEDMONT RELIES IN THIS CASE TO ESTABLISH NEW DEPRECIATION RATES FOR PROPERTY?**

A. Yes, it is.

**Q. WHAT ARE YOUR FINDINGS AND RECOMMENDATIONS?**

A. Piedmont's approved rates are based on the Average Life Group ("ALG") procedure, remaining life technique and were retained in calculating the depreciation rates of this study. However, I found that changes are needed to the mortality characteristics for numerous accounts resulting in revised depreciation rates. A summary comparison of the existing depreciation rates and those recommended in the depreciation study for Piedmont by functional category is as follows:

**Table 1**

**Piedmont Natural Gas Company, Inc.**

| Function | Existing % | Recommended % |
|---|---|---|
| LNG Storage | 1.49 | 0.32 |
| Transmission | 2.39 | 1.44 |
| Distribution | 3.60 | 2.72 |
| General - Depreciated | 2.15 | 2.13 |
| General - Amortized | 6.47 | 0.87 |
| **Total Depreciable Plant** | **3.50** | **2.61** |

**Q. WHAT IMPACT DO YOUR RECOMMENDED CHANGES HAVE ON ANNUAL DEPRECIATION EXPENSE?**

A. Application of the depreciation rates shown in Appendix A of Exhibit ___(RW-1) will result in a decrease of $5.2 million of annual depreciation expense for Piedmont when applied to the attrition period balances. In other words, should the current depreciation rates continue to be used (rather than be updated with the proposed rates presented herein, effective March 1, 2012), the attrition period depreciation and amortization expense would be $5.2 million higher. Piedmont Witness Powers addresses this in testimony and her supporting Exhibit __(PKP-1) Schedule 3 Page 6.

**Q. WHAT ARE THE PRIMARY FORCES AFFECTING THE DEPRECIATION EXPENSE RECOMMENDED IN THIS STUDY?**

A. Generally, depreciation expense is affected by three separate factors – changes in average service life, changes in net salvage, and the effect of reserve position. Piedmont's depreciation expense is no exception. The change in net salvage related to the Distribution function is the primary factor for the decrease in the annual depreciation expense in this study.

**Q. PLEASE DESCRIBE THE RESULTS REFLECTED IN THE TABLE ABOVE FOR LNG STORAGE PLANT.**

A. The functional depreciation rate for the LNG Storage Plant decreased from 1.49% to 0.32%. The assets in this functional category are fully depreciated with the exception of improvements on land and some small miscellaneous equipment. However, as noted in my Exhibit ___(RW-1), Piedmont is currently investing approximately $25 million in plant upgrades, refurbishment and new assets which is expected to be completed in 2012. Piedmont's decision to upgrade, renew, and add assets to the existing LNG plant, while a large investment is significantly lower than the estimated $320 million to construct a new facility. I recommend that new additions use a whole life rate until the next depreciation study. As shown in Exhibit __(PKP-1) Schedule 3 Page 6, the effect upon depreciation expense in the attrition period is an

increase of approximately $600,000. The recommended rates for Storage Plant are shown in my Exhibit ___(RW-1) Life Analysis Section and on Appendix A.

**Q. PLEASE DESCRIBE THE RESULTS REFLECTED IN THE TABLE ABOVE FOR TRANSMISSION PLANT.**

A. The functional depreciation rate for Transmission Plant decreased from 2.39% to 1.44%. There are only two accounts contained in this function at the present time, Land Rights and Mains. The Company has added a new account, 367.10 Cathodic Protection. I recommend that new additions use a whole life rate until the next depreciation study. These recommended rates for Transmission Plant are shown in my Exhibit __(RW-1) Life Analysis Section. The changes are due to increases in the average service life. As shown in Exhibit __(PKP-1) Schedule 3 Page 6, the effect upon depreciation expense in the attrition period is a decrease of approximately $400,000.

**Q. PLEASE DESCRIBE THE RESULTS REFLECTED IN THE TABLE ABOVE FOR DISTRIBUTION PLANT.**

A. The functional depreciation rate for Distribution Plant decreased from 3.60% to 2.72%. The changes are due to changes in life, changes in cost of removal (resulting in a less negative net salvage rate) and the reserve position. However, the primary driver is less negative net salvage rates for Account 376, Mains and Account 380, Services. Among the other accounts in this function there is a mix of increases and decreases in average service lives ("ASL's") and net salvage rates. Plant balances and reserves for Tennessee's assets in Accounts 381.1 Meter Accessories and 381.2 ERTs and Accessories have been transferred from Piedmont Corporate (Joint Property) and reflected in the study. The Company has added a new account, 376.10 Cathodic Protection. I recommend that new additions use a whole life rate until the next depreciation study. These recommended rates for Distribution Plant are shown in my Exhibit __(RW-1) Life Analysis Section. As shown in Exhibit __(PKP-1) Schedule 3 Page 6, the effect upon depreciation expense in the attrition period is a decrease of approximately $5.1 million.

**Q. PLEASE DESCRIBE THE RESULTS REFLECTED IN THE TABLE ABOVE FOR GENERAL PLANT.**

A. The functional depreciation rates for General Plant has been split into two categories, one that is depreciated and the other that is recommended to be amortized through Vintage Plant Amortization. The depreciated category decreased from 2.15% to 2.13% and is due to changes in life, net salvage and the reserve position. The amortized category also reflects a decrease from 6.47% to 0.87%, due to the overall reserve position for the General Plant function, both depreciated and amortized. As shown in Exhibit __(PKP-1) Schedule 3 Page 6, the effect upon depreciation and amortization expense in the attrition period is a decrease of approximately $304,000 in total. These recommended rates for General Plant are shown in my Exhibit __(RW-1) Life Analysis Section.

**Q. WHEN YOU USE THE TERM "RESERVE POSITION", WHAT DO YOU MEAN?**

A. The term "reserve position" refers to the difference between a theoretical reserve and the existing book reserve. If the theoretical reserve is greater than the book reserve, past depreciation has been inadequate compared to the depreciation parameters developed in the depreciation study, and an upward adjustment to the depreciation rate is required. If the opposite is true, a downward adjustment to the depreciation rate is required.

**Q. WHAT METHOD DID YOU USE TO ANALYZE HISTORICAL DATA TO DETERMINE LIFE CHARACTERISTICS?**

A. Accounts were analyzed using the actuarial method to estimate the life of property. In much the same manner as human mortality is analyzed by actuaries, depreciation analysts use models of property mortality characteristics that have been validated in research and empirical applications. Further detail is found in the life analysis section of Exhibit __(RW-1).

**Q. HOW DID YOU DETERMINE THE AVERAGE SERVICE LIVES FOR EACH ASSET GROUP?**

A. The establishment of appropriate average service lives for each account in all the functions was determined by using the actuarial analysis method. Graphs, where possible, showing the

proposed curve and life are provided in Exhibit __(RW-1). The change for each account is shown below in Table 2.

**TABLE 2**
PIEDMONT NATURAL GAS COMPANY - TENNESSEE
COMPARISON OF DEPPRECIATION PARAMETERS

| [1] | [2] | [3] | [4] | [5] | [6] | [7] |
|---|---|---|---|---|---|---|
| | | EXISTING | | STUDY | | CHANGE IN |
| Account Number | Description | Iowa Curve | Average Service Life Yrs | Iowa Curve | Average Service Life Yrs | Average Service Life Yrs |
| 361.00 | Structures & Improvements | S5 | 35.0 | S5 | 35.0 | - |
| 362.00 | Storage Tanks | S5 | 35.0 | S5 | 45.0 | 10.0 |
| 363.00 | Purification Equipment | S5 | 35.0 | S5 | 35.0 | - |
| 363.10 | Liquefaction Equipment | S5 | 35.0 | S5 | 35.0 | - |
| 363.20 | Vaporizing Equipment | S5 | 35.0 | S5 | 35.0 | - |
| 363.30 | Compressor Station Equipment | S5 | 25.0 | S5 | 30.0 | 5.0 |
| 363.40 | M & R Station Equipment | S5 | 30.0 | S5 | 35.0 | 5.0 |
| 363.50 | Other Equipment | S5 | 35.0 | S5 | 30.0 | (5.0) |
| 365.12 | Land Rights | | | R2 | 80.0 | N/A |
| 367.00 | Mains | | | R4 | 70.0 | N/A |
| 367.10 | Cathodic Protection | | | R4 | 15.0 | N/A |
| 375.00 | Structures & Improvements | R4 | 15.0 | R4 | 19.0 | 4.0 |
| 376.00 | Mains | S4 | 50.0 | R4 | 65.0 | 15.0 |
| 376.10 | Cathodic Protection | | | R4 | 15.0 | N/A |
| 378.00 | M & R Station Equipment | R5 | 45.0 | R3 | 27.0 | (18.0) |
| 379.00 | City Gate Equipment | R5 | 45.0 | R5 | 45.0 | - |
| 380.00 | Services | S5 | 50.0 | R4 | 50.0 | - |
| 381.00 | Meters | S3 | 35.0 | R3 | 30.0 | (5.0) |
| 381.10 | Meter Accessories | S0 | 25.0 | R2 | 30.0 | 5.0 |
| 381.20 | ERTs and Accessories | | | R4 | 15.0 | N/A |
| 382.00 | Meter Installations | S3 | 40.0 | R3 | 30.0 | (10.0) |
| 383.00 | House Regulators | S6 | 40.0 | R3 | 30.0 | (10.0) |
| 384.00 | House Regulator Installations | S6 | 40.0 | R3 | 30.0 | (10.0) |
| 385.00 | Industrial M & R Equipment | | | R2 | 35.0 | N/A |
| 390.00 | Structures & Improvements | R3 | 45.0 | R3 | 45.0 | - |
| 391.00 | Office Furniture & Equipment | L1.5 | 20.0 | SQ | 25.0 | 5.0 |
| 392.10 | Transportation - Service Trucks | SQ | 5.0 | L2 | 5.0 | - |
| 392.20 | Transportation - Heavy Trucks | SQ | 5.0 | L2 | 10.0 | 5.0 |
| 393.00 | Stores Equipment | R2 | 30.0 | SQ | 30.0 | - |
| 394.00 | Tools, Shop & Garage Equipment | L0.5 | 15.0 | SQ | 20.0 | 5.0 |
| 395.00 | Laboratory Equipment | | | SQ | 20.0 | N/A |
| 396.00 | Power Operated Equipment | S3 | 10.0 | S6 | 25.0 | 15.0 |
| 397.00 | Communication Equipment | S3 | 15.0 | SQ | 15.0 | - |
| 398.00 | Miscellaneous Equipment | S3 | 20.0 | SQ | 20.0 | - |

**Q. PLEASE DESCRIBE SOME OF THE CHANGES IN THE AVERAGE SERVICE LIVES FOR THE VARIOUS ACCOUNTS?**

A. The detailed analysis of each account is described fully in Exhibit __( RW-1). Examples of some of the changes in average service lives are:

- The largest decrease (greater than 10 years) in life was in Distribution Plant account 378;
- The largest increases in life were in Distribution Plant accounts 376 and General Plant 396 each increased 15 years; and
- Overall, 10 accounts experienced an increase in life, six accounts a decrease in life, 11 remained the same and no comparison could be made in seven accounts.

**Q. WHAT IS NET SALVAGE?**

A. While discussed more fully in the study itself, net salvage is the difference between the gross salvage (what the asset was sold for) and the removal cost (cost to remove and dispose of the asset). Salvage and removal cost percentages are calculated by dividing the current cost of salvage or removal by the original installed cost of the asset. Some plant assets can experience significant negative removal cost percentages due to the amount of removal cost and the timing of the addition versus the retirement.

**Q. HOW DID YOU DETERMINE THE NET SALVAGE PERCENTAGES FOR EACH ASSET GROUP?**

A. Appropriate net salvage percentages for each account were determined by using the method discussed above. The net salvage as a percent of retirements for various bands (i.e. groupings of years such as the three-year average) for each account are shown in Appendix D of my Exhibit __(RW-1). A summary comparing the existing net salvage to the proposed net salvage percentages is shown below in Table 3.

**TABLE 3**
PIEDMONT NATURAL GAS COMPANY - TENNESSEE
COMPARISON OF DEPPRECIATION PARAMETERS

| [1] | [2] | [3] | [4] | [5] | [6] | [7] |
|---|---|---|---|---|---|---|
| | | EXISTING | STUDY | | | CHANGE IN |
| Account Number | Description | Net Salvage | Salvage | COR | Net Salvage | Net Salvage |
| | | % | % | % | % | % |
| 361.00 | Structures & Improvements | - | - | - | - | - |
| 362.00 | LNG Storage Tanks | - | - | - | - | - |
| 363.00 | Purification Equipment | - | - | - | - | - |
| 363.10 | Liquefaction Equipment | - | - | - | - | - |
| 363.20 | Vaporizing Equipment | - | - | - | - | - |
| 363.30 | Compressor Station Equipment | - | - | - | - | - |
| 363.40 | M & R Station Equipment | - | - | - | - | - |
| 363.50 | Other Equipment | - | - | - | - | - |
| 365.12 | Land Right | | - | - | - | N/A |
| 367.00 | Mains | | - | 5.0 | (5.0) | N/A |
| 367.10 | Cathodic Protection | | - | - | - | N/A |
| 375.00 | Structures & Improvements | 50.0 | - | 5.0 | (5.0) | (55.0) |
| 376.00 | Mains | (20.0) | - | 5.0 | (5.0) | 15.0 |
| 376.10 | Cathodic Protection | | - | - | - | N/A |
| 378.00 | M & R Station Equipment | (5.0) | - | - | - | 5.0 |
| 379.00 | City Gate Equipment | (5.0) | - | - | - | - |
| 380.00 | Services | (200.0) | - | 125.0 | (125.0) | 75.0 |
| 381.00 | Meters | 2.0 | - | - | - | (2.0) |
| 381.10 | Meter Accessories | - | - | - | - | - |
| 381.20 | ERTs and Accessories | | - | - | - | - |
| 382.00 | Meter Installations | - | - | - | - | - |
| 383.00 | House Regulators | - | - | - | - | - |
| 384.00 | House Regulator Installations | | - | - | - | - |
| 385.00 | Industrial M & R Equipment | - | - | - | - | N/A |
| 390.00 | Structures & Improvements | 5.0 | - | 5.0 | (5.0) | (10.0) |
| 391.00 | Office Furniture & Equipment | 5.0 | - | - | - | (5.0) |
| 392.01 | Transportation - Service Trucks | 20.0 | 10.0 | - | 10.0 | (10.0) |
| 392.02 | Transportation - Heavy Trucks | 20.0 | 10.0 | - | 10.0 | (10.0) |
| 393.00 | Stores Equipment | - | - | - | - | - |
| 394.00 | Tools, Shop & Garage Equipment | - | - | - | - | - |
| 395.00 | Laboratory Equipment | | | | | N/A |
| 396.00 | Power Operated Equipment | 25.0 | 10.0 | - | 10.0 | (15.0) |
| 397.00 | Communication Equipment | - | - | - | - | - |
| 398.00 | Miscellaneous Equipment | - | - | - | - | - |

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**Q. PLEASE DESCRIBE SOME OF THE CHANGES IN THE NET SALVAGE PERCENTAGES FOR THE VARIOUS ACCOUNTS?**

A. The detailed analysis of each account is described fully in Exhibit __(RW-1). Examples of some of the changes in net salvage are:

- The two largest increases (i.e. more positive or less negative) in net salvage percentages were increases in Account 376.0 – Mains and Account 380.0 – Services;
- The largest decreases (i.e. more negative or less positive) were in Account 375-Structures & Improvements and 396 – Power Operated Equipment; and
- Overall, seven accounts experienced some level of increased negative net salvage percentage while three accounts experienced an increase in salvage resulting in a more positive net salvage percentage, 17 accounts remained the same, and no comparison could be made in seven accounts.

**Q. DO YOU HAVE ANY RECOMMENDATIONS AS A RESULT OF YOUR DEPRECIATION STUDY?**

A. Yes, I do. I recommend that the TRA approve, and Piedmont adopt, the depreciation rates shown on Appendix A of Exhibit __(RW-1).

**Q. UPON WHAT DO YOU BASE THIS RECOMMENDATION?**

A. I base this recommendation on the comprehensive depreciation study that I conducted, giving appropriate recognition to historical experience, recent trends, and Piedmont expectations. The depreciation study results in a fair and reasonable level of depreciation expense which, when incorporated into a revenue stream, will provide Piedmont with adequate capital recovery.

**Q. DOES THIS COMPLETE YOUR PRE-FILED DIRECT TESTIMONY?**

A. Yes, it does.

# EXHIBIT__(RW-1)

# PIEDMONT NATURAL GAS COMPANY

## Tennessee

### DEPRECIATION RATE STUDY

### AT OCTOBER 31, 2009


http://www.utilityalliance.com

# PIEDMONT NATURAL GAS COMPANY
# DEPRECIATION RATE STUDY
# EXECUTIVE SUMMARY

Piedmont Natural Gas Company ("PNG" or "Company") engaged Alliance Consulting Group to conduct a depreciation study of its Tennessee depreciable assets as of October 31, 2009.

This study recommends a decrease of $4.9 million in annual depreciation expense compared to the annual depreciation expense currently being recorded. Overall, the primary driver to this change is in Distribution Plant and is due to negative net salvage. The two largest accounts, Account 376 Mains and Account 380 Services have decreased negative net salvage factors, which is the primary driver of the decrease in the annual depreciation expense accrual. In addition, depreciation expense is projected to decrease the General Plant depreciation accrual rate, which is impacted by both changes in life and net salvage as well as the implementation of general plant amortization.

The implementation of Vintaged Group Amortization (general plant amortization) for certain General Plant accounts is based on FERC Accounting Release 15 ("AR-15") issued by the Federal Energy Regulatory Commission ("FERC"). Vintaged Group Amortization has been implemented and approved by companies and regulators for over 15 years and provides for the efficient and timely recording of retirements for the General Plant function. Implementation in Tennessee is consistent with Piedmont's other jurisdictions.

Appendix A provides the comparison between existing and proposed annual depreciation expense accruals by account and function. Appendix B provides the depreciation rate calculations. Appendix C provides a comparison between the existing and study recommended depreciation parameters. Appendix D provides the net salvage analysis.

# PIEDMONT NATURAL GAS COMPANY
# NATURAL GAS OPERATIONS
# DEPRECIATION RATE STUDY
# AT OCTOBER 31, 2009

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## PURPOSE

The purpose of this study is to develop depreciation rates for the depreciable property for Tennessee as recorded on PNG's books at October 31, 2009. The account based depreciation rates were designed to recover the total remaining undepreciated investment, adjusted for net salvage, over the remaining life of PNG's Tennessee property on a straight-line basis. Non-depreciable property and property which is amortized such as intangibles were excluded from this study.

Piedmont Natural Gas is an energy service company primarily engaged in the distribution of natural gas to more than 164 thousand customers in Tennessee. PNG has been in operation for more than 50 years.

PNG owns and operates a complex system of high and intermediate pressure transmission, liquefied natural gas storage, and intermediate and low pressure distribution networks located across the service area. There are a number of receipt points or city gates, throughout the system where gas is delivered by the transmission system. Once gas is metered through these city gates, the pressure is reduced through regulators in order to meet system requirements as determined by pressure and volume needs.

## STUDY RESULTS

Overall depreciation rates for all PNG depreciable property are shown in Appendix A. These rates translate into an annual depreciation expense accrual of $14.4 million based on PNG's depreciable investment at October 31, 2009. The annual depreciation expense calculated by using the approved account level rates is $19.3 million. Appendix A presents a comparison of approved rates versus proposed rates by account. Appendix B demonstrates the development of the annual depreciation rates and accruals. Appendix C presents a summary of mortality and net salvage estimates by account. Appendix D presents the net salvage analysis by account.

Consistent with FERC Rule AR-15, this depreciation study develops depreciation expense for Vintaged Group Amortization in Accounts 391 through 398, excluding 392 and 396. This process provides for the amortization of general plant over the same life as recommended in this study (with a separate amortization to allocate deficit or excess reserve). At the end of the amortized life, property will be retired from the books. Implementation of this approach did not affect the annual expense accrued by PNG and provides for the timely retirement of assets and the simplification of accounting for general property.

While the study made adjustments, upward and downward, to the average service life for most accounts, it is the change in cost of removal when compared to the existing that is driving the decrease. The two largest accounts in Distribution Plant, Account 376, Mains and Account 380, Services reflect an increase (less negative) in net salvage factors which is the primary driver for the change. These changes represent the most recent indications for these accounts. However, based upon discussions with Company management, future evaluations and analysis will be conducted related to the recording of salvage and cost of removal.

## RECOMMENDATIONS

In addition to the results described above and in the remainder of this report, we have the following recommendations in regard to book depreciation for Piedmont Natural Gas in Tennessee.

1. We recommend adoption of the annual depreciation rates shown on Appendix A for each property group.

2. Due to the length of time between depreciation rate changes and the continued accrual of depreciation for certain accounts, our study reflects the reallocation of the book reserve between accounts within each function. These reallocated book reserves should be adopted by PNG and reflected in PNG's accounting system.

3. The depreciation study indicated the processes related to recording retirement costs when retiring assets with replacement (abandoned and /or removed) should be re-evaluated and standardized as needed. This will ensure the consistent application of accounting removal processes by field personnel. We understand that a time and motion study approach will be initiated within the next year for this re-evaluation. Any changes as a result of this evaluation will be incorporated into the next depreciation study.

4. Due to changes in the mix and characteristics of assets and net salvage experience over time, we recommend an update to the depreciation study be made every five years.

5. We recommend the adoption and implementation of Vintage Amortization Accounting for certain accounts of the General Plant function consistent with Piedmont's other jurisdictions.

## GENERAL DISCUSSION

### Definition

The term "depreciation" as used in this study is considered in the accounting sense, that is, a system of accounting that distributes the cost of assets, less net salvage (if any), over the estimated useful life of the assets in a systematic and rational manner. It is a process of allocation, not valuation. This expense is systematically allocated to accounting periods over the life of the properties. The amount allocated to any one accounting period does not necessarily represent the loss or decrease in value that will occur during that particular period. The Company accrues depreciation on the basis of the original cost of all depreciable property included in each functional property group. On retirement the full cost of depreciable property, less the net salvage value, is charged to the depreciation reserve.

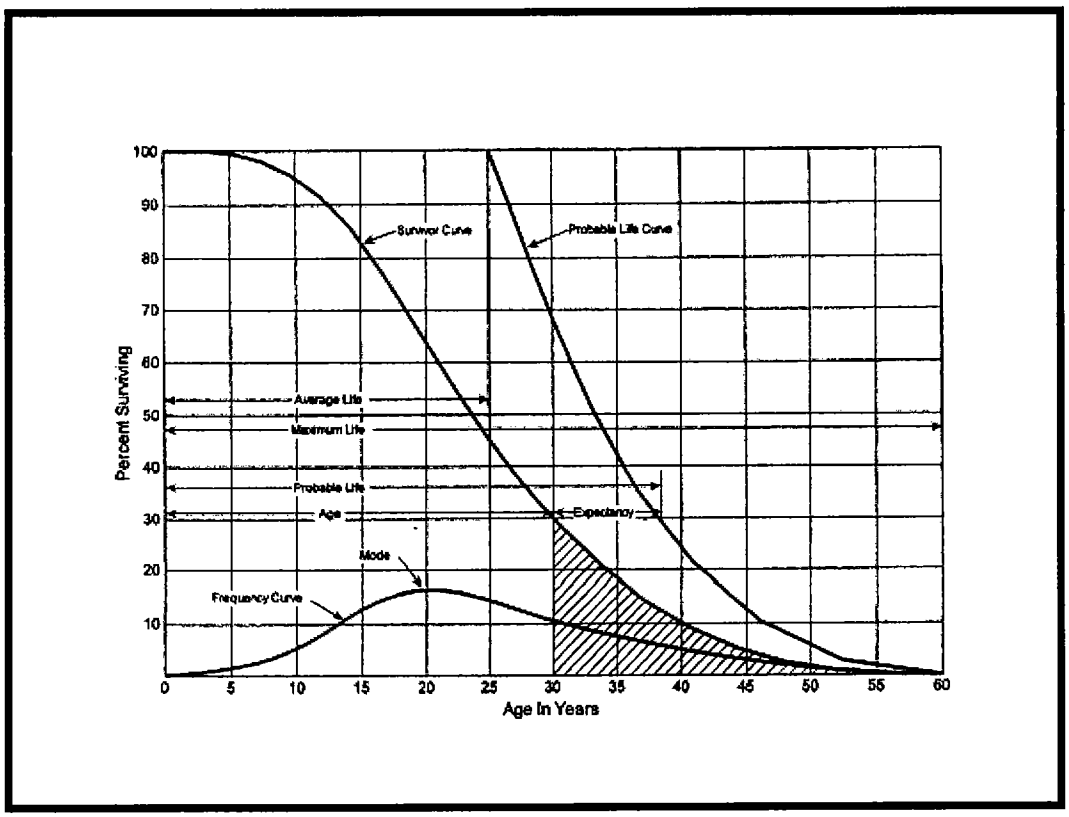
### Basis of Depreciation Estimates

The straight-line, broad (average) life group, remaining-life depreciation system was employed to calculate annual and accrued depreciation in this study. In this system, the annual depreciation expense for each group is computed by dividing the original cost of the asset less allocated depreciation reserve less estimated net salvage by its respective average life group remaining life. The resulting annual accrual amounts of all depreciable property within a function were accumulated, and the total was divided by the original cost of all functional depreciable property to determine the depreciation rate. The calculated remaining lives and annual depreciation accrual rates were based on attained ages of plant in service and the estimated service life and salvage characteristics of each depreciable group. The computations of the annual functional depreciation rates are shown in Appendix A and remaining life calculations are shown in Appendix B.

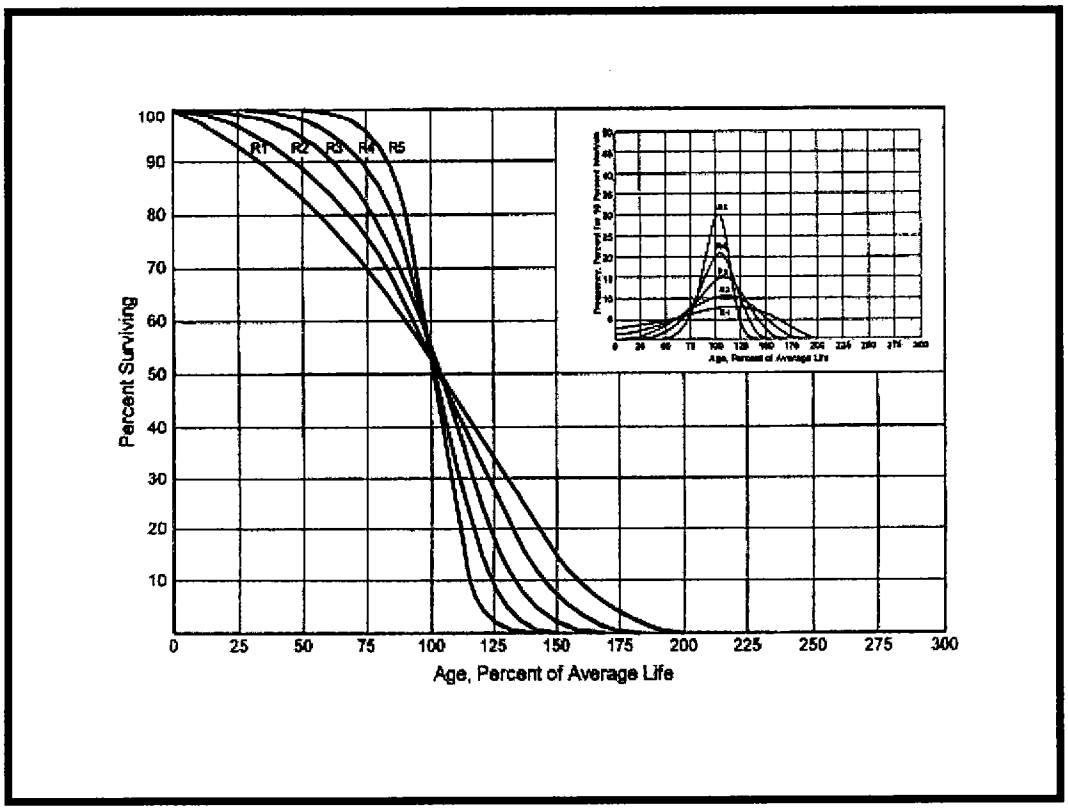
Actuarial analysis was used with each account within a function where sufficient data was available, and judgment was used to some degree on all accounts.

## Survivor Curves

To fully understand depreciation projections in a regulated utility setting, there must be a basic understanding of survivor curves. Individual property units within a group do not normally have identical lives or investment amounts. The average life of a group can be determined by first constructing a survivor curve which is plotted as a percentage of the units surviving at each age. A survivor curve represents the percentage of property remaining in service at various age intervals. The Iowa Curves are the result of an extensive investigation of life characteristics of physical property made at Iowa State College Engineering Experiment Station in the first half of the prior century. Through common usage, revalidation and regulatory acceptance, these curves have become a descriptive standard for the life characteristics of industrial property. An example of an Iowa Curve is shown below.



There are four families in the Iowa Curves that are distinguished by the relation of the age at the retirement mode (largest annual retirement frequency) and the average life. For distributions with the mode age greater than the average life, an "R" designation (i.e., Right modal) is used. The family of "R" moded curves is shown below.




Similarly, an "S" designation (i.e., Symmetric modal) is used for the family whose mode age is symmetric about the average life. An "L" designation (i.e., Left modal) is used for the family whose mode age is less than the average life. A special case of left modal dispersion is the "O" or origin modal curve family. Within each curve family, numerical designations are used to describe the relative magnitude of the retirement frequencies at the mode. A "6" indicates that the retirements are not greatly dispersed from the mode (i.e., high mode frequency) while a "1" indicates a large dispersion about the mode (i.e., low mode frequency).

For example, a curve with an average life of 30 years and an "L3" dispersion is a moderately dispersed, left modal curve that can be designated as a 30 L3 Curve. An SQ, or square, survivor curve occurs where no dispersion is present (i.e., units of common age retire simultaneously).

Most property groups can be closely fitted to one Iowa Curve with a unique average service life. The blending of judgment concerning current conditions and future trends along with the matching of historical data permits the depreciation analyst to make an informed selection of an account's average life and retirement dispersion pattern.

**Actuarial Analysis**

Actuarial analysis (retirement rate method) was used in evaluating historical asset retirement experience where vintage data were available and sufficient retirement activity was present. In actuarial analysis, interval exposures (total property subject to retirement at the beginning of the age interval, regardless of vintage) and age interval retirements are calculated. The complement of the ratio of interval retirements to interval exposures establishes a survivor ratio. The survivor ratio is the fraction of property surviving to the end of the selected age interval, given that it has survived to the beginning of that age interval. Survivor ratios for all of the available age intervals were chained by successive multiplications to establish a series of survivor factors, collectively known as an observed life table. The observed life table shows the experienced mortality characteristic of the account and may be compared to standard mortality curves such as the Iowa Curves. Where data was available, accounts were analyzed using this method. Placement bands were used to illustrate the composite history over a specific era, and experience bands were used to focus on retirement history for all vintages during a set period. The results from these analyses for those accounts which had data sufficient to be analyzed using this method are shown in the Life Analysis section of this report.

**Judgment**

Any depreciation study requires informed judgment by the analyst conducting the study. A knowledge of the property being studied, company policies and procedures, general trends in technology and industry practice, and a sound basis of understanding depreciation theory are needed to apply this informed judgment. Judgment was used in areas such as survivor curve modeling and selection, depreciation method selection, simulated plant record method analysis, and actuarial analysis.

Judgment is not defined as being used in cases where there are specific, significant pieces of information that influence the choice of a life or curve. Those cases would simply be a reflection of specific facts into the analysis. Where there are multiple factors, activities, actions, property characteristics, statistical inconsistencies, implications of applying certain curves, property mix in accounts or a multitude of other considerations that impact the analysis (potentially in various directions), judgment is used to take all of these factors and synthesize them into a general direction or understanding of the characteristics of the property. Individually, no one factor in these cases may have a substantial impact on the analysis, but overall, may shed light on the utilization and characteristics of assets. Judgment may also be defined as deduction, inference, wisdom, common sense, or the ability to make sensible decisions. There is no single correct result from statistical analysis; hence, there is no answer absent judgment. At the very least for example, any analysis requires choosing which bands to place more emphasis.

The establishment of appropriate average service lives and retirement dispersions for the Storage, Transmission, Distribution and General accounts requires judgment to incorporate the understanding of the operation of the system with the available accounting information analyzed using the Retirement Rate actuarial methods. The appropriateness of lives and curves depends not only on statistical analyses, but also on how well future retirement patterns will match past retirements.

Current applications and trends in use of the equipment also need to be factored into life and survivor curve choices in order for appropriate mortality characteristics to be chosen.

**Average Life Group Depreciation**

PNG's existing rates use the average life group ("ALG") depreciation procedure. At the request of PNG, this study continues to use the ALG depreciation procedure to group the assets within each account. After an average service life and dispersion were selected for each account, those parameters were used to estimate what portion of the surviving investment of each vintage was expected to retire. The depreciation of the group continues until all investment in the vintage group is retired. ALG groups are defined by their respective account dispersion, life, and net salvage estimates. A straight-line rate for each ALG group is calculated by computing a composite remaining life for each group across all vintages within the group, dividing the remaining investment to be recovered by the remaining life to find the annual depreciation expense and dividing the annual depreciation expense by the surviving investment. The resultant rate for each ALG group is designed to recover all investment less net salvage when the last unit retires. The ALG procedure recovers net book cost over the life of each account by averaging many components.

**Theoretical Depreciation Reserve**

The book depreciation reserve was derived from Company records where the provision for depreciation is applied at an account level. Since it had been some time since the last depreciation study, the accumulated depreciation was reallocated on an account level using the theoretical reserve model. As a point of comparison, a theoretical depreciation reserve model was computed for each account and the existing functional book reserve was allocated based on the computed theoretical depreciation reserve to each account within that function. This study used a reserve model that relied on a prospective concept relating future retirement and accrual patterns for property, given current life and salvage estimates. The theoretical reserve of a group is developed from the estimated remaining life, total life of the property group, and estimated net salvage. The theoretical reserve represents the portion of the group cost that would have been accrued if current forecasts were used throughout the life of the group for future depreciation accruals. The computation involves multiplying the vintage balances within the group by the theoretical reserve ratio for each vintage. The average life group method requires an estimate of dispersion and service life to establish how much of each vintage is expected to be retired in each year until all property within the group is retired.

Estimated average service lives and dispersion determine the amount within each average life group. The straight-line remaining-life theoretical reserve ratio at any given age (RR) is calculated as:

$$RR = 1 - \frac{(Average\ Remaining\ Life)}{(Average\ Service\ Life)} * (1 - Net\ Salvage\ Ratio)$$

## DETAILED DISCUSSION

**Depreciation Study Process**

This depreciation study encompassed four distinct phases. The first phase involved data collection and field interviews. The second phase was where the initial data analysis occurred. The third phase was where the information and analysis was evaluated. Once the first three stages were complete, the fourth phase began. This phase involved the calculation of deprecation rates and the documenting the corresponding recommendations.

During the Phase I data collection process, historical data was compiled from continuing property records and general ledger systems. Data was validated for accuracy by extracting and comparing to multiple financial system sources. Audit of this data was validated against historical data from prior periods, historical general ledger sources, and field personnel discussions. This data was reviewed extensively to put in the proper format for a depreciation study. Further discussion on data review and adjustment is found in the Salvage Considerations Section of this study. Also as part of the Phase I data collection process, numerous discussions were conducted with engineers and field operations personnel to obtain information that would assist in formulating life and salvage recommendations in this study. One of the most important elements of performing a proper depreciation study is to understand how the Company utilizes assets and the environment of those assets. Interviews with engineering and operations personnel are important ways to allow the analyst to obtain information that is beneficial when evaluating the output from the life and net salvage programs in relation to the Company's actual asset utilization and environment. Information that was gleaned in these discussions is found both in the Detailed Discussion of this study in the life analysis and salvage analysis sections and also in workpapers.

Phase 2 is where the actuarial analysis is performed. Phase 2 and 3 overlap to a significant degree. The detailed property records information is used in phase 2 to develop observed life tables for life analysis. These tables are visually compared to industry standard tables to determine historical life characteristics. It is possible that the analyst would cycle back to this phase based on the evaluation process performed in phase 3. Net salvage analysis consists of compiling historical salvage and removal data by functional group to determine values and trends in gross salvage and removal cost. This information was then carried forward into phase 3 for the evaluation process.

Phase 3 is the evaluation process which synthesizes analysis, interviews, and operational characteristics into a final selection of asset lives and net salvage parameters. The historical analysis from phase 2 is further enhanced by the incorporation of recent or future changes in the characteristics or operations of assets that were revealed in phase 1. Phases 2 and 3 allow the depreciation analyst to validate the asset characteristics as seen in the accounting transactions with actual Company operational experience.

Finally, Phase 4 involved the calculation of accrual rates, making recommendations and documenting the conclusions in a final report. The calculation of accrual rates is found in Appendix B. Recommendations for the various accounts are contained within the Detailed Discussion of this report. The depreciation study flow diagram shown as Figure 1[1] documents the steps used in conducting this study. Depreciation Systems, page 289 documents the same basic processes in performing a depreciation study which are: Statistical analysis, evaluation of statistical analysis, discussions with management, forecast assumptions, write logic supporting forecasts and estimation, and write final report.

[1] Public Utility Finance & Accounting, A Reader

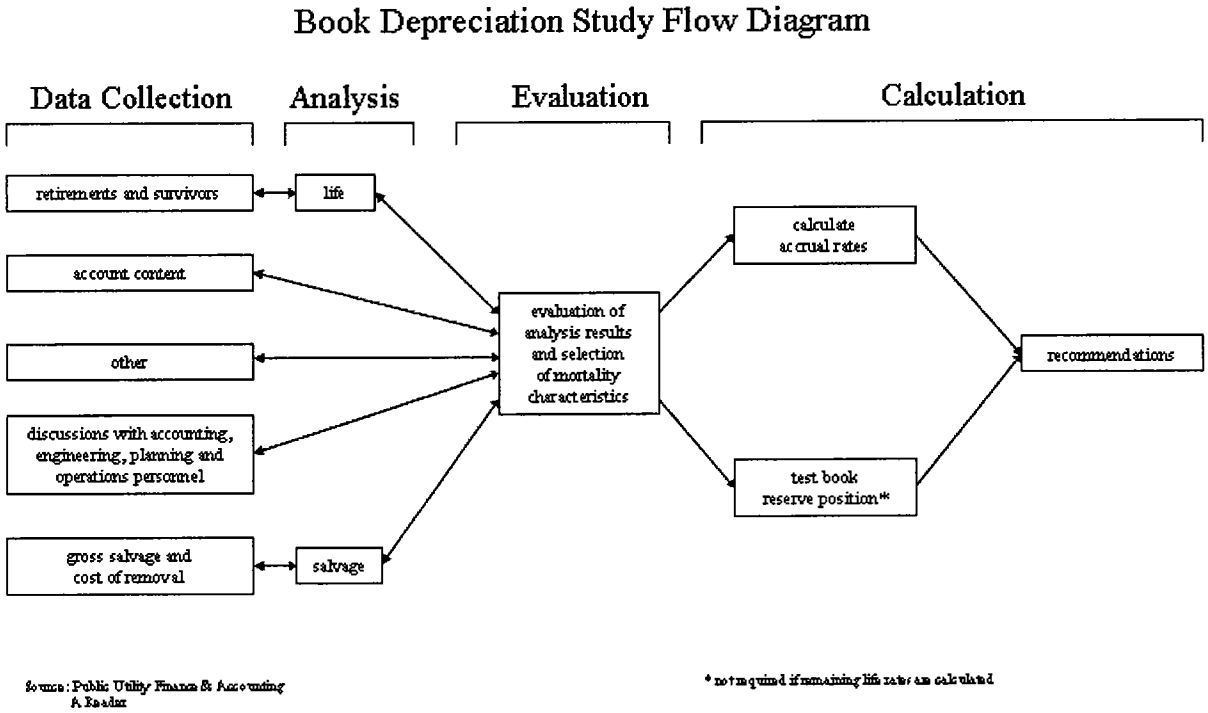



Figure 1

***PNG DEPRECIATION STUDY PROCESS***

**Depreciation Rate Calculation**

Annual depreciation expense amounts for the depreciable accounts of PNG Tennessee were calculated by the straight line method, average life group procedure, and remaining-life technique. With this approach, remaining lives were calculated according to standard ALG group expectancy techniques, using the Iowa Survivor Curves noted in the calculation. For each plant account, the difference between the surviving investment, adjusted for estimated net salvage, and the allocated book depreciation reserve, was divided by the average remaining life to yield the annual depreciation expense.

**Remaining Life Calculation**

The establishment of appropriate average service lives and retirement dispersions for each account within a functional group was based on engineering judgment that incorporated available accounting information analyzed using the Retirement Rate actuarial methods. After establishment of appropriate average service lives and retirement dispersion, remaining life was computed for each account. Theoretical depreciation reserve with zero net salvage was calculated using theoretical reserve ratios as defined in the theoretical reserve portion of the General Discussion section. The difference between plant balance and theoretical reserve was then spread over the ALG depreciation accruals. Remaining life computations are found for each account in work papers.

**Life Analysis**

The retirement rate actuarial analysis method was applied to all accounts for PNG. For each account, an actuarial retirement rate analysis was made with placement and experience bands of varying width. The historical observed life table was plotted and compared with various Iowa Survivor Curves to obtain the most appropriate match. A selected curve for each account is shown in the Life Analysis Section of this report. The observed life tables for all analyzed placement and experience bands are provided in workpapers.

For each account different placement (i.e. placement from earliest vintage year which varied for each account through 2009) and experience bands were plotted. The approved survivor curves were used as a starting point. Then using the same average life, various dispersion curves were plotted. Frequently, visual matching would confirm one specific dispersion pattern (i.e. L, S. or R) as an obviously better match than others. Repeated matching usually pointed to a focus on one dispersion family and small range of service lives. The goal of visual matching was to minimize the differential between the observed life table and Iowa curve in top and mid range of the plots. The next step would be to determine the most appropriate life using that dispersion pattern. These results are used in conjunction with all other factors that may influence asset lives.

## ACCOUNT SPECIFIC LIFE ANALYSIS RESULTS

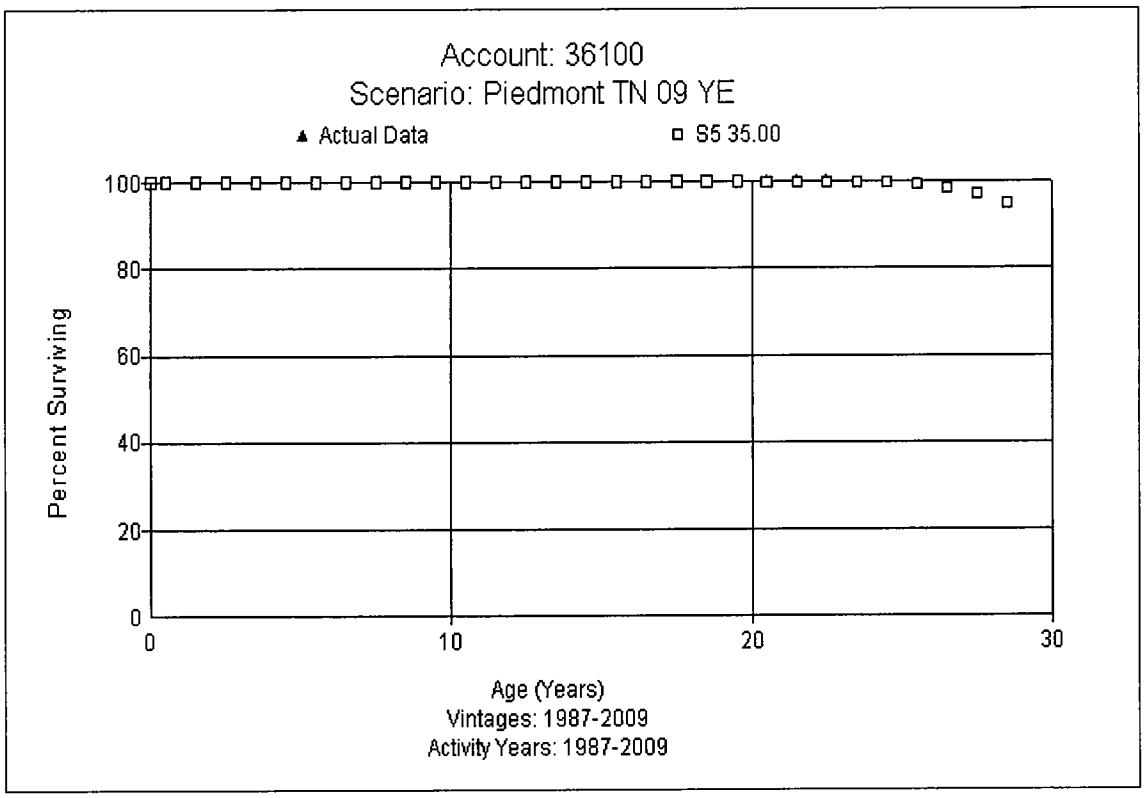
### Storage Plant

The Herbert S. Walters Liquefied Natural Gas (LNG) Facility began operation in 1972. The facility was the nation's 35th of its kind and is designed to convert natural gas to a liquid during "off peak" (summer) and then back to natural gas during "on peak" (winter). The facility located on 66 acres northwest of Nashville, is currently undergoing major upgrades and renovation to its equipment. The project includes investment of capital in each of the accounts. The project will retire old assets and add new as well as refurbish some of the existing assets. Examples of retire and replacement of assets are a new control system, new electrical system, a third boil-off compressor and a completely new vaporizing system using glycol. One of the refurbishment activities consists of the abatement of lead base paint at the facility. The cost of the project is approximately $18 million and will be substantially complete by the end of this year (2011). There are several additional projects, which have been approved, of about $5.0 million. In total, since 2009 through 2012 PNG is expected to replace nearly 60% of the equipment for a cost of approximately $23 million. This compares to the cost of building a new plant of about $350 million.

Due to the magnitude of the project and the timing, we have provided a whole life depreciation rate for the accounts that were considered fully accrued at the time of the depreciation study. We recommend the approval and application of these whole life rates until the next depreciation study.

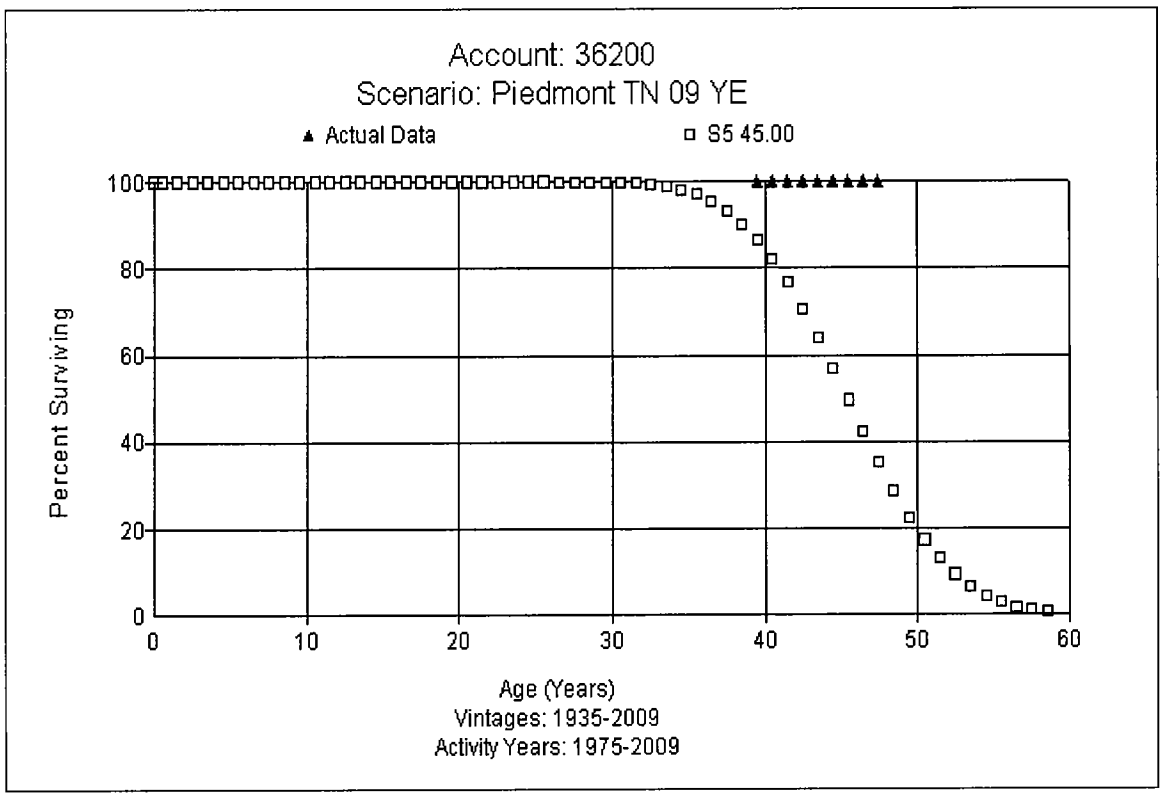
**Account 361.00 Structures and Improvements (35 S5)**

This account consists of buildings. There is approximately $1.1 million in this account. The approved life for this account is 35 years with the S5 dispersion. This study proposes retaining the life of 35 years and the S5 curve. An observed life table is graphed for this account below.



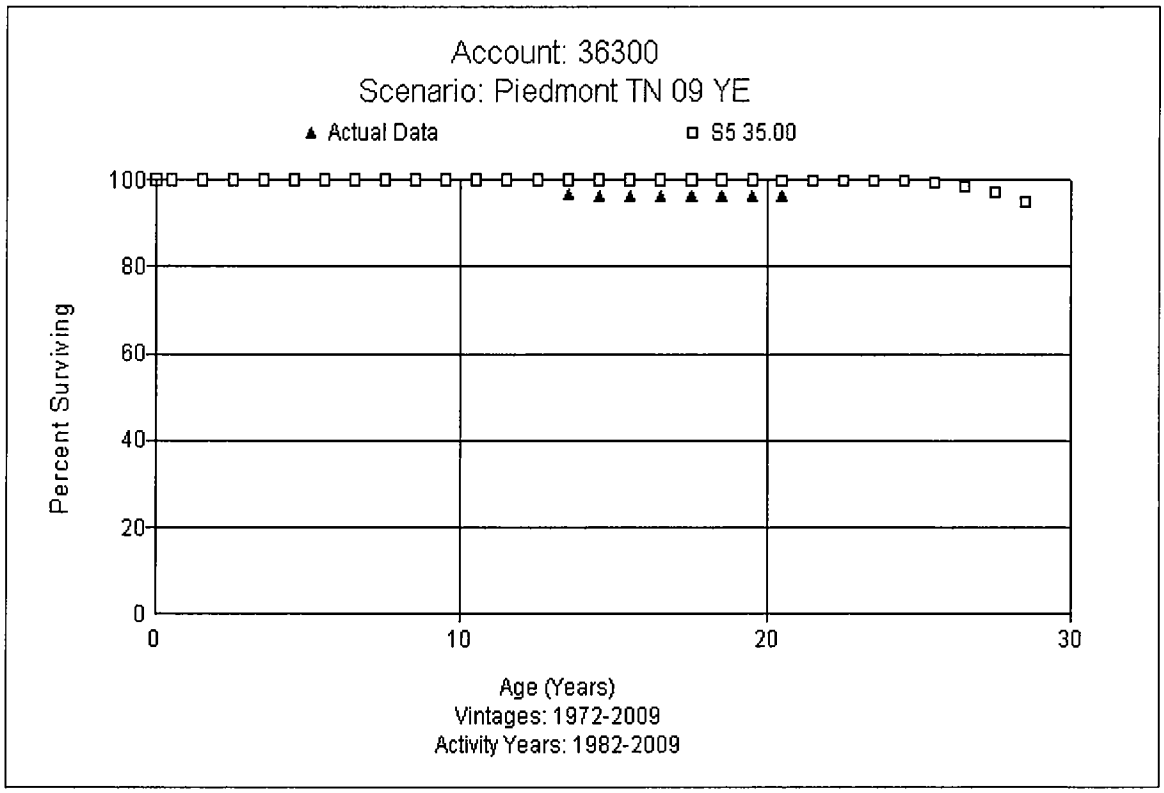
**Account 362.00 Gas Holders (45 S5)**

This account consists of gas holders. There is approximately $2.9 million in this account. The approved life for this account is 35 years with the S5 dispersion. This study proposes an increase in life to 45 years and retaining the S5 curve. It should be noted the study reflects a fully accrued status (0.00% rate) for this account. Should new additions be added subsequently, PNG should use the whole life rate of 2.22% until the next depreciation study can determine a new depreciation rate. An observed life table is graphed for this account below.



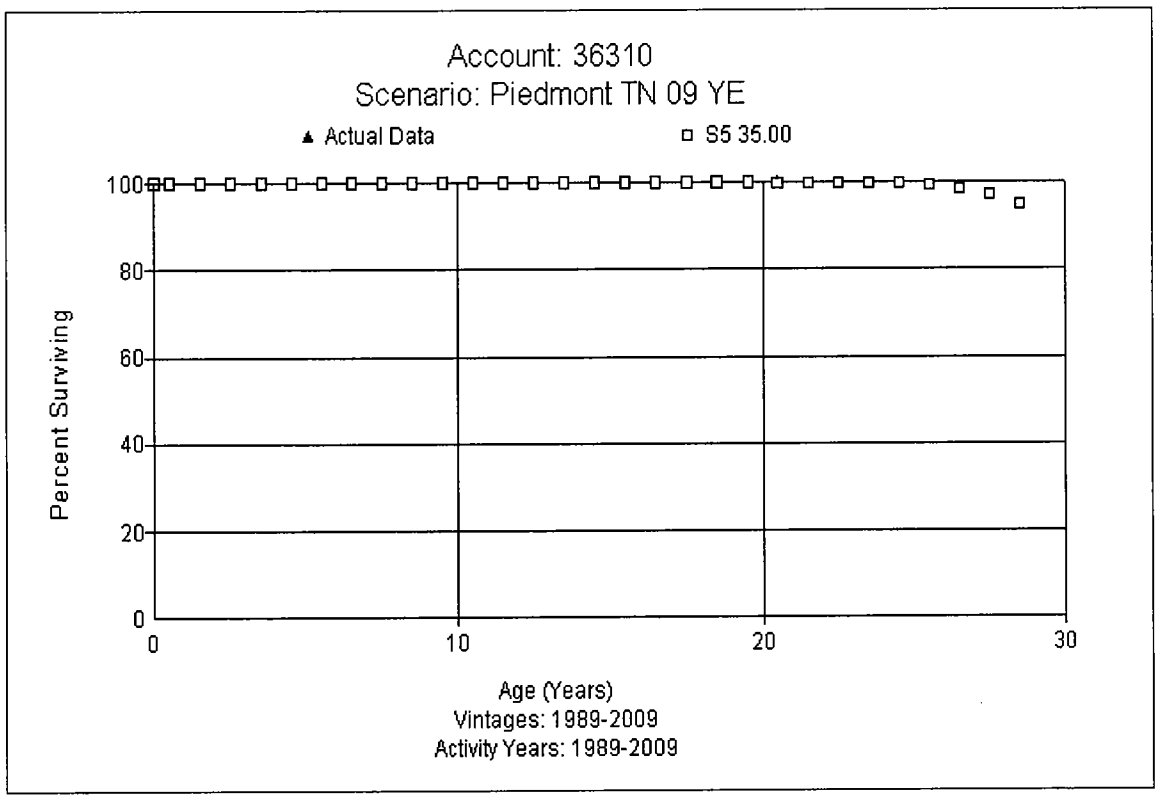
**Account 363.00 Purification Equipment (35 S5)**

This account consists of miscellaneous purification equipment. There is approximately $404 thousand in this account. The approved life for this account is 35 years with the S5 dispersion. This study proposes retaining the life of 35 years and the S5 curve. It should be noted the study reflects a fully accrued status (0.00% rate) for this account. Should new additions be added subsequently, PNG should use the whole life rate of 2.86% until the next depreciation study can determine a new depreciation rate. An observed life table is graphed for this account below.



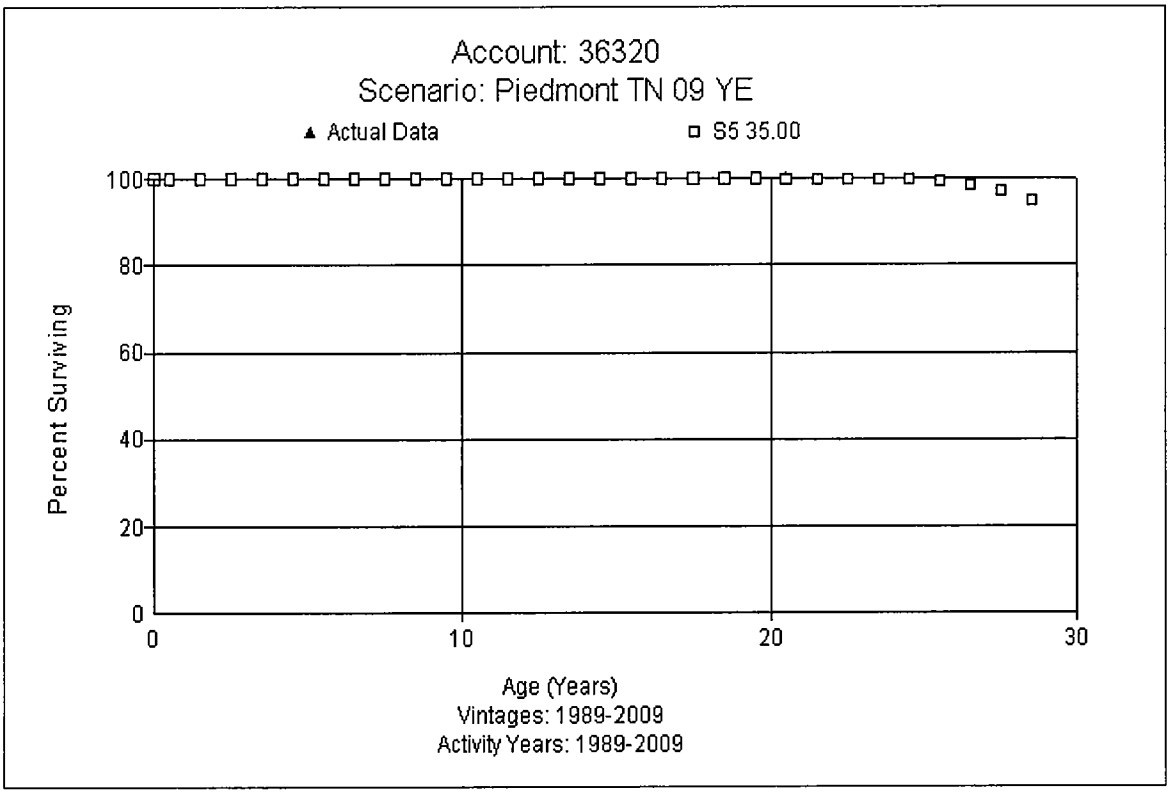
**Account 363.10 Liquefaction Equipment (35 S5)**

This account consists of miscellaneous liquefaction equipment. There is approximately $1.1 million in this account. The approved life for this account is 35 years with the S5 dispersion. This study proposes retaining the life of 35 years and the S5 curve. It should be noted the study reflects a fully accrued status (0.00% rate) for this account. Should new additions be added subsequently, PNG should use the whole life rate of 2.86% until the next depreciation study can determine a new depreciation rate. An observed life table is graphed for this account below.



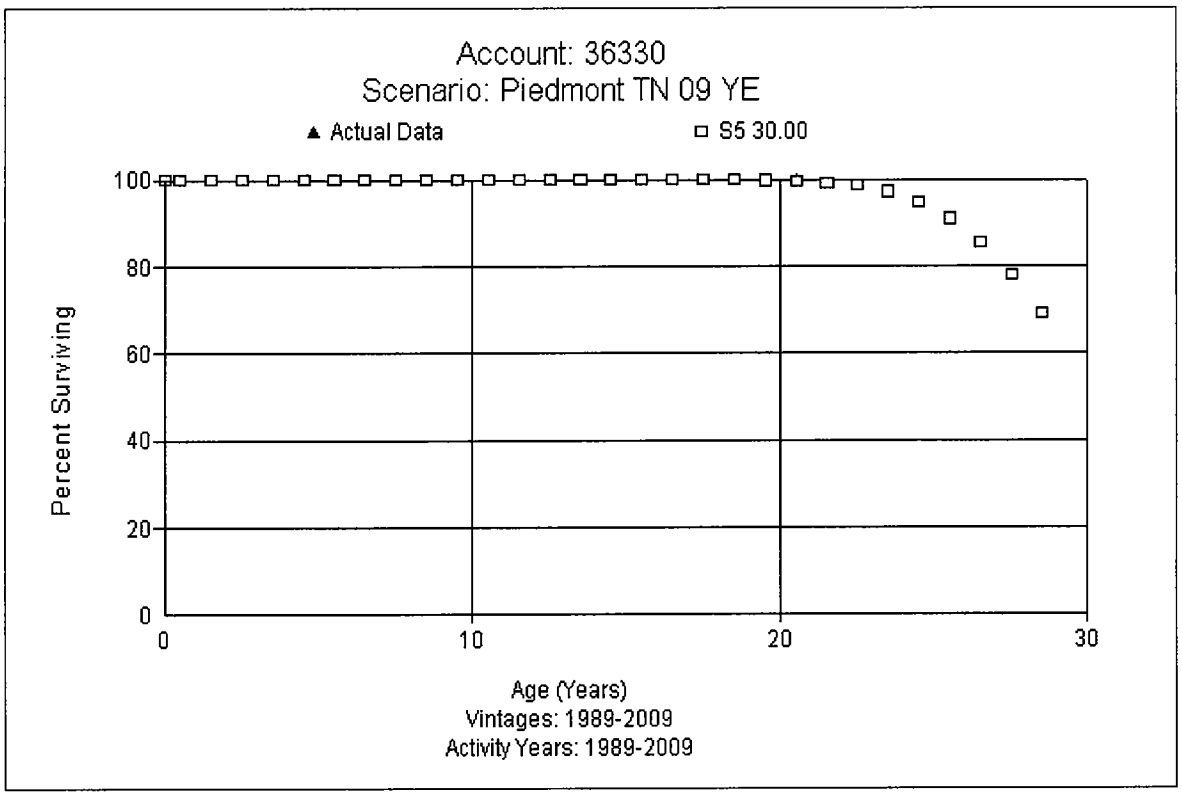
**Account 363.20 Vaporizing Equipment (35 S5)**

This account consists of miscellaneous vaporizing equipment. There is approximately $1.2million in this account. The approved life for this account is 35 years with the S5 dispersion. This study proposes retaining the life of 35 years and the S5 curve. It should be noted the study reflects a fully accrued status (0.00% rate) for this account. Should new additions be added subsequently, PNG should use the whole life rate of 2.86% until the next depreciation study can determine a new depreciation rate. An observed life table is graphed for this account below.



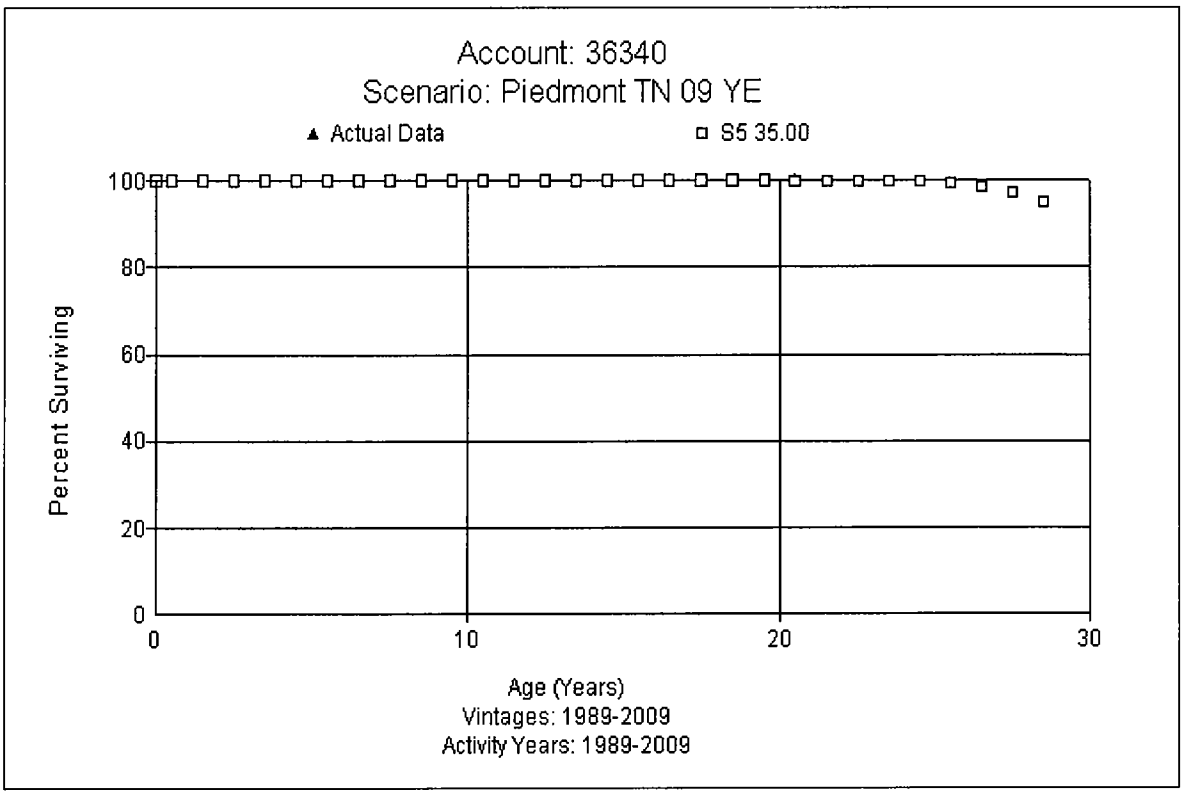
**Account 363.30 Compressor Equipment (30 S5)**

This account consists of miscellaneous compressor equipment. There is approximately $73 thousand in this account. The approved life for this account is 25 years with the S5 dispersion. This study proposes increasing the life to 30 years while retaining the S5 curve. It should be noted the study reflects a fully accrued status (0.00% rate) for this account. Should new additions be added subsequently, PNG should use the whole life rate of 3.33% until the next depreciation study can determine a new depreciation rate. The proposed curve and observed life table for this account are shown below.



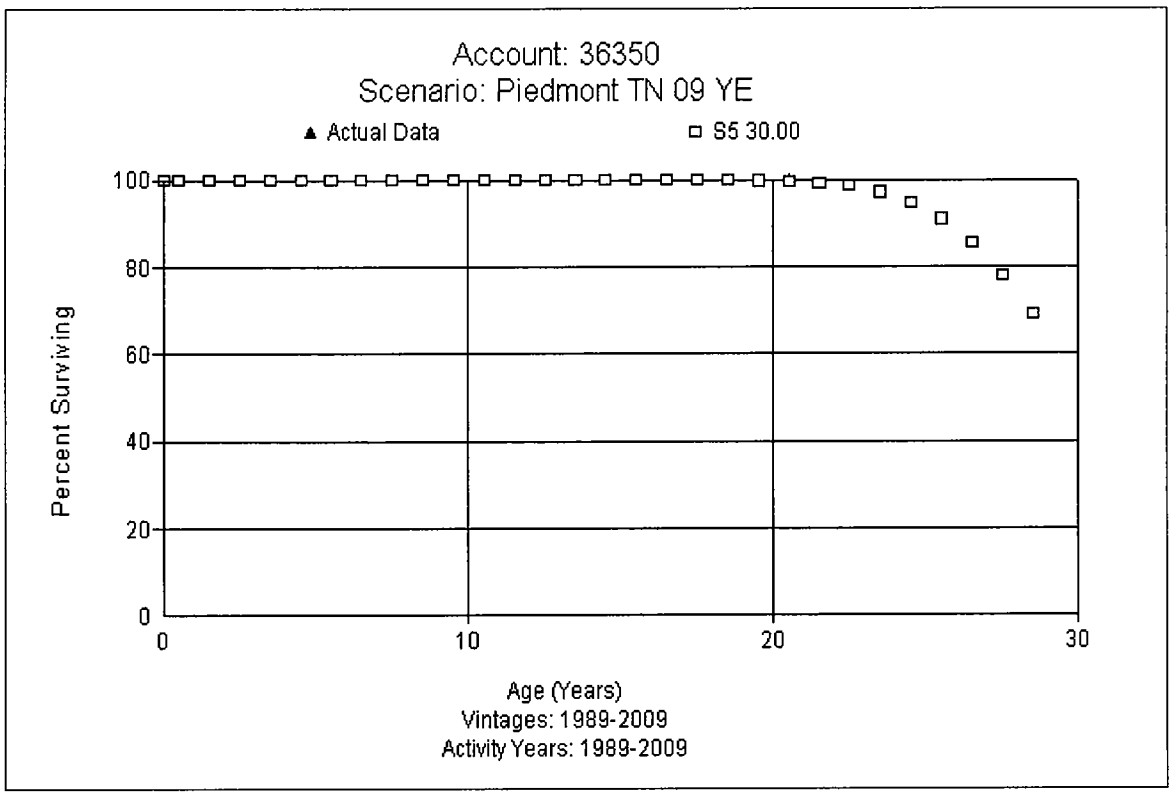
**Account 363.40 Measuring & Regulating Equipment (35 S5)**

This account consists of miscellaneous measuring and regulating equipment. There is approximately $28 thousand in this account. The approved life for this account is 30 years with the S5 dispersion. This study proposes an increase in life to 35 years while retaining the S5 curve. It should be noted the study reflects a fully accrued status (0.00% rate) for this account. Should new additions be added subsequently, PNG should use the whole life rate of 2.86% until the next depreciation study can determine a new depreciation rate. An observed life table is graphed for this account below.



**Account 363.50 Other Equipment (30 S5)**

This account consists of other equipment. There is approximately $1.5 million in this account. The approved life for this account is 35 years with the S5 dispersion. It should be noted the study reflects a nearly fully accrued status (0.37% rate) for this account. Should new additions be added subsequently, PNG should use the whole life rate of 3.33% until the next depreciation study can determine a new depreciation rate. This study proposes decreasing the life to 30 years while maintaining a curve of S5. An observed life table is graphed for this account below.



## Transmission Plant

### Account 365.12 Land Rights (80 R2)

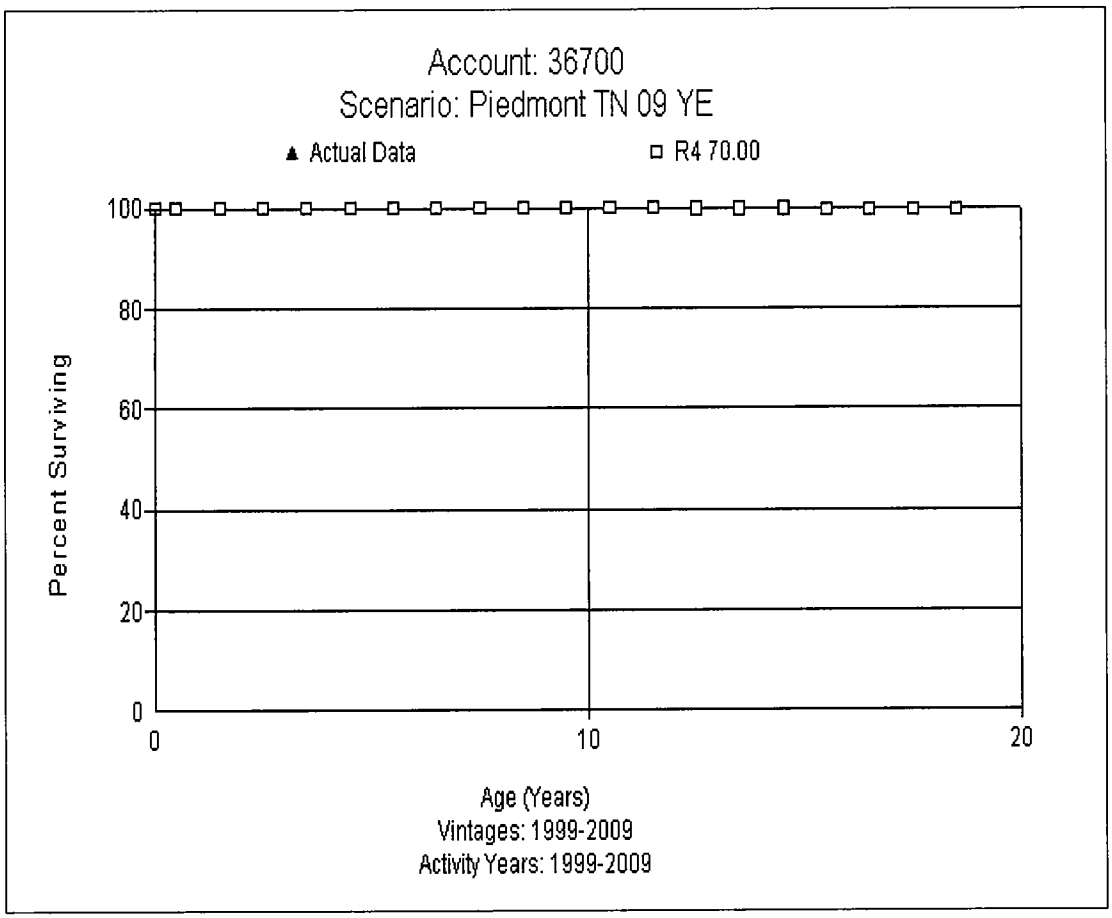
This account consists of land rights used in connection with transmission operations and assets. There is approximately $532 thousand in this account. There is no existing life or curve for this account. Based on judgment, this study proposes a life that is tied to Account 367, Mains plus 10 years. The study recommendation is 80 years with the R2 dispersion pattern. No curve is provided.

### Account 367.10 Cathodic Protection – (15 R4)

This account consists of various cathodic protection related equipment. This is a new account and currently has a zero balance. When additions are made we recommend using a 6.67% rate until the next depreciation study is performed. This study proposes a 15 R4 dispersion pattern. No curve is provided.

**Account 367.00 Mains (70 R4)**

This account includes mains of all sizes, fittings, equipment, and miscellaneous piping. There is currently 90 miles of pipe. PNG recently replaced six miles and expects to replace approximately eight more miles for a total of 14 miles to be replaced. There is approximately $11.9 million in this account. There is no existing life or curve for this account. This study proposes a life of 70 years and the R4 curve. The surviving investment in this account indicates it has been added since 1999 Comparing the life of this account to account 376 Distribution Mains, the proposed life is selected based on discussions with Company personnel and judgment. An observed life table is graphed for this account below.

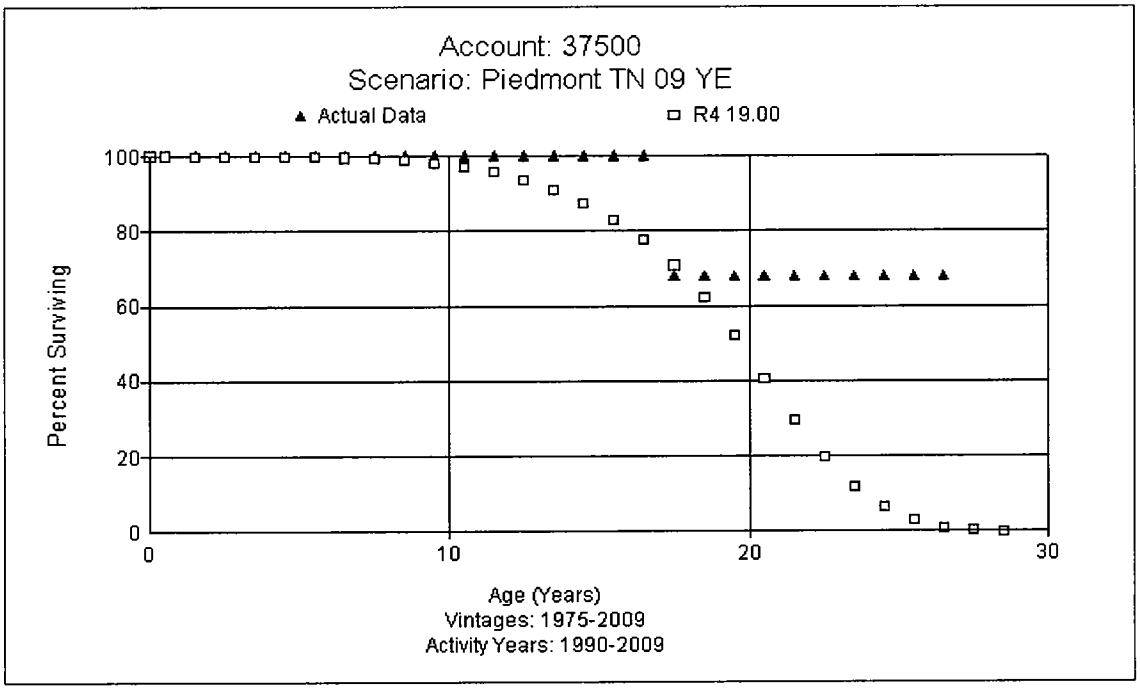


**Distribution Plant**

The Distribution system of PNG Tennessee began making infrastructure replacements, primarily related to Account 376 Mains, in 1990. As a result, most pipe older than 1950 vintage and essentially all the bare steel pipe has been replaced. However, the majority of the pipe and services are steel but are coated and cathodically protected. The company expects to continue addressing system needs and regulatory compliance as required in the future.

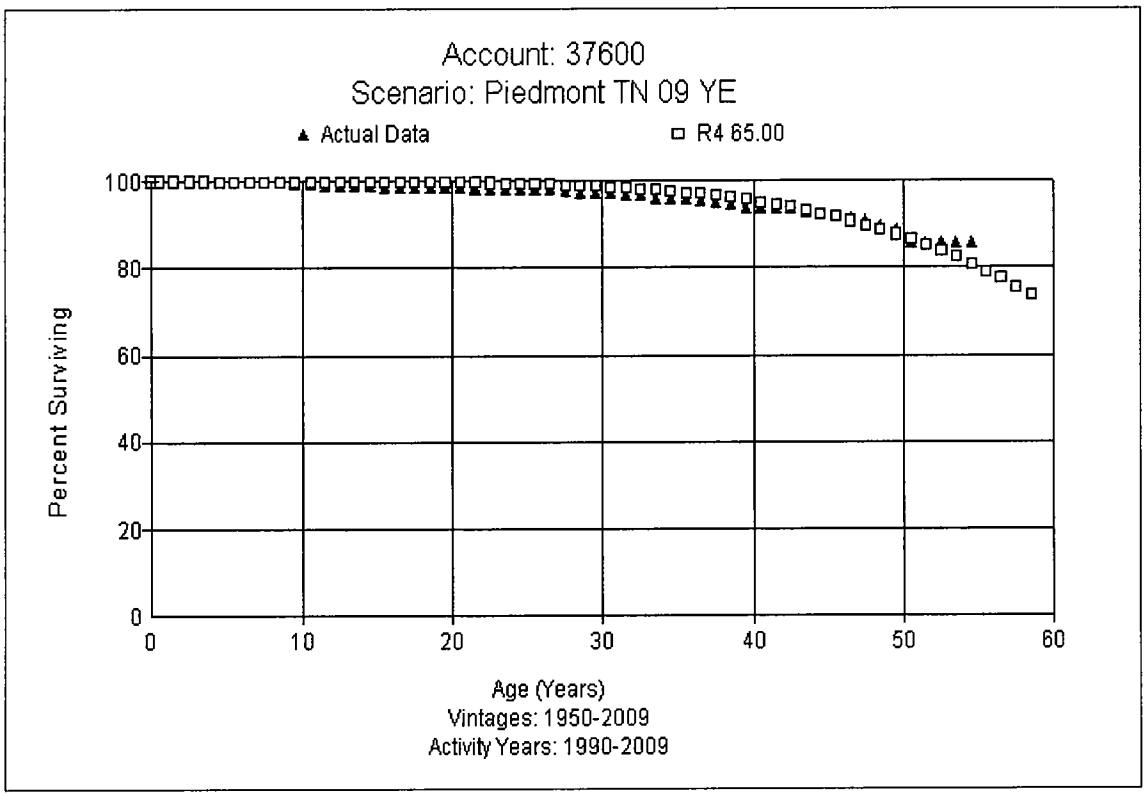
**Account 375.00 Structures and Improvements (19 R4)**

This account includes buildings. There is approximately $161 thousand in this account. The account is nearly fully accrued with a study proposed rate of .11%. If significant new additions are made to this account, it is our recommendation that a whole-life rate of 5.00% be used until the next depreciation study. The approved life for this account is 15 years with the R4 dispersion. This study proposed increasing the life to 19 years while retaining the R4 dispersion pattern. An observed life table is graphed for this account below.



**Account 376.00 Mains – All (65 R4)**

This account consists of approximately 3,155 miles of various size distribution mains as well as miscellaneous fitting, equipment and miscellaneous piping. The system is comprised of coated and protected steel (approximately 2,142 miles or 68%) and the remaining is plastic pipe. There is approximately $250.9 million of investment in this account. The approved curve for this account is the 50 S4. This study recommends increasing the life to 65 years and moving to an R4 dispersion. An observed life table is graphed for this account below.

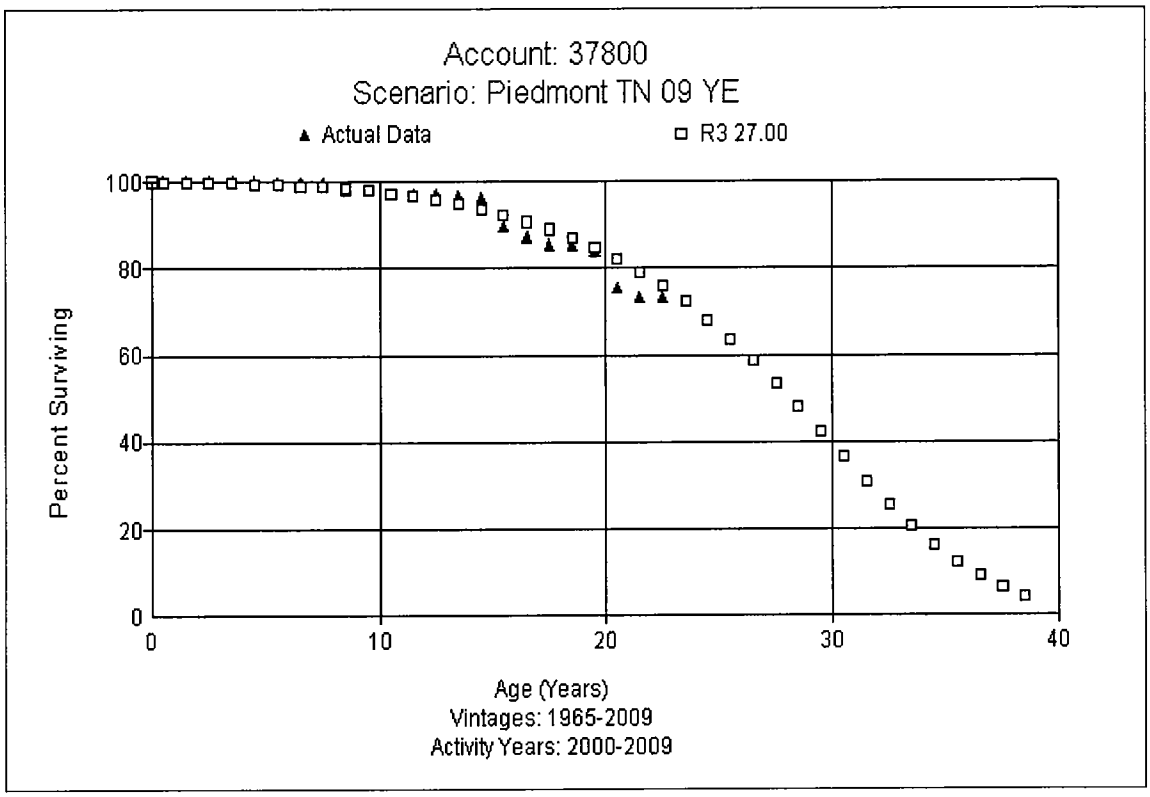


**Account 376.10 Cathodic Protection – (15 R4)**

This account consists of various cathodic protection equipment. This is a new account and currently has a zero balance. When additions are made we recommend using a 6.67% rate until the next depreciation study. This study proposes a 15 R4 dispersion pattern. No curve is provided.

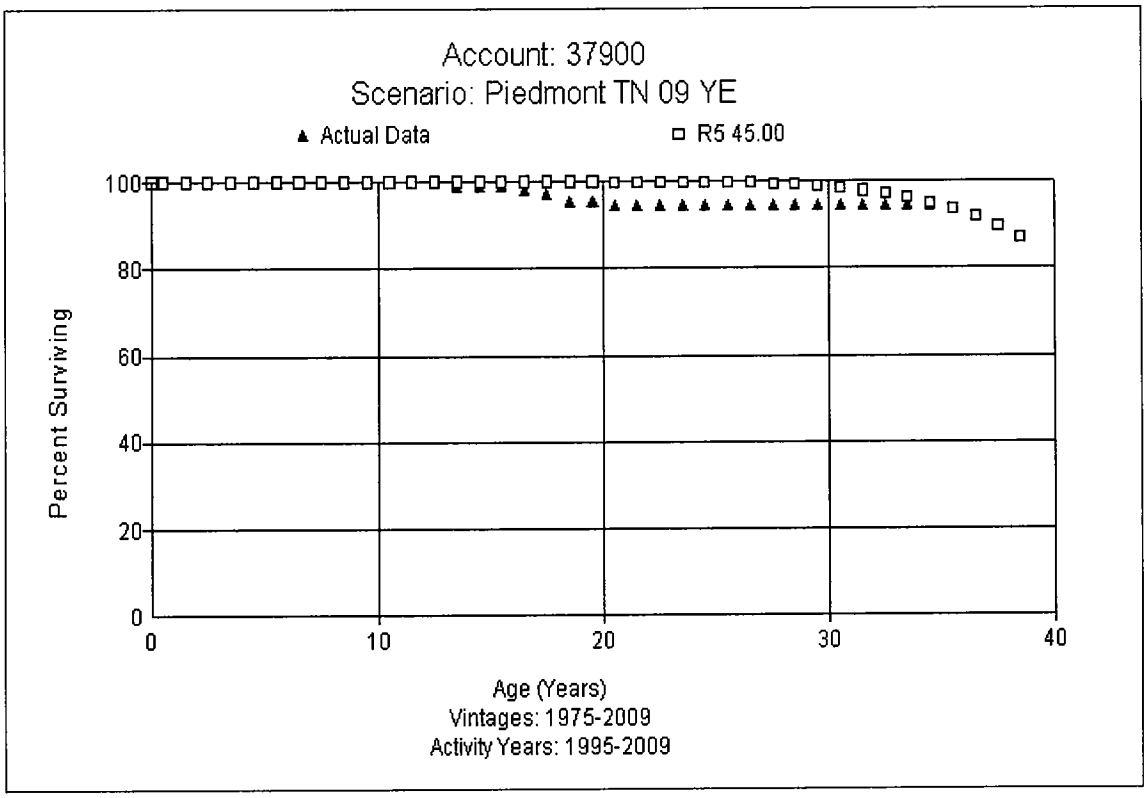
**Account 378.00 Measuring & Regulating Station Equipment – (27 R3)**

This account consists primarily of buildings, meter sets, filter/strainers, miscellaneous equipment, regulators, relief valves, station fittings and equipment. There is approximately $4 million of investment in this account. The approved curve for this account is the 45 R5. This study recommends decreasing the life to 27 years and moving to an R3 curve. An observed life table is graphed for this account below.



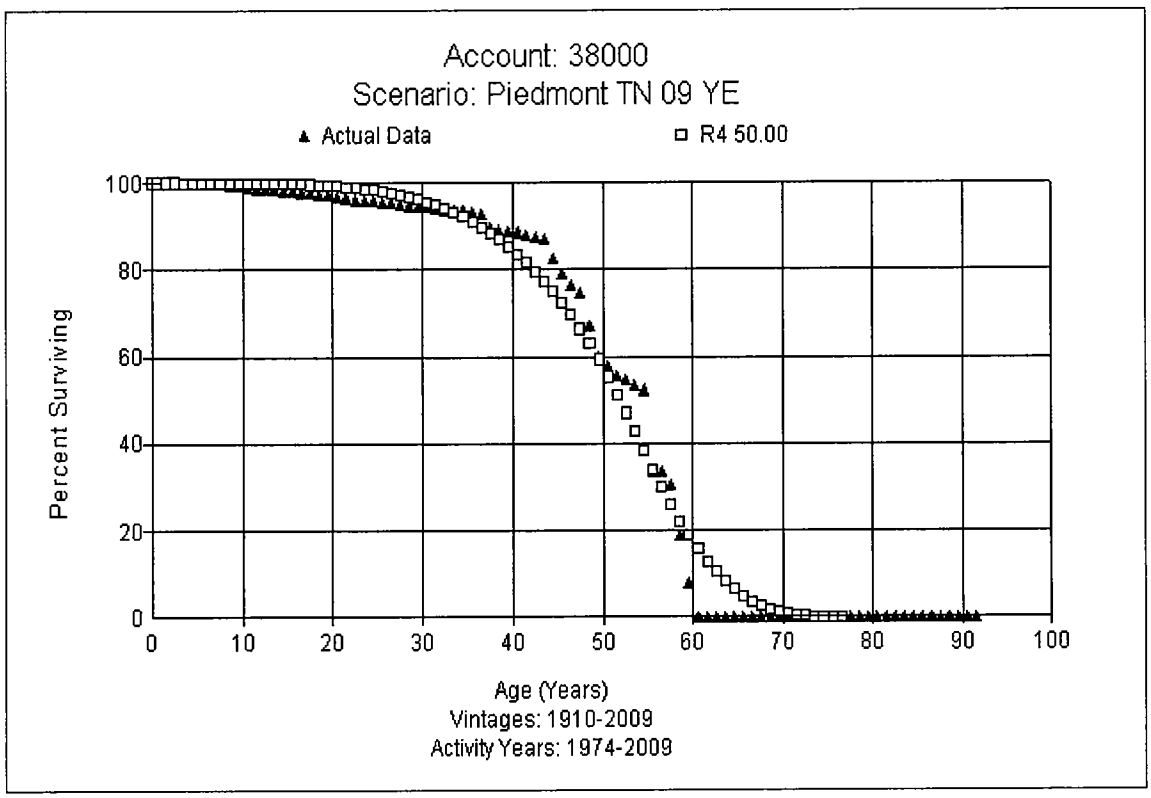
**Account 379.00 Measuring & Regulating Station Equip. - City Gate (45 R5)**

This account consists primarily of buildings, electronic correctors, meter sets, station fittings and equipment. There is approximately $4.2 million of investment in this account. The approved curve for this account is the 45 R5. We recommend retaining the life of 45 years and the R5 curve at this time. An observed life table is graphed for this account below.



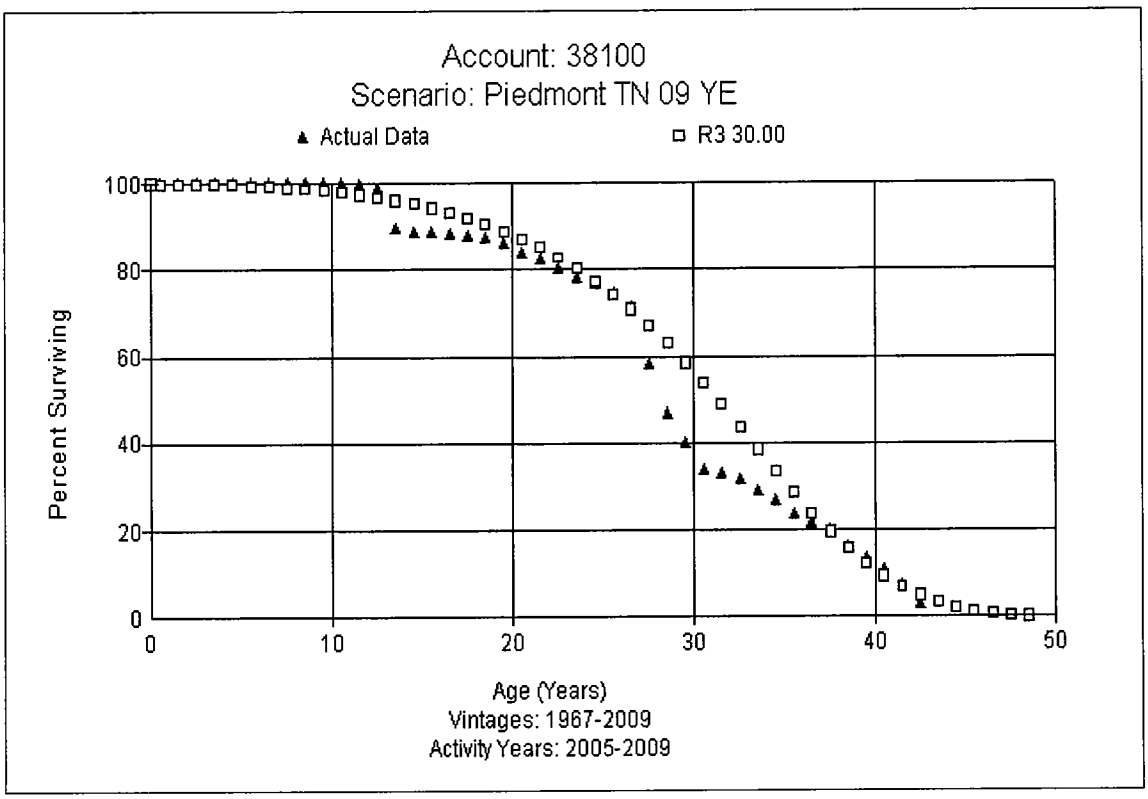
**Account 380.00 Services (50 R4)**

This account consists of approximately 108 thousand steel and 66 thousand plastic services. There is approximately $195.9 million of investment in this account. The approved curve for this account is the 50 S5. Based on the type of assets, the overall band best fit, and discussions with Company personnel, this study proposes retaining the life of 50 years and changing to a R4 dispersion pattern. An observed life table is graphed for this account below.



**Account 381.00 Meters (30 R3)**

This account includes meters. There is approximately $16 million of investment in this account. The approved life is 35 years with the S3 dispersion. Based on experience and Company expectations for these assets, this study recommends a slight decrease in life to 30 years and a move to the R3 curve. A graph reflective of the proposed study recommendation is shown below.



**Account 381.10 Meter Accessories Corporate (30 R2)**

This account includes the meter accessories. These were previously recorded and tracked by state on Corporate's books. However, Tennessee specific meter accessories will be transferred in 2011 and will be maintained on Tennessee's books. There is approximately $513 thousand of investment in this account. The study recommendation relies on the analysis and discussions with the Company during the Corporate and Carolina depreciation study, which was performed at the same time as this study. The Company implemented a process in 2010 that will retire the assets in this account at the time a meter (Account 381.00) is retired. This study recommends the 30 R2. No graph is provided.

**Account 381.20 Meter Accessories ERTS (15 R4)**

This account includes the cost of automatic meter reading equipment. These were previously recorded and tracked by state on Corporate's books. However, Tennessee specific meter accessories will be transferred in 2011 and will be maintained on Tennessee's books. There is approximately $7.3 million of investment in this account. The study recommendation relies on the analysis and discussions with the Company during the Corporate and Carolina depreciation study, which was performed at the same time as this study. Technologically this equipment is very different than the old design meters. There is insufficient information on which to perform a meaningful life analysis. However, based on information from manufacturers, discussions with Company personnel and knowledge of this type of equipment, this study recommends a 15 R4 dispersion curve for this account. No graph is provided.

**Account 382.00 Meter Installations (30 R3)**

This account includes the cost related to the installation of meters. There is approximately $13.1 million of investment in this account. The approved life is 35 years with the S3 dispersion. The current study indicates the life is increasing due to no linkage between the meter retirement and retiring the associated installation

cost. Based on discussions with Company personnel they have implemented a process in 2010 that will retire a meter installation at the same time a meter (Account 381) is retired. Our recommendation, 30 R3, gives recognition to this expectation and the study life characteristics for Account 381.00.

**Account 383.00 House Regulators (30 R3)**

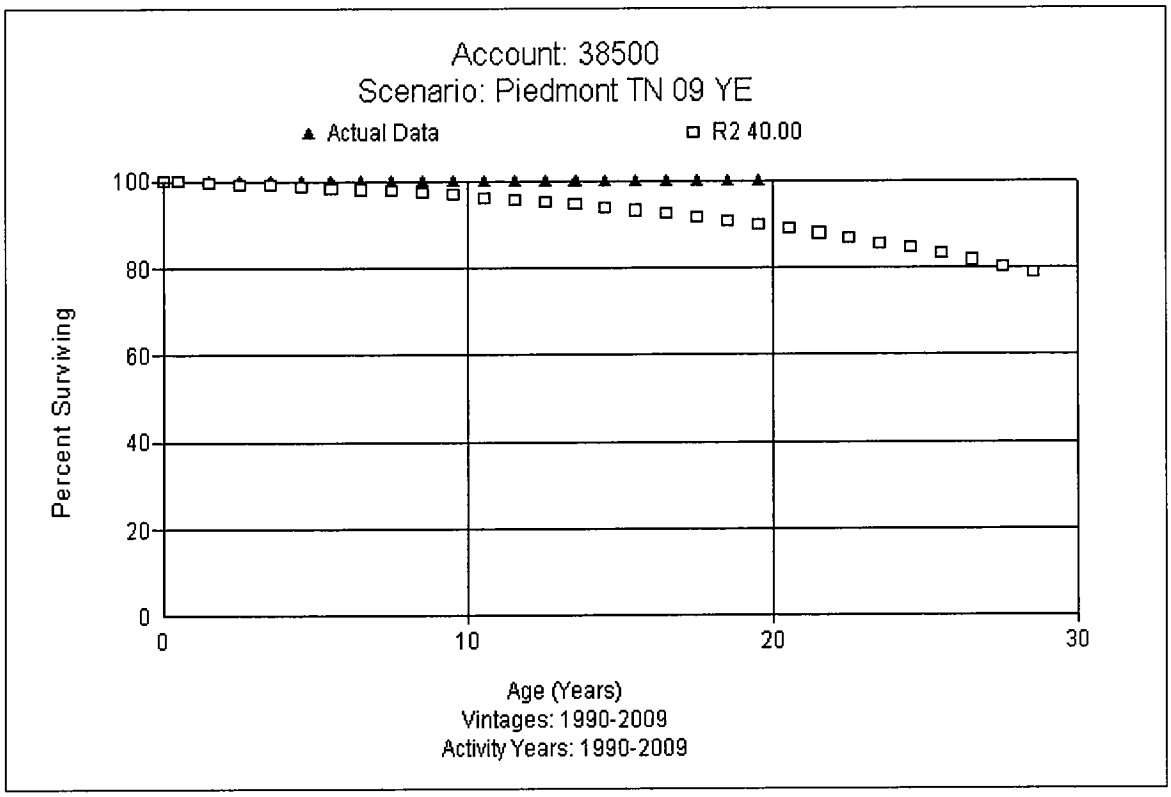
This account includes the cost of house regulators. There is approximately $5.2 million of investment in this account. The approved life is 40 years with the S6 dispersion. The current study indicates the life is increasing due to no linkage between the meter retirement and retiring the associated cost of the house regulator. Based on discussions with Company personnel they have implemented a process in 2010 that will retire a house regulator at the same time a meter (Account 381) is retired. Our recommendation, 30 R3, gives recognition to this expectation and the study life characteristics for Account 381.00. No graph is provided.

**Account 384.00 House Regulator Installations (30 R3)**

This account includes the cost of installing house regulating equipment. The current balance is $4.5 million. The approved life is a 40 S6. The current study indicates the life is increasing due to no linkage between the meter retirement and retiring the associated cost of the house regulator installation. Based on discussions with Company personnel they have implemented a process in 2010 that will retire a house regulator installation at the same time a meter (Account 381) is retired. Our recommendation, 30 R3, gives recognition to this expectation and the study life characteristics for Account 381.00. No graph is provided.

**Account 385.00 Industrial Measuring & Regulator Station Equipment (40 R2)**

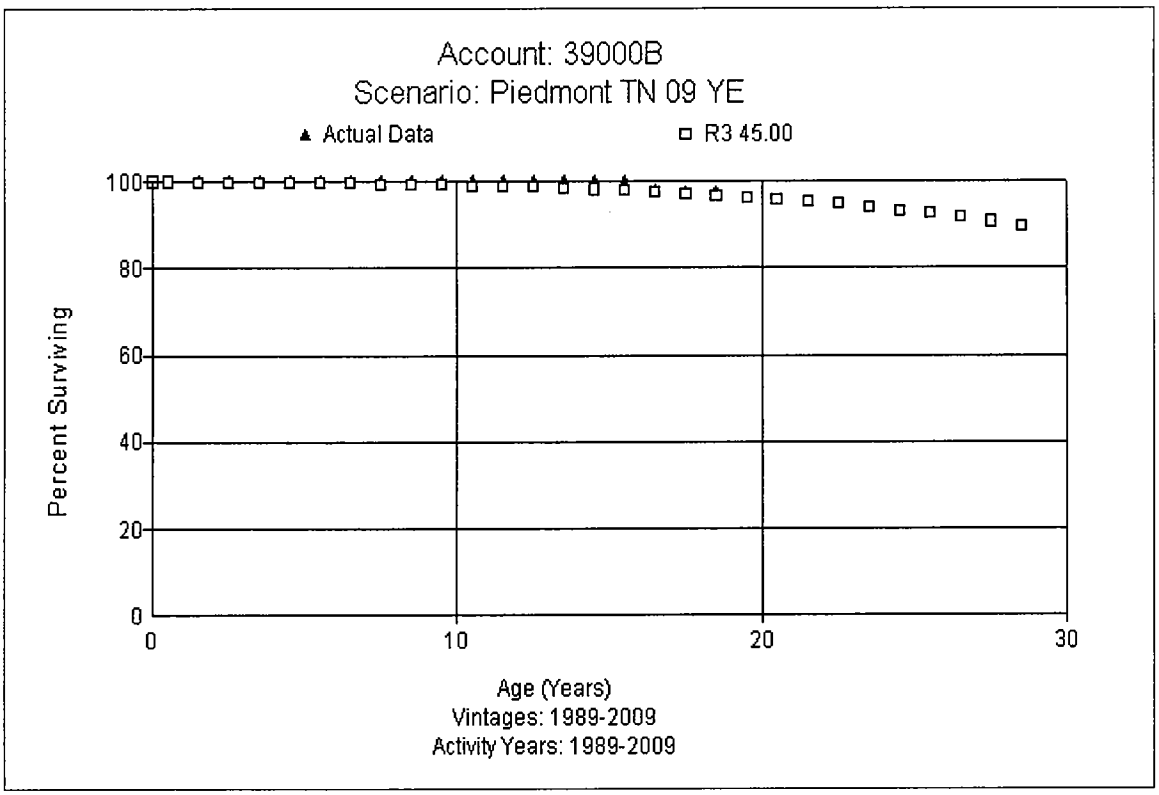
This account includes electronic corrector, fences, filter/strainer, meter installation, meter sets, regulators, relief valves, electronic pressure recorders, valves, station fillings and equipment. The current balance is $1.0 million. There is no existing life or curve for this account. The assets in this account are similar to assets in Account 378 – Measuring & Regulator Equipment. This study recommends a life of 40 years and a curve of R2. A graph reflective of the proposed study recommendation is shown below.



## General Plant

### Account 390.00 Structures & Improvements (45 R3)

This account includes AC heating, buildings, elevator, crane, hoist system, structures & improvements, plumbing system, roof, security system, roads and parking areas. Currently, there is about $22.8 million in this account, which includes costs associated with the new building which were recorded in 2010 but necessary to include as the surviving assets in this account. The approved life for this account is a 45 R3 based on the Company's prior study. Based on the type of surviving assets and future expectations, this study proposes retaining the 45 year life and R3 dispersion pattern. A graph reflective of the proposed study recommendation is shown below.



**Account 392.01 Transportation Equipment – Auto & Light Duty (5 L2)**

This account consists of automobiles and light duty trucks. There is no existing life or curve for this account. There is approximately $2.1 million in this account of which approximately $602 thousand are related to vehicles added in 2010. Based on discussions with company personnel regarding policy, future expectations and judgment, this study recommends a life of 5 years with an L2 curve.

**Account 392.02 Transportation Equipment – Heavy Duty Trucks (10 L2)**

This account consists of heavy duty service trucks used in performing various general company operations. There is no existing life or curve for this account. There is approximately $512 thousand in this account. Based on judgment, this study recommends a life of 10 years with an L2 curve.

**Account 392.03 Transportation Equipment – Trailers & Other Equipment (15 L2)**

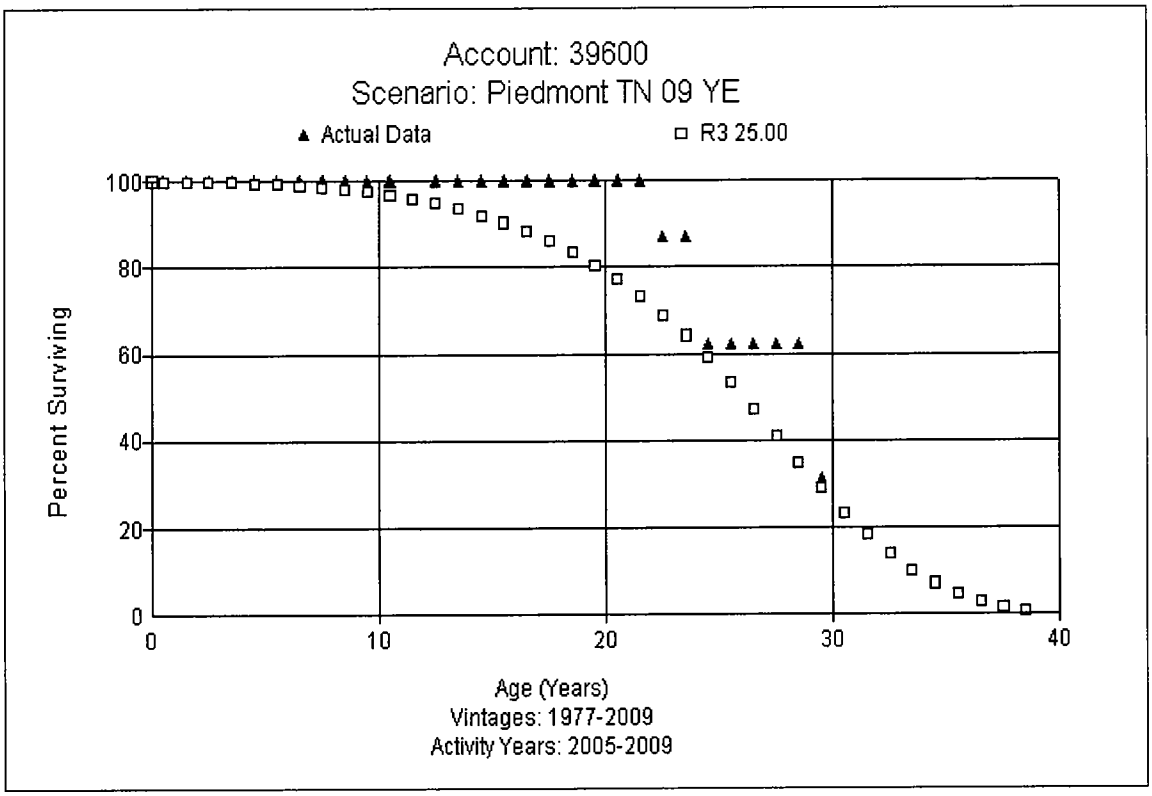
There are currently no assets recorded in this account. However, there may be new assets added in the future and based on discussions with company personnel on policy, future expectations and judgment, this study recommends a life of 15 years with an L2 curve. Should new additions be added subsequently, PNG should use the whole life rate of 6.00% until the next depreciation study.

**Account 392.10 Transportation Equipment – Leased Buyout (3 SQ)**

This account consists of various leased vehicles that were bought by the Company. There is no balance in this account. However, based on discussions and plans of the Company, transfers are expected to occur in 2010. The study recommends a life of 3 years with the SQ dispersion, which is consistent with plans to own, operate and then sell. No graph is shown.

**Account 396.00 Power Operated Equipment (25 R3)**

This account consists of backhoe, air compressor, ATV, back filling machines, boring machine, bush hog mower, crane, hoists, diggers, equipment, trailer, generator, power operated equipment, plow, tractor, trencher and welder. The approved curve for this account is the 10 S3. There is approximately $494 thousand in this account. This account is nearly fully depreciated with a rate of 0.20%. Should significant new additions be made we recommend a whole life rate of 3.60% until the next depreciation study is conducted. The average age of survivors is over 16 years. Based on the analysis indications and type of assets, this study recommends increasing the ASL to 25 years and using the R3 dispersion pattern. An observed life table is graphed for this account below.



**General Plant Amortized**

The following accounts reflect balances that have been reduced due to the implementation AR 15 retirements. In total $2,169,225.26 of assets will be retired from the books and records of PNG. For accounts where the proposed rate is 0% or nearly fully depreciated and where significant new additions are recorded, we recommend the use of a whole-life rate (1 - net salvage % / average service life).

**Account 391.00 Office Furniture & Equipment (25 SQ)**

This account consists of tables, office equipment, floor covering, filing and storage cabinets, drafting equipment, cubical workstation, bookcases, and shelves. There is approximately $411 thousand in equipment in this account. The approved life for this account is a 20 L1.5. This study proposes moving to a 25 year life and SQ dispersion pattern. No graph is provided.

**Account 393.00 Stores Equipment (30 SQ)**

This account contains bins, storage, miscellaneous stores equipment, and storage cabinets used for general utility service. The approved curve for this account is the 30 R2. There is approximately $11 thousand in this account. Based on type of assets and expectations, the study proposes retaining the 30 year life and moving to a SQ dispersion pattern. It should be noted the study reflects a fully accrued status (0.00% rate) for this account. Should new additions be added subsequently, PNG should use a whole life (amortization) rate of 3.33%. No graph is provided.

**Account 394.00 Tools, Shop & Garage Equipment (20 SQ)**

This account consists of above ground lift, CNG compressor station, CNG stations, greasing tools, ladders, machine tools, miscellaneous equipment, motor driven tools, pipe threading, cutting tool, pneumatic tools, pumps, storage boxes, tire changer, vises and welding apparatus. There is approximately $1.6 million in this account. The approved curve for this account is the 15 L0.5. The analysis suggests

a life of 20 years. Based on the type, mix, and expectations of assets in this account, this study proposes increasing the life to 20 years with an SQ curve. No graph is provided.

**Account 395.00 Laboratory Equipment (20 SQ)**

This account consists of meter prover and miscellaneous laboratory equipment. There is approximately $106 thousand in this account. Based on type of assets and judgment, this study recommends a 20 year life and using the SQ dispersion pattern. Assets are from vintages 2005 and forward so no retirement history is available and no graph is provided.

**Account 397.00 Communication Equipment (15 SQ)**

This account consists of miscellaneous communication equipment, PBX, Remote Terminal Unit, and phone equipment. There is approximately $1.8 million in this account. The existing mortality characteristic is a 15 S3. Based on type of assets this study recommends retaining the life of 15 years and using the SQ dispersion pattern. No graph is provided.

**Account 398.00 Miscellaneous Equipment (20 SQ)**

This account consists of miscellaneous equipment and refrigerator. There is approximately $62 thousand in this account. This account currently has a 20 S3. Based on analysis indications the study recommends retaining the 20 year life with a change in dispersion to the SQ. No graph is provided.

**Salvage Analysis**

When a capital asset is retired, physically removed from service and finally disposed of, terminal retirement is said to have occurred. The residual value of a terminal retirement is called gross salvage. Net salvage is the difference between the gross salvage (what the asset was sold for) and the removal cost (cost to remove and dispose of the asset). Salvage and removal cost percentages are calculated by dividing the current cost of salvage or removal by the original installed cost of the asset. Some plant assets can experience significant negative removal cost percentages due to the timing of the original addition versus the retirement. For example, a Distribution asset in FERC Account 376, Mains, with a current installed cost of $500 (2008) would have had an installed cost of $37.93[2] in 1958. A removal cost of $50 for the asset calculated (incorrectly) on current installed cost would only have a negative10 percent removal cost ($50/$500). However, a correct removal cost calculation would show a negative 131.8 percent removal cost for that asset ($50/$37.93). Inflation from the time of installation of the asset until the time of its removal must be taken into account in the calculation of the removal cost percentage because the depreciation rate, which includes the removal cost percentage, will be applied to the original installed cost of assets.

The net salvage analysis uses the history of the individual accounts to estimate the future net salvage that PNG can expect in its operations. As a result, the analysis not only looks at the historical experience of PNG, but also takes into account recent and expected changes in operations that could reasonably lead to different future expectations than were experienced in the past. Recent experience is more heavily weighted in making net salvage recommendations than older experience.

**Salvage Characteristics**

For each account, data for retirements, gross salvage, and cost of removal is derived from 1989-2009. Moving averages, which remove timing differences

between retirement and salvage and removal cost, were analyzed over periods varying from one to 10 years.

**Storage Plant**

**Account 361.0 Structures and Improvements (0% NS)**

This account includes any salvage and removal cost related to buildings used in connection with underground storage compressor operations. No net salvage has been recorded. This study recommends a 0 percent net salvage at this time.

**Account 362.00 Gas Holders (0% NS)**

This account consists of gas holders. No net salvage has been recorded. This study recommends a 0 percent net salvage at this time.

**Account 363.0 Purification Equipment (0% NS)**

This account consists of salvage and removal cost associated with retirement of purification equipment used in the LNG storage operations. No net salvage has been recorded. This study recommends a 0 percent net salvage at this time.

**Account 363.10 Liquefaction Equipment (0% NS)**

This account consists of any salvage and removal costs associated with liquefaction equipment used in the LNG storage operations. No net salvage has been recorded. This study recommends a 0 percent net salvage at this time.

**Account 363.20 Vaporizing Equipment (0% NS)**

This account includes any salvage and removal cost related to vaporizing equipment used in connection with LNG storage operations. No net salvage has been recorded. This study recommends a 0 percent net salvage at this time.

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[2] Using the Handy-Whitman Bulletin No. 169, G-2, line 44, $37.93 = $500 x 49/ 646.

**Account 363.30 Compressor Station Equipment (0% NS)**

This account includes any salvage and removal cost related to compressor station equipment used in connection with LNG storage operations No net salvage has been recorded. This study recommends a 0 percent net salvage at this time.

**Account 363.40 Measuring & Regulating Equipment (0% NS)**

This account includes any salvage and removal cost related to measuring and regulating equipment used in connection with LNG storage operations. No net salvage has been recorded. This study recommends a 0 percent net salvage at this time.

**Account 363.50 Other Storage Equipment (0% NS)**

This account includes any salvage and removal cost related to other storage equipment used in connection with LNG storage operations. No net salvage has been recorded. This study recommends a 0 percent net salvage at this time.

**Transmission Plant**

**Account 365.12 Land Rights (0% NS)**

This account includes the cost of land rights used in connection with transmission operations and assets. No net salvage has been recorded and none is expected for this account. This study recommends a 0 percent net salvage.

**Account 367.00 Transmission Mains (-5% NS)**

This account includes mains of all sizes, miscellaneous fittings, equipment and piping. No net salvage has been recorded for this account. However, cost of removal is expected to exceed any salvage. This study recommends a negative 5 percent net salvage at this time.

**Account 367.10 Transmission Cathodic Protection (0% NS)**

This account consists of various cathodic protection equipment. This is a

new account and currently has a zero balance. We recommend a 0 percent net salvage at this time.

**Distribution Plant**

**Account 375.0 Structures and Improvements (-5% NS)**

This account consists of any salvage and removal cost related to buildings used in distribution plant. The authorized net salvage is 50 percent. Some salvage may be realized at retirement but is unlikely so a 0 percent salvage factor is recommended. Expectations are that cost of removal may be incurred and would exceed any salvage in the future. This study recommends moving to a negative 5 percent net salvage factor for this account.

**Account 376.00 Mains (-5% NS)**

This account consists of any salvage and removal cost related to mains of all material types. The authorized net salvage is negative 20 percent. Due to fluctuations indicated in the analysis, our recommendation is based on the indications in the most recent 2 and 3-year bands. This is a conservative estimate and the Company has indicated plans to reevaluate the current process being used by field personnel in how they record retirement cost activities. The study recommendation for this account is to decrease net salvage to negative 5 percent with the understanding that the results of a time and motion study would be incorporated in the next depreciation study results.

**Account 376.10 Cathodic Protection – (0% NS)**

This account consists of various cathodic protection equipment. This is a new account and we recommend a 0 percent net salvage.

**Account 378.00 Measuring & Regulating Station Equipment (0% NS)**

This account includes any salvage and removal cost related to installed equipment used in regulating gas at entry points to the distribution system. The

authorized net salvage is negative 5 percent. Most recent experience and even the overall indications suggest net salvage to be closer to 0 percent which is the recommendation in this study.

**Account 379.00 City Gate Equipment (0% NS)**

This account includes any salvage and removal cost related to installed equipment used in regulating gas at city gate entry points to the distribution system. Prior studies and the approved net salvage is negative 5 percent. However, no salvage or cost of removal has been recorded so 0 percent is recommended in this study.

**Account 380.00 Services (-125% NS)**

This account includes any salvage and removal cost related to service lines on the distribution system. Service lines are the pipes and accessories leading from the main to the customers' premises. The authorized net salvage rate for this account is negative 200 percent. Current analysis suggests a decline from the current level and our recommendation is based on the most recent five-year experience band. This study recommends moving to a negative 125 percent net salvage for this account.

**Account 381.00 Meters (0% NS)**

This account includes any salvage and removal cost related to meters used in measuring gas to residential customers. The authorized net salvage rate is 2 percent. However, current study analysis indicates that salvage has declined to zero and the company expectations are that no salvage or cost of removal will be recorded in the future, so a 0 percent net salvage is proposed in this study.

**Account 381.10 Meter Accessories (0% NS)**

This account includes any salvage and removal cost related to meter

accessories used in measuring gas to customers. This study recommends a 0 percent net salvage at this time.

**Account 381.20 ERTs and Accessories (0% NS)**

This account includes any salvage and removal cost related to meter accessories used in measuring gas to customers. This study recommends a 0 percent net salvage at this time.

**Account 382.00 Meter Installations (0% NS)**

This account includes any salvage and removal cost related to meter installations used in measuring gas to customers. The authorized net salvage rate is 0 percent. No net salvage has been recorded in the past and there is no expectation that it will be recorded in the future. The 0 percent net salvage is retained in this study.

**Account 383.00 House Regulators (0% NS)**

This account includes any salvage and removal cost related to house regulators. The authorized net salvage rate is 0 percent. No net salvage has been recorded in the past and there is no expectation that it will be recorded in the future. The 0 percent net salvage is retained in this study.

**Account 384.00 House Regulator Installations (0% NS)**

This account includes any salvage and removal cost related to house regulator installations. The authorized net salvage rate is 0 percent. No net salvage has been recorded in the past and there is no expectation that it will be recorded in the future. The 0 percent net salvage is retained in this study.

**Account 385.00 Industrial Meter & Regulator Equipment (0% NS)**

This account includes the salvage and removal costs related to measuring and regulating equipment used in industrial stations. The authorized net salvage

rate is 0 percent. No net salvage has been recorded in the past and there is no expectation that it will be recorded in the future. The 0 percent net salvage is retained in this study.

**General Plant Depreciated**

**Account 390.00 Structures and Improvements (-5% NS)**

This account includes any salvage and removal cost related to structures and improvements used for general utility operations. The authorized net salvage rate for this account is 5 percent. The recent sale of the office building did generate salvage but it was related to the land. Significant salvage is unlikely and cost of removal is expected to exceed any salvage realized. This study recommends negative 5 percent net salvage rate for this account at this time.

**Account 392.01 Transportation Equipment – Autos & Light Trucks (10% NS)**

This account consists of salvage and removal costs associated with autos and light trucks. Based upon discussions with Company personnel regarding recent experience, this study recommends decreasing from the existing 20 percent net salvage to 10 percent net salvage.

**Account 392.02 Transportation Equipment – Heavy Duty Trucks (10% NS)**

This account consists of salvage and removal costs associated with heavy duty trucks. Based upon discussions with Company personnel regarding recent experience, this study recommends decreasing from the existing 20 percent net salvage to 10 percent net salvage.

**Account 392.10 Transportation Equipment – Leased Buyout (75% NS)**

This account consists of salvage and removal costs associated with service trucks. Based on information provided by Company personnel, the salvage rate is based on the necessary amount to be depreciated for full recovery of these assets. This selection is restricted to the unique facts and circumstances of the existing

assets at the time of this study and should not be applied to any new leased buyout assets in the future.

**Account 396.00 Power Operated Equipment (10% NS)**

This account includes any salvage and removal cost related to backhoes, forklifts, trenchers, and other power operated equipment that cannot be licensed on roadways. The authorized net salvage rate for this account is 25 percent. Based on the overall historical experience and discussions with Company personnel, this study recommends decreasing to a 10 percent net salvage at this time.

**General Plant Amortized**

**Account 391.00 Office Furniture and Equipment (0% NS)**

This account includes office furniture and equipment used for general utility operations. The authorized net salvage rate for this account is 5 percent but recent experience suggests no salvage will be realized in the future. This study recommends a 0 percent net salvage rate.

**Account 393.00 Stores Equipment (0% NS)**

This account consists of salvage and removal costs associated with forklifts, shelves and bins. This account is current fully depreciated. There is no past experience of recording salvage or cost of removal in this account, so this study recommends retention of 0 percent net salvage.

**Account 394.00 Tools, Shop & Garage Equipment (0% NS)**

This account consists of salvage and removal costs associated with air compressors, grinders, mixers, hoists, and cranes. Past experience of realizing salvage has been sporadic. Based on discussions with Company personnel and judgment, no salvage or cost of removal is expected, so this study recommends retention of 0 percent net salvage.

**Account 395.00 Laboratory Equipment (0% NS)**

This account consists of laboratory equipment. No net salvage has been recorded and none is expected, so this study recommends retention of 0 percent net salvage.

**Account 397.00 Communication Equipment (0% NS)**

This account consists of miscellaneous communication equipment used in general utility service. No net salvage has been recorded and none is expected, so this study recommends retention of 0 percent net salvage for this account.

**Account 398.00 Miscellaneous Equipment (0% NS)**

This account consists of miscellaneous equipment used in general utility service. No net salvage has been recorded and none is expected in the future. This study recommends retaining the existing 0 percent net salvage for this account.

**APPENDIX A**

**Depreciation Expense Comparison**

**PIEDMONT NATURAL GAS**
**TENNESSEE**
**COMPARISON OF EXISTING VS RECOMMENDED DEPRECIATION RATES**
**DEPRECIATION STUDY AS OF OCTOBER 31, 2009**

Appendix A

| Account Number | Account Description | Plant Balance 10/31/2009 | EXISTING Rates % | EXISTING Annual Accrual | RECOMMENDED Rates % | RECOMMENDED Annual Accrual | Increase/ Decrease |
|---|---|---|---|---|---|---|---|
| | **STORAGE PLANT** | | | | | | |
| 361.00 | Structures & Improvements | 1,105,118.48 | 1.76% | 19,450.09 | 1.90% | 21,010.44 | 1,560.35 |
| 362.00 | Gas Holders | 2,903,542.77 | 1.43% | 41,520.66 | 0.00% [1] | 0.00 | (41,520.66) |
| 363.00 | Purification Equipment | 404,452.61 | 1.43% | 5,783.67 | 0.00% [2] | 0.00 | (5,783.67) |
| 363.10 | Liquefaction Equipment | 1,119,880.10 | 1.42% | 15,902.30 | 0.00% [2] | 0.00 | (15,902.30) |
| 363.20 | Vaporizing Equipment | 1,179,849.41 | 1.42% | 16,753.86 | 0.00% [2] | 0.00 | (16,753.86) |
| 363.30 | Compressor Equipment | 72,891.66 | 3.65% | 2,660.55 | 0.00% [3] | 0.00 | (2,660.55) |
| 363.40 | M& R Equipment | 28,480.74 | 2.41% | 686.39 | 0.00% [2] | 0.00 | (686.39) |
| 363.50 | Other Equipment | 1,471,522.24 | 1.43% | 21,042.77 | 0.37% [3] | 5,385.01 | (15,657.76) |
| | **Total Storage Plant** | 8,285,738.01 | 1.49% | 123,800.28 | 0.32% | 26,395.45 | (97,404.83) |
| | **TRANSMISSION PLANT** | | | | | | |
| 365.12 | Land Rights | 532,183.36 | 1.64% | 8,727.81 | 1.25% | 6,626.75 | (2,101.06) |
| 367.00 | Mains | 11,897,599.91 | 2.42% | 287,921.92 | 1.45% | 172,553.10 | (115,368.82) |
| | **Total Transmission Plant** | 12,429,783.27 | 2.39% | 296,649.72 | 1.44% | 179,179.84 | (117,469.88) |
| | **DISTRIBUTION PLANT** | | | | | | |
| 375.00 | Structures & Improvements | 160,898.10 | 3.43% | 5,518.80 | 0.11% [4] | 172.58 | (5,346.22) |
| 376.00 | Mains | 250,941,642.14 | 2.42% | 6,072,787.74 | 1.49% | 3,748,964.29 | (2,323,823.45) |
| 378.00 | M& R Equipment | 4,034,127.53 | 2.35% | 94,802.00 | 3.08% | 124,072.06 | 29,270.06 |
| 379.00 | City Gate Equipment | 4,213,026.53 | 2.34% | 98,584.82 | 2.08% | 87,639.78 | (10,945.04) |
| 380.00 | Services | 195,887,602.80 | 5.25% | 10,284,099.15 | 4.08% | 7,987,972.56 | (2,296,126.58) |
| 381.00 | Meters | 16,047,019.04 | 2.82% | 452,525.94 | 2.71% | 434,624.80 | (17,901.13) |
| 381.10 | Meter Accessories | 513,104.29 | 4.44% [5] | 22,781.83 | 3.27% | 16,760.55 | (6,021.28) |
| 381.20 | ERTs and Accessories | 7,273,602.60 | 5.88% [5] | 427,687.83 | 8.34% | 606,433.31 | 178,745.48 |
| 382.00 | Meter Installations | 13,080,838.85 | 2.89% | 378,036.24 | 2.83% | 370,395.46 | (7,640.78) |
| 383.00 | House Regulators | 5,229,981.93 | 2.52% | 131,795.54 | 2.68% | 140,114.63 | 8,319.09 |
| 384.00 | House Regulator Installations | 4,476,392.33 | 2.53% | 113,252.73 | 2.75% | 122,962.21 | 9,709.49 |
| 385.00 | Industrial M & R Equipment | 1,013,257.11 | 2.11% | 21,379.73 | 2.36% | 23,925.32 | 2,545.60 |
| | **Total Distribution Plant** | 502,871,493.25 | 3.60% | 18,103,252.35 | 2.72% | 13,664,037.55 | (4,439,214.79) |

**PIEDMONT NATURAL GAS**
**TENNESSEE**
**COMPARISON OF EXISTING VS RECOMMENDED DEPRECIATION RATES**
**DEPRECIATION STUDY AS OF OCTOBER 31, 2009**

Appendix A

| Account Number | Account Description | Plant Balance 10/31/2009 | EXISTING Rates % | EXISTING Annual Accrual | RECOMMENDED Rates % | RECOMMENDED Annual Accrual | Increase/ Decrease |
|---|---|---|---|---|---|---|---|
| | **GENERAL PLANT DEPRECIATED** | | | | | | |
| 390.00 | Structures & Improvements | 22,783,559.31 | 2.03% | 462,506.25 | 2.17% | 495,492.89 | 32,986.64 |
| 396.00 | Power Operated Equipment | 494,310.88 | 7.61% | 37,617.06 | 0.20% [6] | 987.20 | (36,629.86) |
| | **Total General Depreciated Plant** | 23,277,870.19 | 2.15% | 500,123.31 | 2.13% | 496,480.09 | (3,643.22) |
| | **Total Depreciated Plant** | 546,864,884.72 | 3.48% | 19,023,825.66 | 2.63% | 14,366,092.94 | (4,657,732.72) |
| | **GENERAL PLANT AMORTIZED** | | | | | | |
| 391.00 | Office Furniture & Equipment | 410,877.30 | 4.79% | 19,681.02 | 5.04% | 20,709.91 | 1,028.89 |
| 393.00 | Stores Equipment | 10,953.70 | 3.40% | 372.43 | 0.00% | 0.00 | (372.43) |
| 394.00 | Tools, Shop & Garage Equipment | 1,590,683.19 | 6.77% | 107,689.25 | 0.03% | 403.68 | (107,285.57) |
| 395.00 | Laboratory Equipment | 105,879.31 | 4.05% | 4,288.11 | 1.18% | 1,252.48 | (3,035.63) |
| 397.00 | Communication Equipment | 1,764,528.49 | 6.81% | 120,164.39 | 0.32% | 5,568.69 | (114,595.70) |
| 398.00 | Miscellaneous Equipment | 61,848.98 | 5.05% | 3,123.37 | 10.24% | 6,335.32 | 3,211.94 |
| | **Total General Amortized Plant** | 3,944,770.97 | 6.47% | 255,318.58 | 0.87% | 34,270.08 | (221,048.50) |
| | **Total Depreciated & Amortized Plant** | $ 550,809,655.69 | 3.50% | $ 19,279,144.24 | 2.61% | $ 14,400,363.02 | $ (4,878,781.22) |

Notes

[1] Account is currently fully accrued. If new additions are recorded a whole life rate of 2.22% is recommended.
[2] Account is currently fully accrued. If new additions are recorded a whole life rate of 2.86% is recommended.
[3] Account is currently fully accrued or near fully accrued. If new additions are recorded a whole life rate of 3.33% is recommended.
[4] Account is nearly fully accrued. If new additions are recorded a whole life rate of 5.00% is recommended.
[5] The existing rates shown are what have been used in the allocation from Corporate to Tennessee for these accounts.
[6] Account is nearly fully accrued. If new additions are recorded a whole life rate of 3.60% is recommended.
[7] For new additions to Amortized accounts, use of a whole-life rate using the life parameter shown on Appendix C is recommended.

**APPENDIX B**

**Depreciation Rate Calculations**

**PIEDMONT NATURAL GAS**
**TENNESSEE**
**COMPUTATION OF DEPRECIATION ACCRUAL RATE**
**AT OCTOBER 31, 2009**



| Account | Description | Original Cost at 10/31/09 | Allocated Reserve at 10/31/09 | Net Salvage % | Net Salvage Amount | Unrecovered Investment | Remaining Life | Annual Accrual Amount | Annual Accrual % |
|---|---|---|---|---|---|---|---|---|---|
| ***STORAGE PLANT*** | | | | | | | | | |
| 361.00 | Structures & Improvements | 1,105,118.48 | 570,264.89 | 0% | 0.00 | 534,853.59 | 25.46 | 21,010.44 | 1.90% |
| 362.00 | Gas Holders | 2,903,542.77 | 2,903,542.77 | 0% | 0.00 | 0.00 | 24.50 | 0.00 | 0.00% |
| 363.00 | Purification Equipment | 404,452.61 | 404,452.61 | 0% | 0.00 | 0.00 | 14.50 | 0.00 | 0.00% |
| 363.10 | Liquefaction Equipment | 1,119,880.10 | 1,119,880.10 | 0% | 0.00 | 0.00 | 14.63 | 0.00 | 0.00% |
| 363.20 | Vaporizing Equipment | 1,179,849.41 | 1,179,849.41 | 0% | 0.00 | 0.00 | 15.94 | 0.00 | 0.00% |
| 363.30 | Compressor Equipment | 72,891.66 | 72,891.66 | 0% | 0.00 | 0.00 | 12.53 | 0.00 | 0.00% |
| 363.40 | M& R Equipment | 28,480.74 | 28,480.74 | 0% | 0.00 | 0.00 | 17.57 | 0.00 | 0.00% |
| 363.50 | Other Equipment | 1,471,522.24 | 1,399,140.83 | 0% | 0.00 | 72,381.41 | 13.44 | 5,385.01 | 0.37% |
| | **Total Storage Plant** | 8,285,738.01 | 7,678,503.01 | | | 607,235.00 | | 26,395.45 | 0.32% |
| ***TRANSMISSION PLANT*** | | | | | | | | | |
| 365.12 | Land Rights | 532,183.36 | 5,050.17 | 0% | 0.00 | 527,133.19 | 79.55 | 6,626.75 | 1.25% |
| 367.00 | Mains | 11,897,599.91 | 980,059.59 | -5% | (594,880.00) | 11,512,420.32 | 66.72 | 172,553.10 | 1.45% |
| | **Total Transmission Plant** | 12,429,783.27 | 985,109.76 | | (594,880.00) | 12,039,553.51 | | 179,179.84 | 1.44% |
| ***DISTRIBUTION PLANT*** | | | | | | | | | |
| 375.00 | Structures & Improvements | 160,898.10 | 168,721.67 | -5% | (8,044.91) | 221.34 | 1.28 | 172.58 | 0.11% |
| 376.00 | Mains | 250,941,642.14 | 75,791,591.17 | -5% | (12,547,082.11) | 187,697,133.08 | 50.07 | 3,748,964.29 | 1.49% |
| 378.00 | M& R Equipment | 4,034,127.53 | 2,232,544.70 | 0% | 0.00 | 1,801,582.83 | 14.52 | 124,072.06 | 3.08% |
| 379.00 | City Gate Equipment | 4,213,026.53 | 1,065,512.77 | 0% | 0.00 | 3,147,513.76 | 35.91 | 87,639.78 | 2.08% |
| 380.00 | Services | 195,887,602.80 | 150,510,837.73 | -125% | (244,859,503.50) | 290,236,268.57 | 36.33 | 7,987,972.56 | 4.08% |
| 381.00 | Meters | 16,047,019.04 | 8,713,320.07 | 0% | 0.00 | 7,333,698.97 | 16.87 | 434,624.80 | 2.71% |
| 381.10 | Meter Accessories | 513,104.29 | 47,263.22 | 0% | 0.00 | 465,841.07 | 27.79 | 16,760.55 | 3.27% |
| 381.20 | ERT's and Accessories | 7,273,602.60 | 187,974.68 | 0% | 0.00 | 7,085,627.92 | 11.68 | 606,433.31 | 8.34% |
| 382.00 | Meter Installations | 13,080,838.85 | 6,654,279.04 | 0% | 0.00 | 6,426,559.81 | 17.35 | 370,395.46 | 2.83% |
| 383.00 | House Regulators | 5,229,981.93 | 2,958,479.66 | 0% | 0.00 | 2,271,502.27 | 16.21 | 140,114.63 | 2.68% |
| 384.00 | House Regulator Installations | 4,476,392.33 | 2,532,876.26 | 0% | 0.00 | 1,943,516.07 | 15.81 | 122,962.21 | 2.75% |
| 385.00 | Industrial M & R Equipment | 1,013,257.11 | 228,655.07 | 0% | 0.00 | 784,602.04 | 32.79 | 23,925.32 | 2.36% |
| | **Total Distribution Plant** | 502,871,493.25 | 251,092,056.03 | | (257,414,630.51) | 509,194,067.73 | | 13,664,037.55 | 2.72% |
| ***GENERAL PLANT DEPRECIATED*** | | | | | | | | | |
| 390.00 | Structures & Improvements | 22,783,559.31 | 1,874,001.18 | -5% | (1,139,177.97) | 22,048,736.10 | 44.50 | 495,492.89 | 2.17% |
| 392.01 | Transportation - Auto & Light Duty | 2,111,783.22 | 1,525,070.60 | 10% | 211,178.32 | 375,534.30 | 3.91 | 96,120.77 | 4.55% |
| 392.02 | Transportation - Heavy Duty Trucks | 512,319.42 | 163,593.48 | 10% | 51,231.94 | 297,494.00 | 9.50 | 31,310.39 | 6.11% |
| 396.00 | Power Operated Equipment | 494,310.88 | 433,734.89 | 10% | 49,431.09 | 11,144.90 | 11.29 | 987.20 | 0.20% |
| | **Total General Depreciated Plant** | 25,901,972.83 | 3,996,400.14 | | (827,336.61) | 22,732,909.30 | | 623,911.25 | 2.41% |
| | **Total Depreciated Plant** | **$ 549,488,987.36** | **$ 263,752,068.94** | | **$ (258,836,847.12)** | **$ 544,573,765.54** | | **$ 14,493,524.10** | |

**PIEDMONT NATURAL GAS**
**TENNESSEE**
**COMPUTATION OF AMORTIZATION AMOUNT**
**FOR AMORTIZED GENERAL PROPERTY**
**AT OCTOBER 31, 2009**

**Amortize AR 15**

| Account | Description | Plant Balance 10/31/2009 | Allocated Reserve 10/31/2009 | Theoretical Reserve 10/31/2009 | Reserve Surplus | Remaining Life | Amortize Reserve Surplus |
|---|---|---|---|---|---|---|---|
| 391.00 | Office Furniture & Equipment | 1,978,606.15 | 1,940,791.82 | 1,797,968.81 | 142,823.02 | 1.83 | (78,220.40) |
| 391.10 | Computer Hardware/Software | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 393.00 | Stores Equipment | 14,918.21 | 14,918.21 | 12,609.74 | 2,308.48 | 4.64 | (497.27) |
| 394.00 | Tools, Shop & Garage Equipment | 1,961,706.58 | 1,958,932.44 | 1,287,651.62 | 671,280.81 | 6.87 | (97,681.65) |
| 395.00 | Laboratory Equipment | 105,879.31 | 84,972.98 | 17,512.63 | 67,460.35 | 16.69 | (4,041.49) |
| 397.00 | Communication Equipment | 1,818,427.76 | 1,794,197.59 | 1,290,945.39 | 503,252.20 | 4.35 | (115,659.82) |
| 398.00 | Miscellaneous Equipment | 234,458.22 | 208,559.22 | 186,534.54 | 22,024.68 | 4.09 | (5,387.59) |
| | **Total General Amortized** | 6,113,996.23 | 6,002,372.26 | 4,593,222.72 | 1,409,149.54 | | (301,488.23) |
| | **Total Depreciated & Amortized Before AR 15** | 555,602,983.59 | 269,754,441.20 | | | | |

**After Retirements of Assets With Age > Average Service Life**

| Account | Description | Plant Balance 10/31/2009 | Allocated Reserve 10/31/2009 | Annual Amortization | Accrual For Reserve Surplus | Total Amortization | Annual Amortization % |
|---|---|---|---|---|---|---|---|
| 391.00 | Office Furniture & Equipment | 410,877.30 | 373,062.97 | 98,930.31 | (78,220.40) | 20,709.91 | 5.04% |
| 391.10 | Computer Hardware/Software | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | |
| 393.00 | Stores Equipment | 10,953.70 | 10,953.70 | 497.27 | (497.27) | 0.00 | 0.00% |
| 394.00 | Tools, Shop & Garage Equipment | 1,590,683.19 | 1,587,909.05 | 98,085.33 | (97,681.65) | 403.68 | 0.03% |
| 395.00 | Laboratory Equipment | 105,879.31 | 84,972.98 | 5,293.97 | (4,041.49) | 1,252.48 | 1.18% |
| 397.00 | Communication Equipment | 1,764,528.49 | 1,740,298.32 | 121,228.52 | (115,659.82) | 5,568.69 | 0.32% |
| 398.00 | Miscellaneous Equipment | 61,848.98 | 35,949.98 | 11,722.91 | (5,387.59) | 6,335.32 | 10.24% |
| | **Total General Amortized** | 3,944,770.97 | 3,833,147.00 | 335,758.30 | (301,488.23) | 34,270.08 | 0.87% |
| | **Total Depreciated & Amortized After AR 15** | $ 553,433,758.33 | $ 267,585,215.94 | | | | |

**APPENDIX C**

**Depreciation Parameter Comparison**

**PIEDMONT NATURAL GAS**
**TENNESSEE**
**COMPARISON OF MORTALITY CHARACTERISTICS**
**DEPRECIATION STUDY AS OF OCTOBER 31, 2009**

Appendix C

| Account Number | Description | EXISTING Average Life | Iowa Curve | Net Salvage | RECOMMENDED Average Life | Iowa Curve | Net Salvage |
|---|---|---|---|---|---|---|---|
| | | Yrs | | % | Yrs | | % |
| | **STORAGE PLANT** | | | | | | |
| 361.00 | Structures & Improvements | 35 | S5 | 0 | 35 | S5 | 0 |
| 362.00 | Gas Holders | 35 | S5 | 0 | 45 | S5 | 0 |
| 363.00 | Purification Equipment | 35 | S5 | 0 | 35 | S5 | 0 |
| 363.10 | Liquefaction Equipment | 35 | S5 | 0 | 35 | S5 | 0 |
| 363.20 | Vaporizing Equipment | 35 | S5 | 0 | 35 | S5 | 0 |
| 363.30 | Compressor Equipment | 25 | S5 | 0 | 30 | S5 | 0 |
| 363.40 | M& R Equipment | 30 | S5 | 0 | 35 | S5 | 0 |
| 363.50 | Other Equipment | 35 | S5 | 0 | 30 | S5 | 0 |
| | **TRANSMISSION PLANT** | | | | | | |
| 365.12 | Land Rights | | | | 80 | R2 | 0 |
| 367.00 | Mains | | | | 70 | R4 | (5) |
| 367.10 | Cathodic Protection | | | | 15 | R4 | 0 |
| | **DISTRIBUTION PLANT** | | | | | | |
| 375.00 | Structures & Improvements | 15 | R4 | 50 | 19 | R4 | (5) |
| 376.00 | Mains | 50 | S4 | (20) | 65 | R4 | (5) |
| 376.10 | Cathodic Protection | | | | 15 | R4 | 0 |
| 378.00 | M& R Equipment | 45 | R5 | (5) | 27 | R3 | 0 |
| 379.00 | City Gate Equipment | 45 | R5 | (5) | 45 | R5 | 0 |
| 380.00 | Services | 50 | S5 | (200) | 50 | R4 | (125) |
| 381.00 | Meters | 35 | S3 | 2 | 30 | R3 | 0 |
| 381.10 | Meter Accessories | 25 | S0 | 0 | 30 | R2 | 0 |
| 381.20 | ERT's and Accessories | | | | 15 | R4 | 0 |
| 382.00 | Meter Installations | 35 | S3 | 0 | 30 | R3 | 0 |
| 383.00 | House Regulators | 40 | S6 | 0 | 30 | R3 | 0 |
| 384.00 | House Regulator Installations | 40 | S6 | 0 | 30 | R3 | 0 |
| 385.00 | Industrial M & R Equipment | | | | 40 | R2 | 0 |
| | **GENERAL PLANT DEPRECIATED** | | | | | | |
| 390.00 | Structures & Improvements | 45 | R3 | 5 | 45 | R3 | (5) |
| 392.01 | Transportation - Auto & Light Duty | 5 | SQ | 20 | 5 | L2 | 10 |
| 392.02 | Transportation - Heavy Duty Trucks | 5 | SQ | 20 | 10 | L2 | 10 |
| 396.00 | Power Operated Equipment | 10 | S3 | 25 | 25 | R3 | 10 |
| | **GENERAL PLANT AMORTIZED** | | | | | | |
| 391.00 | Office Furniture & Equipment | 20 | L1.5 | 5 | 25 | SQ | 0 |
| 393.00 | Stores Equipment | 30 | R2 | 0 | 30 | SQ | 0 |
| 394.00 | Tools, Shop & Garage Equipment | 15 | L0.5 | 0 | 20 | SQ | 0 |
| 395.00 | Laboratory Equipment | | | | 20 | SQ | 0 |
| 397.00 | Communication Equipment | 15 | S3 | 0 | 15 | SQ | 0 |
| 398.00 | Miscellaneous Equipment | 20 | S3 | 0 | 20 | SQ | 0 |

**APPENDIX D**

**Net Salvage**

*PIEDMONT NATURAL GAS - TENNESSEE*
*NET SALVAGE HISTORY AS ADJUSTED*

| Acct | Activity Year | Retirement | Gross Salvage | Cost of Removal | Net Salvage | Net Salv. % | 2- yr Net Salv. % | 3- yr Net Salv. % | 4- yr Net Salv. % | 5- yr Net Salv. % | 6- yr Net Salv. % | 7- yr Net Salv. % | 8- yr Net Salv. % | 9- yr Net Salv. % | 10- yr Net Salv. % | 11- yr Net Salv. % | 12- yr Net Salv. % | 13- yr Net Salv. % | 14- yr Net Salv. % | 15- yr Net Salv. % |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 37500 | 2006 | 73,813.20 | 94,479.00 | 4,426.00 | 90,053 | 122.0% | | | | | | | | | | | | | | |
| 37500 | 2007 | 0 | 0 | 0 | 0 | NA | 122.0% | | | | | | | | | | | | | |
| 37500 | 2008 | 0 | 0 | 0 | 0 | NA | NA | 122.0% | | | | | | | | | | | | |
| 37500 | 2009 | 0 | 0 | 0 | 0 | NA | NA | NA | 122.0% | | | | | | | | | | | |
| 37600 | 1994 | 149,304.60 | - | 1,426.30 | (1,426) | -1.0% | | | | | | | | | | | | | | |
| 37600 | 1995 | 155,416.20 | - | 2,449.50 | (2,450) | -1.6% | -1.3% | | | | | | | | | | | | | |
| 37600 | 1996 | 126,309.30 | - | 369.40 | (369) | -0.3% | -1.0% | -1.0% | | | | | | | | | | | | |
| 37600 | 1997 | - | - | 8,228.30 | (8,228) | NA | -6.8% | -3.9% | -2.9% | | | | | | | | | | | |
| 37600 | 1998 | 249,448.90 | - | 4,775.50 | (4,776) | -1.9% | -5.2% | -3.6% | -3.0% | -2.5% | | | | | | | | | | |
| 37600 | 1999 | 371,862.80 | - | 18,983.60 | (18,984) | -5.1% | -3.8% | -5.1% | -4.3% | -3.9% | -3.44% | | | | | | | | | |
| 37600 | 2000 | 455,134.80 | - | 2,368.00 | (2,368) | -0.5% | -2.6% | -2.4% | -3.2% | -2.9% | -2.74% | -2.56% | | | | | | | | |
| 37600 | 2001 | 342,252.30 | - | 14,203.50 | (14,204) | -4.2% | -2.1% | -3.0% | -2.8% | -3.4% | -3.17% | -3.02% | -2.85% | | | | | | | |
| 37600 | 2002 | 311,216.20 | - | 11,171.40 | (11,171) | -3.6% | -3.9% | -2.5% | -3.2% | -3.0% | -3.45% | -3.24% | -3.11% | -2.96% | | | | | | |
| 37600 | 2003 | 506,678.90 | - | 31,535.20 | (31,535) | -6.2% | -5.2% | -4.9% | -3.7% | -3.9% | -3.71% | -4.08% | -3.88% | -3.74% | -3.58% | | | | | |
| 37600 | 2004 | 468,359.90 | - | 23,654.90 | (23,655) | -5.1% | -5.7% | -5.2% | -4.9% | -4.0% | -4.15% | -3.94% | -4.25% | -4.07% | -3.94% | -3.80% | | | | |
| 37600 | 2005 | 691,429.40 | - | 15,551.20 | (15,551) | -2.2% | -3.4% | -4.2% | -4.1% | -4.1% | -3.55% | -3.73% | -3.60% | -3.84% | -3.71% | -3.62% | -3.52% | | | |
| 37600 | 2006 | 1,052,206.30 | - | 1,772.30 | (1,772) | -0.2% | -1.0% | -1.9% | -2.7% | -2.8% | -2.90% | -2.62% | -2.84% | -2.79% | -2.97% | -2.90% | -2.86% | -2.80% | | |
| 37600 | 2007 | 34,564.07 | - | 1,168.98 | (1,169) | -3.4% | -0.3% | -1.0% | -1.9% | -2.7% | -2.77% | -2.91% | -2.63% | -2.84% | -2.79% | -2.98% | -2.90% | -2.86% | -2.80% | |
| 37600 | 2008 | 109,096.44 | - | - | 0 | 0.0% | -0.8% | -0.2% | -1.0% | -1.8% | -2.57% | -2.67% | -2.82% | -2.55% | -2.77% | -2.73% | -2.91% | -2.84% | -2.80% | -2.74% |
| 37600 | 2009 | 8,912.63 | - | 5,472.36 | (5,472) | -61.4% | -4.6% | -4.4% | -0.7% | -1.3% | -2.01% | -2.76% | -2.84% | -2.97% | -2.69% | -2.89% | -2.84% | -3.02% | -2.95% | -2.90% |
| 37800 | 1994 | 22,755.00 | - | 4,419.40 | (4,419) | -19.4% | | | | | | | | | | | | | | |
| 37800 | 1995 | - | - | - | 0 | NA | -19.4% | | | | | | | | | | | | | |
| 37800 | 1996 | 23,063.80 | - | 111.30 | (111) | -0.5% | -0.5% | -9.9% | | | | | | | | | | | | |
| 37800 | 1997 | - | - | - | 0 | NA | -0.5% | -0.5% | -9.9% | | | | | | | | | | | |
| 37800 | 1998 | 2,012.50 | - | - | 0 | 0.0% | 0.0% | -0.4% | -0.4% | -9.5% | | | | | | | | | | |
| 37800 | 1999 | - | - | - | 0 | NA | 0.0% | 0.0% | -0.4% | -0.4% | -9.47% | | | | | | | | | |
| 37800 | 2000 | - | - | - | 0 | NA | NA | 0.0% | 0.0% | -0.4% | -0.44% | -9.47% | | | | | | | | |
| 37800 | 2001 | - | - | - | 0 | NA | NA | NA | 0.0% | 0.0% | -0.44% | -0.44% | -9.47% | | | | | | | |
| 37800 | 2002 | - | - | 1,294.50 | (1,295) | NA | NA | NA | NA | -64.3% | -64.32% | -5.61% | -5.61% | -12.18% | | | | | | |
| 37800 | 2003 | - | - | - | 0 | NA | NA | NA | NA | NA | -64.32% | -64.32% | -5.61% | -5.61% | -12.18% | | | | | |
| 37800 | 2004 | 148,406.80 | 6,000.00 | - | 6,000 | 4.0% | 4.0% | 3.2% | 3.2% | 3.2% | 3.17% | 3.13% | 3.13% | 2.65% | 2.65% | 0.09% | | | | |
| 37800 | 2005 | - | - | - | 0 | NA | 4.0% | 4.0% | 3.2% | 3.2% | 3.17% | 3.17% | 3.13% | 3.13% | 2.65% | 2.65% | 0.09% | | | |
| 37800 | 2006 | - | | - | 0 | NA | NA | 4.0% | 4.0% | 3.2% | 3.17% | 3.17% | 3.17% | 3.13% | 3.13% | 2.65% | 2.65% | 0.09% | | |
| 37800 | 2007 | - | - | - | 0 | NA | NA | NA | 4.0% | 4.0% | 3.17% | 3.17% | 3.17% | 3.17% | 3.13% | 3.13% | 2.65% | 2.65% | 0.09% | |
| 37800 | 2008 | - | - | - | 0 | NA | NA | NA | NA | 4.0% | 4.04% | 3.17% | 3.17% | 3.17% | 3.17% | 3.13% | 3.13% | 2.65% | 2.65% | 0.09% |
| 37800 | 2009 | 323,841.83 | - | - | 0 | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 1.27% | 1.27% | 1.00% | 1.00% | 1.00% | 1.00% | 0.99% | 0.99% | 0.92% | 0.92% |
| 37900 | 2007 | - | - | - | 0 | NA | | | | | | | | | | | | | | |
| 37900 | 2008 | - | - | - | 0 | NA | NA | | | | | | | | | | | | | |
| 37900 | 2009 | 29,225.65 | - | - | 0 | 0.0% | 0.0% | 0.0% | | | | | | | | | | | | |

***PIEDMONT NATURAL GAS - TENNESSEE***
***NET SALVAGE HISTORY AS ADJUSTED***

| Acct | Activity Year | Retirement | Gross Salvage | Cost of Removal | Net Salvage | Net Salv. % | 2- yr Net Salv. % | 3- yr Net Salv. % | 4- yr Net Salv. % | 5- yr Net Salv. % | 6- yr Net Salv. % | 7- yr Net Salv. % | 8- yr Net Salv. % | 9- yr Net Salv. % | 10- yr Net Salv. % | 11- yr Net Salv. % | 12- yr Net Salv. % | 13- yr Net Salv. % | 14- yr Net Salv. % | 15- yr Net Salv. % |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 38000 | 1994 | 237,062.50 | - | 8,628.40 | (8,628) | -3.6% | | | | | | | | | | | | | | |
| 38000 | 1995 | 29,219.10 | - | 24,078.10 | (24,078) | -82.4% | -12.3% | | | | | | | | | | | | | |
| 38000 | 1996 | 74,139.00 | - | 5,597.90 | (5,598) | -7.6% | -28.7% | -11.3% | | | | | | | | | | | | |
| 38000 | 1997 | 99,556.50 | - | 8,927.20 | (8,927) | -9.0% | -8.4% | -19.0% | -10.7% | | | | | | | | | | | |
| 38000 | 1998 | 192,724.60 | - | 888.90 | (889) | -0.5% | -3.4% | -4.2% | -10.0% | -7.6% | | | | | | | | | | |
| 38000 | 1999 | 771,401.20 | - | - | 0 | 0.0% | -0.1% | -0.9% | -1.4% | -3.4% | -3.43% | | | | | | | | | |
| 38000 | 2000 | 944,162.60 | - | 31,991.30 | (31,991) | -3.4% | -1.9% | -1.7% | -2.1% | -2.3% | -3.39% | -3.41% | | | | | | | | |
| 38000 | 2001 | 482,354.70 | - | 55,037.70 | (55,038) | -11.4% | -6.1% | -4.0% | -3.7% | -3.9% | -3.99% | -4.88% | -4.77% | | | | | | | |
| 38000 | 2002 | 395,129.80 | - | 152,894.50 | (152,895) | -38.7% | -23.7% | -13.2% | -9.3% | -8.6% | -8.66% | -8.63% | -9.35% | -8.93% | | | | | | |
| 38000 | 2003 | 485,450.10 | - | 212,515.70 | (212,516) | -43.8% | -41.5% | -30.8% | -19.6% | -14.7% | -13.86% | -13.71% | -13.58% | -14.16% | -13.49% | | | | | |
| 38000 | 2004 | 455,793.90 | - | 293,979.00 | (293,979) | -64.5% | -53.8% | -49.3% | -39.3% | -27.0% | -21.12% | -20.05% | -19.76% | -19.53% | -20.00% | -19.07% | | | | |
| 38000 | 2005 | 350,748.70 | - | 366,136.10 | (366,136) | -104.4% | -81.8% | -67.5% | -60.8% | -49.8% | -35.73% | -28.64% | -27.31% | -26.87% | -26.53% | -26.91% | -25.69% | | | |
| 38000 | 2006 | 370,841.90 | - | 372,051.00 | (372,051) | -100.3% | -102.3% | -87.7% | -74.9% | -67.9% | -57.18% | -42.61% | -34.88% | -33.39% | -32.86% | -32.45% | -32.77% | -31.35% | | |
| 38000 | 2007 | 174,910.75 | - | 307,070.10 | (307,070) | -175.6% | -124.4% | -116.6% | -99.0% | -84.4% | -76.34% | -64.81% | -48.96% | -40.44% | -38.77% | -38.14% | -37.67% | -37.94% | -36.33% | |
| 38000 | 2008 | 234,852.88 | - | 355,102.26 | (355,102) | -151.2% | -161.6% | -132.5% | -123.8% | -106.8% | -92.00% | -83.47% | -71.69% | -55.13% | -46.01% | -44.21% | -43.50% | -42.97% | -43.20% | -41.43% |
| 38000 | 2009 | 176,863.45 | - | 257,379.37 | (257,379) | -145.5% | -148.8% | -156.8% | -134.9% | -126.7% | -110.64% | -96.21% | -87.62% | -75.86% | -59.05% | -49.65% | -47.76% | -47.01% | -46.45% | -46.65% |
| 38100 | 1994 | 148,203.40 | - | - | 0 | 0.0% | | | | | | | | | | | | | | |
| 38100 | 1995 | 92,694.90 | - | - | 0 | 0.0% | 0.0% | | | | | | | | | | | | | |
| 38100 | 1996 | 238,656.60 | - | - | 0 | 0.0% | 0.0% | 0.0% | | | | | | | | | | | | |
| 38100 | 1997 | 112,158.40 | - | - | 0 | 0.0% | 0.0% | 0.0% | 0.0% | | | | | | | | | | | |
| 38100 | 1998 | 224,420.90 | 400.00 | - | 400 | 0.2% | 0.1% | 0.1% | 0.1% | 0.0% | | | | | | | | | | |
| 38100 | 1999 | 34,870.30 | - | - | 0 | 0.0% | 0.2% | 0.1% | 0.1% | 0.1% | 0.05% | | | | | | | | | |
| 38100 | 2000 | - | - | - | 0 | NA | 0.0% | 0.2% | 0.1% | 0.1% | 0.06% | 0.05% | | | | | | | | |
| 38100 | 2001 | - | - | - | 0 | NA | NA | 0.0% | 0.2% | 0.1% | 0.07% | 0.06% | 0.05% | | | | | | | |
| 38100 | 2002 | - | - | - | 0 | NA | NA | NA | 0.0% | 0.2% | 0.11% | 0.07% | 0.06% | 0.05% | | | | | | |
| 38100 | 2003 | - | - | - | 0 | NA | NA | NA | NA | 0.0% | 0.15% | 0.11% | 0.07% | 0.06% | 0.05% | | | | | |
| 38100 | 2004 | - | - | - | 0 | NA | NA | NA | NA | NA | 0.00% | 0.15% | 0.11% | 0.07% | 0.06% | 0.05% | | | | |
| 38100 | 2005 | - | 500.00 | - | 500 | NA | NA | NA | NA | NA | NA | 1.43% | 0.35% | 0.24% | 0.15% | 0.13% | 0.11% | | | |
| 38100 | 2006 | - | (500.00) | - | (500) | NA | NA | NA | NA | NA | NA | NA | 0.00% | 0.15% | 0.11% | 0.07% | 0.06% | 0.05% | | |
| 38100 | 2007 | - | - | - | 0 | NA | NA | NA | NA | NA | NA | NA | NA | 0.00% | 0.15% | 0.11% | 0.07% | 0.06% | 0.05% | |
| 38100 | 2008 | - | - | - | 0 | NA | NA | NA | NA | NA | NA | NA | NA | NA | 0.00% | 0.15% | 0.11% | 0.07% | 0.06% | 0.05% |
| 38100 | 2009 | 1,549,119.38 | - | - | 0 | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.02% | 0.02% | 0.02% | 0.02% |
| 38200 | 1994 | 60,192.60 | - | - | 0 | 0.0% | | | | | | | | | | | | | | |
| 38200 | 1995 | - | | | 0 | NA | 0.0% | | | | | | | | | | | | | |
| 38200 | 1996 | 56,878.60 | - | - | 0 | 0.0% | 0.0% | 0.0% | | | | | | | | | | | | |
| 38200 | 1997 | 27,183.70 | - | - | 0 | 0.0% | 0.0% | 0.0% | 0.0% | | | | | | | | | | | |
| 38200 | 1998 | 59,320.40 | - | - | 0 | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | | | | | | | | | | |
| 38200 | 1999 | 8,197.10 | - | - | 0 | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.00% | | | | | | | | | |
| 38200 | 2000 | - | - | - | 0 | NA | 0.0% | 0.0% | 0.0% | 0.0% | 0.00% | 0.00% | | | | | | | | |
| 38200 | 2001 | - | - | - | 0 | NA | NA | 0.0% | 0.0% | 0.0% | 0.00% | 0.00% | 0.00% | | | | | | | |
| 38200 | 2002 | - | - | - | 0 | NA | NA | NA | 0.0% | 0.0% | 0.00% | 0.00% | 0.00% | 0.00% | | | | | | |
| 38200 | 2003 | - | - | - | 0 | NA | NA | NA | NA | 0.0% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | | | | | |
| 38200 | 2004 | - | - | - | 0 | NA | NA | NA | NA | NA | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | | | | |
| 38200 | 2005 | - | - | - | 0 | NA | NA | NA | NA | NA | NA | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | | | |
| 38200 | 2006 | - | - | - | 0 | NA | NA | NA | NA | NA | NA | NA | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | | |
| 38200 | 2007 | - | - | - | 0 | NA | NA | NA | NA | NA | NA | NA | NA | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | |
| 38200 | 2008 | - | - | - | 0 | NA | NA | NA | NA | NA | NA | NA | NA | NA | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| 38200 | 2009 | - | - | - | 0 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| 38600 | 1997 | 8,494.80 | - | - | 0 | 0.0% | | | | | | | | | | | | | | |

***PIEDMONT NATURAL GAS - TENNESSEE***
***NET SALVAGE HISTORY AS ADJUSTED***

| Acct | Activity Year | Retirement | Gross Salvage | Cost of Removal | Net Salvage | Net Salv. % | 2- yr Net Salv. % | 3- yr Net Salv. % | 4- yr Net Salv. % | 5- yr Net Salv. % | 6- yr Net Salv. % | 7- yr Net Salv. % | 8- yr Net Salv. % | 9- yr Net Salv. % | 10- yr Net Salv. % | 11- yr Net Salv. % | 12- yr Net Salv. % | 13- yr Net Salv. % | 14- yr Net Salv. % | 15- yr Net Salv. % |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 38700 | 2007 | - | - | - | 0 | NA | | | | | | | | | | | | | | |
| 38700 | 2008 | - | - | - | 0 | NA | NA | | | | | | | | | | | | | |
| 38700 | 2009 | 157,241.16 | - | - | 0 | 0.0% | 0.0% | 0.0% | | | | | | | | | | | | |
| 39000 | 1995 | 60,867.30 | 88,959.90 | 41,535.10 | 47,425 | 77.9% | | | | | | | | | | | | | | |
| 39000 | 1996 | - | - | - | 0 | NA | 77.9% | | | | | | | | | | | | | |
| 39000 | 1997 | - | - | - | 0 | NA | NA | 77.9% | | | | | | | | | | | | |
| 39000 | 1998 | - | - | - | 0 | NA | NA | NA | 77.9% | | | | | | | | | | | |
| 39000 | 1999 | - | - | - | 0 | NA | NA | NA | NA | 77.9% | | | | | | | | | | |
| 39000 | 2000 | - | - | - | 0 | NA | NA | NA | NA | NA | 77.92% | | | | | | | | | |
| 39000 | 2001 | - | - | - | 0 | NA | NA | NA | NA | NA | NA | 77.92% | | | | | | | | |
| 39000 | 2002 | - | - | - | 0 | NA | NA | NA | NA | NA | NA | NA | 77.92% | | | | | | | |
| 39000 | 2003 | - | - | - | 0 | NA | NA | NA | NA | NA | NA | NA | NA | 77.92% | | | | | | |
| 39000 | 2004 | 113,930.90 | 154,933.50 | - | 154,934 | 136.0% | 136.0% | 136.0% | 136.0% | 136.0% | 135.99% | 135.99% | 135.99% | 135.99% | 115.77% | | | | | |
| 39000 | 2005 | - | - | - | 0 | NA | 136.0% | 136.0% | 136.0% | 136.0% | 135.99% | 135.99% | 135.99% | 135.99% | 135.99% | 115.77% | | | | |
| 39000 | 2006 | - | - | - | 0 | NA | NA | 136.0% | 136.0% | 136.0% | 135.99% | 135.99% | 135.99% | 135.99% | 135.99% | 135.99% | 115.77% | | | |
| 39000 | 2007 | - | - | - | 0 | NA | NA | NA | 136.0% | 136.0% | 135.99% | 135.99% | 135.99% | 135.99% | 135.99% | 135.99% | 135.99% | 115.77% | | |
| 39000 | 2008 | 9,741,878.81 | 9,332,727.27 | 541,402.59 | 8,791,325 | 90.2% | 90.2% | 90.2% | 90.2% | 90.8% | 90.77% | 90.77% | 90.77% | 90.77% | 90.77% | 90.77% | 90.77% | 90.77% | 90.69% | |
| 39000 | 2009 | - | - | - | 0 | NA | 90.2% | 90.2% | 90.2% | 90.2% | 90.77% | 90.77% | 90.77% | 90.77% | 90.77% | 90.77% | 90.77% | 90.77% | 90.77% | 90.69% |
| 39100 | 1994 | 50,071.30 | - | - | 0 | 0.0% | | | | | | | | | | | | | | |
| 39100 | 1995 | 16.50 | 255.00 | - | 255 | 1545.5% | 0.5% | | | | | | | | | | | | | |
| 39100 | 1996 | - | - | - | 0 | NA | 1545.5% | 0.5% | | | | | | | | | | | | |
| 39100 | 1997 | 312.40 | - | - | 0 | 0.0% | 0.0% | 77.5% | 0.5% | | | | | | | | | | | |
| 39100 | 1998 | 668.10 | - | - | 0 | 0.0% | 0.0% | 0.0% | 25.6% | 0.5% | | | | | | | | | | |
| 39100 | 1999 | 8,730.60 | - | - | 0 | 0.0% | 0.0% | 0.0% | 0.0% | 2.6% | 0.43% | | | | | | | | | |
| 39100 | 2000 | - | - | - | 0 | NA | 0.0% | 0.0% | 0.0% | 0.0% | 2.62% | 0.43% | | | | | | | | |
| 39100 | 2001 | - | - | - | 0 | NA | NA | 0.0% | 0.0% | 0.0% | 0.00% | 2.62% | 0.43% | | | | | | | |
| 39100 | 2002 | 5,158.00 | - | - | 0 | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.00% | 0.00% | 1.71% | 0.39% | | | | | | |
| 39100 | 2003 | - | - | - | 0 | NA | 0.0% | 0.0% | 0.0% | 0.0% | 0.00% | 0.00% | 0.00% | 1.71% | 0.39% | | | | | |
| 39100 | 2004 | - | - | - | 0 | NA | NA | 0.0% | 0.0% | 0.0% | 0.00% | 0.00% | 0.00% | 0.00% | 1.71% | 0.39% | | | | |
| 39100 | 2005 | - | - | - | 0 | NA | NA | NA | 0.0% | 0.0% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 1.71% | 0.39% | | | |
| 39100 | 2006 | - | - | - | 0 | NA | NA | NA | NA | 0.0% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 1.71% | 0.39% | | |
| 39100 | 2007 | - | - | - | 0 | NA | NA | NA | NA | NA | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 1.71% | 0.39% | |
| 39100 | 2008 | - | - | - | 0 | NA | NA | NA | NA | NA | NA | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 1.71% | 0.39% |
| 39100 | 2009 | - | - | - | 0 | NA | NA | NA | NA | NA | NA | NA | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 1.71% |
| 39110 | 1997 | 67,566.60 | - | - | 0 | 0.0% | | | | | | | | | | | | | | |
| 39110 | 1998 | - | - | - | 0 | NA | 0.0% | | | | | | | | | | | | | |
| 39110 | 1999 | - | - | - | 0 | NA | NA | 0.0% | | | | | | | | | | | | |
| 39110 | 2000 | - | - | - | 0 | NA | NA | NA | 0.0% | | | | | | | | | | | |
| 39110 | 2001 | 36,920.60 | - | - | 0 | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | | | | | | | | | | |
| 39110 | 2002 | - | - | - | 0 | NA | 0.0% | 0.0% | 0.0% | 0.0% | 0.00% | | | | | | | | | |
| 39110 | 2003 | - | - | - | 0 | NA | NA | 0.0% | 0.0% | 0.0% | 0.00% | 0.00% | | | | | | | | |
| 39110 | 2004 | - | - | - | 0 | NA | NA | NA | 0.0% | 0.0% | 0.00% | 0.00% | 0.00% | | | | | | | |
| 39110 | 2005 | - | - | - | 0 | NA | NA | NA | NA | 0.0% | 0.00% | 0.00% | 0.00% | 0.00% | | | | | | |
| 39110 | 2006 | - | - | - | 0 | NA | NA | NA | NA | NA | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | | | | | |
| 39110 | 2007 | 1,201.03 | - | - | 0 | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | | | | |
| 39110 | 2008 | - | - | - | 0 | NA | 0.0% | 0.0% | 0.0% | 0.0% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | | | |
| 39110 | 2009 | - | - | - | 0 | NA | NA | 0.0% | 0.0% | 0.0% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | | |

***PIEDMONT NATURAL GAS - TENNESSEE***
***NET SALVAGE HISTORY AS ADJUSTED***

| Acct | Activity Year | Retirement | Gross Salvage | Cost of Removal | Net Salvage | Net Salv. % | 2-yr Net Salv. % | 3-yr Net Salv. % | 4-yr Net Salv. % | 5-yr Net Salv. % | 6-yr Net Salv. % | 7-yr Net Salv. % | 8-yr Net Salv. % | 9-yr Net Salv. % | 10-yr Net Salv. % | 11-yr Net Salv. % | 12-yr Net Salv. % | 13-yr Net Salv. % | 14-yr Net Salv. % | 15-yr Net Salv. % |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 39120 | 1999 | 3,567.00 | - | - | 0 | 0.0% | | | | | | | | | | | | | | |
| 39120 | 2000 | | - | - | 0 | NA | 0.0% | | | | | | | | | | | | | |
| 39120 | 2001 | | - | - | 0 | NA | NA | 0.0% | | | | | | | | | | | | |
| 39120 | 2002 | 702,503.20 | - | - | 0 | 0.0% | 0.0% | 0.0% | 0.0% | | | | | | | | | | | |
| 39120 | 2003 | | - | - | 0 | NA | 0.0% | 0.0% | 0.0% | 0.0% | | | | | | | | | | |
| 39120 | 2004 | | - | - | 0 | NA | NA | 0.0% | 0.0% | 0.0% | 0.00% | | | | | | | | | |
| 39120 | 2005 | | - | - | 0 | NA | NA | NA | 0.0% | 0.0% | 0.00% | 0.00% | | | | | | | | |
| 39120 | 2006 | | - | - | 0 | NA | NA | NA | NA | 0.0% | 0.00% | 0.00% | 0.00% | | | | | | | |
| 39120 | 2007 | | - | - | 0 | NA | NA | NA | NA | NA | 0.00% | 0.00% | 0.00% | 0.00% | | | | | | |
| 39120 | 2008 | | - | - | 0 | NA | NA | NA | NA | NA | NA | 0.00% | 0.00% | 0.00% | 0.00% | | | | | |
| 39120 | 2009 | | - | - | 0 | NA | NA | NA | NA | NA | NA | NA | 0.00% | 0.00% | 0.00% | 0.00% | | | | |
| | | | | | 0 | NA | NA | NA | NA | NA | NA | NA | NA | NA | 0.00% | 0.00% | 0.00% | 0.00% | | |
| | | | | | 0 | NA | NA | NA | NA | NA | NA | NA | NA | NA | 0.00% | 0.00% | 0.00% | 0.00% | | |
| 39300 | 1996 | 2,686.40 | - | - | 0 | 0.0% | | | | | | | | | | | | | | |
| 39400 | 1994 | 47,361.30 | 400.00 | - | 400 | 0.8% | | | | | | | | | | | | | | |
| 39400 | 1995 | 16,656.80 | - | - | 0 | 0.0% | 0.6% | | | | | | | | | | | | | |
| 39400 | 1996 | (5,895.00) | - | - | 0 | 0.0% | 0.0% | 0.7% | | | | | | | | | | | | |
| 39400 | 1997 | 676.30 | - | - | 0 | 0.0% | 0.0% | 0.0% | 0.7% | | | | | | | | | | | |
| 39400 | 1998 | 12,556.30 | - | - | 0 | 0.0% | 0.0% | 0.0% | 0.0% | 0.6% | | | | | | | | | | |
| 39400 | 1999 | - | - | - | 0 | NA | 0.0% | 0.0% | 0.0% | 0.0% | 0.56% | | | | | | | | | |
| 39400 | 2000 | - | - | - | 0 | NA | NA | 0.0% | 0.0% | 0.0% | 0.00% | 0.56% | | | | | | | | |
| 39400 | 2001 | - | - | - | 0 | NA | NA | NA | 0.0% | 0.0% | 0.00% | 0.00% | 0.56% | | | | | | | |
| 39400 | 2002 | - | - | - | 0 | NA | NA | NA | NA | 0.0% | 0.00% | 0.00% | 0.00% | 0.56% | | | | | | |
| 39400 | 2003 | - | - | - | 0 | NA | NA | NA | NA | NA | 0.00% | 0.00% | 0.00% | 0.00% | 0.56% | | | | | |
| 39400 | 2004 | 9,885.50 | 601.00 | - | 601 | 6.1% | 6.1% | 6.1% | 6.1% | 6.1% | 6.08% | 2.68% | 2.60% | 3.49% | 1.77% | 1.23% | | | | |
| 39400 | 2005 | - | - | - | 0 | NA | 6.1% | 6.1% | 6.1% | 6.1% | 6.08% | 6.08% | 2.68% | 2.60% | 3.49% | 1.77% | 1.23% | | | |
| 39400 | 2006 | - | - | - | 0 | NA | NA | 6.1% | 6.1% | 6.1% | 6.08% | 6.08% | 6.08% | 2.68% | 2.60% | 3.49% | 1.77% | 1.23% | | |
| 39400 | 2007 | 26,134.56 | 10,891.70 | - | 10,892 | 41.7% | 41.7% | 41.7% | 31.9% | 31.9% | 31.91% | 31.91% | 31.91% | 31.91% | 23.66% | 23.33% | 26.51% | 19.15% | 11.08% | |
| 39400 | 2008 | - | - | - | 0 | NA | 41.7% | 41.7% | 41.7% | 31.9% | 31.91% | 31.91% | 31.91% | 31.91% | 31.91% | 23.66% | 23.33% | 26.51% | 19.15% | 11.08% |
| 39400 | 2009 | - | - | - | 0 | NA | NA | 41.7% | 41.7% | 41.7% | 31.91% | 31.91% | 31.91% | 31.91% | 31.91% | 31.91% | 23.66% | 23.33% | 26.51% | 19.15% |
| 39600 | 1994 | 84,202.00 | - | - | 0 | 0.0% | | | | | | | | | | | | | | |
| 39600 | 1995 | - | - | - | 0 | NA | 0.0% | | | | | | | | | | | | | |
| 39600 | 1996 | 8,328.40 | - | - | 0 | 0.0% | 0.0% | 0.0% | | | | | | | | | | | | |
| 39600 | 1997 | 23,850.30 | - | - | 0 | 0.0% | 0.0% | 0.0% | 0.0% | | | | | | | | | | | |
| 39600 | 1998 | 4,128.70 | 350.00 | - | 350 | 8.5% | 1.3% | 1.0% | 1.0% | 0.3% | | | | | | | | | | |
| 39600 | 1999 | - | - | - | 0 | NA | 8.5% | 1.3% | 1.0% | 1.0% | 0.29% | | | | | | | | | |
| 39600 | 2000 | 62,224.20 | - | - | 0 | 0.0% | 0.0% | 0.5% | 0.4% | 0.4% | 0.36% | 0.19% | | | | | | | | |
| 39600 | 2001 | - | - | - | 0 | NA | 0.0% | 0.0% | 0.5% | 0.4% | 0.36% | 0.36% | 0.19% | | | | | | | |
| 39600 | 2002 | - | - | - | 0 | NA | NA | 0.0% | 0.0% | 0.5% | 0.39% | 0.36% | 0.36% | 0.19% | | | | | | |
| 39600 | 2003 | - | - | - | 0 | NA | NA | NA | 0.0% | 0.0% | 0.53% | 0.39% | 0.36% | 0.36% | 0.19% | | | | | |
| 39600 | 2004 | 8,370.50 | 601.00 | - | 601 | 7.2% | 7.2% | 7.2% | 7.2% | 0.9% | 0.85% | 1.27% | 0.96% | 0.89% | 0.89% | 0.50% | | | | |
| 39600 | 2005 | - | - | - | 0 | NA | 7.2% | 7.2% | 7.2% | 7.2% | 0.85% | 0.85% | 1.27% | 0.96% | 0.89% | 0.89% | 0.50% | | | |
| 39600 | 2006 | - | - | - | 0 | NA | NA | 7.2% | 7.2% | 7.2% | 7.18% | 0.85% | 0.85% | 1.27% | 0.96% | 0.89% | 0.89% | 0.50% | | |
| 39600 | 2007 | - | - | - | 0 | NA | NA | NA | 7.2% | 7.2% | 7.18% | 7.18% | 0.85% | 0.85% | 1.27% | 0.96% | 0.89% | 0.89% | 0.50% | |
| 39600 | 2008 | 15,526.53 | 7,420.00 | - | 7,420 | 47.8% | 47.8% | 47.8% | 47.8% | 33.6% | 33.56% | 33.56% | 33.56% | 9.31% | 9.31% | 9.28% | 7.34% | 6.84% | 6.84% | 4.05% |
| 39600 | 2009 | 3,665.00 | 545.00 | - | 545 | 14.9% | 41.5% | 41.5% | 41.5% | 41.5% | 31.08% | 31.08% | 31.08% | 31.08% | 9.54% | 9.54% | 9.49% | 7.57% | 7.07% | 7.07% |

*PIEDMONT NATURAL GAS - TENNESSEE*
*NET SALVAGE HISTORY AS ADJUSTED*

| Acct | Activity Year | Retirement | Gross Salvage | Cost of Removal | Net Salvage | Net Salv. % | 2- yr Net Salv. % | 3- yr Net Salv. % | 4- yr Net Salv. % | 5- yr Net Salv. % | 6- yr Net Salv. % | 7- yr Net Salv. % | 8- yr Net Salv. % | 9- yr Net Salv. % | 10- yr Net Salv. % | 11- yr Net Salv. % | 12- yr Net Salv. % | 13- yr Net Salv. % | 14- yr Net Salv. % | 15- yr Net Salv. % |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 39700 | 2000 | 144,440.70 | - | - | 0 | 0.0% | | | | | | | | | | | | | | |
| 39700 | 2001 | - | - | - | 0 | NA | 0.0% | | | | | | | | | | | | | |
| 39700 | 2002 | - | - | - | 0 | NA | NA | 0.0% | | | | | | | | | | | | |
| 39700 | 2003 | - | - | - | 0 | NA | NA | NA | 0.0% | | | | | | | | | | | |
| 39700 | 2004 | - | - | - | 0 | NA | NA | NA | NA | 0.0% | | | | | | | | | | |
| 39700 | 2005 | - | - | - | 0 | NA | NA | NA | NA | NA | 0.00% | | | | | | | | | |
| 39700 | 2006 | - | - | - | 0 | NA | NA | NA | NA | NA | NA | 0.00% | | | | | | | | |
| 39700 | 2007 | - | - | - | 0 | NA | NA | NA | NA | NA | NA | NA | 0.00% | | | | | | | |
| 39700 | 2008 | - | - | - | 0 | NA | NA | NA | NA | NA | NA | NA | NA | 0.00% | | | | | | |
| 39700 | 2009 | - | - | - | 0 | NA | NA | NA | NA | NA | NA | NA | NA | NA | 0.00% | | | | | |
| 39800 | 1996 | 431.80 | - | - | 0 | 0.0% | | | | | | | | | | | | | | |
| 39800 | 1997 | - | - | - | 0 | NA | 0.0% | | | | | | | | | | | | | |
| 39800 | 1998 | - | - | - | 0 | NA | NA | 0.0% | | | | | | | | | | | | |
| 39800 | 1999 | - | - | - | 0 | NA | NA | NA | 0.0% | | | | | | | | | | | |
| 39800 | 2000 | - | - | - | 0 | NA | NA | NA | NA | 0.0% | | | | | | | | | | |
| 39800 | 2001 | - | - | - | 0 | NA | NA | NA | NA | NA | 0.00% | | | | | | | | | |
| 39800 | 2002 | - | - | - | 0 | NA | NA | NA | NA | NA | NA | 0.00% | | | | | | | | |
| 39800 | 2003 | - | - | - | 0 | NA | NA | NA | NA | NA | NA | NA | 0.00% | | | | | | | |
| 39800 | 2004 | - | - | - | 0 | NA | NA | NA | NA | NA | NA | NA | NA | 0.00% | | | | | | |
| 39800 | 2005 | - | - | - | 0 | NA | NA | NA | NA | NA | NA | NA | NA | NA | 0.00% | | | | | |
| 39800 | 2006 | - | - | - | 0 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | 0.00% | | | | |
| 39800 | 2007 | - | - | - | 0 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | 0.00% | | | |
| 39800 | 2008 | - | - | - | 0 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | 0.00% | | |
| 39800 | 2009 | - | - | - | 0 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | | |