

Commonwealth of Pennsylvania  
Pennsylvania Public Utility Commission  
Pike County Light & Power Company

Docket No. \_\_\_\_\_

ELECTRIC

TESTIMONY AND EXHIBITS

Pike County Light & Power Co.  
Electric Case

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Pike County Light & Power Co.

Pike County Light & Power Co.  
4 Irving Place  
New York NY 10003-0987  
www.oru.com

July 17, 2008

**VIA EXPRESS MAIL**

Honorable James J. McNulty  
Secretary  
Commonwealth of Pennsylvania  
Pennsylvania Public Utility Commission  
400 North Street  
Harrisburg, Pennsylvania 17105-3265

Re: Pike County Light & Power Company  
Supplement No. 46 to Tariff  
Electric - Pa. P.U.C. No. 8

Dear Secretary McNulty:

I enclose for filing on behalf of Pike County Light & Power Company (“Pike” or the “Company”) an original and eight copies of Supplement No. 46 to its tariff for electric service, Electric - Pa. P.U.C. No. 8, issued July 18, 2008 to be effective September 16, 2008. Pursuant to the Commission’s normal procedures, the Company expects that any rate increase will not become effective until April 2009.

Supplement No. 46 consists of the following tariff leaves:

Supplement No. 46 – Notice	15th Revised Leaf No.	84
44th Revised Leaf No. 2	21st Revised Leaf No.	85
44th Revised Leaf No. 3	19th Revised Leaf No.	86
5th Revised Leaf No. 4	1st Revised Leaf No.	87
8th Revised Leaf No. 5	14th Revised Leaf No.	88
39th Revised Leaf No. 6	15th Revised Leaf No.	89
1st Revised Leaf No. 33	19th Revised Leaf No.	91
2nd Revised Leaf No. 34	2nd Revised Leaf No.	92
2nd Revised Leaf No. 35	14th Revised Leaf No.	93
2nd Revised Leaf No. 36	13th Revised Leaf No.	94
2nd Revised Leaf No. 57	17th Revised Leaf No.	99
2nd Revised Leaf No. 58	1st Revised Leaf No.	101
Original Leaf No. 58A		

Honorable James J. McNulty

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I also enclose the written pre-filed testimony of the Company's Accounting Panel, Forecasting Panel, Rate Panel and Mr. Hutcheson, Dr. Morin, Mr. Regan and Ms. Quin, and supporting schedules, including data required by the Commission's regulations.

Pike is engaged in the retail distribution and sale of electricity for residential, commercial and industrial purposes within the State of Pennsylvania. Pike serves approximately 4,600 residential and commercial electric customers in Pike County, Pennsylvania.

The increased rates and charges reflected in Supplement No. 46 are designed to produce additional revenues of \$1.2 million per year, which represents an increase of approximately 9.6% in the Company's electric revenues (including an estimate of electric supply costs for full service and retail access customers) based on the twelve months ending March 31, 2009. In addition, the Company is proposing an alternative three-year rate plan for its electric operations, which, if adopted, would establish rates for the three-year period ending March 31, 2012. Under the three-year levelized rate proposal advanced by the Company, the levelized annual increase would amount to \$614,400 per year. While the percentage and dollar impacts for the Company's three-year proposal currently are not available, the monthly bill impacts for customers would certainly be much lower under a three-year rate plan than a one year rate plan. The Company expects that the percentage and dollar impacts associated with the Company's three-year proposal will be fully developed through the Commission's rate case process.

Pike requests that Supplement No. 46 become effective on September 16, 2008. Pike's electric base rates were last increased in June 1993, over 15 years ago. Pike's current electric rates do not produce an adequate return on the Company's invested capital that is dedicated to the service of the Company's electric customers. The proposed rates for electric service are necessary to provide sufficient operating revenues to meet operating expenses (including depreciation), taxes and fixed charges, and provide a reasonable rate of return on the Company's investment in electric property. The proposed rates should be approved to enable Pike to maintain its creditworthiness at a level sufficient to raise capital necessary to perform properly its obligations to provide safe, adequate and proper service to its electric customers.

As set forth in the testimony of the Electric Rate Panel, the bills of all Pike's electric customers will be affected by this rate increase. Appendix A attached hereto sets forth, by service classification, the revenue increases associated with this filing.

As set forth in the testimony of Mr. Hutcheson, Pike also is requesting the Commission's approval to adjust its depreciation rates.

Pike hereby advises the Commission that it has elected to use the method of customer notification set forth in Section 53.45 (b)(2) of the Commission's regulations, 52 Pa. Code § 53.45 (b)(2). I enclose a copy of the Notice of Proposed Rate Changes sent to all Pike electric customers by first class mail on July 17, 2008. Also included is an affidavit stating that the required notice provisions have and will be complied with.

Honorable James J. McNulty

July 17, 2008

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As indicated in the attached Certificate of Service, Pike has served copies of this filing and all supporting data on the Office of Consumer Advocate, as required by Section 53.51(d) of the Commission's regulations, 52 Pa. Code § 53.51 (d), on the Office of Small Business Advocate, and on the Commission's Office of Trial Staff.

The Company is presenting the direct testimony of seven witnesses. The Accounting Panel will discuss the Company's various financial exhibits, capital structure, cost of service, and its proposed three-year rate plan. The Forecasting Panel will discuss the Company's electric sales and revenue forecasts. Angelo Regan will discuss the Company's capital expenditures, additions to plant and system reliability programs. Charles Hutcheson will discuss his recommendations regarding the Company's depreciation rates. Dr. Roger Morin will testify as to the fair and reasonable rate of return on the common equity capital invested by the Company in its electric delivery operations. The Electric Rate Panel will discuss the Company's Electric Embedded Cost of Service study, the Company's proposal for revenue allocation and rate design, the impact of the proposed rate changes on customers' bills, and other tariff changes. Jane Quin will discuss the Company's energy efficiency proposal. Pike specifically reserves the right to submit additional direct testimony in support of this filing.

Pike's legal counsel for this filing are as follows:

John J. Gallagher, Esq.  
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Consolidated Edison Company of New York, Inc.  
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Fax: 212.677.5850

Honorable James J. McNulty

July 17, 2008

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Please date and time-stamp the enclosed extra copy of this letter and return it to me in the envelope provided. If you have any questions regarding the enclosed filing or supporting data, please contact me at (212) 460-3308 or at the address listed above.

Very truly yours,

A handwritten signature in blue ink, appearing to read "Will @ Atzl".

William A. Atzl, Jr.  
Director – O&R Rates

Enclosures

c: Certificate of Service

**PIKE COUNTY LIGHT AND POWER COMPANY**

Impact of Proposed Rate Change on Total Billed Revenue  
For the 12 Months Ending March 31, 2009

Service Class	Type of Service	Annual Bills	Total Sales (kWh)	Total Revenue* at:		Increase:	
				Present Rates (\$000)	Proposed Rates (\$000)	Rev Change (\$000)	Percent Change
1	Residential Service	43,268	28,783,000	4,738	5,412	674	14.2%
2	General Secondary Service	10,887	31,889,000	5,129	5,506	377	7.3%
2	General Primary Service	84	14,995,000	2,269	2,357	88	3.9%
3	Municipal Street Lighting	60	208,000	63	83	20	31.6%
4	Private Area Lighting	<u>1,248</u>	<u>214,000</u>	<u>51</u>	<u>64</u>	<u>13</u>	<u>25.2%</u>
Total		55,547	76,089,000	12,251	13,422	1,172	9.6%

\* For comparison purposes, an estimated electric supply charge for retail access customers has been included in total revenues.

## CERTIFICATE OF SERVICE

I hereby certify that a true and correct copy of the foregoing document has been served upon the following persons, in the manner indicated, in accordance with the requirements of 52 Pa. Code § 1.54 (relating to service by a participant).

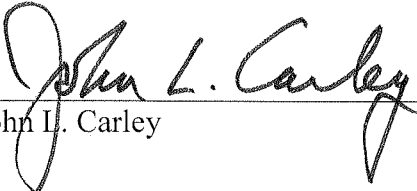
### VIA FIRST CLASS MAIL

Irwin A. Popowsky  
Consumer Advocate  
Office of Consumer Advocate  
555 Walnut Street  
Forum Place, 5th Floor  
Harrisburg, PA 17101-1923

Robert V. Eckenrod, Esquire  
Office of Trial Staff  
PA Public Utility Commission  
Commonwealth Keystone Building  
400 North Street, 2nd Floor West  
PO Box 3265  
Harrisburg, PA 17105-3265

William R. Lloyd, Jr.  
Small Business Advocate  
Office of Small Business Advocate  
Commerce Building Suite 1102  
300 North Second Street  
Harrisburg, PA 17101

Date: July 18, 2008

  
John L. Carley



July 17, 2008

## NOTICE OF PROPOSED RATE CHANGES

To Our Customers:

Pike County Light & Power Company (Company) is filing a request with the Pennsylvania Public Utility Commission (PUC) to increase your electric rates as of September 16, 2008. However, the Company anticipates the PUC will follow its normal procedure and suspend rates for nine months, therefore new rates will not become effective until April 2009. This notice describes the Company's rate request, the PUC's role, and what actions you can take.

### **THE LEVEL OF THE PROPOSED RATE INCREASE**

The Company has requested an overall rate increase of \$1.2 million per year. If the Company's entire request is approved, the total bill for a residential customer using 660 kWh would increase from \$109.47 to \$125.37 per month or by 14.5%.

The total bill for a commercial customer using 3,600 kWh would increase from \$579.32 to \$621.20 per month or by 7.2%.

In addition, the Company is proposing an alternative three-year rate plan for its electric operations, which, if adopted, would establish rates for the three-year period ending March 2012. Under the three-year levelized rate proposal advanced by the Company, the levelized annual increase would amount to \$614,400 per year. While the percentage and dollar impacts for the Company's three-year proposal currently are not available, the monthly bill impacts for customers would certainly be much lower under a three-year rate plan than a one year rate plan.

To find out your customer class or how the requested increase may affect your electric bill, please contact the Company at 1-877-434-4100. The rates requested by the Company may be found in Supplement No. 46 to the Company's electric tariff, Electric – Pa. P.U.C. No. 8. You may examine the material filed with the PUC which explains the requested increase and the reasons for it. A copy of this material is kept at the Company's office located at 311 Broad Street, Milford, Pennsylvania.

### **THE PROCESS FOR APPROVING THE REQUESTED RATE INCREASE**

The state agency which approves rates for public utilities is the PUC. The PUC will examine the requested rate increase and can prevent existing rates from changing until it investigates and/or holds hearings on the request. The Company must prove that the requested rates are reasonable. After examining the evidence, the PUC may grant all, some, or none of the request or may reduce existing rates.

The PUC may change the amount of the rate increase or decrease requested by the Company for each customer class. As a result, the rate charged to you may be different than the rate requested by the Company and shown above.

### **HOW TO CHALLENGE THE RATE INCREASE**

There are three ways to challenge the Company's request to change its rates:

1. You can file a formal complaint. If you want a hearing before a judge, you must file a formal complaint. By filing a formal complaint, you assure yourself the opportunity to take part in hearings about the rate increase request. All complaints should be filed with the PUC before September 16, 2008. If no formal complaints are filed, the PUC may grant all, some or none of the request without holding a hearing before a judge.
2. You can send the PUC a letter telling why you object to the requested rate increase. Sometimes there is information in these letters that makes the PUC aware of problems with the company's service or management. This information can be helpful when the PUC investigates the rate request.

Send your letter or request for a formal complaint form to the Pennsylvania Public Utility Commission, Post Office Box 3265, Harrisburg, PA 17105-3265.

3. You can be a witness at a public input hearing. Public input hearings are held if the PUC opens an investigation of the Company's rate increase request and if there are a large number of customers interested in the case. At these hearings you have the opportunity to present your views in person to the PUC judge hearing the case and the Company's representatives. All testimony given "under oath" becomes part of the official rate case record. These hearings are held in the service area of the Company.

Pike County Light & Power Company

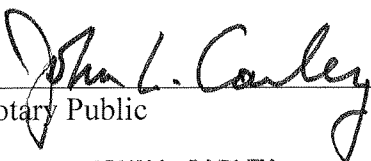
**AFFIDAVIT**

In accordance with 52 Pa. Code § 53.45 (h), William A. Atzl, Jr., being duly sworn according to law, deposes and says that he is Director, O&R Rates for Pike County Light & Power Company (“Pike”); and that, regarding the electric base rate filing that Pike has requested be effective September 16, 2008, the notice requirements pursuant to 52 Pa. Code § 53.45 et seq. have been met to the best of his knowledge, information and belief.



William A. Atzl, Jr.  
Director, O&R Rates

Sworn and subscribed before me  
The 17th day of July 2008.

  
\_\_\_\_\_  
Notary Public

**JOHN L. CARLEY**  
Notary Public, State of New York  
No. 4906281  
Qualified in Rockland County  
Commission Expires August 31, **2009**

PIKE COUNTY LIGHT & POWER COMPANY

RATES AND RULES  
GOVERNING THE  
FURNISHING OF  
ELECTRIC SERVICE

IN

THE BOROUGHS OF MATAMORAS AND MILFORD  
AND VICINITY,  
PIKE COUNTY, PENNSYLVANIA

(See Leaf No. 7)

ISSUED: July 18, 2008

EFFECTIVE: September 16, 2008

ISSUED BY: John D. McMahon, President  
Milford, Pennsylvania

NOTICE

This Supplement increases existing rates. (See Leaf No. 2)

**2. CHANGES MADE BY THIS SUPPLEMENT**

Supplement No. 46 has been filed to reflect:

- (1) increased delivery charges applicable to Service Classification Nos. 1, 2, 3, and 4;
- (2) a roll in of the State Tax Adjustment Surcharge, Part 1, into delivery rates;
- (3) a revised reconnection charge; and
- (4) the implementation of a late payment charge.

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ISSUED: July 18, 2008

EFFECTIVE: September 16, 2008

ISSUED BY: John D. McMahon, President  
Milford, Pennsylvania

PIKE COUNTY LIGHT & POWER COMPANY

44th REVISED LEAF NO. 3  
SUPERSEDING 43rd REVISED LEAF NO. 3

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ISSUED:	July 18, 2008	EFFECTIVE:	September 16, 2008
ISSUED BY:	John D. McMahon, President Milford, Pennsylvania		

PIKE COUNTY LIGHT & POWER COMPANY

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PIKE COUNTY LIGHT & POWER COMPANY

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PIKE COUNTY LIGHT & POWER COMPANY

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ISSUED:	July 18, 2008	EFFECTIVE:	September 16, 2008
ISSUED BY:	John D. McMahon, President Milford, Pennsylvania		

**RULES AND REGULATIONS**

10. METERING AND BILLING (Continued)

10.5 RENDERING OF BILLS: (Continued)

Bills for service are normally rendered monthly. When the Company is unable to obtain meter readings on regular reading dates, bills are rendered (1) on readings by customers if said readings are received on or before the date shown on the meter indexing card, or (2) on estimated readings. Amounts billed on the basis of such estimates are subject to adjustment in accordance with the next meter readings obtained by the Company.

In case any meter for any reason fails to register the full usage of service by the customer for any period of time, the usage of service by the customer may be estimated by the Company on the basis of available data, and the customer billed accordingly.

10.6 LATE PAYMENT CHARGE: (C)

The Company may impose late payment charges on any bill not paid within five days of the due date at the rate of one and one-half percent (1.5%) per month on the overdue balance of the bill. The interest rate, when annualized, will not exceed 18% simple interest per annum.

10.7 CHANGE OF RATE: (C)

Service Classifications and Rules and Regulations under which customers are served are subject to such changes as may be lawfully made.

Customers taking service under a rate schedule so revised shall thereafter take and pay for service in accordance with the provisions of the revised, superseding or substituted schedule so established.

10.8 BILLING OPTIONS: (C)

The Company will bill the customer for all applicable charges unless the customer has chosen to have an Electric Generation Supplier bill the customer for the energy and capacity services provided by the Electric Generation Supplier.

(C) Indicates Change

(Continued)

**RULES AND REGULATIONS**

10. METERING AND BILLING (Continued)

10.9 BUDGET BILLING:

(C)

Residential customers, customers who are a condominium association or a cooperative housing corporation, master metered electrically heated multifamily dwelling units during the time that such unit is either owned by the Federal Department of Housing and Urban Development or subject to a first mortgage held or guaranteed by that agency, any customer taking service under Special Provision B of Service Classification No. 2, and any non-residential customer taking secondary service, unless otherwise prohibited, may elect to pay for service taken in accordance with the following provisions:

- A. The customer will make equal monthly payments during the Budget Year based on the Company's estimate of the customer's total cost for the Budget Year; and
- B. If at the end of the Budget Year, the amount paid by the customer is less than the amount due for actual service rendered:
  - (1) the balance due for residential customers, customers who are a condominium association, cooperative housing corporation, and master metered electrically heated multifamily dwelling units during the time that such units are either owned by the Federal Department of Housing and Urban Development or subject to a first mortgage held or guaranteed by that agency shall be billed and payable by the customer during the next six monthly billing periods; or
  - (2) the balance due for all other customers will be billed in the month ending the budget year and shall be payable by the customer in full at that time.
- C. If at the end of the Budget Year, the amount paid by the customer is greater than the amount due for actual service rendered, the Company shall apply a credit to the customer's account equal to the amount overpaid or, at the customer's request, shall refund an amount equal to the overpayment.

The Budget Year will be the twelve-month period beginning with the billing month the customer initially enrolls in budget billing.

(C) Indicates Change

(Continued)

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ISSUED: July 18, 2008

EFFECTIVE: September 16, 2008

ISSUED BY: John D. McMahon, President  
Milford, Pennsylvania

**RULES AND REGULATIONS**

10. METERING AND BILLING (Continued)

10.9 BUDGET BILLING: (Continued) (C)

An Electric Generation Supplier's charges will be included in the customer's budget billing plan if the customer and Electric Generation Supplier so indicate.

The monthly budget payment will normally be adjusted at the end of the Budget Year to reflect any changes in the Company's charges or the customer's usage during the Budget Year. The Company may also adjust the monthly budget payment during the Budget Year should conditions warrant a change.

When a customer elects budget billing for both gas and electric service, the monthly budget payment will be based on the combined cost of providing gas and electric service.

Should a customer fail to make a monthly budget payment when due, the Company shall have the right to cancel the budget billing plan. Upon cancellation any overpayment will be credited to the customer's account and any deficiency shall be due and payable.

10.10 PAYMENT PROCESSING: (C)

The Company must receive and process all payments for amounts reflected on the Company's bill.

If a customer remits a partial payment to the Company, that payment will be posted to the customer's account in the following order:

(C) Indicates Change

(Continued)

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ISSUED: July 18, 2008 EFFECTIVE: September 16, 2008

ISSUED BY: John D. McMahon, President  
Milford, Pennsylvania

PIKE COUNTY LIGHT & POWER COMPANY

2nd REVISED LEAF NO. 36  
SUPERSEDING 1st REVISED LEAF NO. 36

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**RULES AND REGULATIONS**

10. METERING AND BILLING (Continued)

10.10 PAYMENT PROCESSING: (Continued) (C)

1. Outstanding balance before Direct Access or the installment amount for a payment agreement on this balance;
2. Balance due or the installment amount for a payment agreement for the Competitive Transition Charge;
3. Balance due or the installment amount for a payment agreement for Delivery Service and Customer Charges;
4. Current Delivery Service and Customer Charges;
5. Balance due for prior charges for Default Service (if the Company is providing Default Service) or Competitive Energy Supply (if the Company is billing for Electric Generation Supplier charges);
6. Current charges for Default Service (if the Company is providing Default Service) or Competitive Energy Supply (if the Company is billing for Electric Generation Supplier charges);
7. Non-basic service charges.

(C) Indicates Change

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ISSUED: July 18, 2008 EFFECTIVE: September 16, 2008

ISSUED BY: John D. McMahon, President  
Milford, Pennsylvania

PIKE COUNTY LIGHT & POWER COMPANY

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RULES AND REGULATIONS

15. INTERRUPTION AND DISCONTINUANCE OF SERVICE TO RESIDENTIAL CUSTOMERS  
(Continued)

15.2 DISCONTINUANCE OF SERVICE (Continued)

(B) Other Premises or Dwellings:

- (1) When a residential customer requests discontinuance: at a dwelling other than his or her residence; or at a single meter multi-family residence, whether or not his or her residence but in either case, only under the following conditions:
  - (a) The residential customer states in writing that the premises are unoccupied and such statement shall be on a form conspicuously bearing notice that information provided by the residential customer will be relied upon by the Pennsylvania Public Utility Commission in administering a system of uniform service standards for public utilities, and that any false statements are punishable criminally; or
  - (b) The occupant(s) affected by proposed cessation inform the Company orally or in writing of their consent to the discontinuation.
- (2) Where the conditions set forth in subsection (1) of this paragraph have not been met, the residential customer will continue to be responsible for payment of bills until the Company terminates service in accordance with Section 13.6(A) of this tariff (relating to general rule).

16. RESTORATION OF SERVICE (C)

16.1 General Provisions

(A) Requirements for Residential Reconnection (C)

When service to a dwelling has been terminated, the Company shall inform the applicant or residential customer where payment can be made to restore service and shall reconnect service after receiving:

- (1) Full payment of any outstanding charges plus a reconnection fee of \$27.00 if the residential customer or applicant has a household income exceeding 300 percent of the Federal Poverty Level or has defaulted on two or more payment agreements. If an applicant or residential customer with household income exceeding 300 percent of the Federal Poverty Level experiences a life event the residential customer or applicant shall be permitted a period of not more than three months to pay the outstanding balance required for reconnection. For purposes of this paragraph, a life event is a job loss that extended beyond nine months, a serious illness that extended beyond nine months, or death of the primary wage earner; or

(C) Indicates Change

(Continued)

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ISSUED: July 18, 2008 EFFECTIVE: September 16, 2008

ISSUED BY: John D. McMahon, President  
Milford, Pennsylvania

**RULES AND REGULATIONS**

16. RESTORATION OF SERVICE (C)

16.1 General Provisions (Continued)

(A) Requirements for Residential Reconnection (Continued) (C)

- (2) Full payment of a reconnection charge of \$27.00 and a payment over 12 months of any outstanding charges if the residential customer or applicant has a household income exceeding 150 percent of the Federal Poverty Level but not greater than 300 percent of the Federal Poverty Level; or
- (3) Full payment of a reconnection charge of \$27.00 and a payment over 24 months of any outstanding charges if the residential customer or applicant has a household income not exceeding 150 percent of the Federal Poverty Level; or
- (4) Payment of any outstanding balance or payment of a portion of the outstanding balance if the applicant resided at the premises for which service is being requested during the time that the outstanding balance accrued. The Company may establish that the applicant resided at the premises for which service is requested through the use of mortgage, deed, or lease information or a commercially available credit reporting service or by other methods approved by the Commission.

(B) Requirements for Non-Residential Connection (C)

When service to a non-residential building has been terminated, the Company shall inform the applicant where payment can be made to restore service and shall reconnect service after receiving full payment of any outstanding charges plus a reconnection fee of \$27.00.

(C) Timing of Reconnection (C)

The Company shall restore service, provided that the applicant has met all conditions for the restoration of service, as follows:

- (1) Within 24 hours for erroneous terminations or upon receipt by the Company of a valid medical certification,
- (2) Within 24 hours for termination occurring after November 30 and before April 1,
- (3) Within three days for erroneous terminations requiring street or sidewalk digging,
- (4) Within three days from April 1 to November 30 for proper terminations,
- (5) Within seven days for proper terminations requiring street or sidewalk digging.

(C) Indicates Change

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ISSUED: July 18, 2008 EFFECTIVE: September 16, 2008

ISSUED BY: John D. McMahon, President  
Milford, Pennsylvania

**RULES AND REGULATIONS**

16. RESTORATION OF SERVICE (C)

16.2 PERSONNEL AVAILABLE TO RESTORE SERVICE (C)

The Company shall have adequate personnel available between 9 a.m. and 5 p.m. on each working day, or for a commensurate period of eight consecutive hours, to restore service when required under this Section.

(C) Indicates Change

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ISSUED: July 18, 2008 EFFECTIVE: September 16, 2008

ISSUED BY: John D. McMahon, President  
Milford, Pennsylvania



PIKE COUNTY LIGHT & POWER COMPANY

15th REVISED LEAF NO. 84  
SUPERSEDING 14th REVISED LEAF NO. 84

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**STATE TAX ADJUSTMENT SURCHARGE**

In addition to the charges provided in this tariff, except for charges or credits applied under the Income Tax Adjustment, a two part surcharge will be assessed for all service rendered on and after the effective date of this leaf.

Part 1 will include Capital Stock Tax, Corporate Income Tax, Public Utility Realty Tax, Gross Receipts Tax and the STAS Reconciliation, which will be applied to all charges except Default Service Charges. Part 1 is 0.0%. Part 2 (D) will include Gross Receipts Tax, which will be applied to Default Service Charges. Part 2 is a surcharge of 0.29%.

Each part of the State Tax Adjustment Surcharge will be recomputed using the elements prescribed by the Commission whenever the Company experiences a material change in any of the taxes used in calculation of the surcharge. Such recalculation will be submitted to the Commission within 10 days after the occurrence of the event which occasions such recomputation. If the recomputed surcharge is less than the one in effect the utility will, or if the recomputed surcharge is more than the one in effect the utility may, submit with such recomputation a tariff or supplement to reflect such recomputed surcharge. The effective date of such tariff or supplement shall be ten days after filing. Any charges or credits in the surcharge shall be rolled into base rates in the Company's next base rate proceeding.

**TAX INDEMNIFICATION**

If the Company becomes liable under Section 2806(g) or 2809(c) of the Public Utility Code, 66 Pa. C.S. Section 2806(g) or 2809(f), for Pennsylvania state taxes not paid by an Electric Generation Supplier (EGS), the non-compliant EGS shall indemnify the Company for the amount of additional state tax liability imposed upon the Company by the Pennsylvania Department of Revenue due to the failure of the EGS to pay or remit to the Commonwealth the tax imposed on its gross receipts under Section 1101 of the Tax Report Code of 1971 or Chapter 28 of Title 66.

(D) Indicates Decrease

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ISSUED: July 18, 2008                                      EFFECTIVE: September 16, 2008  
ISSUED BY: John D. McMahon, President  
               Milford, Pennsylvania

PIKE COUNTY LIGHT & POWER COMPANY

SERVICE CLASSIFICATION NO. 1

APPLICABLE TO USE OF SERVICE FOR:

Residential service, including Space Heating.

CHARACTER OF SERVICE:

Continuous, 60 cycles, A.C., from any one of the following systems as designated by the Company:

- (a) Single phase approximately 120, 120/208 or 120/240 Volts,
- (b) Three phase four wire at approximately 208 Volts in limited areas.

RATE - FOUR PART - MONTHLY:

(1) Customer Charge ... .. \$8.00 per month (I)

(2) Energy Charge (¢ per kWh)

	<u>Delivery Charge (I)</u>	<u>System Benefits Charge</u>
First 1,000 kWh .....	5.8232	0.0251
Over 1,000 kWh .....	5.0319	0.0251

(3) Default Service Charge

A Default Service Charge, determined in accordance with Section No. 18 of the Rules and Regulations, shall apply to customers taking Default Service from the Company. This charge is not applicable to customers obtaining Competitive Energy Supply.

(4) State Tax Adjustment Surcharge

The State Tax Adjustment Surcharge included in this Tariff is applied to all charges under this Service Classification. Part 1 of The State Tax Adjustment Surcharge applies to all charges except Default Service Charges. Part 2 of the State Tax Adjustment Surcharge applies to Default Service Charges.

(I) Indicates Increase

(Continued)

ISSUED: July 18, 2008 EFFECTIVE: September 16, 2008

ISSUED BY: John D. McMahon, President  
Milford, Pennsylvania

PIKE COUNTY LIGHT & POWER COMPANY

**SERVICE CLASSIFICATION NO. 1 (Continued)**

**MINIMUM CHARGE EACH CONTRACT EACH LOCATION:**

\$8.00 monthly, not less than \$48.00 per contract. (I)

**TERMS OF PAYMENT:**

Bills are due and payable on or before twenty days from date bill is mailed to customer. If bill is not paid within twenty days, service may be discontinued after suitable written notice as outlined in the Rules and Regulations.

**TERM:**

Terminable at any time unless a specified period is required under a line extension agreement.

**EXTENSION OF FACILITIES:**

Where service is supplied from an extension the minimum monthly charges thereon shall be determined as provided in the Rules and Regulations.

**SPECIAL PROVISIONS:**

**A. WATER HEATING:**

Where an approved electric storage heater is used for the customer's entire water heating requirement, the Energy Charge for monthly use in excess of 300 kWh up to and including 700 kWh will be as follows:

Delivery Charge	5.0319 ¢ per kWh	(I)
System Benefits Charge	0.0251 ¢ per kWh	

Except for usage as stated above, the provisions of RATE - FOUR PART - MONTHLY shall apply.

(I) Indicates Increase

(Continued)

**SERVICE CLASSIFICATION NO. 1 (Continued)**

**SPECIAL PROVISIONS: (Continued)**

**A. WATER HEATING: (Continued)**

An approved electric water heater is one that has a minimum storage capacity of 40 gallons and two heating elements with the upper and lower elements so interlocked that they may not operate simultaneously. The size of the elements shall not exceed those listed in the tabulation below:

Gallons	<u>40</u>	<u>50</u>	<u>66</u>	<u>82</u>	<u>110</u>
Upper element, Maximum Watts	4500	1500	2500	3000	4000
Lower element, Maximum Watts	4500	1000	1500	1500	2500

The 40 gallon heater is restricted to use in mobile homes and individual apartments.

**B. SHORT TERM SERVICE:**

Customers desiring service under this Schedule on a short term basis, where service is already installed, shall pay in advance the contract minimum as specified under "Minimum Charge Each Contract Each Location" or under an applicable line extension agreement, or, if the estimated bill for two months or such shorter period as service may be desired exceeds the contract minimum, the Company reserves the right to request a deposit equal to this estimated bill. A part of a month shall be considered a full month for computing all charges hereunder.

**C. BUDGET BILLING (OPTIONAL):**

(C)

Any customer taking service hereunder may, upon request, be billed monthly in accordance with the budget billing plan provided for in Section 10.9 of the Rules and Regulations.

(C) Indicates Change

ISSUED: July 18, 2008

EFFECTIVE: September 16, 2008

ISSUED BY: John D. McMahon, President  
Milford, Pennsylvania

PIKE COUNTY LIGHT & POWER COMPANY

**SERVICE CLASSIFICATION NO. 2**

**APPLICABLE TO USE OF SERVICE FOR:**

General Service, secondary or primary. All service at each location shall be taken through one meter.

**CHARACTER OF SERVICE:**

Continuous, 60 cycles, A.C., single or three phase secondary at approximately 120/208, 120/240 Volts, and 277/480 Volts where available; or single or three phase primary at approximately 2400 Volts Delta where available.

**RATE - FIVE PART - MONTHLY:**

(1) Customer Charge (\$/month)

Secondary (I) Primary (C) (I)

\$10.00 \$105.00

Secondary      Primary      System  
Delivery      Delivery      Benefits  
Charge (I) Charge(C) (I)      Charge\*

(2) Demand Charge (\$/kW)

First 5 kW .....	No Charge	No Charge	No Charge
Over 5 kW .....	3.37	3.13	No Charge

(3) Energy Charge (¢ per kWh)

First 100 Hours Use of Billing Demand .....			
First 300 kWh .....	6.1166	5.6820	0.0251
Next 700 kWh .....	5.6423	5.2414	0.0251
Over 1,000 kWh.....	4.3760	4.0651	0.0251
Next 100 Hours Use of Billing Demand .....	3.8246	3.5528	0.0251
Over 200 Hours Use of Billing Demand .....	3.7145	2.3400	0.0251

\* Applies to both secondary and primary service.

(I) Indicates Increase  
(C) Indicates Change

(Continued)

ISSUED: July 18, 2008 EFFECTIVE: September 16, 2008

ISSUED BY: John D. McMahon, President  
Milford, Pennsylvania

PIKE COUNTY LIGHT & POWER COMPANY

15th REVISED LEAF NO. 89  
SUPERSEDING 14th REVISED LEAF NO. 89

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**SERVICE CLASSIFICATION NO. 2 (Continued)**

**RATE - FIVE PART - MONTHLY:** (Continued)

(4) Default Service Charge

A Default Service Charge, determined in accordance with Section No. 18 of the Rules and Regulations, shall apply to customers taking Default Service from the Company. This charge is not applicable to customers obtaining Competitive Energy Supply.

(5) State Tax Adjustment Surcharge

The State Tax Adjustment Surcharge included in this Tariff is applied to all charges under this Service Classification. Part 1 of the State Tax Adjustment Surcharge applies to all charges except Default Service Charges. Part 2 of the State Tax Adjustment Surcharge applies to the Default Service Charges.

**MINIMUM MONTHLY CHARGE:**

For secondary service, \$10.00 plus the demand charge. For primary service, \$105.00 plus the demand charge.

(I) Indicates Increase

(Continued)

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ISSUED: July 18, 2008

EFFECTIVE: September 16, 2008

ISSUED BY: John D. McMahon, President  
Milford, Pennsylvania

PIKE COUNTY LIGHT & POWER COMPANY

19th REVISED LEAF NO. 91  
SUPERSEDING 18th REVISED LEAF NO. 91

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**SERVICE CLASSIFICATION NO. 2 (Continued)**

**TERM:**

Secondary service is terminable at any time after six months unless a longer period is required under a line extension agreement.

Primary service is terminable at any time after one year upon ninety days written notice. The Company reserves the right to require a longer initial term where special construction is required to furnish the service.

**SPECIAL PROVISIONS:**

**A. SHORT TERM SECONDARY SERVICE:**

When short term service is requested, the Company reserves the right to require a deposit of the estimated bill for the period service is desired. The minimum charge for such short term service shall be an amount equal to six times the minimum monthly charge, payable in advance. When construction is necessary, the cost of installation and removal of all equipment, less salvage value, shall be borne by the customer, and a sufficient amount to cover these charges shall be paid in advance. A part of a month shall be considered a full month for computing all charges hereunder.

**B. SPACE HEATING:**

Customers who take service under this Service Classification for 10 kW or more of permanently installed space heating equipment may elect to have the electricity for this service billed separately. All monthly use will be billed at the following rates:

Delivery Charge	4.0999¢ per kWh	(I)
System Benefits Charge	0.0251¢ per kWh	

When this option is requested, it shall apply for at least 12 months and shall be subject to a minimum charge of \$31.32 per year per kW of space heating capacity. This rule applies for both heating and cooling where the two services are combined by the manufacturer in a single self-contained unit.

All usage under this Special Provision shall also be subject to Parts (4) and (5) of RATE - FIVE PART - MONTHLY.

(I) Indicates Increase

(Continued)

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ISSUED:	July 18, 2008	EFFECTIVE:	September 16, 2008
ISSUED BY:	John D. McMahon, President Milford, Pennsylvania		

PIKE COUNTY LIGHT & POWER COMPANY

2nd REVISED LEAF NO. 92  
SUPERSEDING 1st REVISED LEAF NO. 92

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**SERVICE CLASSIFICATION NO. 2 (Continued)**

**SPECIAL PROVISIONS: (Continued)**

**C. BUDGET BILLING (OPTIONAL)**

Any HUD financed housing project, condominium association or cooperative housing corporation who takes service hereunder and any customer who takes service under Special Provision B of this Service Classification may, upon request, be billed monthly in accordance with the budget billing plan provided for in Section 10.9 of the Rules and Regulations. (C)

**D. OPTIONAL RATE FOR VOLUNTEER FIRE COMPANIES AND NON-PROFIT SENIOR CITIZEN CENTERS**

Pursuant to Act 103 of 1985 and Act 203 of 2002, Volunteer Fire Companies and Non-Profit Senior Citizen Centers, and Non-Profit Ambulance Services and Non-Profit Rescue Squads, respectively, may elect to have electric service rendered at the rates and charges included in Service Classification No. 1 of this Tariff under the title "RATE - FOUR - PART MONTHLY". This provision is available upon application and execution of a contract by the Customer for a minimum term of one year.

(C) Indicates Change

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ISSUED: July 18, 2008 EFFECTIVE: September 16, 2008  
ISSUED BY: John D. McMahon, President  
Milford, Pennsylvania



PIKE COUNTY LIGHT & POWER COMPANY

14th REVISED LEAF NO. 93  
SUPERSEDING 13th REVISED LEAF NO. 93

SERVICE CLASSIFICATION NO. 3

**APPLICABLE TO USE OF SERVICE FOR:**

Municipal Street Lighting, where the Company furnishes all equipment, except as provided for below, and maintains and operates the system.

**CHARACTER OF SERVICE - MULTIPLE:**

Continuous, alternating current, 60 cycles, 120 Volts, single phase. Units will be photoelectrically controlled and operate approximately 4100 hours per year, and mounted on wood poles for Overhead Services.

**RATE - THREE PART - MONTHLY:**

(1) Luminaire Charge (\$/month)

<u>Nominal Lumens</u>	<u>Luminaire Type</u>	<u>Nominal Wattage</u>	<u>Total Wattage</u>	<u>Delivery Charge</u> (I)	<u>System Benefits Charge</u>
<u>Street Lighting Luminaries</u>					
5,800	Sodium Vapor	70	108	\$ 14.25	\$0.01
9,500	Sodium Vapor	100	142	15.60	0.01
16,000	Sodium Vapor	150	199	17.72	0.02
27,500	Sodium Vapor	250	311	22.72	0.03
46,000	Sodium Vapor	400	488	29.93	0.04

Flood Lighting Luminaires

27,500	Sodium Vapor	250	311	24.11	0.03
46,000	Sodium Vapor	400	488	30.63	0.04

The following luminaires will no longer be installed. Charges are for existing installations only:

4,000	Mercury Vapor	100	127	10.16	0.01
7,900	Mercury Vapor	175	211	12.71	0.02
12,000	Mercury Vapor	250	296	17.02	0.03
22,500	Mercury Vapor	400	459	22.72	0.04
1,000*	Incandescent	92	92	7.38	0.01
2,500*	Incandescent	189	189	10.76	0.02

\* Indicates those luminaires that no longer will be repaired.  
See Special Provision B.

(I) Indicates Increase

(Continued)

ISSUED: July 18, 2008 EFFECTIVE: September 16, 2008

ISSUED BY: John D. McMahon, President  
Milford, Pennsylvania

PIKE COUNTY LIGHT & POWER COMPANY

**SERVICE CLASSIFICATION NO. 3**

**RATE - THREE PART - MONTHLY:** (Continued)

(1) Luminaire Charge (\$/month) (Continued)

**Types of Service and Additional Charges:**

1. Overhead Service - Pole Mounted, 8' Upsweep 1-1/4" and 2" Aluminum Brackets for side mounted Units. For 15' Upsweep Brackets add \$5.28 per year. (I)
2. Underground Service - Aluminum Standards, where the Company owns and maintains the underground duct system, with a 120' maximum distance between light centers installed on one side of street, the above prices are increased by \$203.16 per year. Where a customer owns and maintains an underground duct system, including the cable, which is adequate in the opinion of the Company's engineers, the above prices are increased by \$49.20 per year. (I)

(2) Default Service Charge

A Default Service Charge, determined in accordance with Section No. 18 of the Rules and Regulations, shall apply to customers taking Default Service from the Company. This charge is not applicable to customers obtaining Competitive Energy Supply.

The Default Service Charge shall apply to the kWh estimated in the following manner:

$$\text{kWh} = (\text{Total Wattage} \div 1,000) \text{ Times Monthly Burn Hours}^*$$

\* See Monthly Burn Hours Table.

(I) Indicates Increase

(Continued)

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ISSUED: July 18, 2008

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ISSUED BY: John D. McMahon, President  
Milford, Pennsylvania

PIKE COUNTY LIGHT & POWER COMPANY

17th REVISED LEAF NO. 99  
SUPERSEDING 16th REVISED LEAF NO. 99

SERVICE CLASSIFICATION NO. 4

APPLICABLE TO USE OF SERVICE FOR:

Private overhead street, yard or flood Mercury Vapor and Sodium Vapor lighting.

CHARACTER OF SERVICE - MULTIPLE:

Continuous, 60 cycles, A. C., 120 Volts, single phase. Units will be photoelectrically controlled and operate approximately 4100 hours per year.

RATE - THREE PART - MONTHLY

(1) Luminaire Charge (\$/month)

<u>Lumens</u>	<u>Nominal Wattage</u>	<u>Total Wattage</u>	<u>Delivery Charge</u> (I)	<u>System Benefits Charge</u>
<u>Mercury Vapor</u>				
Open Bottom Luminaires				
4,000	100	127	\$ 8.97	\$0.01
7,900	175	215	11.06	0.02
Closed Bottom Luminaires				
4,000	100	127	10.00	0.01
7,900	175	211	12.11	0.02
Closed Bottom Luminaires and Floodlighting				
12,000	250	296	15.78	0.03
22,500	400	459	20.51	0.04
59,000	1,000	1,105	40.74	0.09
<u>Sodium Vapor</u>				
46,000	400	488	24.86	0.04

(2) Default Service Charge

A Default Service Charge, determined in accordance with Section No. 18 of the Rules and Regulations, shall apply to customers taking Default Service from the Company. This charge is not applicable to customers obtaining Competitive Energy Supply.

The Default Service Charge shall apply to the kWh estimated in the following manner:

$$\text{kWh} = (\text{Total Wattage} \div 1,000) \text{ Times Monthly Burn Hours}^*$$

\* See Monthly Burn Hours Table.

(I) Indicates Increase

(Continued)

ISSUED: July 18, 2008

EFFECTIVE: September 16, 2008

ISSUED BY: John D. McMahon, President  
Milford, Pennsylvania

PIKE COUNTY LIGHT & POWER COMPANY

**SERVICE CLASSIFICATION NO. 4 (Continued)**

**TERM:**

Contracts are made for an initial period of one year and continue in force thereafter, until terminated by seven days' written notice.

**SPECIAL PROVISIONS:**

- A. Complete lighting units, installed according to Company standards, will be pole mounted for private road, yard or flood lighting service at the monthly charge per lamp hereinabove set forth. The Company will construct any required extension of service on private property and the customer shall reimburse the Company for the actual cost of such construction. The Company will furnish and install the complete lighting unit, make the necessary lamp renewals, and maintain the installation.
- B. Short Term Service will be furnished only upon prepayment of the cost of installation and removal of equipment, less salvage value. For Recurring Seasonal Service the charges for the 12 months' period are due and payable in advance each year on the anniversary date of the contract.
- C. Service for existing incandescent 92 Watt units will be billed at a monthly charge of \$7.24 until the contract is terminated by mutual agreement. (I)
- D. Fifteen foot brackets are available at an additional cost of \$5.28 per year. (I)

(I) Indicates Increase

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ISSUED: July 18, 2008 EFFECTIVE: September 16, 2008

ISSUED BY: John D. McMahon, President  
Milford, Pennsylvania

**PIKE COUNTY LIGHT & POWER COMPANY  
ELECTRIC RATE CASE  
DIRECT TESTIMONY OF  
ACCOUNTING PANEL**

1 Q. Would the members of the Accounting Panel please state  
2 your names and business addresses.

3 A. Kenneth A. Kosior, One Blue Hill Plaza, Pearl River,  
4 New York 10965.

5 Richard A. Kane, 4 Irving Place, New York, New York  
6 10003.

7 Stephen D. Prager, 4 Irving Place, New York, New York  
8 10003.

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

10 A. **(Kosior)** I am employed by Orange and Rockland  
11 Utilities, Inc. ("Orange and Rockland" or "O&R") where  
12 I hold the position of Director - Financial Services.

13 **(Kane)** I am employed by Consolidated Edison Company of  
14 New York, Inc. ("Con Edison"), where I hold the  
15 position of Department Manager of Regulatory Filings.

16 **(Prager)** I am employed by Con Edison where I hold the  
17 position of Senior Accountant in Regulatory Filings.

18 Q. Please explain your educational background, work  
19 experience, and current general responsibilities.

20 A. **(Kosior)** I graduated from Pace University in 1976 with  
21 a Bachelor of Business Administration degree, having  
22 majored in Accounting. In June 1980, I received a  
23 Masters of Business Administration degree from

## ACCOUNTING PANEL

1 Fairleigh Dickinson University, having majored in  
2 Accounting and Finance. After graduation from Pace, I  
3 was employed by Homa Company as a staff accountant. I  
4 joined Orange and Rockland in July 1979 as an Associate  
5 Accountant advancing to Supervisor-Payroll, Supervisor  
6 & Manager-General Accounting where I had the  
7 responsibility of administering and supervising all  
8 employee related payroll records and subsequently the  
9 books and records of Orange and Rockland and its  
10 subsidiaries, including Pike County Light & Power  
11 Company ("Pike" or the "Company"). In June 1989, I was  
12 promoted to Manager-Budgets and was responsible for the  
13 development and management of the operating and capital  
14 budgets. My additional duties included forecasting and  
15 analyzing the corporate financial statements. I was  
16 named Strategic Analysis Principal in October 1994 and  
17 became responsible for developing, analyzing and  
18 evaluating corporate direction and business  
19 opportunities. In June 1995, I was promoted to  
20 Director of Accounting, where I was responsible for the  
21 accounting functions of Orange and Rockland and its  
22 subsidiaries, including the consolidated financial  
23 statements. In July 1999, as a result of the merger  
24 involving Con Edison and Orange and Rockland, I was  
25 appointed Director-Financial Planning and

## ACCOUNTING PANEL

1 Administration, now called Financial Services,  
2 responsible for providing the coordination for  
3 administration, financial, budget and regulatory  
4 activities between Con Edison and Orange and Rockland.  
5 I have been a member of various accounting and finance  
6 committees of the Edison Electric Institute and  
7 Pennsylvania Electric Association. In addition, I am a  
8 past Chairperson of the New Jersey Utilities  
9 Association Accounting and Finance Committee.

10 **(Kane)** I received a Bachelor of Science degree in  
11 Accounting from Manhattan College in May 1976. I  
12 worked for Con Edison from August 1976 until January  
13 1978, as a staff accountant. I then joined Orange and  
14 Rockland and became Supervisor - Facility Accounting.  
15 In 1980, I became Manager - Budgets. In 1989, I became  
16 Manager - General Accounting, and in 1996, the Accounts  
17 Payable Section was added to my responsibilities. As a  
18 result of the merger involving Orange and Rockland and  
19 Con Edison, Orange and Rockland's Accounting Department  
20 was combined with Con Edison's and relocated to Con  
21 Edison's headquarters in New York City. Since the  
22 merger, I continued to be responsible for overseeing  
23 Orange and Rockland's General Accounting Section and  
24 Financial Reporting area until March 2003. At that  
25 time, I assumed my current position as Manager of the

## ACCOUNTING PANEL

1 Regulatory Filing Section within Con Edison's Corporate  
2 Accounting Department where I oversee rate case revenue  
3 requirement calculations and supporting documentation  
4 as well as Accounting Petitions filed in New York, New  
5 Jersey and Pennsylvania.

6 **(Prager)** I received a Bachelor of Science degree in  
7 Accounting from Yeshiva University in 1988. I started  
8 my career at Con Edison in July 1988 as a management  
9 intern. From July 1989 through September 1998, I worked  
10 in Accounting Research and Procedures. From October  
11 1998 through March 2000, I worked in General Accounts.  
12 Since April 2000, I have been working in Regulatory  
13 Filings, coordinating the rate cases of Con Edison and  
14 Orange and Rockland and its subsidiaries.

15 Q. Have you previously submitted testimony before the  
16 Pennsylvania Public Utility Commission ("PAPUC")?

17 A. **(Kosior)** Yes. I submitted testimony in Docket No. R-  
18 00049884.

19 **(Kane)** Yes. I submitted testified in Docket No. R-  
20 00049884.

21 **(Prager)** No.

22 Q. What is the purpose of the Accounting Panel's testimony  
23 in this proceeding?

24 A. The Accounting Panel is sponsoring Exhibits E-1 through  
25 E-5, which explain and detail the following:



## ACCOUNTING PANEL

- 1 • Historic financial data (Exhibit E-1);
- 2 • Actual and forecast capital structures and rate of
- 3 return (Exhibit E-2);
- 4 • Historic and forecast electric rate base (Exhibit E-
- 5 3);
- 6 • Historic and forecast cost of service (Exhibit E-4);
- 7 and
- 8 • The Company's three-year rate proposal (Exhibit E-5)

9 Q. Is the Accounting Panel familiar with Pike's books and  
10 records, as well as the Power Supply Agreement ("PSA")  
11 and Joint Operating Agreement ("JOA") between Pike and  
12 Orange and Rockland, pursuant to which certain costs,  
13 including but not limited to, wage, salary and payroll  
14 taxes, are allocated to Pike?

15 A. Yes.

16 Q. Are the accounts of the Company kept in accordance with  
17 the Uniform System of Accounts as prescribed by the  
18 PAPUC?

19 A. Yes.

20

### 21 EXHIBIT E-1 HISTORICAL FINANCIAL DATA

22 Q. Please describe Exhibit E-1.

23 A. Exhibit E-1 contains the historic financial data for  
24 Pike as required by PAPUC regulations. Schedule 1  
25 shows the balance sheets of Pike at March 31, 2007 and

## ACCOUNTING PANEL

1 March 31, 2008. Schedule 2 provides the account  
2 balances comprising the Company's net investment in  
3 electric and gas utility plant in service at March 31,  
4 2008. Schedule 3 is an income statement that shows the  
5 derivation of net income for electric and gas  
6 operations for the year ended March 31, 2008. Schedule  
7 4 is a comparative income statement for Pike's electric  
8 operations for the twelve months ended March 31, 2007  
9 and March 31, 2008. Schedule 5 shows the intercompany  
10 charges billed to Pike under the terms of the JOA for  
11 the twelve months ended March 31, 2008. Schedule 6  
12 shows the detail of Pike Accounts Payable to Orange and  
13 Rockland for the twelve months ended March 31, 2008.  
14 These charges are in accordance with the terms of the  
15 PSA (FERC Schedule No. 60, currently effective).

### 16 **Joint Operating Agreement**

17 Q. Please describe Exhibit E-1, Schedule 5 in more detail.  
18 A. Exhibit E-1, Schedule 5, "Statement of Charges Made by  
19 Orange and Rockland Utilities, Inc. to Pike County  
20 Light & Power Company Electric Operations under the  
21 Terms of the Joint Operating Agreement", is submitted  
22 in support of the charges for electric operations  
23 billed by Orange and Rockland to Pike in accordance  
24 with the terms of the JOA. The schedule sets forth by

## ACCOUNTING PANEL

1 prime account each item for which a direct charge is  
2 made or which was the result of an allocation.

3 Q. What types of services are billed by Orange and  
4 Rockland to Pike based on direct charges?

5 A. Pursuant to the JOA, billings are made on a direct  
6 charge basis for services rendered by O&R to Pike  
7 whenever it is practical, based on payroll records,  
8 direct payments to vendors and contractors, and usage  
9 studies supporting the distribution of clearing  
10 accounts. The direct charge billings are for  
11 activities and services rendered that are for the  
12 exclusive benefit of Pike's customers, such as the  
13 operation and maintenance ("O&M") of Pike's electric  
14 distribution facilities, construction or purchase of  
15 utility plant, and other services required for  
16 operation.

### 17 COST ALLOCATION METHODS

18 Q. Please describe the types of costs allocated by O&R to  
19 Pike and the methods of allocation used.

20 A. The types of costs allocated and the basis for such  
21 allocations are defined in Article 2 of the JOA. Costs  
22 that are impractical to charge on a direct basis, such  
23 as administrative and general, collection of customer  
24 billings, meter reading, customer accounting and  
25 customer services charges are allocated to Pike based

## ACCOUNTING PANEL

1 on the relationship, during the preceding calendar  
2 year, of the revenues of Pike to the total revenues of  
3 O&R and its utility subsidiaries. For purposes of  
4 these calculations, revenue is defined as revenue from  
5 ultimate customers, net of fuel cost recoveries. For  
6 2008, the ratios are as follows:

### AO Ratio

7  
8 Pike Electric Revenue  $\frac{\$3,063,000}{\$403,085,000} = 0.76\%$   
9 Total Consolidated Net Revenue

10  
11 The AO ratio is used to distribute costs that are  
12 common to the electric and gas operations of O&R  
13 and all its utility subsidiaries.  
14

### DO Ratio

15  
16  
17 Pike Electric Revenue  $\frac{\$3,063,000}{\$310,816,000} = 0.99\%$   
18 Total Net Revenue of O&R and Pike

19  
20 The DO ratio is used to distribute costs that are  
21 common to the electric and gas operations of O&R  
22 and Pike.  
23

### EO Ratio

24  
25  
26 Pike Electric Revenue  $\frac{\$3,063,000}{\$298,548,000} = 1.02\%$   
27 Total Consolidated Electric Revenue

28  
29 The EO ratio is used to distribute costs that are  
30 common to the electric operations of O&R and all  
31 its utility subsidiaries.  
32

### LO Ratio

33  
34  
35 Pike Electric Revenue  $\frac{\$3,063,000}{\$206,279,000} = 1.48\%$   
36 Total Electric Revenue O&R & Pike

37  
38 The LO ratio is used to distribute costs that are  
39 common to the electric operations of O&R and Pike.  
40  
41

## ACCOUNTING PANEL

1 In addition, Pike owns its proportionate share of the  
2 general materials and supplies inventory, the  
3 allocation of which is determined as follows:

4 (1) General electric stock items are allocated on the  
5 ratio of the number of Pike electric customers to  
6 the total number of electric customers of O&R and  
7 its utility subsidiaries at the end of the  
8 preceding year. For the year 2008, this ratio  
9 allocates 1.5442% to Pike electric operations.

10 (2) Common stock items usable in both electric and gas  
11 operations such as gasoline, small tools, and  
12 undistributed storeroom expenses are allocated on  
13 the ratio of the number of Pike customers to the  
14 total number of electric and gas customers of O&R  
15 and its utility subsidiaries at the end of the  
16 preceding calendar year. For the year 2008, this  
17 ratio allocates 1.3575% to Pike electric  
18 operations.

19 With regard to Federal income taxes, O&R and its  
20 subsidiaries file a consolidated Federal Income tax  
21 return and any tax liability or benefit is allocated  
22 among O&R and its subsidiaries as provided for in  
23 Section 1152-1 (a)(2) of the Internal Revenue Code of  
24 1954. Tax liabilities or benefits are computed and  
25 allocated to each company on the separate return basis,

**ACCOUNTING PANEL**

1 with tax liabilities or benefits allocated to the  
2 company that generated the liability or benefit, and  
3 each company's tax liabilities never exceeds its  
4 separate return liability.

5

6

**EXHIBIT E-2 CAPITALIZATION**

7 Q. Please describe Exhibit E-2.

8 A. Exhibit E-2 shows the actual and forecast capital  
9 structures.

10 Q. What capital structure is Pike requesting in this  
11 proceeding?

12 A. The Company is requesting an average capital structure  
13 for March 31, 2009 as shown below:

	<u>Ratio</u>
14 Long-Term Debt	48.03%
15 Common Equity	<u>51.97%</u>
16 Total	<u>100.00%</u>

17

18 Q. Do you believe that this is a reasonable capital  
19 structure to be employed in this proceeding?  
20

21 A. Yes, we do.

22 Q. Please explain why this capital structure is  
23 appropriate?

24 A. It reflects the forecast ratios of capital being  
25 employed by O&R, Pike's parent company, as set forth on  
26 Exhibit E-2, Schedule 1 for the twelve months ending

## ACCOUNTING PANEL

1 March 31, 2009. The capital structure reflects the  
2 proportions of the actual capital being used in the  
3 utility's business plus projected financings. We would  
4 note that Exhibit E-2, Schedule 2, which sets forth the  
5 long-term debt of O&R and its subsidiaries, assumes  
6 that O&R will be issuing \$50 million of long-term debt  
7 at 6.10% in August 2008 and \$50 million of long-term  
8 debt at 6.74% in September 2008. Given the timing of  
9 the planned financings, we will update the capital  
10 structure for actual amount and cost of the new debt  
11 issues during the course of this proceeding. This  
12 capital structure is reasonable when compared to the  
13 capital structure of the proxy companies used in Dr.  
14 Morin's cost of equity analysis. The actual Value Line  
15 capital structure for these companies for 2007 and  
16 projected 2013 median capital structure ratios for the  
17 proxy group are summarized below:

	<u>2007</u>	<u>2013</u>
18 Long-Term Debt	54.0%	49.5%
20 Preferred Stock	0.5	0.5
21 Common Equity	<u>45.7</u>	<u>50.0</u>
22 Total	<u>100%</u>	<u>100%</u>

23  
24 Q. What is your conclusion as to the reasonableness of  
25 Pike's requested common equity ratio in this  
26 proceeding?

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1 A. Based on the above analysis and discussion, we conclude  
2 that the 51.97 percent common equity ratio requested by  
3 Pike in this proceeding is reasonable. The requested  
4 equity ratio reflects the parent company's forecast  
5 common equity ratio and that equity ratio is in line  
6 with proxy group and subsidiary utility companies and  
7 thus is appropriate to use in this proceeding.

8 Q. Does the capital structure reflect the cost of equity  
9 return recommended by Company witness Morin of 10.9  
10 percent?

11 A. No, in order to mitigate the size of the rate increase  
12 the Company is seeking for its electric operations we  
13 are requesting a return on equity of 10.0 percent.  
14 Lowering the requested return on equity by 90 basis  
15 points decreased the requested rate increase by  
16 approximately \$90,000.

17 Q. What is the overall rate of return ("ROR")the Company  
18 is requesting?

19 A. As shown on Exhibit E-2, Schedule 3, the overall ROR is  
20 8.21 percent.

21

### 22 Exhibit E-3 ELECTRIC RATE BASE

23 Q. Please describe Exhibit E-3.



## ACCOUNTING PANEL

1 A. Exhibit E-3 consists of a summary and eight schedules  
2 containing Pike's historic and future electric rate  
3 base.

4 Q. Please describe the method used to calculate the  
5 historic electric rate base at March 31, 2008 as shown  
6 on the summary page.

7 A. We began with actual electric utility plant and plant  
8 reserves to arrive at net plant at March 31, 2008. To  
9 net plant, we added cash working capital, materials and  
10 supplies, and prepayments. Finally, we deducted  
11 accumulated deferred income taxes to arrive at electric  
12 rate base.

13 Q. Please describe the method used to calculate the  
14 forecast electric plant balance at September 30, 2009.

15 A. We began with the actual electric plant in service  
16 balance per books at March 31, 2008. Mr. Regan  
17 provided us with the budgeted electric distribution  
18 additions scheduled for April 1, 2008 through September  
19 30, 2009. Retirements were projected through September  
20 30, 2009 and are based on a five-year historical  
21 average. The calculated adjustment of \$2,058,500 is  
22 shown on Exhibit E-3, Schedule 1, Page 1.

23 Q. Please describe the method used to calculate the  
24 forecast common plant balance at March 31, 2009.

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1 A. The Company did not have any common plant in service  
2 balance on its books at March 31, 2008. In April, the  
3 Company rented and occupied a new office in Milford,  
4 Pennsylvania to provide customer service. The Company  
5 spent \$50,000 on furniture and equipment. The  
6 allocation to electric of \$39,900 is shown on Exhibit  
7 E-3, Schedule 1, Page 2.

8 Q. Please describe the calculation of the accumulated  
9 provision for depreciation of electric plant in service  
10 for the period ending September 30, 2009.

11 A. We began with the per books balance at March 31, 2008,  
12 added accruals projected for the 18 months ending  
13 September 30, 2009 and subtracted retirements for the  
14 same period to arrive at the ending balance at  
15 September 30, 2009. Our calculated adjustment of  
16 \$421,500 is shown on Exhibit E-3, Schedule 2, Page 1.

17 Q. Please describe the \$13,200 decrease to the reserve  
18 balance as shown on Exhibit E-3, Schedule 2, Page 1.

19 A. We began with the forecasted electric plant in service  
20 balance at September 30, 2009. We then multiplied that  
21 amount by the proposed composite book depreciation rate  
22 of 2.56% to arrive at our proposed accrual to the  
23 depreciation reserve of \$371,400. This represents a  
24 \$2,800 increase to the reserve as the projected accrual

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1 for the period April 1, 2008 - March 31, 2009, as shown  
2 at the top of Exhibit E-3, Schedule 2, Page 1.

3 Q. Please continue.

4 A. We made a second adjustment to the reserve balance for  
5 the difference between the book and theoretical  
6 reserve. This adjustment is also shown on Exhibit E-3,  
7 Schedule 2, Page 1. The depreciation reserve based on  
8 proposed rates would be \$2,534,133, which is \$416,318  
9 less than the actual book reserve balance. Electric  
10 Plant has an average age of 13 years compared to a  
11 composite book life for this plant of 39 years. We  
12 therefore amortized the excess depreciation reserve  
13 over the remaining life of the plant, i.e., 26 years.  
14 This results in a \$16,000 increase to the reserve. The  
15 net of the two adjustments is a \$13,200 decrease to the  
16 reserve.

17 Q. Please describe the calculation of the accumulated  
18 provision for depreciation of common plant in service  
19 for the period ending March 31, 2009.

20 A. The Company did not have any accumulated provision for  
21 depreciation of common plant in service balance on its  
22 books at March 31, 2008. As stated above, the Company  
23 projects to spend \$50,000 on furniture and equipment at  
24 its office in Milford. The allocation to Electric of

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1 the related accumulated depreciation of \$8,000 is shown  
2 on Exhibit E-3, Schedule 2, Page 2

3 Q. How did you calculate the cash working capital for the  
4 twelve months ending March 31, 2009?

5 A. We prepared a lead/lag study, which is shown on Exhibit  
6 E-3, Schedule 3, Page 1 of 3.

7 Q. Please provide an overview of the lead/lag study and  
8 describe its results.

9 A. The lead/lag study utilizes accounting information and  
10 financial studies for the twelve months ended December  
11 31, 2007 to determine the net lag days. The net lag  
12 days are applied to the cost of service inputs for the  
13 rate year ending March 31, 2009, in order to determine  
14 the cash working capital requirements reflected in rate  
15 base. The study indicates a cash working capital  
16 requirement of \$346,670, as shown on Exhibit E-3,  
17 Schedule 3, Page 1. The purpose of the cash working  
18 capital component of rate base is to compensate the  
19 Company for funds it provides to pay operating expenses  
20 in advance of receipt of revenue. It reflects the  
21 amount of capital over and above investment in plant  
22 and other separately identified rate base items  
23 provided by the Company to bridge the gap between the  
24 time the Company provides service and the time the  
25 Company collects revenue for that service. A lead or

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1 lag reflects the amount of time that elapses between  
2 when a party provides a product or service, and when  
3 that providing party is compensated for the product or  
4 service provided. For the purpose of this study, the  
5 amount of lead or lag times was calculated in days.

6 Q. Please describe the revenue component of the lead/lag  
7 study.

8 A. The lag on revenue collection consists of three  
9 components:

- 10 • the time between rendering of service and meter  
11 reading;
- 12 • the time between meter reading and billing of  
13 services; and
- 14 • the time between billing of services and  
15 collection of revenue.

16 Pike's customers are billed on a monthly cycle.  
17 The average time from the rendering of service to meter  
18 reading date is calculated to be 15.2 days. The 15.2  
19 days was calculated by dividing 365 days by twelve  
20 months and then dividing by two to achieve the mid-  
21 point for each monthly service period ( $365 / 12 = 30.4$   
22  $/ 2 = 15.2$ ). Based on an examination of the meter  
23 reading and billing data for the year ended December  
24 31, 2007, on average, it took 1.5 days from the time  
25 meters were read to the time bills were generated and

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1 mailed out. Generally, billing occurs the same day the  
2 meter reading is completed for that particular cycle,  
3 with mailing occurring the following day. The billing  
4 to collection lag was determined by analyzing one  
5 month's payments for each quarter of 2007 (i.e.,  
6 January, April, July and October). Average lag days  
7 were generated for each revenue class of billing and  
8 weighted by their amounts. Based on this analysis, on  
9 average, bills were outstanding for 26.9 days.  
10 Combined, the total lag in revenue recovery of energy  
11 bills and miscellaneous operating revenues is 43.6  
12 days.

13 Q. Please describe the treatment of cost of service in the  
14 study.

15 A. The cost of service was broken down into the basic  
16 components of operating expense and operating income.  
17 Operating income, which represents a return on invested  
18 capital, is included as a component of the cost of  
19 service.

20 Q. Please describe the treatment of purchased power  
21 expenses in the study.

22 A. The cost of purchased power and related expenses  
23 allocated to Pike by O&R in accordance with the terms  
24 of the PSA, are the basis for the lead/lag on purchased  
25 power costs. Under the PSA, there is a 45-day lag

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1 based on the payment terms included in the agreement.  
2 The PSA states that payments are due 30 days after the  
3 month in which services were rendered. The lag is  
4 measured from the mid-point of the month ( $30 \text{ days} / 2 =$   
5  $15$ ) to the date of payment for services (30 days),  
6 totaling 45 days.

7 Q. Please describe the treatment of salaries and wages.

8 A. The lag for salaries and wages, reflecting both weekly  
9 and semi-monthly employees, was calculated to be 8.1  
10 days. Weekly employees are paid on the Thursday  
11 following the week worked resulting in an 8.5-day lag  
12 (service period 7 days / 2 = 3.5 day midpoint + 5 days  
13 until checks are received). Semi-monthly employees are  
14 paid the 15th and 30th of every month for their prior  
15 two weeks worked resulting in a 7.6-day lag. The two  
16 payroll schedules weighted by dollars charged to O&M  
17 expense for the twelve months ended December 31, 2007  
18 produce an 8.1-day lag.

19 Q. Please describe the lag days associated with pensions.

20 A. A zero lag is assigned to fund contributions and  
21 supplemental expenses. The lag on 401K matching  
22 contributions is 8.1 days based on the salary and wages  
23 lag since it is paid on the same days checks are  
24 distributed to weekly and semi-monthly employees. The  
25 net lag is 0.4 days.

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- 1 Q. Please describe the lags associated with other post  
2 employment benefits ("OPEBs") and employee welfare  
3 expenses.
- 4 A. The lag on OPEBs is a result of the weighted average  
5 lags on pay-as-you-go health insurance expense and  
6 OPEBs. Pay-as-you-go health insurance expense has a  
7 zero lag, as it is a non-cash item. The lag for OPEBs  
8 expense was calculated to be 79.5 days. The Company  
9 makes three payments annually to the OPEB trust, a 50%  
10 contribution on or about August 15th, 25% on or about  
11 October 15th, and the remaining 25% on or about  
12 December 15th. A mid-point was determined for each of  
13 the respective pay periods and then weighted against  
14 their payment allocation for total lag of 79.5 days.  
15 The lag on employee welfare expenses is a result of the  
16 weighted average lags on health and life insurance  
17 premiums and miscellaneous employee welfare expenses.  
18 An analysis of payments to health and life insurance  
19 carriers was conducted for 2007 by analyzing premiums  
20 paid and calculating a lag from each service period  
21 (mid-point) to the pay date resulting in a lag of 12.1  
22 days. Miscellaneous employee welfare expense utilized  
23 the same 12.6-day lag as accounts payable.
- 24 Q. How was the lag for the JOA calculated?



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- 1 A. The JOA expenditures were lagged at 45 days, consistent  
2 with the terms of the JOA. Under the JOA, there is a  
3 45-day lag based on the payment terms included in the  
4 agreement. The JOA states that payments are due 30  
5 days after the month in which services were rendered.  
6 The lag is measured from the mid-point of the month (30  
7 days / 2 = 15) to the date of payment for services (30  
8 days), totaling 45 days.
- 9 Q. Please describe the lag associated with uncollectible  
10 accounts expense.
- 11 A. Uncollectible accounts expense was lagged at 43.6 days,  
12 consistent with the revenue recovery lag, to reflect  
13 the portion of revenue that is uncollectible.
- 14 Q. Please describe the lag associated with other O&M.
- 15 A. The lag on other O&M expenses was calculated to be 12.6  
16 days. This calculation is based on an analysis of  
17 accounts payable payments made to vendors for materials  
18 and services charged to O&M expense, excluding pension  
19 and employee welfare expenses. Lag days were measured  
20 from the invoice date to the payment date.
- 21 Q. Please describe the lead or lag associated with taxes  
22 other than income taxes.
- 23 A. Individual studies were prepared to measure the lag  
24 period for each type of tax paid by the Company for the  
25 year 2007. The taxes related to corporate loans,

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1 capital stock, and gross premium insurance are paid in  
2 conjunction with the Company's federal tax return. The  
3 lag assumes four annual payments (i.e., April 15, June  
4 15, September 15 and December 15). We determined that  
5 there was a lag of 36.5 days by calculating the number  
6 of days that elapsed from the mid-point of the service  
7 period (i.e., July 2) and the four payments,  
8 respectively. Unemployment taxes have quarterly  
9 payments on April 20, July 16, October 12 and January  
10 31. There was an average of a 64-day lag that elapsed  
11 from July 1, the mid-point of 2007, to each of the four  
12 payment dates, respectively.

13 Q. Please describe the lag days associated with  
14 Pennsylvania's gross receipts tax.

15 A. We determined that there was a lead of 109 days by  
16 calculating the number of days that elapsed from the  
17 March 15, 2007 payment date until the mid-point of the  
18 service period (i.e., July 2).

19 Q. Please describe the lag days associated with Federal  
20 and state income taxes.

21 A. The Federal Income Tax ("FIT") and state income tax lag  
22 assumes four annual payments (i.e., April 15th, June  
23 15th, September 15th and December 15th). We determined  
24 that there was a lag of 36.5 days by the number of days

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1 that elapsed from the mid-point of the service period  
2 (i.e., July 2) and the four payments, respectively.

3 Q. Please describe the lag days associated with deferred  
4 purchased power expense, materials and supplies,  
5 amortization expense, deferred federal income taxes,  
6 depreciation, and return on invested capital.

7 A. These components are assigned a zero lag to the amounts  
8 included in the cost of service because they are non-  
9 cash items.

10 Q. How did you calculate the Plant Materials and Stores  
11 component of electric working capital?

12 A. We used the average balance for the historic year as a  
13 proxy for the plant material and stores balances for  
14 the ensuing twelve month period. The calculation is  
15 shown on Exhibit E-3, Schedule 3, Page 2 of 3.

16 Q. How did you calculate the prepayments component of  
17 electric working capital?

18 A. We used the same method we used to calculate the plant  
19 material and stores balances. The components of  
20 prepayments and the balances used for the calculations  
21 are shown on Exhibit E-3, Schedule 3, Page 3 of 3.

22 Q. Please describe Exhibit E-3, Schedule 4.

23 A. The Company estimates that it will incur \$500,000 of  
24 outside legal and consulting costs related to the  
25 electric and gas rate filings. \$400,000 of these costs

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1           were allocated to electric operations based on a net  
2           revenue split. On Schedule 4, we calculated the after  
3           tax amount to be \$234,000. The Company has a deferred  
4           OPEB balance of \$295,408 and an OPEB reserve balance of  
5           \$341,070 at March 31, 2008 for a net deferred credit of  
6           \$45,662. We calculated the after tax amount to be  
7           \$26,700. The Company has a deferred SBC balance of  
8           \$10,604 at March 31, 2008. We calculated the after tax  
9           amount to be \$6,200. We added the after tax deferred  
10          amounts for rate case and SBC costs offset by OPEB  
11          accruals totaling \$240,200 to the electric rate base  
12          for the twelve months ending March 31, 2009.

13   Q.    Please describe Exhibit E-3, Schedule 5.

14   A.    At March 31, 2008, the Company had a deferred credit of  
15          \$26,566 related to a tax refund and a deferred credit  
16          of \$30,400 related to depreciation benefits. We  
17          calculated the after tax amount of these two items to  
18          be \$33,300. We deducted this amount from the electric  
19          rate base for the twelve months ending March 31, 2009.

20   Q.    Please describe Exhibit E-3, Schedule 6.

21   A.    Schedule 6 shows the effects of the gain on the sale of  
22          the Milford office on electric rate base. The office  
23          was contained within a private house located at 219 ½  
24          Broad Street in Milford, Pennsylvania. When Pike  
25          purchased this building, 50% percent of the cost was

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1 placed into common utility plant and the other half was  
2 placed in non-utility plant. The after tax gain on the  
3 sale of the 50% interest in the Milford Office property  
4 designated as utility plant is \$80,208. To this amount,  
5 we subtracted one year's amortization amount based on a  
6 five-year amortization period for a net rate base  
7 deduction of \$64,200. \$51,100 of this amount is  
8 applicable to electric.

9 Q. Did you calculate the deferred income taxes for the  
10 twelve months ending March 31, 2009?

11 A. Yes. This calculation, shown on Exhibit E-3, Schedule  
12 7, presents the difference between the balances of  
13 accumulated deferred income taxes at March 31, 2008 and  
14 March 31, 2009, respectively. The computation of this  
15 change is shown on Exhibit E-4, Schedule 16, page 2 of  
16 3.

17

### 18 EXHIBIT E-4 ELECTRIC COST OF SERVICE

19 Q. Please describe Exhibit E-4

20 A. Exhibit E-4 consists of a summary and sixteen schedules  
21 containing the historic and future electric cost of  
22 service. The Accounting Panel supports all schedules  
23 with the exception of Schedules 1, 12 and 13, which are  
24 supported by the Forecasting Panel, Mr. Regan and Mr.  
25 Hutcheson, respectively. Page 1 of the Summary shows

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1 the historic and forecast cost of service, page 2 of  
2 the Summary shows the calculation of the revenue  
3 requirement, and page 3 of the Summary lists all of the  
4 adjustments to the cost of service.

5 Q. How did you develop the historical and forecast cost of  
6 service?

7 A. We began with the actual per books information for the  
8 twelve months ended March 31, 2008. This information  
9 is shown in Column 1 of Exhibit E-4, Summary, Page 1 of  
10 3. Column 3 of the same exhibit sets forth the  
11 adjustments necessary to bring historical revenues,  
12 expenses, and rate base in line with the levels of  
13 revenues, expenses and rate base projected for the  
14 twelve months ending March 31, 2009.

15 Q. Please describe how the revenue requirement of  
16 \$1,172,100 shown on page 2 of the Summary was  
17 calculated?

18 A. We began with the projected March 31, 2009 rate base  
19 from Exhibit E-3, Summary. To this balance we applied  
20 the overall rate of return shown on Exhibit E-2,  
21 Schedule 3. This produced a return of \$878,314. We  
22 compared this number to the earned return projected on  
23 page 1, column 4 of the Summary, which was \$238,600.  
24 The difference between these two amounts was \$639,714,  
25 which we factored up for the Pennsylvania gross

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- 1 earnings tax, customer uncollectibles, and income taxes  
2 to arrive at a revenue requirement of \$1,172,100.
- 3 Q. Please describe Exhibit E-4, Schedule 1.
- 4 A. The Forecasting Panel will discuss Exhibit E-4,  
5 Schedule 1, Page 1 and Exhibit E-4, Schedule 1, Page 3.  
6 On Exhibit E-4, Schedule 1, Page 2, the Company has  
7 eliminated the non-recurring hedging gains from sales  
8 revenues.
- 9 Q. Please describe Exhibit E-4, Schedule 2.
- 10 A. Exhibit E-4, Schedule 2 reflects the pass back of  
11 revenues related to the 1993-1994 investigation over a  
12 five-year period.
- 13 Q. Please describe Exhibit E-4, Schedule 3.
- 14 A. Exhibit E-4, Schedule 3 reflects the decrease in  
15 purchased power expenses.
- 16 Q. Please describe how you calculated Adjustment No. 4  
17 (b), Changes in Operation and Maintenance Expenses to  
18 Reflect Increases In Wages and Salaries, and Adjustment  
19 No. 4 (c), Changes in Operation and Maintenance Expense  
20 to reflect Increase in Additional Employee Positions,  
21 which are shown on Exhibit E-4, Summary, as well as on  
22 Exhibit E-4, Schedule 4, Pages 2 and 3.
- 23 A. In developing the increase in wages and salaries that  
24 is applicable to Pike electric operations, which  
25 amounts to \$55,400 (\$32,000 of which is detailed on

## ACCOUNTING PANEL

1 Exhibit E-4, Schedule 4, Page 2 of 3 and \$23,400 of  
2 which is detailed on Exhibit E-4, Schedule 4, Page 3 of  
3 3), we first analyzed the actual, historic labor cost  
4 of the consolidated O&R system for the twelve months  
5 ended March 31, 2008. We then made an adjustment to  
6 the actual, per-books consolidated labor expense of a  
7 reduction of \$523,000 to correct an erroneous  
8 accounting entry that was discovered during the  
9 analysis.

10 The actual, per books consolidated labor data was  
11 further adjusted for certain normalizing entries. The  
12 purpose of the normalizing entries was to annualize the  
13 labor expense for certain new employee positions that  
14 were added during the test year and, therefore, the  
15 historic test year labor expense did not reflect a full  
16 year of cost for such employees. The normalizing  
17 adjustments amounted to \$288,966 of additional expense  
18 for new union positions and \$29,167 of additional  
19 expense for new management positions. Details  
20 regarding those positions are as follows:

21 Weekly (i.e., Union) Positions - Electric Overhead  
22 Linemen, ten new positions added during September 2007,  
23 normalized to add five months of labor costs to the  
24 historic test year; Electric Underground Linemen, six



## ACCOUNTING PANEL

1 new positions added during June 2007, normalized to add  
2 two months of labor costs to the historic test year.  
3 Semi-Monthly (i.e., Management) Positions - Electric  
4 Underground Line Supervisor, one new position added  
5 during June 2007, normalized to add two months of labor  
6 costs to the historic test year; Emergency Preparedness  
7 Specialist, one new position, added during June 2007,  
8 normalized to add two months of labor cost to the  
9 historic test year.

10 Q. Did you include any other adjustments for additional  
11 employee positions in your analysis?

12 A. Yes. The analysis includes a total of twenty-one  
13 additional employee positions, six of which are union  
14 positions and fifteen of which are management  
15 positions. Twenty of these positions were included in  
16 a new rate plan (NYPSC Case No. 07-E-0949) that went  
17 into effect July 1, 2008 for Orange and Rockland's New  
18 York electric operations subject to final approval by  
19 the New York State Public Service Commission ("NYPSC").  
20 The final Rate Order by the NYPSC is expected during  
21 July 2008. Also, one union position was included in  
22 this Case that was not part of the above-referenced O&R  
23 proceeding, the addition of a Customer Service  
24 Representative as a result of the establishment of new  
25 customer service center in the Pike service territory.

## ACCOUNTING PANEL

1 Details regarding the additional employee positions,  
2 including the assumed date filled and whether the cost  
3 of the position is allocated to Pike electric and/or  
4 gas operation and maintenance expense, are shown in  
5 Schedule 4 of Exhibit E-4. As indicated on Schedule 4,  
6 all twenty-one positions have costs allocated to Pike  
7 electric operations.

8 The analysis then separately identified the adjusted  
9 and normalized consolidated labor costs as to total  
10 wages applicable to union employees and total wages  
11 applicable to management employees. It also identified  
12 the amount of adjusted wages that was charged to Pike  
13 electric O&M expense, which amounted to 0.41% of the  
14 adjusted (as described above) total consolidated wages  
15 of O&R for the twelve months ended March 31, 2008.  
16 Then, using the actual and budgeted wage increase  
17 percentages applicable to union and management  
18 employees, we calculated the amount of total wages that  
19 represent base pay versus wage increase amounts for the  
20 period from April 1, 2008 through March 31, 2010. The  
21 wage increase percentages for union employees are  
22 pursuant to the negotiated labor agreement with Local  
23 503 of the International Brotherhood of Electrical  
24 Workers, which became effective on June 1, 2004 and  
25 extends through June 1, 2009. The agreement provides,

## ACCOUNTING PANEL

1 among other things, for a wage increase of 3.25%, which  
2 became effective on June 1, 2007, and 3.50%, which  
3 became effective on June 1, 2008. The 3.50% negotiated  
4 wage increase was then applied to the period through  
5 March 31, 2010 in the calculations. The wage increase  
6 applicable to management employees was 3.25% effective  
7 April 1, 2007 and 3.50% effective April 1, 2008 and  
8 April 1, 2009, respectively. We then calculated the  
9 forecasted increase in wages using these percentages.  
10 Once the total wage increase amount was calculated for  
11 union and management employees, the portion of such  
12 wage increase that is applicable to Pike electric  
13 operations was calculated. For those employees who  
14 were part of the historic test period in this case  
15 (excluding the additional employees) the amount  
16 allocated to Pike electric operations was 0.41%, which,  
17 as described above, is the historic percent of  
18 consolidated O&R wages that was allocated to Pike  
19 electric operations for the twelve months ended March  
20 31, 2008. For the twenty-one additional employees the  
21 actual projected amounts of wages to be charged to Pike  
22 electric operations, based on each particular position  
23 and salary level, was calculated individually.

## ACCOUNTING PANEL

- 1 Q. Please continue with an explanation of Adjustment 4(a),  
2 Changes to Power Supply Expense to Reflect Increases in  
3 Wages and Salaries.
- 4 A. Adjustments 4(b) and 4(c) as described above detailed  
5 the increase in salaries and wages that are applicable  
6 to Pike electric operation and maintenance expense.  
7 However, additional salary and wage expense is  
8 allocated to Pike electric operations pursuant to the  
9 terms of the PSA between O&R and Pike. Adjustment 4(a)  
10 begins with the amount of total consolidated increase  
11 in salary and wages as calculated in Adjustment 4(b)  
12 and 4(c) and, based on the allocation procedures in the  
13 PSA, calculates the increased labor costs applicable to  
14 Pike. This is partially offset by costs that are  
15 billable back to O&R from Pike pursuant to the terms of  
16 the PSA.
- 17 Q. Please continue with a description of Adjustment No.  
18 (5), Changes in Operation and Maintenance Expense to  
19 Reflect the Estimated Increase in Payroll Ancillary  
20 Costs and Adjustment No. (14a), Changes in Taxes Other  
21 Than Income Taxes to Reflect Increases in Payroll  
22 Taxes, as shown on Exhibit E-4, Summary, as well as on  
23 Exhibit E-4, Schedule 5 and Schedule 14, Page 1  
24 respectively.

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1 A. The estimated increase in payroll ancillary costs,  
2 which amounts to \$9,800, was calculated by applying the  
3 fringe benefit rate of 16.36% to the forecasted wage  
4 increase amount for management and union employees  
5 (including wage increases through the PSA), which was  
6 developed on Exhibit E-4, Schedule 4, Pages 1 through 3  
7 and which was described earlier in this testimony. The  
8 16.36% fringe benefit rate includes the cost of  
9 employee health and life insurance at 11.95%, Workers'  
10 Compensation insurance at 2.38%, and the cost of O&R's  
11 401K matching contribution of 2.03%. These rates were  
12 developed based on the forecasted cost of each benefit  
13 item in relation to the total forecasted labor costs of  
14 the O&R system for the year 2008. The estimated  
15 increase in Payroll Taxes, which amounts to \$4,600, was  
16 calculated by applying the payroll tax rate of 7.74% to  
17 the forecasted wage increase amount for management and  
18 union employees. The 7.74% payroll tax rate includes  
19 the cost of Federal Insurance Contribution Act ("FICA")  
20 Tax at 6.20%, Medicare at 1.45%, Federal Unemployment  
21 Tax at 0.07%, and State Unemployment Taxes at 0.02%.  
22 These tax rates were developed based on the estimated  
23 O&R consolidated costs for the year 2008 in the same  
24 manner as described above for the payroll ancillary  
25 costs.

## ACCOUNTING PANEL

- 1 Q. Please describe Adjustment No. (6a), Changes in  
2 Operation and Maintenance Expenses to Reflect Estimated  
3 Employee OPEB and Pension Expense, as shown in Exhibit  
4 E-4, Schedule 6, Page 1.
- 5 A. Adjustment No. (6a) for \$38,800 reflects the \$900  
6 increase in SFAS 87 pension expense net of  
7 capitalization and recoveries as compared to the actual  
8 pension expense for the twelve months ended March 31,  
9 2008 and the \$37,900 increase in SFAS 106 OPEB expense  
10 net of capitalization and recoveries and VEBA health  
11 insurance reimbursements as compared to the actual OPEB  
12 expense for the twelve months ended March 31, 2008.  
13 The Company's actuary, Buck Consultants, calculated the  
14 SFAS 87 pension expense.
- 15 Q. Please describe Adjustment No. (6b), Changes in  
16 Operation and Maintenance Expenses to Reflect Recovery  
17 of Deferred OPEB Expense, as shown in Exhibit E-4,  
18 Schedule 6, Page 2.
- 19 A. Adjustment No. (6b) for \$64,400 reflects a five year  
20 amortization of the \$321,921 estimated deferred OPEB  
21 balance at December 31, 2008.
- 22 Q. Please describe Adjustment No. (7), Changes in  
23 Operation and Maintenance Expenses to Reflect Rent of  
24 the Milford Office, as shown in Exhibit E-4, Schedule  
25 7.

## ACCOUNTING PANEL

- 1 A. Adjustment No. (7) for \$30,600 reflects the 87.41%  
2 allocation to electric of the \$35,000 annual rent of  
3 the Milford Office.
- 4 Q. Please describe Adjustment No. (8), Changes in  
5 Operation and Maintenance Expense to Normalize Outside  
6 Legal Fees, as shown on Exhibit E-4, Summary, as well  
7 as on Exhibit E-4, Schedule 8.
- 8 A. Adjustment No. (8) reflects a decrease in O&M expense  
9 of \$306,400 for the normalization of outside legal  
10 fees. In the test year, the Company had outside legal  
11 fees of \$403,300, which was \$306,400 more than the ten-  
12 year average of \$96,900.
- 13 Q. Please describe Adjustment No. (9), Changes in  
14 Operation and Maintenance Expense to Reflect  
15 Amortization of Estimated Outside Rate Expenses, as  
16 shown on Exhibit E-4, Summary, as well as on Exhibit E-  
17 4, Schedule 9.
- 18 A. Adjustment No.(9) results in an increase in O&M expense  
19 of \$80,000 for the effect of the forecasted annual  
20 amortization of costs incurred in the preparation and  
21 filing of this electric base rate case. As shown on  
22 Schedule 9, Pike estimates that it will incur \$400,000  
23 of costs in the preparation and filing of this case,  
24 which are primarily outside legal fees. Assuming a

## ACCOUNTING PANEL

1 five-year amortization period results in an annual  
2 amortization allowance of \$80,000.

3 Q. Please describe Adjustment No. (10), True-up of Joint  
4 Use Operating Expense, as shown on Exhibit E-4,  
5 Summary, as well as on Exhibit E-4, Schedule 10.

6 A. The adjustment to reflect current Joint Use Rents  
7 increases operation and maintenance expense by \$28,185  
8 (rounded up on the Exhibit to \$28,200). The adjustment  
9 was calculated by comparing the amount of JOA expense  
10 that was actually charged to Pike electric operations  
11 during the twelve months ended March 31, 2008, which  
12 amounted to \$180,963, to the revised and updated annual  
13 billing amount of \$209,148. The billing amount under  
14 the JOA is updated annually based on the actual charges  
15 experienced by O&R during the preceding year. In this  
16 case, the new billing amount reflects an update to the  
17 year 2006 data, and the new monthly billing rate will  
18 remain in effect until mid-2008, at which time it will  
19 be updated to reflect actual charges experienced by O&R  
20 during 2007.

21 Q. Please address Adjustment No. (11).

22 A. Adjustment No. (11) represents actual customer  
23 uncollectible write-off experience. It was calculated  
24 as the average of bad debt write-offs as a percentage  
25 of revenues. The resultant factor of 0.8133 is then  
26 applied to the forecasted revenues for the rate year.



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1 The result of \$93,700 is compared to the bad debt  
2 expense for the test year of \$117,800, for a decrease  
3 of \$24,100.

4 Q. Mr. Hutcheson states on page 10 of his direct testimony  
5 that the Accounting Panel will set forth a proposal to  
6 amortize the \$416,000 by which the actual reserve  
7 exceeds the computed reserve based on proposed rates.  
8 What is your proposal?

9 A. We propose to pass back the excess depreciation reserve  
10 over the average remaining life for electric plant  
11 assets of 26 years. This amounts to \$16,000 a year as  
12 shown on Exhibit E-4, Schedule 13, Page 3.

13 Q. Please describe Adjustment No. (14a), Changes in Taxes  
14 Other, as shown Exhibit E-4, Schedule 14, Page 1.

15 A. Adjustment No. (14a), in addition to the change to  
16 payroll taxes discussed above, reflects the change in  
17 the Pennsylvania Gross Earnings Tax for the Twelve  
18 Months Ending March 31, 2009. We reduced the Gross  
19 Earnings Tax to reflect the 5.9% tax rate on the rate  
20 year revenues.

21 Q. Please describe Adjustment No. (14b), Changes in Taxes  
22 Other, Property Tax Refund as shown Exhibit E-4,  
23 Schedule 14, Page 2.

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- 1 A. Adjustment No. (14b) reflects the five-year  
2 amortization of the electric property tax refund  
3 discussed above.
- 4 Q. Please describe Adjustment No. (15), Changes in Gain on  
5 Sale of Utility Plant to reflect the amortization of  
6 the net gain from the sale of the Milford Office, as  
7 shown in Exhibit E-4, Schedule 15.
- 8 A. The electric allocation of the gain on the sale for the  
9 50% of the Milford Office property designated as  
10 utility plant is \$108,592. The annual amortization  
11 based on a five-year amortization period is \$21,700.
- 12 Q. Please describe Adjustment No. (16), Calculation of  
13 Income Tax Expense for the Twelve Months Ending March  
14 31, 2009, as shown Exhibit E-4, Schedule 16.
- 15 A. Adjustment No. (16) shows the necessary additions and  
16 subtractions that must be made to operating income  
17 before taxes in order to determine taxable income to  
18 which the statutory tax rates are applied.
- 19 Q. Please explain page 3 of Schedule 16.
- 20 A. Page 3 of Schedule 16 shows the calculation of the  
21 interest deduction included in page 1 of Schedule 16.  
22 The majority of long term debt has been issued by  
23 Orange and Rockland for itself and its subsidiary  
24 utility affiliates, Pike and Rockland Electric Company.  
25 This adjustment is necessary in order to allocate the

## ACCOUNTING PANEL

1 proper level of interest expense to each jurisdiction,  
2 based on Orange and Rockland's overall consolidated  
3 interest expense.

4

5

### Exhibit E-5, THREE-YEAR RATE PLAN

6 Q. Is the Company sponsoring a three-year rate plan  
7 proposal as an alternative to a one-year case?

8 A. Yes.

9 Q. Please explain how a rate plan of this length would  
10 benefit the Company's customers.

11 A. Multi-year rate plans provide the Company with greater  
12 flexibility to schedule and execute critical programs  
13 in the most cost-effective manner. They also place a  
14 greater responsibility on the Company to manage its  
15 resources over several years when there may be larger  
16 swings in economic conditions and permit greater focus  
17 on operating efficiencies as opposed to the alternative  
18 of a relatively constant focus on rate litigation.  
19 When the Company manages its resources in a cost-  
20 effective manner, both the Company and its customers  
21 benefit. That is, the Company could receive a benefit  
22 during a portion of the current rate period, and its  
23 customers during all successive rate periods, retaining  
24 the more significant value of the improvements in the  
25 business.

## ACCOUNTING PANEL

1 A three-year rate plan balances the impact of future  
2 uncertainties on customers and the Company.

3 Q. Please explain how your multi-year proposal would work.

4 A. The Company proposes that the rates set for the first  
5 rate year become the base from which projections are  
6 made for the second and third years of the rate plan.  
7 The Company further proposes that the Commission adopt  
8 a series of staged rate changes for the second and  
9 third years. We would like to emphasize that, by  
10 proposing a three-year plan in the alternative, the  
11 Company does not waive its rights to file for new rates  
12 immediately following the conclusion of this case, if  
13 the Company views (1) the rate change granted by the  
14 Commission for the first year to be inadequate, or (2)  
15 the terms for an additional rate year(s) under a multi-  
16 year rate plan to be unreasonable. We would also note  
17 that the various five-year amortizations proposed  
18 throughout the Company's filing are proposed for both  
19 the one-year rate request and the three-year rate  
20 proposal.

21 Q. Does Exhibit E-5 show the calculation of the Company's  
22 revenue requirement for the second and third years?

23 A. Yes, it does.

24 Q. Please describe Exhibit E-5.

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1 A. Exhibit E-5 consists of a summary and fifteen schedules  
2 containing Pike's proposal for a multi-year rate plan.  
3 The proposal, if adopted by the Commission, would  
4 establish rate increases for three years and offer the  
5 Commission the option to phase-in the rate increases on  
6 a levelized and earnings neutral basis, through the use  
7 of deferred accounting. The phasing-in of the  
8 requested rate increase would reduce the customer bill  
9 impact in the first year rate year and allow customers  
10 certainty as to their base rates for the next three  
11 years.

12 Q. What are the annual and levelized rate increases the  
13 Company is proposing in the rate plan?

14 A. As indicated previously, the rate increase for the  
15 first rate period would be \$1,172,100. For the second  
16 and third periods the corresponding rate increases  
17 would be \$56,400 and \$23,200, respectively. Exhibit E-  
18 5, Summary, Page 4 of 7, shows the calculation of a  
19 levelized annual increase amounting to \$614,400 per  
20 year.

21 Q. Please explain how you derived the rate increases for  
22 the second and third rate years.

23 A. As shown on Exhibit E-5, Schedules 1 through 8, the  
24 Company assumed and reflected an increase in its  
25 estimate of electric sales revenues by 0.9 percent or

## ACCOUNTING PANEL

1       \$26,500 and 1.6 percent or \$47,500 respectively for the  
2       second and third years (Schedule 1), salary and wage  
3       increases of 3.5 percent per year or \$37,600 and  
4       \$38,900, respectively for the second and third years  
5       (Schedule 2), increases in the cost of employee  
6       benefits of \$25,900 and \$26,800, respectively for the  
7       second and third years (Schedule 3), general  
8       inflationary increases on other operating expense of  
9       2.3 percent per annum or \$11,500 and \$11,800,  
10      respectively for the second and third years (Schedule  
11      4), uncollectible costs related to the higher revenues  
12      of \$200 and \$400, respectively for the second and third  
13      years (Schedule 5), depreciation associated with new  
14      plant additions of \$6,000 and \$5,600, respectively for  
15      the second and third years (Schedule 6) and net  
16      increases in payroll taxes related to higher salaries  
17      and wages and revenue taxes of \$3,400 and \$4,700,  
18      respectively for the second and third years (Schedule  
19      7). The associated computation of Federal and state  
20      income taxes is shown on Schedule 8.

21      Page 5 of Schedule 8 shows the calculation of the  
22      interest deduction included in pages 1 and 3 of  
23      Schedule 8. The majority of long term debt has been  
24      issued by Orange and Rockland for itself and its  
25      subsidiary utility affiliates, Pike and Rockland

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1 Electric Company. This adjustment is necessary in  
2 order to allocate the proper level of interest expense  
3 to each jurisdiction.

4 Q. Please discuss how rate base was projected for the  
5 second and third years of the proposed rate plan.

6 A. Rate base is shown on Exhibit E-5, Summary, Page 6 and  
7 reflects the Company's forecast of plant additions,  
8 depreciation accruals, working capital, and changes in  
9 deferred income tax balances. In addition, deferred  
10 balances have been adjusted to reflect the impact of  
11 amounts amortized each year. The details supporting the  
12 adjustments to rate base are shown on Schedules 9  
13 through 15.

14 Q. Does that conclude your testimony?

15 A. Yes, it does.

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1 Q. Would the members of the Forecasting Panel please state  
2 their names and business address.

3 A. Patrick F. Hourihane, and Charles K. Akabay, 4 Irving  
4 Place, New York, New York 10003.

5 Q. By whom are you employed, in what capacity, and what  
6 are your professional backgrounds and qualifications?

7 A. (Hourihane). We are employed by Consolidated Edison  
8 Company of New York, Inc. ("Con Edison").

9 (Hourihane). I am Section Manager of Electric Revenue  
10 and Volume Forecasting in Corporate Accounting. My  
11 background is as follows: I received a Bachelor of  
12 Arts Degree in History from Saint Meinrad in 1974 and a  
13 Masters Degree in Energy Management from New York  
14 Institute of Technology in 2000. In 1975, I began my  
15 employment with Con Edison in the Customer Service  
16 Department. Between 1978 and 2005, I worked in  
17 positions of increasing responsibility in Customer  
18 Service and Energy Management Departments working on  
19 such projects as the electric governmental forecast and  
20 gas sales forecast. In 2005, I transferred to the Rate  
21 Engineering Department. In December 2006, I was  
22 promoted to my present position.

23 (Akabay). I am a Senior Analyst in the Revenue and



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1 Volume Forecasting Department in Corporate Accounting.  
2 My background is as follows: I received a Bachelor's  
3 degree in Economics and Finance from the University of  
4 Ankara, Turkey, in 1969. I also received an MBA degree  
5 in Economics and Econometrics from New York University  
6 in 1976. In 1986, I joined Con Edison in the capacity  
7 of Analyst as an experienced economic modeler and  
8 forecaster. I have developed econometric time series  
9 models and forecasts for Orange and Rockland Utilities,  
10 Inc. ("Orange and Rockland") and Con Edison, as well as  
11 at my previous employers, General Motors Corporation  
12 and New York Telephone Company. Prior to joining Con  
13 Edison, I taught economics and econometrics at the  
14 State University of New York.

15 Q. Please generally describe your current  
16 responsibilities.

17 A. (Hourihane). My responsibilities include the  
18 preparation of electric sales forecasts, and electric  
19 transmission and distribution ("T&D") revenue  
20 forecasts.

21 (Akabay). My current responsibilities include the  
22 development, maintenance and updating of the Company's  
23 electric energy forecasting models, and presentation of

PIKE COUNTY LIGHT & POWER COMPANY  
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1 energy forecasts.

2 Q. Have you published any literature which is relevant to  
3 modeling and forecasting?

4 A. (Akabay). Yes, I co-authored two articles dealing with  
5 problems in econometric time series modeling and  
6 forecasting that have been published in the Journal of  
7 Business Forecasting - Methods & Systems.

8 Q. Have you previously testified before the Pennsylvania  
9 Public Utility Commission ("PAPUC")?

10 A. (Hourihane). No.  
11 (Akabay). No.

12 Q. What is the responsibility of the Forecasting Panel in  
13 this proceeding?

14 A. We present the forecast of Pike County Light & Power  
15 Company's ("Pike" or the "Company") electric sales  
16 volumes and revenues from April 1, 2008 to March 31,  
17 2009, and discuss the methodologies used to develop  
18 these forecasts.

19 Q. What are the actual and normalized total sales volumes  
20 for the 12 months ended March 31, 2008?

21 A. The actual total sales volume for the 12 months ended  
22 March 31, 2008 is 75,394 MWHs. The total normalized  
23 sales volume for this period is 75,449 MWHs.

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1 Q. Please summarize, in aggregate form, your sales volume  
2 forecasts for the 12 months ending March 31, 2009.

3 A. For the 12 months ending March 31, 2009, the total  
4 sales volume forecast is 75,651, which is an increase  
5 of 202 MWHs from the 12 months ended March 31, 2008 and  
6 reflects a 0.3% growth for the period.

7 Q. The Accounting Panel is proposing a three-year  
8 agreement. Do you have a sales volume forecast for the  
9 additional two years?

10 A. Yes we do. For the 12 months ending March 31, 2010,  
11 the total sales volume forecast is 76,303 MWHs, which  
12 is an increase of 652 MWHs and reflects a 0.9% growth  
13 over the forecast for the 12 months ending March 31,  
14 2009. For the 12 months ending March 31, 2011, the  
15 total sales volume forecast is 77,555, which is an  
16 increase of 1,252 MWHs and reflects a 1.6% growth over  
17 the forecast for the 12 months ending March 31, 2010.

18 SALES VOLUMES

19 Q. What forecasting methodologies did you use to project  
20 the Company's electric sales volumes?

21 A. The billed sales volume forecasts are based on various  
22 econometric and time series models. Models for  
23 forecasting billed sales volumes are done on the major

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1           classifications defined as residential, secondary,  
2           primary, and lighting.

3    Econometric Models

4    Q.    Please describe the econometric models you used,  
5           including their modeling periods, the independent  
6           variables included in them, and the model structures.

7    A.    Econometric models have been used to forecast billed  
8           sales volumes for residential, secondary and primary.  
9           The modeling periods, the independent variables, and  
10          the model structure are described below.

11   Modeling Period

12          The econometric models are developed on a quarterly  
13          basis. For the residential and secondary models, the  
14          modeling period starts with the first quarter of 1990  
15          and ends with the first quarter of 2008. For the  
16          primary model, however, the modeling period starts in  
17          the first quarter of 1994 and ends with the first  
18          quarter of 2008.

19   Independent Variables

20          The models basically include three types of independent  
21          variables - weather, economic and others.

22          Weather variables in terms of heating and cooling  
23          degree days are included in the models to account for

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1 delivery volume variations due to differences in  
2 weather conditions. The key economic variables in the  
3 various models are private non-manufacturing  
4 employment, real electric price, and the number of  
5 customers.

6 The residential and primary models include real  
7 electric price for their respective classes, private  
8 non-manufacturing employment and number of customers  
9 for the respective class. The secondary model includes  
10 real electric price and number of customers.

11 The lighting model is a pure time series an integrated  
12 autoregressive and moving average ("ARIMA") model that  
13 does not include any economic variables. For the  
14 lighting model, the modeling period starts with the  
15 first quarter of 1990 and ends with the first quarter  
16 of 2008.

17 In addition, the secondary model includes a  
18 combination of a dummy variable and a deterministic  
19 trend variable to account for a level-shift during the  
20 period between the fourth quarter of 1996 and the  
21 second quarter of 2005. The primary model includes a  
22 dummy variable for an atypical observation that can not  
23 be accounted for by the included variables. It also

PIKE COUNTY LIGHT & POWER COMPANY  
ELECTRIC RATE CASE  
DIRECT TESTIMONY OF  
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1 includes a binary level-shift variable to account for  
2 the expansion of a customer beginning in the first  
3 quarter of 2006.

4 Model Structure

5 Each of the econometric models consists of two parts:  
6 the first part is a regression model, which relates the  
7 sales volume with the set of independent variables  
8 included in the model; the second part is an ARIMA  
9 model. The ARIMA model can take many different forms,  
10 and each model has its own ARIMA structure  
11 statistically determined according to the data pattern  
12 of each major classification.

13 Q. What is the purpose of including an ARIMA part in the  
14 econometric model?

15 A. In forecast modeling, the model can include only a few  
16 key economic variables, such as real electric price,  
17 number of customers and employment. All other economic  
18 variables, which may have an effect on electric sales  
19 but either are not quantifiable or for which no data is  
20 available, are excluded from the model. The ARIMA  
21 mechanism captures the collective effect of those  
22 excluded variables. In addition, ARIMA also smoothes  
23 out autocorrelations in the data; the presence of

PIKE COUNTY LIGHT & POWER COMPANY  
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DIRECT TESTIMONY OF  
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1            autocorrelations would increase forecast error.

2    Model Assumptions

3    Q.    You listed the key economic variables used in  
4           forecasting models as private non-manufacturing  
5           employment, real electric price, and the number of  
6           customers in each major classification. Please explain  
7           how the forecast of private non-manufacturing  
8           employment was developed.

9    A.    The private non-manufacturing employment forecast is  
10          prepared by the economic consulting firm, Moody's  
11          Economy.com.    Moody's Economy.com prepares a  
12          "Newburgh" forecast that consists of Pike County,  
13          Pennsylvania and Orange County, New York. The Newburgh  
14          employment forecasts show that private non-  
15          manufacturing employment is projected to increase by  
16          0.2% in 2008, and 0.7% in 2009.

17   Q.    What assumption do the models use for the real price  
18          variable for forecasting purposes?

19   A.    For forecasting purposes, we assumed that the real  
20          electric price remains at the same level as for the 12  
21          months ended March 2008 level.

22   Q.    Please explain the development of the number of  
23          customers for Pike's various service classifications.

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1 A. The forecasts for the number of residential and  
2 secondary customers are based on the input of the  
3 Company's new business group. The number of  
4 residential customers is projected to grow by nine  
5 customers a year for 2008 and 2009. The number of  
6 secondary customers is assumed to remain stationary for  
7 2008 and expected to grow by two in year 2009. The  
8 number of primary customers is not expected to change  
9 from the current level of seven. The number of  
10 lighting customers is also not expected to change after  
11 the average number of customers for the last two years  
12 has declined by 4 in 2006 and 3 in 2007.

13 Q. Are the foregoing projections of employment, real  
14 electric price and numbers of customers used as inputs  
15 in the forecasting models to generate the Pike County  
16 sales volume forecasts?

17 A. Yes.

18 Q. Are there any adjustments to the volume forecasts  
19 generated by these models?

20 A. Yes. The primary volume forecast generated from the  
21 model assumes that there are six customers. The  
22 forecasted load for a new primary customer that came on  
23 line in March 2008 was developed independently from the



PIKE COUNTY LIGHT & POWER COMPANY  
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1 model. This new customer's load is smaller than the  
2 historical average size for primary load so the model's  
3 projected load would overstate the sales for this  
4 seventh customer. Therefore, we manually added sales  
5 to the model forecast.

6 Q. How were the quarterly volume forecasts disaggregated  
7 into monthly sales volumes?

8 A. Quarterly sales volumes were divided into monthly sales  
9 volumes by reflecting the patterns of weather-  
10 normalized historical monthly sales volumes over the  
11 past two years. Monthly sales volumes also were  
12 adjusted for the appropriate billing-days.

13 Q. How do you account for unbilled sales in calculating  
14 Pike's total sales volumes?

15 A. The total sales volumes are derived by estimating the  
16 unbilled sales volumes and adding those volumes to the  
17 billed volume forecast.

18 Q. Please explain unbilled sales volumes.

19 A. Billed sales volumes are recorded on a billing cycle  
20 basis, which does not represent the calendar month.  
21 The unbilled sales volumes translate the billed sales  
22 volumes from a billing cycle basis to sales on a  
23 calendar month basis.

PIKE COUNTY LIGHT & POWER COMPANY  
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1 Q. How are the unbilled sales estimated?

2 A. The unbilled sales volumes are estimated by subtracting  
3 the monthly cycle billed volume forecast from the  
4 monthly calendar volume forecast.

5 Q. How are the monthly calendar volumes forecasted?

6 A. The monthly calendar volumes are forecasted by taking  
7 the monthly cycle billed sales volumes and adjusting  
8 for the difference between cycle degree days and  
9 calendar degree days. The billing cycle sales volumes  
10 are also adjusted for the difference in the number of  
11 days between the monthly billing cycle and calendar  
12 days.

13 REVENUE FORECAST

14 Q. Please explain the method of estimating Pike's T&D  
15 revenues for the forecast periods.

16 A. The T&D revenues from the forecasted billed sales  
17 volumes to Pike's customers were estimated by month and  
18 by service classification. For residential, secondary  
19 and primary service classes a customer charge is  
20 calculated based on the number of customers forecasted  
21 for each service class. For energy, a pricing equation  
22 is developed by correlating historical average T&D  
23 revenue of the class to historical monthly billed

PIKE COUNTY LIGHT & POWER COMPANY  
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1 volumes of the class. For the secondary and primary  
2 service classes, where energy and demand charges apply,  
3 a demand pricing equation is developed by correlating  
4 historical billed average T&D revenue of the class to  
5 historical billed demand of the class. The pricing  
6 equations are based upon the historical data from 2007.  
7 Service Classes 3 & 4 (Lighting) were priced at the  
8 tariff rate. For the unbilled sales volumes, the T&D  
9 revenue was derived by applying the resulting  
10 forecasted average T&D rate for each month and for each  
11 service class to the unbilled volumes for that month  
12 and service class.

13 Q. Please explain the projection of billable demand for  
14 Pike's secondary and primary customers.

15 A. Billable demand is the ratio of the forecasts for  
16 billed energy volumes and the average hours use.

17 Q. How are the average hours use forecasted?

18 A. An analysis of the relationship between historical  
19 billed sales volumes and billable demand is used to  
20 project the average hours use.

21 Q. I show you a one-page document, which is entitled  
22 "ELECTRIC SALES VOLUMES AND REVENUES FROM SALES VOLUMES  
23 BY SERVICE CLASSIFICATION" and ask if it was prepared

PIKE COUNTY LIGHT & POWER COMPANY  
ELECTRIC RATE CASE  
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1 under your supervision and direction?

2 A. Yes, it was.

3 MARK FOR IDENTIFICATION EXHIBIT\_\_\_(E-6),

4 Q. Please describe what is shown on this Exhibit?

5 A. This Exhibit shows electric sales volumes and revenues  
6 by service classification for the twelve months ending  
7 March 31, 2009. Kilowatt hour sales volumes are shown  
8 in Column 1, the annual sum of the monthly billable  
9 demand is shown in column 2, T&D revenues at the  
10 currently effective rates in Column 3.

11 Q. Does this conclude your testimony?

12 A. Yes, it does.

PIKE COUNTY LIGHT & POWER COMPANY  
DIRECT TESTIMONY OF  
CHARLES D. HUTCHESON - ELECTRIC

1 Q. Please state your name and business address.

2 A. My name is Charles D. Hutcheson. My business address  
3 is 4 Irving Place, New York, New York.

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

5 A. I am an employee of Consolidated Edison Company of New  
6 York, Inc. ("CECONY") and hold the position of Manager  
7 of the Property Tax and Depreciation group. My duties  
8 include responsibility for the property tax and  
9 depreciation functions for the regulated subsidiaries  
10 of Consolidated Edison, Inc., which includes Pike  
11 County Light & Power Company ("the Company").

12 Q. Please briefly outline your educational background and  
13 business experience.

14 A. I graduated from Hofstra University in May 1978 with  
15 the degree of Bachelor of Business Administration in  
16 Accounting. I have been employed by CECONY since  
17 January 2, 1979 and have held various positions of  
18 increasing responsibility within the Finance  
19 Department. My first assignment with CECONY was in the  
20 Depreciation Section. I spent my first 15 years of  
21 employment in that area rising to the position of  
22 Senior Accountant. In 1993, I moved to the Rates and

CHARLES D. HUTCHESON - ELECTRIC

1 Budget Section. In 1996, I transferred to the  
2 Financial Restructuring Team, where my duties were to  
3 assist on the development of CECONY's rate plan in the  
4 New York Public Service Commission's Competitive  
5 Opportunities Proceeding. I moved to the Tax  
6 Department in 1997 after the Restructuring Team  
7 disbanded to work as a Senior Tax Accountant in the  
8 Federal Tax Section. In September 1999, I was promoted  
9 to Manager, Property Taxes. In December 2001, I once  
10 again began working on depreciation matters when the  
11 Tax Department assumed responsibility for the book  
12 depreciation function for our regulated subsidiaries,  
13 including the Company. My duties include  
14 responsibility for gathering the statistical data for  
15 and preparing plant mortality and net salvage studies  
16 and for analyzing and interpreting the results of these  
17 studies.

18 Q. Are you a member of any professional societies?

19 A. Yes. I am a member of the Society of Depreciation  
20 Professionals. The group was formed to recognize the  
21 field of depreciation and those individuals  
22 contributing to the field. It also promotes the  
23 professional development of those practicing in the  
24 field of depreciation and serves as a forum to collect

CHARLES D. HUTCHESON - ELECTRIC

1 and exchange information and ideas related to  
2 depreciation. Membership is not restricted to the  
3 utility industry as the Society is represented by those  
4 in the fields of government, education, and industry.

5 Q. Have you previously testified before any regulatory  
6 commission?

7 A. I have submitted testimony and testified on the subject  
8 of depreciation and/or property taxes for CECONY and  
9 Orange and Rockland Utilities, Inc. before the New York  
10 State Public Service Commission and before the New  
11 Jersey Board of Public Utilities (on behalf of Rockland  
12 Electric Company) in numerous cases.

13 Q. What is the purpose of your testimony in this  
14 proceeding?

15 A. The purpose of my testimony is to present  
16 recommendations with respect to the annual book  
17 depreciation rates for the Company's Electric Utility  
18 Plant. In addition, I will identify the Accumulated  
19 Provision for Depreciation per Books at December 31,  
20 2007, the computed reserve based on existing rates, and  
21 the computed reserve based on proposed rates for  
22 Electric Plant. Lastly, my testimony will detail the  
23 variations between the book and theoretical reserve.

24 Q. Have you reviewed the adequacy of the Accumulated

CHARLES D. HUTCHESON - ELECTRIC

1 Provision for Depreciation per books and the factors  
2 that determine annual depreciation expense?

3 A. Yes, I have. The Company prepares annual studies of  
4 depreciation that test the Accumulated Provision for  
5 Depreciation per Books. In addition, the Company  
6 prepares plant mortality studies to determine average  
7 service lives and life tables that are appropriate for  
8 each depreciable asset account or sub-account. The most  
9 recent studies are based on plant mortality experience  
10 through December 31, 2006.

11 Q. Based on these studies, are you recommending any  
12 changes to depreciation related to the Company's  
13 Electric Utility Plant?

14 A. Yes, after a thorough review of the aforementioned  
15 annual studies of depreciation, I have concluded that  
16 various changes to the Company's depreciation  
17 parameters are required.

18 Q. Have you prepared an exhibit for this proceeding that  
19 summarizes your proposals?

20 A. Yes. I have prepared an exhibit entitled "PIKE COUNTY  
21 LIGHT AND POWER COMPANY, PROPOSED DEPRECIATION RATE  
22 CHANGES FOR ELECTRIC PLANT AT DECEMBER 31, 2007."

23 Q. Was this exhibit prepared under your direction and  
24 supervision?



CHARLES D. HUTCHESON - ELECTRIC

1 A. Yes, it was.

2 MARK FOR IDENTIFICATION AS EXHIBIT \_\_\_\_ (E-10,  
3 Schedule 1)

4 Q. Please describe this exhibit.

5 A. The exhibit compares the Annual Provision for  
6 Depreciation on a "BOOK BASIS" and on a "PROPOSED  
7 BASIS". This exhibit also includes a comparison of the  
8 Accumulated Provision for Depreciation per books at  
9 December 31, 2007 to a computed, or theoretical reserve  
10 based on depreciation parameters currently in effect,  
11 and on the average service lives and life tables that I  
12 am proposing in this case.

13 Q. What is the basis for the changes you have proposed?

14 A. The proposed changes are based primarily on my review  
15 and analysis of the historical data comprising the  
16 Company's plant mortality studies. The studies are my  
17 primary means of determining an appropriate average  
18 service life and h-curve by employing actuarial methods  
19 based on past experience. The data within those  
20 studies are organized into various groupings, referred  
21 to as rolling or shrinking bands, which aid in the  
22 analysis of the extensive historical information  
23 available. In those instances where an account does  
24 not have sufficient retirement results to produce

CHARLES D. HUTCHESON - ELECTRIC

1 statistically reliable mortality data, I relied on  
2 existing depreciation parameters.

3 Q. What part does the average service life play in the  
4 determination of depreciation rates?

5 A. The estimated average service life is used to provide  
6 for the recovery of the original cost of plant over its  
7 useful life.

8 Q. Please describe the changes you propose to the average  
9 service lives as a result of the aforementioned  
10 depreciation studies.

11 A. As set forth in Exhibit \_\_\_ (E-10, Schedule 1), I  
12 propose to implement 12 changes to average service  
13 lives that will result in a decrease in annual  
14 depreciation expense of \$2,230 based on the book cost  
15 of plant at December 31, 2007.

16 Q. What is the effect on annual depreciation expense of a  
17 change to an average service life?

18 A. The depreciation expense accrual varies inversely with  
19 its underlying average service life - the longer the  
20 service life, the lower the annual depreciation rate,  
21 and therefore, the lower annual depreciation expense.  
22 Conversely, a shorter service life results in a higher  
23 annual depreciation rate, and therefore, a higher  
24 annual depreciation expense. My proposals result in

CHARLES D. HUTCHESON - ELECTRIC

1 changes that both increase and decrease lives that  
2 result in a relatively minor change in the overall  
3 level of depreciation expense. In addition, as I  
4 discuss below in my testimony, the Company is  
5 experiencing a depreciation reserve variation. In  
6 their direct testimony, the Company's Accounting Panel  
7 proposes how to address this situation.

8 Q. Please describe the changes you propose to the life  
9 tables as a result of your study?

10 A. Life tables, or "h-curves" are survivor curves that  
11 represent typical patterns of retirement dispersion.  
12 An h-curve, along with an average service life is used  
13 to compute a theoretical reserve for depreciation.  
14 Changes to h-curves do not impact annual depreciation  
15 expense but do affect computed reserves, which are used  
16 to help determine whether the Company's actual book  
17 depreciation reserve is adequate.

18 Q. Do you have an exhibit containing the data you relied  
19 on to select appropriate depreciation rates?

20 A. Yes, I do. For accounts where I have performed studies,  
21 I have an exhibit entitled "PIKE COUNTY LIGHT AND POWER  
22 COMPANY, ELECTRIC UTILITY PLANT, SUMMARY OF AVERAGE  
23 SERVICE LIVES, EQUIVALENT "h" CURVES AND OTHER  
24 STATISTICAL DATA INDICATED BY PLANT MORTALITY STUDIES

CHARLES D. HUTCHESON - ELECTRIC

1           BASED ON EXPERIENCE THROUGH DECEMBER 31, 2006."

2   Q.    Was this exhibit prepared under your direction and  
3           supervision?

4   A.    Yes, it was.

5                    MARK FOR IDENTIFICATION AS EXHIBIT \_\_\_\_ (E-10,  
6                    Schedule 2)

7   Q.    Please describe this exhibit.

8   A.    The exhibit includes computer generated average service  
9           lives, equivalent h-curves, and other statistical data  
10          indicated by the rolling and shrinking band analysis of  
11          the Company's mortality experience with respect to  
12          Electric Utility Plant from 1952 (or the earliest  
13          available date), through 2006.

14   Q.    From what source was the data for this exhibit  
15          obtained?

16   A.    The Company utilizes a program adopted from the New  
17          York State Public Service Commission's computer  
18          programs that employ actuarial methods for the  
19          development of life tables and average service lives  
20          based on utility plant mortality experience.

21   Q.    What is the source of the data for the aforementioned  
22          programs?

23   A.    The source data comes from the Company's books and  
24          records.

CHARLES D. HUTCHESON - ELECTRIC

1 Q. What part does salvage play in the determination of  
2 depreciation rates?

3 A. In lieu of recovering net salvage costs through the  
4 annual depreciation rate, the Pennsylvania Public  
5 Utility Commission establishes an annual allowance to  
6 be collected through base rates which is computed by  
7 averaging the Company's annual actual expenditures for  
8 net salvage costs. That amount is then added to or  
9 subtracted from annual depreciation expense. The  
10 Company's Accounting Panel addresses the adjustment for  
11 net salvage in their testimony.

12 Q. Please review your findings on the difference between  
13 the book and computed reserve for depreciation.

14 A. Exhibit \_\_\_ (E-10, Schedule 1) shows that for the total  
15 Electric Utility Plant at December 31, 2007, the  
16 Accumulated Provision for Depreciation per books  
17 amounted to approximately \$3.0 million. The computed  
18 reserve summarized under the heading "BOOK BASIS" was  
19 calculated on the basis of the average service lives  
20 and life tables currently in use by the Company and in  
21 total amounted to approximately \$2.6 million. The  
22 computed reserve shown under the heading "PROPOSED  
23 BASIS" was calculated based on the average service  
24 lives and life tables proposed by me and in total

CHARLES D. HUTCHESON - ELECTRIC

1           amounted to approximately \$2.6 million. The exhibit  
2           indicates that for the total Electric Utility Plant the  
3           Accumulated Provision for Depreciation per books is  
4           approximately \$383,000 greater than the computed  
5           reserve based upon the "BOOK BASIS" and approximately  
6           \$416,000 greater than the computed reserve based upon  
7           the "PROPOSED BASIS."

8   Q.   What does the Company propose to do with this  
9           variation?

10  A.   In their direct testimony, the Company's Accounting  
11       Panel sets forth a proposal to amortize this variation.

12  Q.   What effect will your proposed changes have on annual  
13       depreciation expense?

14  A.   As I indicated earlier, the impact on annual  
15       depreciation expense resulting from my proposals to  
16       change average service lives amounts to a decrease of  
17       \$2,230 annually. That amount is based on the book cost  
18       as of December 31, 2007 and is not reflective of plant  
19       changes in the future. Therefore, the Accounting Panel  
20       has computed the total changes to depreciation expense  
21       (see Exhibit \_\_\_\_ (E-4, Schedule 13)) based on the rates  
22       I have proposed, adjusted for a new level for the net  
23       salvage allowance, as well as an adjustment to amortize  
24       the reserve variation.

CHARLES D. HUTCHESON - ELECTRIC

1 Q. Are there any other issues that you would like to  
2 address at this time?

3 A. Yes. In accordance with PUC Docket C-20065942, the  
4 Company has established a presence in Pennsylvania by  
5 opening a new Customer Service Center in Milford,  
6 Pennsylvania. Therefore, it is likely that various  
7 common utility plant accounts will be opened to record  
8 the related capital costs that will need to be  
9 depreciated. In order to recover these costs, I  
10 propose to amortize the costs related to the office  
11 renovation over five years. For all other common  
12 utility plant, I also propose to recover the costs by  
13 amortizing them over five years. The all other common  
14 utility plant is expected to consist of routine office  
15 equipment like personal computers, telephones, desks,  
16 and chairs. Any future equipment that may need to be  
17 added, or equipment that will replace retired  
18 equipment, will be amortized over a new five year  
19 amortization period beginning with their in-service  
20 date.

21 Q. Does that conclude your testimony?

22 A. Yes, it does.

**BEFORE THE PENNSYLVANIA PUBLIC UTILITY COMMISSION**

In the matter of:

APPLICATION OF PIKE COUNTY )  
LIGHT & POWER COMPANY FOR AN ) CASE NO. \_\_\_\_\_  
INCREASE IN ELECTRIC AND GAS RATES )

TESTIMONY

OF

ROGER A. MORIN, PhD

July 2008



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**PIKE COUNTY LIGHT & POWER COMPANY**

**TESTIMONY OF DR. ROGER A. MORIN**

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1 **I. INTRODUCTION**

2 Q. Please state your name, address, and occupation.

3 A. My name is Dr. Roger A. Morin. My business address is Georgia State  
4 University, Robinson College of Business, University Plaza, Atlanta, Georgia,  
5 30303. I am Emeritus Professor of Finance at the Robinson College of Business,  
6 Georgia State University and Professor of Finance for Regulated Industry at the  
7 Center for the Study of Regulated Industry at Georgia State University. I am also  
8 a principal in Utility Research International, an enterprise engaged in regulatory  
9 finance and economics consulting to business and government.

10 Q. Please describe your educational background.

11 A. I hold a Bachelor of Engineering degree and an MBA in Finance from McGill  
12 University, Montreal, Canada. I received my Ph.D. in Finance and Econometrics  
13 at the Wharton School of Finance, University of Pennsylvania.

14 Q. Please summarize your academic and business career.

15 A. I have taught at the Wharton School of Finance, University of Pennsylvania,  
16 Amos Tuck School of Business at Dartmouth College, Drexel University,  
17 University of Montreal, McGill University, and Georgia State University. I was a  
18 faculty member of Advanced Management Research International, and I am  
19 currently a faculty member of The Management Exchange Inc. and Exnet, where I  
20 continue to conduct frequent national executive-level education seminars  
21 throughout the United States and Canada. In the last thirty years, I have  
22 conducted numerous national seminars on "Utility Finance," "Utility Cost of  
23 Capital," "Alternative Regulatory Frameworks," and on "Utility Capital  
24 Allocation," which I have developed on behalf of The Management Exchange Inc.

1 in conjunction with Public Utilities Reports, Inc.

2 I have authored or co-authored several books, monographs, and articles in  
3 academic scientific journals on the subject of finance. They have appeared in a  
4 variety of journals, including The Journal of Finance, The Journal of Business  
5 Administration, International Management Review, and Public Utility  
6 Fortnightly. I published a widely-used treatise on regulatory finance, Utilities'  
7 Cost of Capital, Public Utilities Reports, Inc., Arlington, Va. 1984. My second  
8 book on regulatory matters, Regulatory Finance, is a voluminous treatise on the  
9 application of finance to regulated utilities and was released by the same publisher  
10 in late 1994. A revised and expanded edition, The New Regulatory Finance, was  
11 published in 2006. I have engaged in extensive consulting activities on behalf of  
12 numerous corporations, legal firms, and regulatory bodies in matters of financial  
13 management and corporate litigation. Exhibit RAM-1 describes my professional  
14 credentials in more detail.

15 Q. Have you previously testified on cost of capital before regulatory bodies?

16 A. Yes, I have been a cost of capital witness before nearly fifty (50) regulatory  
17 bodies in North America, including the Pennsylvania Public Utility Commission  
18 (“PPUC”), the Federal Energy Regulatory Commission and the Federal  
19 Communications Commission. I have testified before regulatory bodies in the  
20 following states:

Alabama	Hawaii	Montana	Ontario
Alaska	Illinois	Nevada	Oregon
Alberta	Indiana	New Brunswick	Pennsylvania
Arizona	Iowa	New Hampshire	Quebec
Arkansas	Kentucky	New Jersey	South Carolina
British Columbia	Louisiana	New York	South Dakota
California	Maine	Newfoundland	Tennessee
Colorado	Manitoba	North Carolina	Texas
Delaware	Michigan	North Dakota	Utah
District of Columbia	Minnesota	Nova Scotia	Vermont
Florida	Mississippi	Ohio	Washington
Georgia	Missouri	Oklahoma	West Virginia

1           The details of my participation in regulatory proceedings are provided in Exhibit  
2           RAM-1.

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

4    A.       The purpose of my testimony in this proceeding is to present an independent  
5           appraisal of the fair and reasonable rate of return on the common equity capital  
6           (“ROE”) invested in Pike County Power & Light Company’s (“PCPL” or the  
7           “Company”) energy delivery operations in the State of Pennsylvania. Based  
8           upon this appraisal, I have formed my professional judgment as to a return on  
9           such capital that would: (1) be fair to customers, (2) allow the Company to attract  
10          equity capital on reasonable terms, (3) maintain the Company’s financial  
11          integrity, and (4) be comparable to returns offered on comparable risk  
12          investments. I will testify in this proceeding as to the basis for that opinion.

13                 This testimony and accompanying schedules were prepared by me or  
14                 under my direct supervision and control. The source documents for my testimony  
15                 are Company records, public documents, and my personal knowledge and  
16                 experience.

1

2 Q. Please briefly identify the schedules and appendices accompanying your  
3 testimony.

4 A. I have attached to my testimony Exhibit RAM-1 through Exhibit RAM-8 and  
5 Appendices A and B. These Exhibits and Appendices relate directly to points in  
6 my testimony, and are described in further detail in connection with the  
7 discussion of those points in my testimony.

8 Q. Please summarize your findings and recommendation.

9 A. I recommend the adoption of a ROE of 10.9% on PCPL's electric and gas  
10 delivery operations. My recommendation is derived from studies that I performed  
11 using the Capital Asset Pricing Model ("CAPM"), Risk Premium, and Discounted  
12 Cash Flow ("DCF") methodologies. I performed two CAPM analyses, one using  
13 the plain vanilla CAPM and another using an empirical approximation of the  
14 CAPM ("ECAPM"). I performed two risk premium analyses: (1) a historical risk  
15 premium analysis on the electric utility industry, and (2) a study of the risk  
16 premiums allowed in the electric utility industry. I also performed DCF analyses  
17 on two surrogates for the Company's electricity delivery business. They are: a  
18 group of investment-grade electricity delivery utilities and a group consisting of  
19 the companies that make up Moody's Electric Utility Index.

20 My recommended rate of return reflects the application of my professional  
21 judgment to the indicated returns from my CAPM, Risk Premium, and DCF  
22 analyses.

23 Q. Dr. Morin, please describe how your testimony is organized.

24 A. The remainder of my testimony is divided into three (3) sections:

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- I. Regulatory Framework and Rate of Return;
- II. Cost of Equity Estimates; and
- III. Summary and Cost of Equity Recommendation.

The first section discusses the rudiments of rate of return regulation and the basic notions underlying rate of return. The second section contains the application of CAPM, Risk Premium, and DCF tests. The third section summarizes the results from the various approaches used in determining a fair return.

**A. REGULATORY FRAMEWORK AND RATE OF RETURN**

Q. What economic and financial concepts have guided your assessment of PCPL’s cost of common equity?

A. Two fundamental economic principles underlie the appraisal of the Company’s cost of equity, one relating to the supply side of capital markets, the other to the demand side. According to the first principle, a rational investor maximizes the performance of his or her portfolio only if he or she expects the returns earned on investments of comparable risk to be the same. If not, the rational investor will switch out of those investments yielding lower returns at a given risk level in favor of those investment activities offering higher returns for the same degree of risk. This principle implies that a company will be unable to attract the capital funds it needs to meet its service demands and to maintain financial integrity unless it can offer returns to capital suppliers that are comparable to those achieved on competing investments of similar risk. On the demand side, the second principle asserts that a company will continue to invest in real physical

1 assets if the return on these investments exceeds or equals the company's marginal  
2 cost of capital. This concept suggests that a regulatory commission should set  
3 rates at a level sufficient to create at least equality between the return on physical  
4 asset investments and the company's cost of capital.

5 Q. How does PCPL's cost of capital relate to that of its parent company, Orange and  
6 Rockland Utilities, Inc. ("O&R")?

7 A. I am treating PCPL's electric/gas delivery operations as a separate stand-alone  
8 entity, distinct from its holding company, O&R, because it is the cost of capital  
9 for PCPL's electric and gas utility business that we are attempting to measure and  
10 not the cost of capital for O&R's consolidated activities. Financial theory  
11 establishes that the true cost of capital depends on the use to which the capital is  
12 put, in this case PCPL's electric and gas delivery operations in the State of  
13 Pennsylvania. The specific source of funding an investment and the cost of funds  
14 to the investor are irrelevant considerations.

15 For example, if an individual investor borrows money at the bank at an  
16 after-tax cost of 8% and invests the funds in a speculative oil extraction venture,  
17 the required return on the investment is not the 8% cost but, rather, the return  
18 foregone in speculative projects of similar risk, say 20%. Similarly, the required  
19 return on PCPL is the return foregone in comparable risk electric delivery  
20 operations, and is unrelated to the parent's cost of capital. The cost of capital is  
21 governed by the risk to which the capital is exposed and not by the source of  
22 funds. The identity of the shareholders has no bearing on the cost of equity, be it  
23 either individual investors or a parent holding company.

24 Just as individual investors require different returns from different assets

1 in managing their personal affairs, corporations behave in the same manner. A  
2 parent company normally invests money in many operating companies of varying  
3 sizes and varying risks. These operating subsidiaries pay different rates for the  
4 use of investor capital, such as for long-term debt capital, because investors  
5 recognize the differences in capital structure, risk, and prospects between  
6 subsidiaries. Thus, the cost of investing funds in an operating utility company  
7 such as PCPL is the return foregone on investments of similar risk and is  
8 unrelated to the investor's identity.

9 Q. Under traditional cost of service regulation, please explain how a regulated  
10 company's rates should be set.

11 A. Under the traditional regulatory process, a regulated company's rates should be set  
12 so that the company recovers its costs, including taxes and depreciation, plus a  
13 fair and reasonable return on its invested capital. The allowed rate of return must  
14 necessarily reflect the cost of the funds obtained, that is, investors' return  
15 requirements. In determining a company's rate of return, the starting point is  
16 investors' return requirements in financial markets. A rate of return can then be  
17 set at a level sufficient to enable the company to earn a return commensurate with  
18 the cost of those funds.

19 Funds can be obtained in two general forms, debt capital and equity  
20 capital. The cost of debt funds can be easily ascertained from an examination of  
21 the contractual interest payments. The cost of common equity funds, that is,  
22 investors' required rate of return, is more difficult to estimate. It is the purpose of  
23 the next section of my testimony to estimate PCPL's cost of common equity  
24 capital.



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2 Q. Dr. Morin, what must be considered in estimating a fair ROE?

3 A. The legal requirement is that the allowable ROE should be commensurate with  
4 returns on investments in other firms having corresponding risks. The allowed  
5 return should be sufficient to assure confidence in the financial integrity of the  
6 firm, in order to maintain creditworthiness, and ability to attract capital on  
7 reasonable terms. The attraction of capital standard focuses on investors' return  
8 requirements that are generally determined using market value methods, such as  
9 the Risk Premium, CAPM, or DCF methods. These market value tests define fair  
10 return as the return that investors anticipate when they purchase equity shares of  
11 comparable risk in the financial marketplace. This return is a market rate of  
12 return, defined in terms of anticipated dividends and capital gains as determined  
13 by expected changes in stock prices, and reflects the opportunity cost of capital.  
14 The economic basis for market value tests is that new capital will be attracted to a  
15 firm only if the return expected by the suppliers of funds is commensurate with  
16 that available from alternative investments of comparable risk.

17 Q. What fundamental principles underlie the determination of a fair and reasonable  
18 ROE?

19 A. The heart of utility regulation is the setting of just and reasonable rates by way of  
20 a fair and reasonable return. There are two landmark United States Supreme Court  
21 cases that define the legal principles underlying the regulation of a public utility's  
22 rate of return and provide the foundations for the notion of a fair return:

23 1. Bluefield Water Works & Improvement Co. v. Public Service  
24 Commission of West Virginia, 262 U.S. 679 (1923).

1                   2. Federal Power Commission v. Hope Natural Gas Company, 320 U.S.  
2                   591 (1944).

3                   The Bluefield case set the standard against which just and reasonable rates  
4 of return are measured:

5                   *A public utility is entitled to such rates as will permit it to earn a return on*  
6 *the value of the property which it employs for the convenience of the public equal*  
7 *to that generally being made at the same time and in the same general part of the*  
8 *country on investments in other business undertakings which are attended by*  
9 *corresponding risks and uncertainties ... The return should be reasonable,*  
10 *sufficient to assure confidence in the financial soundness of the utility, and should*  
11 *be adequate, under efficient and economical management, to maintain and*  
12 *support its credit and enable it to raise money necessary for the proper discharge*  
13 *of its public duties. (Emphasis added)*

14                  The Hope case expanded on the guidelines to be used to assess the  
15 reasonableness of the allowed return. The Court reemphasized its statements in  
16 the Bluefield case and recognized that revenues must cover "capital costs." The  
17 Court stated:

18                  *From the investor or company point of view it is important that there be*  
19 *enough revenue not only for operating expenses but also for the capital costs of*  
20 *the business. These include service on the debt and dividends on the stock ... By*  
21 *that standard the return to the equity owner should be commensurate with returns*  
22 *on investments in other enterprises having corresponding risks. That return,*  
23 *moreover, should be sufficient to assure confidence in the financial integrity of*  
24 *the enterprise, so as to maintain its credit and attract capital. (Emphasis added)*

25                  The United States Supreme Court reiterated the criteria set forth in Hope in  
26 Federal Power Commission v. Memphis Light, Gas & Water Division, 411 U.S.  
27 458 (1973), in Permian Basin Rate Cases, 390 U.S. 747 (1968), and most recently  
28 in Duquesne Light Co. vs. Barasch, 488 U.S. 299 (1989). In the Permian cases,  
29 the Supreme Court stressed that a regulatory agency's rate of return order should:

30                  *...reasonably be expected to maintain financial integrity, attract necessary*  
31 *capital, and fairly compensate investors for the risks they have assumed...*  
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Therefore, the "end result" of the Commission's decision should be to allow PCPL the opportunity to earn a return on equity that is: (1) commensurate with returns on investments in other firms having corresponding risks, (2) sufficient to assure confidence in the Company's financial integrity, and (3) sufficient to maintain the Company's creditworthiness and ability to attract capital on reasonable terms.

Q. How is the fair rate of return determined?

A. The aggregate return required by investors is called the "cost of capital." The cost of capital is the opportunity cost, expressed in percentage terms, of the total pool of capital employed by the utility. It is the composite weighted cost of the various classes of capital (i.e., bonds, preferred stock, common stock) used by the utility, with the weights reflecting the proportions of the total capital that each class of capital represents. The fair return in dollars is obtained by multiplying the rate of return set by the regulator by the utility's "rate base." The rate base is essentially the net book value of the utility's plant and other assets used to provide utility service in a particular jurisdiction.

While utilities like PCPL enjoy varying degrees of monopoly in the sale of public utility services, they must compete with everyone else in the free, open market for the input factors of production, whether they be labor, materials, machines, or capital. The prices of these inputs are set in the competitive marketplace by supply and demand, and it is these input prices that are incorporated in the cost of service computation. This item is just as true for capital as for any other factor of production. Since utilities and other investor-

1 owned businesses must go to the open capital markets and sell their securities in  
2 competition with every other issuer, there is obviously a market price to pay for  
3 the capital they require, for example, the interest on debt capital, or the expected  
4 market return on common and/or preferred equity.

5 Q. How does the concept of a fair return relate to the concept of opportunity cost?

6 A. The concept of a fair return is intimately related to the economic concept of  
7 “opportunity cost.” When investors supply funds to a utility by buying its stocks  
8 or bonds, they are not only postponing consumption, giving up the alternative of  
9 spending their dollars in some other way, they also are exposing their funds to  
10 risk and forgoing returns from investing their money in alternative comparable-  
11 risk investments. The compensation that they require is the price of capital. If  
12 there are differences in the risk of the investments, competition among firms for a  
13 limited supply of capital will bring different prices. These differences in risk are  
14 translated by the capital markets into price differences in much the same way that  
15 differences in the characteristics of commodities are reflected in different prices.

16 The important point is that market prices of debt capital and equity capital  
17 are set by supply and demand, and both are influenced by the relationship  
18 between the risk and return expected for the respective securities and the risks  
19 expected from the overall menu of available securities.

20 Q. How does the Company obtain its capital and how is its overall cost of capital  
21 determined?

22 A. The funds employed by the Company are obtained in two general forms, debt  
23 capital and equity capital. The latter consists of preferred equity capital and  
24 common equity capital. The cost of debt funds and preferred stock funds can be



1 the exercise of an informed judgment. Reliance on any single method or preset  
2 formula is inappropriate when dealing with investor expectations because of  
3 possible measurement difficulties and vagaries in individual companies' market  
4 data. Examples of such vagaries include dividend suspension, insufficient or  
5 unrepresentative historical data due to a recent merger, impending merger or  
6 acquisition, and a new corporate identity due to restructuring activities. The  
7 advantage of using several different approaches is that the results of each one can  
8 be used to check the others.

9 As a general proposition, it is extremely dangerous to rely on only one  
10 generic methodology to estimate equity costs. The difficulty is compounded  
11 when only one variant of that methodology is employed. It is compounded even  
12 further when that one methodology is applied to a single company. Hence,  
13 several methodologies applied to several comparable risk companies should be  
14 employed to estimate the cost of common equity.

15 Q. Dr. Morin, are you aware that some regulatory commissions and some analysts  
16 have placed principal reliance on DCF-based analyses to determine the cost of  
17 equity for public utilities?

18 A. Yes, I am.

19 Q. Do you agree with this approach?

20 A. While I agree that it is certainly appropriate to use the DCF methodology to  
21 estimate the cost of equity, and I myself do rely on such evidence, there is no  
22 proof that the DCF produces a more accurate estimate of the cost of equity than  
23 other methodologies. As I have stated, there are three broad generic  
24 methodologies available to measure the cost of equity: DCF, Risk Premium, and

1 CAPM. All three of these methodologies are accepted and used by the financial  
2 community and firmly supported in the financial literature.

3 When measuring the cost of common equity, which essentially deals with  
4 the measurement of investor expectations, no one single methodology provides a  
5 foolproof panacea. Each methodology requires the exercise of considerable  
6 judgment on the reasonableness of the assumptions underlying the methodology  
7 and on the reasonableness of the proxies used to validate the theory and apply the  
8 methodology. The failure of the traditional infinite growth DCF model to account  
9 for changes in relative market valuation, and the practical difficulties of  
10 specifying the expected growth component, are vivid examples of the potential  
11 shortcomings of the DCF model. It follows that more than one methodology  
12 should be employed in arriving at a judgment on the cost of equity and that all of  
13 these methodologies should be applied to multiple groups of comparable risk  
14 companies.

15 There is no single model that conclusively determines or estimates the  
16 expected return for an individual firm. Each methodology has its own way of  
17 examining investor behavior, its own premises, and its own set of simplifications  
18 of reality. Investors do not necessarily subscribe to any one method, nor does the  
19 market price of a share reflect the application of any one single method by the  
20 price-setting investor. Absent any hard evidence as to which method outperforms  
21 the other, all relevant evidence should be used, without discounting the value of  
22 any results, in order to minimize judgmental error, measurement error, and  
23 conceptual infirmities. I submit that a regulatory body should rely on the results  
24 of a variety of methods applied to a variety of comparable groups. There is no

1           guarantee that a single DCF result is necessarily the ideal predictor of the market  
2           price of a share and of the market cost of equity reflected in that price, just as  
3           there is no guarantee that a single CAPM or Risk Premium result constitutes the  
4           perfect explanation of a stock's price or the cost of equity.

5    Q.    Does the financial literature support the use of more than a single method?

6    A.    Yes.  Authoritative financial literature strongly supports the use of multiple  
7           methods.  For example, Professor Eugene F. Brigham, a widely respected scholar  
8           and finance academician, discusses the various methods used in estimating the  
9           cost of common equity capital, and states (see E. F. Brigham and M. C. Ehrhardt,  
10          Financial Management Theory and Practice, p. 311 (11<sup>th</sup> ed., Thomson South-  
11          Western, 2005):

12           *Three methods typically are used: (1) the Capital Asset Pricing Model (CAPM),*  
13           *(2) the discounted cash flow (DCF) model, and (3) the bond-yield-plus-risk-*  
14           *premium approach.  These methods are not mutually exclusive - no method*  
15           *dominates the others, and all are subject to error when used in practice.*  
16           *Therefore, when faced with the task of estimating a company' cost of equity, we*  
17           *generally use all three methods....*

18                    Another prominent finance scholar, Professor Stewart Myers, points out  
19           (see S. C. Myers, "On the Use of Modern Portfolio Theory in Public Utility Rate  
20           Cases: Comment," Financial Management, p. 67, Autumn 1978):

21           *Use more than one model when you can.  Because estimating the opportunity cost*  
22           *of capital is difficult, only a fool throws away useful information.  That means you*  
23           *should not use any one model or measure mechanically and exclusively.  Beta is*  
24           *helpful as one tool in a kit, to be used in parallel with DCF models or other*  
25           *techniques for interpreting capital market data.*

26    Q.    Does the broad use of the DCF methodology in past regulatory proceedings  
27           indicate that it is superior to other methods?

28    A.    No, it does not.  Uncritical acceptance of the standard DCF equation vests the



1 model with a degree of reliability that is simply not justified. One of the leading  
2 experts on regulation, Dr. Charles F. Phillips discusses the dangers of relying  
3 solely on the DCF model:

4 *[U]se of the DCF model for regulatory purposes involves both theoretical and*  
5 *practical difficulties. The theoretical issues include the assumption of a constant*  
6 *retention ratio (i.e. a fixed payout ratio) and the assumption that dividends will*  
7 *continue to grow at a rate 'g' in perpetuity. Neither of these assumptions has any*  
8 *validity, particularly in recent years. Further, the investors' capitalization rate*  
9 *and the cost of equity capital to a utility for application to book value (i.e. an*  
10 *original cost rate base) are identical only when market price is equal to book*  
11 *value. Indeed, DCF advocates assume that if the market price of a utility's*  
12 *common stock exceeds its book value, the allowable rate of return on common*  
13 *equity is too high and should be lowered; and vice versa. Many question the*  
14 *assumption that market price should equal book value, believing that the earnings*  
15 *of utilities should be sufficiently high to achieve market-to-book ratios which are*  
16 *consistent with those prevailing for stocks of unregulated companies.*

17  
18 *...[T]here remains the circularity problem: Since regulation establishes a level of*  
19 *authorized earnings which, in turn, implicitly influences dividends per share,*  
20 *estimation of the growth rate from such data is an inherently circular process.*  
21 *For all of these reasons, the DCF model suggests a degree of precision which is*  
22 *in fact not present and leaves wide room for controversy about the level of k [cost*  
23 *of equity].<sup>1</sup>*  
24

25 Sole reliance on any one model, whether it is DCF, CAPM, or Risk  
26 Premium, simply ignores the capital market evidence and investors' use of the  
27 other theoretical frameworks. The DCF model is only one of many tools to be  
28 employed in conjunction with other methods to estimate the cost of equity. It is  
29 not a superior methodology that should supplant other financial theory and market  
30 evidence. The same is true of the CAPM.

31 Q. Does the manner in which the regulator applies the DCF model understate the  
32 cost of equity?

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<sup>1</sup> C.F. Phillips, The Regulation of Public Utilities Theory and Practice (Public Utilities Reports, Inc., 1988)  
pp. 376-77 [Footnotes omitted]

1 A. Applying the market rate of return to the book value of equity understates the  
2 required return on book equity under current capital market conditions.  
3 Application of the DCF model produces estimates of common equity cost that are  
4 consistent with investors' expected return only when stock price and book value  
5 are reasonably similar, that is, when the Market-to-Book ("M/B") ratio is close to  
6 unity. As shown below, application of the standard DCF model does not account  
7 for the investor's expected return when the M/B ratio of a given stock deviates  
8 from unity. This item is particularly relevant in the current capital market  
9 environment where stocks in general and utility stocks in particular are trading at  
10 M/B ratios well above unity and have been for two decades. The converse is also  
11 true, that is, the DCF model overstates the investor's return when the stock's M/B  
12 ratio is less than unity. The reason for the distortion is that the DCF market return  
13 is applied to a book value rate base by the regulator, that is, a utility's earnings are  
14 limited to earnings on a book value rate base.

15 Q. What are the results of this distortion?

16 A. The return given to equity investors is lower than what they actually require when  
17 M/B ratios exceed unity. This is neither equitable for the existing stockholders  
18 nor efficient from the point of view of attracting capital to cover the significant  
19 capital expenditures that need to be undertaken.

20 Q. Can you illustrate the effect of the M/B ratio on the applicability of the DCF  
21 model by means of a simple example?

22 A. Yes. The simple numerical illustration shown in the table below demonstrates the  
23 result of applying a market value cost rate to book value rate base under three  
24 different M/B scenarios. The three columns correspond to three M/B situations:

1 the stock trades below, equal to, and above book value, respectively. The last  
 2 situation (third column of numbers) is noteworthy and representative of the  
 3 current capital market environment. The DCF cost rate of 10%, made up of a 5%  
 4 dividend yield and a 5% growth rate, is applied to the book value rate base of \$50  
 5 to produce \$5.00 of earnings. Of the \$5.00 of earnings, the full \$5.00 are required  
 6 for dividends to produce a dividend yield of 5% on a stock price of \$100.00, and  
 7 no dollars are available for growth. The investor's return is therefore only 5%  
 8 versus his required return of 10%. A DCF cost rate of 10%, which implies \$10.00  
 9 of earnings, translates to only \$5.00 of earnings on book value, a 5% return.

10 The situation is reversed in the first column when the stock trades below  
 11 book value. The \$5.00 of earnings is more than enough to satisfy the investor's  
 12 dividend requirements of \$1.25, leaving \$3.75 for growth, for a total return of  
 13 20%. This item occurs when the DCF cost rate is applied to a book value rate  
 14 base well above the market price.

15 Therefore, the DCF cost rate significantly understates the investor's  
 16 required return when stock prices are well above book, as is the case presently.

#### EFFECT OF MARKET-TO-BOOK RATIO ON MARKET RETURN

	Situation	1	2	3
1	Initial purchase price	\$25	\$50	\$100
2	Initial book value	\$50	\$50	\$50
3	Initial M/B	0.50	1.00	2.00
4	DCF Return 10% = 5% + 5%	10%	10%	10%
5	Dollar Return	\$5.00	\$5.00	\$5.00
6	Dollar Dividends 5% Yield	\$1.25	\$2.50	\$5.00
7	Dollar Growth 5% Growth	\$3.75	\$2.50	\$0.00
8	Market Return	20%	10%	5%

17 Q. Does the annual version of the DCF model understate the cost of equity?

1 A. Yes, it does. Another reason why the DCF methodology understates the cost of  
2 equity is that the annual DCF model usually employed in regulatory settings  
3 assumes that dividend payments are made annually at the end of the year, while  
4 most utilities in fact pay dividends on a quarterly basis. Failure to recognize the  
5 quarterly nature of dividend payments understates the cost of equity capital by  
6 about 30 basis points. By analogy, a bank rate on deposit that does not take into  
7 consideration the timing of the interest payments understates the true yield of your  
8 investment if you receive the interest payments more than once a year. Since the  
9 stock price employed in the DCF model already reflects the quarterly stream of  
10 dividends to be received, consistency therefore requires explicit recognition of the  
11 quarterly nature of dividend payments. One only has to think of what would  
12 happen to a company's stock price if the company was to suddenly announce that  
13 it is, from now on, paying dividends once a year at the end of the year instead of  
14 four times a year each quarter. Clearly, the stock price would decline by an  
15 amount reflecting the lost time value of money.

16 Q. Do regulators rely primarily on the DCF model?

17 A. A majority of regulatory commissions do not, as a matter of practice, rely solely  
18 on the DCF model results in setting the allowed rate of return on common equity.  
19 According to the survey results posted in the Utility Regulatory Policy in the  
20 United States and Canada – 1994-1995 Compilation which was conducted by the  
21 National Association of Regulatory Utility Commissioners (“NARUC”),  
22 regulators employ a variety of methods and rely on all the evidence submitted.

23 Q. Do regulators share your reservations on the reliability of the DCF model?

1 A. Yes, I believe they do. While a majority of regulatory commissions do not, as a  
2 matter of practice, rely solely on the DCF model results in setting the allowed  
3 ROE, some regulatory commissions have explicitly recognized the need to avoid  
4 exclusive reliance upon the DCF model and have acknowledged the need to adjust  
5 the DCF result when M/B ratios exceed one<sup>2</sup>. In a recent case involving Pacific  
6 Bell Telephone Company, the California Commission (Application No. 01-02-  
7 024, Joint Application of ATT Communications, Opinion Establishing Revised  
8 Unbundled Network Element Rates at VI.N, October 2004) declined to place any  
9 reliance on the DCF method, finding that it was “too dependent on one forecasted  
10 input.”

11 My sentiments on the DCF model were echoed in a decision by the  
12 Indiana Utility Regulatory Commission (“IURC”). The IURC recognized its  
13 concerns with the DCF model and that the model understates the cost of equity.  
14 In Cause No. 39871 Final Order, the IURC states on page 24:

15 *....the DCF model, heavily relied upon by the Public, understates the cost of*  
16 *common equity. The Commission has recognized this fact before. In Indiana*  
17 *Mich. Power Co. (IURC 8/24/90), Cause No. 38728, 116 PUR4th 1, 17-18, we*  
18 *found:*

19 *The unadjusted DCF result is almost always well below what any informed*  
20 *financial analyst would regard as defensible, and therefore requires an upward*  
21 *adjustment based largely on the expert witness’s judgment.*  
22

23 The Commission also expressed its concern with a witness relying solely  
24 on one methodology:

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<sup>2</sup> See the Indiana Utility Regulatory Commission decision in Indiana Mich. Power Co. (IURC 8/24/90), Cause No. 38728, 116 PUR4th 1, 17-18. See also the Iowa Utilities Board decision in U.S. West Communications, Inc. Docket No. RPR-93-9, 152 PUR4th 446, 459 (Iowa 1994). See also the Hawaii Public Utilities Commission decision in Hawaiian Electric Company, Inc., 134 PUR4th 418, 479

1 .....the Commission has had concerns in our past orders with a witness relying  
2 solely on one methodology in reaching an opinion on a proper return on equity  
3 figure. (page 25)  
4  
5

6 Even more convincing evidence that regulators have in fact not relied on  
7 the DCF model exclusively is the fact that M/B ratios have exceeded unity for  
8 over two decades. Had regulators relied exclusively on the DCF model, utility  
9 stocks would have traded at or near book value. Regulators have “corrected” for  
10 this M/B problem by considering other methods for estimating capital cost.

11 Q. Is the usage of the DCF model prevalent in corporate practices?

12 A. No, not really. The CAPM continues to be widely used by analysts, investors, and  
13 corporations. Bruner, Eades, Harris, and Higgins (1998) in a comprehensive survey<sup>3</sup>  
14 of current practices for estimating the cost of capital found that 81% of companies  
15 used the CAPM to estimate the cost of equity, 4% used a modified CAPM, and 15%  
16 were uncertain. In another comprehensive survey conducted by Graham and  
17 Harvey (2001), the managers surveyed reported using more than one methodology  
18 to estimate the cost of equity, and 73% used the CAPM.<sup>4</sup> Since its introduction by  
19 Professor William F. Sharpe in 1964, the CAPM has gained immense popularity  
20 as the practitioner’s method of choice when estimating cost of capital under  
21 conditions of risk.<sup>5</sup> The intuitive simplicity of its basic concept (that investors  
22 must get compensated for the risk they assume), and the relatively easy

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(1992). More recently, see the Pennsylvania Public Utility Commission decision in Pennsylvania-American Water Co., Docket R-00016339.

<sup>3</sup> Bruner, R. F., Eades, K. M., Harris, R. S., and Higgins, R. C., “Best Practices in Estimating the Cost of Capital: Survey and Synthesis,” *Financial Practice and Education*, Vol. 8, Number 1, Spring/Summer 1998, page 18.

<sup>4</sup> Graham, J. R. and Harvey, C. R., “The Theory and Practice of Corporate Finance: Evidence from the Field,” *Journal of Financial Economics*, Vol. 61, 2001, pp. 187-243.

<sup>5</sup> See practitioner surveys by Graham & Harvey (2001) and Bruner, et. al. (1988)

1 application of the CAPM are the main reasons behind its popularity.

2 Q. Do the assumptions underlying the DCF model require that the model be treated  
3 with caution?

4 A. Yes, particularly in today's rapidly changing electric utility industry. Even  
5 ignoring the fundamental thesis that several methods and/or variants of such  
6 methods should be used in measuring equity costs, the DCF methodology, as  
7 those familiar with the industry and the accepted norms for estimating the cost of  
8 equity are aware, is problematic for use in estimating cost of equity at this time.

9 Several fundamental structural changes have transformed the energy  
10 utility industry since the standard DCF model and its assumptions were  
11 developed. For example, deregulation, accounting rule changes, changes in  
12 customer attitudes regarding utility services, the evolution of alternative energy  
13 sources, highly volatile fuel prices, and mergers-acquisitions have all influenced  
14 stock prices in ways that have deviated substantially from the assumptions of the  
15 DCF model, which was first formulated in the mid-1970s. These changes suggest  
16 that (1) some of the fundamental assumptions underlying the standard DCF  
17 model, particularly that of constant growth and constant relative market valuation,  
18 for example price/earnings ("P/E") ratios and M/B ratios, are problematic at this  
19 point in time for utility stocks, and (2) therefore, alternate methodologies to  
20 estimate the cost of common equity should be accorded at least as much weight as  
21 the DCF method.

22 Q. Is the constant relative market valuation assumption inherent in the DCF model  
23 always reasonable?

24 A. No, not always. Caution must be exercised when implementing the standard DCF

1 model in a mechanistic fashion, for it may fail to recognize changes in relative  
2 market valuations over time. The traditional DCF model is not equipped to deal  
3 with surges in P/E ratios and M/B multiples. The standard DCF model assumes a  
4 constant market valuation multiple, that is, a constant P/E ratio and a M/B ratio.  
5 Stated another way, the model assumes that investors expect the ratio of market  
6 price to dividends (or earnings) in any given year to be the same as the current  
7 ratio of market price to dividend (or earnings). This item is a necessary result of  
8 the infinite growth assumption. This assumption is unrealistic under current  
9 conditions.

10 Q. What is your recommendation given such market conditions?

11 A. In short, caution and judgment are required in interpreting the results of the  
12 standard DCF model because of (1) the effect of changes in risk and growth on  
13 electric utilities, (2) the fragile applicability of the DCF model to electric utilities  
14 stocks in the current capital market environment, and (3) the practical difficulties  
15 associated with the growth component of the standard DCF model. Hence, there  
16 is a clear need to go beyond the standard DCF results and take into account the  
17 results produced by alternate methodologies in arriving at a common equity  
18 recommendation.

19 Q. What weight would you give the DCF model in determining a utility company's  
20 cost of common equity capital?

21 A. As stated earlier, there is no single model that conclusively determines or  
22 estimates the expected return for an individual firm. Absent any hard evidence as  
23 to which method outperforms the other, all relevant evidence should be used,  
24 without discounting the value of any results, in order to minimize judgmental



1 error, measurement error, and conceptual infirmities. I submit that a regulatory  
2 body should rely on the results of a variety of methods applied to a variety of  
3 comparable groups. I would therefore ascribe equal weight to the various  
4 methodologies. I do note that the DCF model has more questionable underlying  
5 assumptions than do other models at this time.

6 Q. Do the assumptions underlying the CAPM require that the model be treated with  
7 caution?

8 A. Yes, as was the case with the DCF model, the assumptions underlying any model  
9 in the social sciences, including the CAPM, are stringent. Moreover, the  
10 empirical validity of the CAPM has been the subject of intense research in recent  
11 years. Although the CAPM provides useful evidence, it must be complemented  
12 by other methodologies as well.

13 Q. As a theoretical matter, why should the CAPM be used as a tool to estimate utility  
14 capital costs in regulatory proceedings?

15 A. As a tool in the regulatory arena, the CAPM is a rigorous conceptual framework,  
16 and is logical insofar as it is not subject to circularity problems, since its inputs are  
17 objective, market-based quantities, largely immune to regulatory decisions. The  
18 data requirements of the model are not prohibitive. The CAPM is one of several  
19 tools in the arsenal of techniques to determine the cost of equity capital. Caution,  
20 appropriate training in finance and econometrics, and judgment are required for its  
21 successful execution, as is the case with the DCF and Risk Premium methodologies.

## 22 **A.RISK PREMIUM ANALYSES**

23 Q. Dr. Morin, please provide an overview of your risk premium analyses.

1 A. In order to quantify the risk premium for PCPL, I have performed four risk  
2 premium studies. The first two studies deal with aggregate stock market risk  
3 premium evidence using two versions of the CAPM methodology and the other  
4 two studies deal directly with the electric utility industry.

### 5 1. CAPM ESTIMATES

6 Q. Please describe your application of the CAPM risk premium approach.

7 A. My first two risk premium estimates are based on the CAPM and on an empirical  
8 approximation to the CAPM (“ECAPM”). The CAPM is a fundamental paradigm  
9 of finance. Simply put, the fundamental idea underlying the CAPM is that risk-  
10 averse investors demand higher returns for assuming additional risk, and higher-  
11 risk securities are priced to yield higher expected returns than lower-risk  
12 securities. The CAPM quantifies the additional return, or risk premium, required  
13 for bearing incremental risk. It provides a formal risk-return relationship  
14 anchored on the basic idea that only market risk matters, as measured by beta.  
15 According to the CAPM, securities are priced such that their:

$$16 \text{ EXPECTED RETURN} = \text{RISK-FREE RATE} + \text{RISK PREMIUM}$$

17 Denoting the risk-free rate by  $R_F$  and the return on the market as a whole  
18 by  $R_M$ , the CAPM is:

$$19 K = R_F + \beta (R_M - R_F)$$

20 This is the seminal CAPM expression, which states that the return required  
21 by investors is made up of a risk-free component,  $R_F$ , plus a risk premium  
22 determined by  $\beta(R_M - R_F)$ . To derive the CAPM risk premium estimate, three  
23 quantities are required: the risk-free rate ( $R_F$ ), beta ( $\beta$ ), and the market risk  
24 premium, ( $R_M - R_F$ ). For the risk-free rate, I used 4.6% based on the current level

1 of long-term Treasury interest rates. For beta, I used 0.82 and for the market risk  
2 premium (“MRP”), I used 7.3%. These inputs to the CAPM are explained below.

3 Q. What risk-free rate did you use in your CAPM and risk premium analyses?

4 A. To implement the CAPM and Risk Premium methods, an estimate of the risk-free  
5 return is required as a benchmark. As a proxy for the risk-free rate, I have relied  
6 on the current level of 30-year Treasury bond yields.

7 The appropriate proxy for the risk-free rate in the CAPM is the return on  
8 the longest term Treasury bond possible. This is because common stocks are very  
9 long-term instruments more akin to very long-term bonds rather than to short-  
10 term or intermediate-term Treasury notes. In a risk premium model, the ideal  
11 estimate for the risk-free rate has a term to maturity equal to the security being  
12 analyzed. Since common stock is a very long-term investment because the cash  
13 flows to investors in the form of dividends last indefinitely, the yield on the  
14 longest-term possible government bonds, that is the yield on 30-year Treasury  
15 bonds, is the best measure of the risk-free rate for use in the CAPM. The  
16 expected common stock return is based on very long-term cash flows, regardless  
17 of an individual's holding time period. Moreover, utility asset investments  
18 generally have very long-term useful lives and should correspondingly be  
19 matched with very long-term maturity financing instruments.

20 While long-term Treasury bonds are potentially subject to interest rate  
21 risk, this is only true if the bonds are sold prior to maturity. A substantial fraction  
22 of bond market participants, usually institutional investors with long-term  
23 liabilities (pension funds, insurance companies), in fact hold bonds until they  
24 mature, and therefore are not subject to interest rate risk. Moreover, institutional

1 bondholders neutralize the impact of interest rate changes by matching the  
2 maturity of a bond portfolio with the investment planning period, or by engaging  
3 in hedging transactions in the financial futures markets. The merits and  
4 mechanics of such immunization strategies are well documented by both  
5 academicians and practitioners.

6 Another reason for using the longest maturity Treasury bond possible is  
7 that common equity has an infinite life span, and the inflation expectations  
8 embodied in its market-required rate of return will therefore be equal to the  
9 inflation rate anticipated to prevail over the very long-term. The same  
10 expectation should be embodied in the risk-free rate used in applying the CAPM  
11 model. It stands to reason that the yields on 30-year Treasury bonds will more  
12 closely incorporate within their yield the inflation expectations that influence the  
13 prices of common stocks than do short-term or intermediate-term U.S. Treasury  
14 notes.

15 Among U.S. Treasury securities, 30-year Treasury bonds have the longest  
16 term to maturity and the yield on such securities should be used as proxies for the  
17 risk-free rate in applying the CAPM, provided there are no anomalous conditions  
18 existing in the 30-year Treasury market. In the absence of such conditions, I have  
19 relied on the yield on 30-year Treasury bonds in implementing the CAPM and  
20 risk premium methods.

Q. Dr. Morin, why did you reject short-term interest rates as proxies for the risk-free  
rate in implementing the CAPM?

21 A. Short-term rates are volatile, fluctuate widely, and are subject to more random  
22 disturbances than are long-term rates. Short-term rates are largely administered

1 rates. For example, Treasury bills are used by the Federal Reserve as a policy  
2 vehicle to stimulate the economy and to control the money supply, and are used  
3 by foreign governments, companies, and individuals as a temporary safe-house  
4 for money.

5 As a practical matter, it makes no sense to match the return on common  
6 stock to the yield on 90-day Treasury Bills. This is because short-term rates, such  
7 as the yield on 90-day Treasury Bills, fluctuate widely, leading to volatile and  
8 unreliable equity return estimates. Moreover, yields on 90-day Treasury Bills  
9 typically do not match the equity investor's planning horizon. Equity investors  
10 generally have an investment horizon far in excess of 90 days.

11 As a conceptual matter, short-term Treasury bill yields reflect the impact  
12 of factors different from those influencing the yields on long-term securities such  
13 as common stock. For example, the premium for expected inflation embedded  
14 into 90-day Treasury Bills is likely to be far different than the inflationary  
15 premium embedded into long-term securities yields. On grounds of stability and  
16 consistency, the yields on long-term Treasury bonds match more closely with  
17 common stock returns.

18 Q. What is the current level of U.S. Treasury 30-year bonds?

19 A. The yield on U.S. Treasury 30-year bonds prevailing in July 2008, as reported in  
20 Value Line and the Federal Reserve Bank Web site, was 4.6%. Accordingly, I  
21 use 4.6% as my estimate of the risk-free rate component of the CAPM.

22 Q. How did you select the beta for your CAPM analysis?

23 A. A major thrust of modern financial theory as embodied in the CAPM is that  
24 perfectly diversified investors can eliminate the company-specific component of

1 risk, and that only market risk remains. The latter is technically known as "beta",  
2 or "systematic risk". The beta coefficient measures the change in a security's  
3 return relative to that of the market. The beta coefficient states the extent and  
4 direction of movement in the rate of return on a stock relative to the movement in  
5 the rate of return on the market as a whole. The beta coefficient indicates the  
6 change in the rate of return on a stock associated with a one percentage point  
7 change in the rate of return on the market, and, thus, measures the degree to which  
8 a particular stock shares the risk of the market as a whole. Modern financial  
9 theory has established that beta incorporates several economic characteristics of a  
10 corporation which are reflected in investors' return requirements.

11 Technically, the beta of a stock is a measure of the covariance of the  
12 returns of a stock with the returns of the market as a whole. Accordingly, it  
13 measures dispersion in a stock's return that cannot be reduced through  
14 diversification. For a large diversified portfolio, dispersion in the market rate of  
15 return on the entire portfolio is the weighted sum of the beta coefficients of its  
16 constituent stocks.

17 PCPL is not publicly-traded and, therefore, proxies must be used for  
18 PCPL. As a first proxy for the Company's beta, I have examined the betas of a  
19 sample of widely-traded investment-grade dividend-paying electric utilities  
20 designated as distribution utilities by S&P covered by Value Line and with at  
21 least 50% of their revenues from electric utility operations. This group is  
22 examined in more detail later in my testimony, in connection with the DCF  
23 estimates of the cost of common equity. As displayed on page 1 of Exhibit  
24 RAM-2, the average beta for the group is currently 0.82.

1 I also examined the average beta of the companies that make up Moody's  
2 Electric Utility Index as a second proxy for the Company. As shown on page 2 of  
3 Exhibit RAM-2, the average beta of the Moody's group is 0.84. If those  
4 companies with less than 50% of their revenues from electric utility operations are  
5 removed from the group, the average beta of the remaining companies is 0.83, as  
6 shown on page 3 of Exhibit RAM-2. Based on these results, I shall use 0.82 as a  
7 beta estimate for PCPL's electric and gas delivery operations.

8 Q. Did you consider analyzing a group of natural gas distributors as a proxy for  
9 PCPL's energy distribution business?

10 A. Yes, I did but chose not to analyze a separate group of natural gas distribution  
11 utilities for two reasons. First, PCPL's energy distribution business consists  
12 primarily of electricity distribution which makes up the majority of its operating  
13 income. Second, the sample of pure-play natural gas distribution utilities has  
14 dwindled considerably in recent years. Several former natural gas distributors are  
15 no longer publicly traded as a result of merger and acquisitions (e.g. Cascade,  
16 Keyspan), and several others now possess significant unregulated energy trading  
17 operations (e.g. New Jersey Resources, AGL Resources, Atmos Energy).  
18 Therefore, I have relied on two samples of electric utilities, as proxies for PCPL.

19 Q. What MRP estimate did you use in your CAPM analysis?

20 A. For the MRP, I used 7.3%. This estimate was based on the results of both  
21 forward-looking and historical studies of long-term risk premiums. First, the  
22 Ibbotson Associates (now Morningstar) study, Stocks, Bonds, Bills, and Inflation,  
23 2008 Yearbook, compiling historical returns from 1926 to 2007, shows that a  
24 broad market sample of common stocks outperformed long-term U. S. Treasury

1 bonds by 6.5%. The historical MRP over the income component of long-term  
2 Treasury bonds rather than over the total return is 7.1%. The Morningstar study  
3 recommends the use of the latter as a more reliable estimate of the historical  
4 MRP, and I concur with this viewpoint. The historical MRP should be computed  
5 using the income component of bond returns because the intent, even using  
6 historical data, is to identify an expected MRP. The more accurate way to  
7 estimate the MRP from historic data is to use the income return, not total returns  
8 on government bonds, as explained at pages 75-77 of Morningstar's Stocks,  
9 Bonds, Bills, and Inflation: Valuation Edition, 2007 Yearbook. This is because  
10 the income component of total bond return (i.e., the coupon rate) is a far better  
11 estimate of expected market return than the total return (i.e., the coupon rate +  
12 capital gain), as realized capital gains/losses are largely unanticipated by bond  
13 investors. The long-horizon (1926-2007) MRP (based on income returns, as  
14 required) is specifically calculated to be 7.1% rather than 6.5%.

15 Second, a DCF analysis applied to the aggregate equity market using the  
16 S&P 500 Index and Value Line growth forecasts indicates a prospective MRP of  
17 7.5%. Therefore, I shall employ the average of the two estimates, 7.3%, as a  
18 reasonable estimate of the MRP.

### 19 **Historical Market Risk Premium**

20 Q. On what maturity bond does the Morningstar historical risk premium data rely  
21 upon?

22 A. Because 30-year bonds were not always traded or even available throughout the  
23 entire 1926-2007 period covered in the Morningstar Study of historical returns,



1 the latter study relied on bond return data based on 20-year Treasury bonds. To  
2 the extent that the normal yield curve is virtually flat above maturities of 20 years  
3 over most of the period covered in the Ibbotson study, the difference in yield is  
4 not material. In fact, the difference in yield between 30-year and 20-year bonds is  
5 actually negative. The average difference in yield over the 1977-2007 period is  
6 approximately 13 basis points, that is, the yield on 20-year bonds is slightly  
7 higher than the yield on 30-year bonds.

8 Q. Why did you use long time periods in arriving at your historical MRP estimate?

9 A. Because realized returns can be substantially different from prospective returns  
10 anticipated by investors when measured over short time periods, it is important to  
11 employ returns realized over long time periods rather than returns realized over  
12 more recent time periods when estimating the MRP with historical returns.  
13 Therefore, a risk premium study should consider the longest possible period for  
14 which data are available. Short-run periods during which investors earned a  
15 lower risk premium than they expected are offset by short-run periods during  
16 which investors earned a higher risk premium than they expected. Only over long  
17 time periods will investor return expectations and realizations converge.

18 I have therefore ignored realized risk premiums measured over short time  
19 periods, since they are heavily dependent on short-term market movements.  
20 Instead, I relied on results over periods of enough length to smooth out short-term  
21 aberrations, and to encompass several business and interest rate cycles. The use  
22 of the entire study period in estimating the appropriate MRP minimizes subjective  
23 judgment and encompasses many diverse regimes of inflation, interest rate cycles,  
24 and economic cycles.

1           To the extent that the estimated historical equity risk premium follows  
2 what is known in statistics as a “random walk,” the best estimate of the future risk  
3 premium is the historical mean. Since I found no evidence that the MRP in  
4 common stocks has changed over time, that is, no significant serial correlation in  
5 the Ibbotson study, it is reasonable to assume that these quantities will remain  
6 stable in the future.

### 7                           **Prospective Market Risk Premium**

8   Q.   Please describe your prospective approach in deriving the MRP in the CAPM  
9 analysis.

10   A.   For my prospective estimate of the MRP, I applied a DCF analysis to the  
11 aggregate equity market using Value Line's VLIA software. The dividend yield  
12 on the stocks that make up the S&P 500 Index is currently 1.78% (VLIA 06/2008  
13 edition), and the average projected long-term growth rate in dividends is 10.21%.  
14 Adding the dividend yield to the growth component produces an expected return  
15 on the aggregate equity market of 11.99%. Following the tenets of the DCF  
16 model, the spot dividend yield must be converted into an expected dividend yield  
17 by multiplying it by one plus the growth rate. This brings the expected return on  
18 the aggregate equity market to 12.17%. Recognition of the quarterly timing of  
19 dividend payments rather than the annual timing of dividends assumed in the  
20 annual DCF model brings the MRP estimate to approximately 12.37%.  
21 Subtracting the risk-free rate of 4.6% from the latter, the implied risk premium is  
22 7.77% over long-term U.S. Treasury bonds.

23   Q.   Did you check your MRP estimate of 7.3% from any other source?

1 A. Yes, I did. As a check on the MRP estimate, I examined a 2003 comprehensive  
2 article published in Financial Management (see Harris, R. S., Marston, F. C.,  
3 Mishra, D. R., and O'Brien, T. J., "Ex Ante Cost of Equity Estimates of S&P 500  
4 Firms: The Choice Between Global and Domestic CAPM," Financial  
5 Management, Autumn 2003, pp. 51-66).

6 These authors provide estimates of the prospective expected market  
7 returns for S&P 500 companies over the period 1983-1998. They measure the  
8 expected market rate of return of each dividend-paying stock in the S&P 500 for  
9 each month from January 1983 to August 1998 by using the constant growth DCF  
10 model. The prevailing risk-free rate for each year was then subtracted from the  
11 expected rate of return for the overall market to arrive at the market risk premium  
12 for that year. The table below, drawn from Table 2 of the aforementioned study,  
13 displays the average prospective MRP estimate (Column 2) for each year from  
14 1983 to 1998. The average MRP estimate for the overall period is 7.2%, which is  
15 very close to my own estimate of 7.3%.

16  
17

	<u>Year</u>	<u>DCF Market Risk Premium</u>
1		
2		
3	1983	6.6%
4	1984	5.3%
5	1985	5.7%
6	1986	7.4%
7	1987	6.1%
8	1988	6.4%
9	1989	6.6%
10	1990	7.1%
11	1991	7.5%
12	1992	7.8%
13	1993	8.2%
14	1994	7.3%
15	1995	7.7%
16	1996	7.8%
17	1997	8.2%
18	1998	9.2%
19	<b>MEAN</b>	<b>7.2%</b>

20

21 Q. What is your estimate of PCPL’s cost of equity using the CAPM approach?

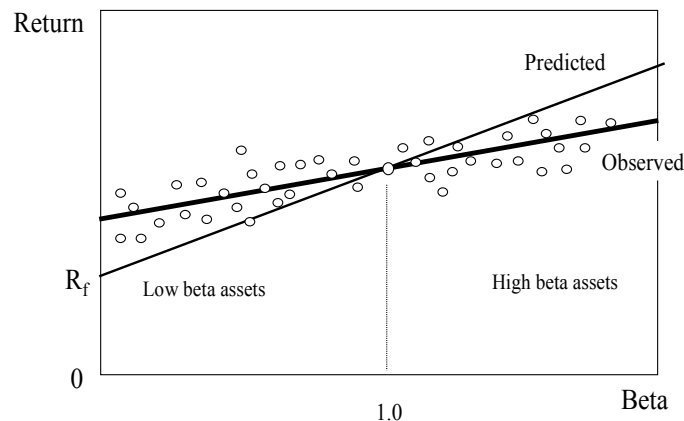
22 A. Inserting those input values in the CAPM equation, namely a risk-free rate of  
 23 4.6%, a beta of 0.82, and a MRP of 7.3%, the CAPM estimate of the cost of  
 24 common equity for PCPL is:  $4.6\% + 0.82 \times 7.3\% = 10.6\%$ . This estimate  
 25 becomes 10.9% with flotation costs. The need for a flotation cost allowance is  
 26 discussed later in my testimony.

27 Q. What is your estimate of PCPL’s cost of equity using the ECAPM?

28 A. There have been countless empirical tests of the CAPM in the finance literature in  
 29 order to determine to what extent security returns and betas are related in the  
 30 manner predicted by the CAPM. This literature is summarized in Chapter 13 of  
 31 my 1994 book, Regulatory Finance, and Chapter 6 of my most recent book, The  
 32 New Regulatory Finance, both published by Public Utilities Report Inc. The  
 33 results of the tests support the idea that beta is related to security returns, that the  
 34 risk-return tradeoff is positive, and that the relationship is linear. The

1 contradictory finding is that the risk-return tradeoff is not as steeply sloped as the  
 2 predicted CAPM. That is, empirical research has long shown that low-beta  
 3 securities earn returns somewhat higher than the CAPM would predict, and high-  
 4 beta securities earn less than predicted. A CAPM-based estimate of cost of  
 5 capital underestimates the return required from low-beta securities and overstates  
 6 the return required from high-beta securities, based on the empirical evidence.  
 7 This is one of the most well-known results in finance, and it is displayed  
 8 graphically below.

CAPM: Predicted vs Observed Returns



9 A number of variations on the original CAPM theory have been proposed  
 10 to explain this finding. The ECAPM makes use of these empirical findings.  
 11 The ECAPM estimates the cost of capital with the equation:

$$12 \quad K = R_F + \alpha + \beta \times (MRP - \alpha)$$

13 where  $\alpha$  is the "alpha" of the risk-return line, a constant, MRP is the market  
 14 risk premium ( $R_M - R_F$ ), and the other symbols are defined as usual. Inserting

1 the long-term risk-free rate as a proxy for the risk-free rate, an alpha in the  
2 range of 1% - 2%, and reasonable values of beta and the MRP in the above  
3 equation produces results that are indistinguishable from the following more  
4 tractable ECAPM expression:

$$5 \quad K = R_F + 0.25 (R_M - R_F) + 0.75 \beta(R_M - R_F)$$

6 An alpha range of 1% - 2% is somewhat lower than that estimated  
7 empirically. The use of a lower value for alpha leads to a lower estimate of the  
8 cost of capital for low-beta stocks such as regulated utilities. This is because  
9 the use of a long-term risk-free rate rather than a short-term risk-free rate already  
10 incorporates some of the desired effect of using the ECAPM. That is, the long-  
11 term risk-free rate version of the CAPM has a higher intercept and a flatter  
12 slope than the short-term risk-free version which has been tested. This is also  
13 because the use of adjusted betas rather than the use of raw betas also  
14 incorporates some of the desired effect of using the ECAPM. Thus, it is  
15 reasonable to apply a conservative alpha adjustment.

16 Q. Is the use of the ECAPM consistent with the use of adjusted betas?

17 A. Yes, it is. Some have argued that the use of the ECAPM is inconsistent with the  
18 use of adjusted betas, such as those supplied by Value Line. This is because the  
19 reason for using the ECAPM is to allow for the tendency of betas to regress  
20 toward the mean value of 1.00 over time, and, since Value Line betas are already  
21 adjusted for such trend, an ECAPM analysis results in double-counting. This  
22 argument is erroneous. Fundamentally, the ECAPM is not an adjustment,  
23 increase or decrease, in beta. This is obvious from the fact that the observed

1 return on high beta securities is actually lower than that produced by the CAPM  
2 estimate. The ECAPM is a formal recognition that the observed risk-return  
3 tradeoff is flatter than predicted by the CAPM based on myriad empirical  
4 evidence. The ECAPM and the use of adjusted betas comprised two separate  
5 features of asset pricing. Even if a company's beta is estimated accurately, the  
6 CAPM still understates the return for low-beta stocks. Even if the ECAPM is  
7 used, the return for low-beta securities is understated if the betas are understated.  
8 Referring back to the previous graph, the ECAPM is a return (vertical axis)  
9 adjustment and not a beta (horizontal axis) adjustment. Both adjustments are  
10 necessary. Moreover, the use of adjusted betas compensates for interest rate  
11 sensitivity of utility stocks not captured by unadjusted betas, as explained in  
12 Appendix A.

13 Appendix A contains a full discussion of the ECAPM, including its  
14 theoretical and empirical underpinnings. In short, the following equation provides  
15 a viable approximation to the observed relationship between risk and return, and  
16 provides the following cost of equity capital estimate:

$$17 \quad K = R_F + 0.25 (R_M - R_F) + 0.75 \beta (R_M - R_F)$$

18 Inserting 4.6% for the risk-free rate  $R_F$ , a MRP of 7.3% for  $(R_M - R_F)$  and  
19 a beta of 0.82 in the above equation, the ROE is 10.9% without flotation costs and  
20 11.2% with flotation costs.

21 Q. Dr. Morin, please summarize your CAPM estimates.

22 A. The table below summarizes the common equity estimates obtained from my  
23 CAPM studies. The average CAPM result is a rounded 11.1%.

<u>CAPM</u>	<u>% ROE</u>
CAPM plain	10.9%
Empirical CAPM	11.2%
AVERAGE	11.1%

1

2

## 2. HISTORICAL RISK PREMIUM

3 Q. Please describe your historical risk premium analysis of the electric utility  
4 industry.

5 A. As a proxy for the risk premium applicable to the Company, I estimated the  
6 historical risk premium for the electric utility industry with an annual time series  
7 analysis applied to the industry as a whole, using *Moody's Electric Utility Index* as  
8 an industry proxy. The analysis is depicted on Exhibit RAM-3. The risk  
9 premium was estimated by computing the actual realized return on equity capital  
10 for Moody's Index for each year, using the actual stock prices and dividends of  
11 the index, and then subtracting the long-term government bond return for that  
12 year.

13 As shown on Exhibit RAM-3, the average risk premium over the period  
14 was 5.7% over historical long-term Treasury bond returns and 5.8% over long-  
15 term Treasury bond yields. Given that the risk-free rate is 4.6%, and using the  
16 historical estimate of 5.7%, the implied cost of equity for the average electric  
17 utility from this particular method is  $4.6\% + 5.7\% = 10.3\%$  without flotation costs  
18 and  $10.6\%$  with flotation costs.

19 Q. Dr. Morin, are risk premium studies widely used?

20 A. Yes, they are. Risk Premium analyses are widely used by analysts, investors, and  
21 expert witnesses. Most college-level corporate finance and/or investment



1 management texts including Investments by Bodie, Kane, and Marcus, McGraw-  
2 Hill Irwin, 2002, which is a recommended textbook for CFA (Chartered Financial  
3 Analyst) certification and examination, contain detailed conceptual and empirical  
4 discussion of the risk premium approach. The latter is typically recommended as  
5 one of the three leading methods of estimating the cost of capital. Professor  
6 Brigham's best-selling corporate finance textbook (Financial Management:  
7 Theory and Practice, 11<sup>th</sup> ed., South-Western, 2005), recommends the use of risk  
8 premium studies, among others. Techniques of risk premium analysis are  
9 widespread in investment community reports. Professional certified financial  
10 analysts are certainly well versed in the use of this method.

11 Q. Are you concerned about the realism of the assumptions that underlie the historical  
12 risk premium method?

13 A. No, I am not, for they are no more restrictive than the assumptions that underlie  
14 the DCF model or the CAPM. While it is true that the method looks backward in  
15 time and assumes that the risk premium is constant over time, these assumptions  
16 are not necessarily restrictive. By employing returns realized over long time  
17 periods rather than returns realized over more recent time periods, investor return  
18 expectations and realizations converge. Realized returns can be substantially  
19 different from prospective returns anticipated by investors, especially when  
20 measured over short time periods. By ensuring that the risk premium study  
21 encompasses the longest possible period for which data are available, short-run  
22 periods during which investors earned a lower risk premium than they expected  
23 are offset by short-run periods during which investors earned a higher risk  
24 premium than they expected. Only over long time periods will investor return

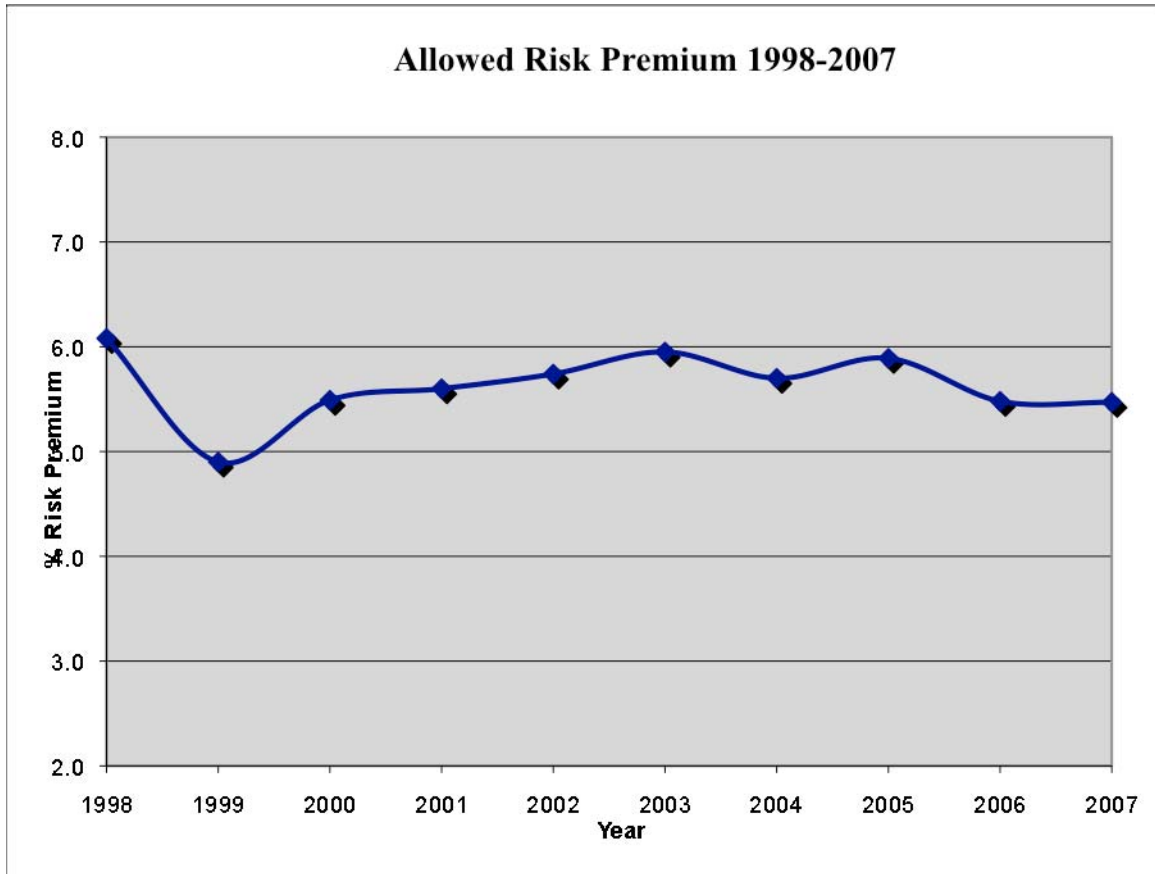
1 expectations and realizations converge, or else, investors would never invest any  
2 money.

### 3 3. ALLOWED RISK PREMIUMS

4 Q. Please describe your analysis of allowed risk premiums in the electric utility  
5 industry.

6 A. To estimate the Company's cost of common equity, I also examined the historical  
7 risk premiums implied in the ROEs allowed by regulatory commissions for  
8 electric utilities over the last decade relative to the contemporaneous level of the  
9 long-term Treasury bond yield. This variation of the risk premium approach is  
10 reasonable because allowed risk premiums are presumably based on the results of  
11 market-based methodologies (DCF, Risk Premium, CAPM, *etc.*) presented to  
12 regulators in rate hearings and on the actions of objective unbiased investors in a  
13 competitive marketplace. Historical allowed ROE data are readily available over  
14 long periods on a quarterly basis from SNL [formerly Regulatory Research  
15 Associates ("RRA")] and easily verifiable from RRA publications and past  
16 commission decision archives. The average ROE spread over long-term Treasury  
17 yields was 5.6% for the 1999-2008 time period, as shown in the graph below. I  
18 note that this estimate is nearly identical to the one obtained from the historical  
19 risk premium study of the electric utility industry.

Given the current long-term Treasury bond yield of 4.6% and a risk premium of 5.6%, the implied allowed ROE for the average risk electric utility is 10.2%. No flotation cost adjustment is required here since the return figures are allowed book returns on common equity capital.



1

2

3 Q. Why did you rely on the last decade to conduct your allowed risk premium  
4 analysis?

5 A. Because allowed returns already reflect investor expectations, that is, are forward-  
6 looking in nature, the need for relying on long historical periods is minimized.  
7 The last decade is a reasonable period of analysis in the case of allowed returns in  
8 view of the stability of the inflation rate experienced over the last decade.

9 Q. Do investors take into account allowed returns in formulating their return  
10 expectations?

11 A. Yes, they do. Investors do take into account returns granted by various regulators  
12 in formulating their risk and return expectations, as evidenced by the availability

1 of commercial publications disseminating such data, including Value Line and  
2 RRA. Allowed returns, while certainly not a precise indication of a particular  
3 company's cost of equity capital, are an important determinant of investor growth  
4 perceptions and investor expected returns.

5 Q. Please summarize your risk premium estimates.

6 A. The table below summarizes the ROE estimates obtained from the three risk  
7 premium studies. The average risk premium result is 10.4%.

8	<b>Risk Premium Method</b>	<b>ROE</b>
9	Historical Risk Premium Electric	10.6%
10	Allowed Risk Premium	10.2%

11 **B. DCF ESTIMATES**

12 Q. Please describe the DCF approach to estimating the cost of equity capital.

13 A. According to DCF theory, the value of any security to an investor is the expected  
14 discounted value of the future stream of dividends or other benefits. One widely  
15 used method to measure these anticipated benefits in the case of a non-static  
16 company is to examine the current dividend plus the increases in future dividend  
17 payments expected by investors. This valuation process can be represented by the  
18 following formula, which is the standard DCF model:

19 
$$K_e = D_1/P_0 + g$$

20 where:  $K_e$  = investors' expected return on equity

21  $D_1$  = expected dividend at the end of the coming year

22  $P_0$  = current stock price

23  $g$  = expected growth rate of dividends, earnings, stock price, book value

24 The standard DCF formula states that under certain assumptions, which

1 are described in the next paragraph, the equity investor's expected return,  $K_e$ , can  
2 be viewed as the sum of an expected dividend yield,  $D_1/P$ , plus the expected  
3 growth rate of future dividends, earnings, and book value,  $g$ . The returns  
4 anticipated at a given stock price are not directly observable and must be  
5 estimated from statistical information. The idea of the market value approach is  
6 to infer ' $K_e$ ' from the observed stock price, the observed dividend, and an estimate  
7 of investors' expectations of future growth.

8 The assumptions underlying this valuation formulation are well known,  
9 and are discussed in detail in Chapter 4 of my reference book, Regulatory  
10 Finance, and Chapter 8 of my latest textbook, New Regulatory Finance. The  
11 standard DCF model requires the following main assumptions: a constant average  
12 growth trend for both dividends and earnings, a stable dividend payout policy, a  
13 discount rate in excess of the expected growth rate, and a constant price-earnings  
14 multiple, which implies that growth in price is synonymous with growth in  
15 earnings and dividends. The standard DCF model also assumes that dividends are  
16 paid at the end of each year when, in fact, dividend payments are normally made  
17 on a quarterly basis.

18 Q. How did you estimate PCPL's cost of equity with the DCF model?

19 A. I applied the DCF model to two proxies for PCPL's energy delivery operations: a  
20 group consisting of investment-grade dividend-paying electric distribution  
21 utilities and a group consisting of those electric utilities that make up Moody's  
22 Electric Utility Index. In addition, both groups were restricted to those companies  
23 with at least 50% of their revenues from regulated operations.

24

1           In order to apply the DCF model, two components are required: the  
2 expected dividend yield ( $D_1/P_0$ ) and the expected long-term growth ( $g$ ). The  
3 expected dividend  $D_1$  in the annual DCF model can be obtained by multiplying  
4 the current indicated annual dividend rate by the growth factor ( $1 + g$ ).

5           From a conceptual viewpoint, the stock price to employ in calculating the  
6 dividend yield is the current price of the security at the time of estimating the cost  
7 of equity. The reason is that current stock price provides a better indication of  
8 expected future prices than any other price in an efficient market. An efficient  
9 market implies that prices adjust rapidly to the arrival of new information.  
10 Therefore, the current price reflects the fundamental economic value of a security.  
11 A considerable body of empirical evidence indicates that capital markets are  
12 efficient with respect to a broad set of information. This evidence implies that  
13 observed current prices represent the fundamental value of a security, and that a  
14 cost of capital estimate should be based on current prices.

15           In implementing the DCF model, I have used the current dividend yields  
16 reported in the latest edition of Value Line's VLIA software. Basing dividend  
17 yields on average results from a large group of companies reduces the concern  
18 that idiosyncrasies of individual company stock prices will result in an  
19 unrepresentative dividend yield.

20 Q. How did you estimate the growth component of the DCF model?

21 A. The principal difficulty in calculating the required return by the DCF approach is  
22 in ascertaining the growth rate that investors currently expect. Since no explicit  
23 estimate of expected growth is observable, proxies must be employed.

24

1           As proxies for expected growth, I examined growth estimates developed  
2 by professional analysts employed by large investment brokerage institutions.  
3 Projected long-term growth rates actually used by institutional investors to  
4 determine the desirability of investing in different securities influence investors'  
5 growth anticipations. These forecasts are made by large reputable organizations,  
6 and the data are readily available to investors and are representative of the  
7 consensus view of investors. Because of the dominance of institutional investors  
8 in investment management and security selection, and their influence on  
9 individual investment decisions, analysts' growth forecasts influence investor  
10 growth expectations and provide a sound basis for estimating the cost of equity  
11 with the DCF model. Growth rate forecasts of analysts are available from  
12 published investment newsletters and from systematic compilations of analysts'  
13 forecasts, such as those tabulated by Zacks Investment Research Inc. ("Zacks"). I  
14 used analysts' long-term earnings growth forecasts contained in Zacks as proxies  
15 for investors' growth expectations in applying the DCF model. I also used Value  
16 Line's earnings and dividend growth forecasts as an additional proxy. Unlike  
17 earnings, there are no formal compilations of analysts' dividend growth forecasts,  
18 owing to the scarcity of such forecasts.

19 Q. Why did you reject the use of historical growth rates in applying the DCF model  
20 to utilities?

21 A. I have rejected historical growth rates as proxies for expected growth in the DCF  
22 calculation because historical growth patterns are already incorporated in  
23 analysts' growth forecasts that should be used in the DCF model, and are  
24 therefore somewhat redundant.

1 Q. Did you consider any other method of estimating expected growth in the DCF  
2 model?

3 A. Yes, I did. I considered using the so-called “sustainable growth” method, also  
4 referred to as the “retention growth” method. According to this method, future  
5 growth is estimated by multiplying the fraction of earnings expected to be  
6 retained by the company, 'b', by the expected return on book equity, 'ROE'. That  
7 is,

$$8 \quad g = b \times \text{ROE}$$

9 where:  $g$  = expected growth rate in earnings/dividends

10  $b$  = expected retention ratio

11  $\text{ROE}$  = expected return on book equity

12 However, I do not generally subscribe to the growth results produced by  
13 this particular method for several reasons. First, the sustainable method of  
14 predicting growth is only accurate under the assumptions that the ROE is constant  
15 over time and that no new common stock is issued by the company, or if so, it is  
16 sold at book value. Second, and more importantly, the sustainable growth method  
17 contains a logic trap: the method requires an estimate of ROE to be implemented.  
18 But if the ROE input required by the model differs from the recommended return  
19 on equity, a fundamental contradiction in logic follows. Third, the empirical  
20 finance literature demonstrates that the sustainable growth method of determining  
21 growth is not as significantly correlated to measures of value, such as stock prices  
22 and price/earnings ratios, as analysts' growth forecasts<sup>6</sup>. I therefore placed no

---

<sup>6</sup> See Vander Weide & Carleton, "Investor Growth Expectations: Analysts vs. History," Jrnl. of Portfolio Mgt., Spring 1988. Timme & Eiseman, "On the Use of Consensus Forecasts of Growth in the Constant Growth Model: The Case of Electric Utilities," Financial Mgt., Winter 1989.



1 reliance on this method.

2 Q. Please describe your first proxy group for the Company's electric distribution  
3 business?

4 A. As a first proxy for the Company's energy distribution business, I examined a  
5 group of investment-grade publicly-traded utilities designated as electricity  
6 distribution utilities by S&P in its analysis of utility business risks. The original  
7 group is shown on Pages 1 - 2 of Exhibit RAM-4, and includes electricity  
8 distribution and natural gas distribution companies engaged in predominantly  
9 monopolistic distribution activities. Foreign companies and companies below  
10 investment-grade, that is, companies with a bond rating below BBB-, were  
11 eliminated as well as those companies without Value Line coverage. Page 3 of  
12 Exhibit RAM-4 narrows the group down to only include electricity distribution  
13 operating utilities. The final sample of 11 companies is made up of the parent  
14 company of these investment-grade operating electricity distribution companies  
15 with at least 50% of their revenues from regulated operations, as shown on Page 4  
16 of Exhibit RAM-4. The initial group was utilized earlier in connection with beta  
17 estimates. The same group was retained for the DCF analysis.

18 Q. What DCF results did you obtain for the electricity distribution utilities group  
19 using the Value Line growth forecasts?

20 A. As shown on Column 2 of Exhibit RAM-5 page 1, the average long-term earnings  
21 growth forecast obtained from Value Line is 8.1% for this group. Combining this  
22 growth rate with the average expected dividend yield of 4.1% shown in Column  
23 3, produces an estimate of equity costs of 12.2% for the group, unadjusted for  
24 flotation costs. Adding an allowance for flotation costs to the results of Column 4

1 brings the cost of equity estimate to 12.5%, shown in Column 5.

2 Page 2 of Exhibit RAM-5 displays the same analysis only this time using  
3 Value Line's dividend growth forecasts instead of earnings growth forecasts. The  
4 average long-term dividend growth forecast obtained from Value Line is 6.9% for  
5 this group. Combining this growth rate with the average expected dividend yield  
6 of 4.1% shown in Column 3, produces an estimate of equity costs of 10.3% for  
7 the group, unadjusted for flotation costs. Adding an allowance for flotation costs  
8 to the results of Column 4 brings the cost of equity estimate to 10.5%, shown in  
9 Column 5. Removing Ameren from the group because of the unavailability of a  
10 dividend growth forecast, the average cost of equity estimate for the group is  
11 11.0%. The average of the two estimates derived from earnings growth, 12.5%,  
12 and dividend growth, 11.0%, is 11.7%.

13 Q. What DCF results did you obtain for the electricity distribution utilities group  
14 using the analyst's consensus growth forecast?

15 A. From the original sample of eleven companies shown on page 1 of Exhibit RAM-  
16 6, Energy East was eliminated as no analysts' growth forecasts was available  
17 from Zacks. The DCF analysis for the remaining ten companies is shown on page  
18 2 of Exhibit RAM-6. Using the consensus analysts' earnings growth forecast  
19 published by Zacks of 8.8% instead of the Value Line forecast, the cost of equity  
20 for the group is 12.9%. Allowance for flotation costs brings the cost of equity  
21 estimate to 13.1%. Eliminating the outlying PPL Corp. estimate of 19.6% and in  
22 order to palliate the influence of the two companies with high growth estimates  
23 (Exelon and Public Service Enterprise), the median estimate of 11.2% is a more  
24 reasonable estimate.

1 Q. What DCF results did you obtain for Moody's electric utilities group using the  
2 Value Line growth forecasts?

3 A. Page 1 of Exhibit RAM-7 displays the electric utilities that make up Moody's  
4 Electric Utility Index. No growth forecast was available for Duke Energy, and  
5 that company was therefore eliminated from the group. The DCF analysis is  
6 shown on page 2 of Exhibit RAM-7. As shown on Column 2 of page 2 of  
7 Exhibit RAM-7, the average long-term growth forecast obtained from Value Line  
8 is 6.8% for this group. Coupling this growth rate with the average expected  
9 dividend yield of 4.4% shown in Column 3 produces an estimate of equity costs  
10 of 11.1% for the group. Allowance for flotation costs brings the cost of equity  
11 estimate to 11.4%.

12 Eliminating the companies with less than 50% of their revenues from  
13 regulated electricity operations, the average DCF result for the remaining fourteen  
14 companies is 11.1%, as shown on page 3 of Exhibit RAM-7.

15 Page 4 of Exhibit RAM-7 displays the same analysis only this time using  
16 Value Line's dividend growth forecasts instead of earnings growth forecasts. The  
17 average long-term dividend growth forecast obtained from Value Line is 5.0% for  
18 this group. Combining this growth rate with the average expected dividend yield  
19 of 4.3% shown in Column 3, produces an estimate of equity costs of 9.2% for the  
20 group, unadjusted for flotation costs. Adding an allowance for flotation costs to  
21 the results of Column 4 brings the cost of equity estimate to 9.4%, shown in  
22 Column 5. The average of the two estimates derived from earnings growth,  
23 11.1%, and dividend growth, 9.4%, is 10.3%.

1 Q. What DCF results did you obtain for the Moody's electric utilities group using  
2 analysts' growth forecasts?

3 A. The DCF analysis is displayed on Pages 1 and 2 of Exhibit RAM-8. Page 1 shows  
4 the Moody's companies sample, along with the dividend yield and growth data.  
5 No growth projections were available for CH Energy and Energy East, and these  
6 two companies were therefore eliminated from the group. Page 2 displays the  
7 actual DCF analysis for the remaining 18 companies. Using the analysts'  
8 earnings growth forecast of 8.0% from Zacks instead of the Value Line growth  
9 forecast, the cost of equity for the Moody's group is 12.4%. Allowance for  
10 flotation costs brings the cost of equity estimate to 12.6%.

11 As shown on page 3 of Exhibit RAM-8, eliminating utility companies with  
12 less than 50% of their revenues from utility operations from the Moody's group,  
13 the average estimate for the group is 12.4%. In order to palliate the influence of  
14 the companies with high growth estimates, the median estimate of 11.3% is a  
15 more reasonable estimate.

16 Q. Please summarize your DCF estimates.

17 A. The table below summarizes the DCF estimates. The mean DCF result is 11.1%.

<b>DCF STUDY</b>	<b>ROE</b>
Electricity Distribution Utilities Value Line Growth	11.7%
Electricity Distribution Utilities Zacks Growth	11.2%
Moody's Electric Utilities Value Line Growth	10.3%
Moody's Electric Utilities Zacks Growth	11.3%

18

19 Q. Dr. Morin, please now turn to the need for a flotation cost allowance.

20 A. All the market-based estimates reported above include an adjustment for flotation  
21 costs. The simple fact of the matter is that common equity capital is not free.

1 Flotation costs associated with stock issues are exactly like the flotation costs  
2 associated with bonds and preferred stocks. Flotation costs are incurred; they are  
3 not expensed at the time of issue and, therefore, must be recovered via a rate of  
4 return adjustment. This treatment is done routinely for bond and preferred stock  
5 issues by most regulatory commissions. Clearly, the common equity capital  
6 accumulated by the Company is not cost-free. The flotation cost allowance to the  
7 cost of common equity capital is discussed and applied in most corporate finance  
8 textbooks; it is unreasonable to ignore the need for such an adjustment.

9 Flotation costs are very similar to the closing costs on a home mortgage.  
10 In the case of issues of new equity, flotation costs represent the discounts that  
11 must be provided to place the new securities. Flotation costs have a direct and an  
12 indirect component. The direct component is the compensation to the security  
13 underwriter for his marketing/consulting services, for the risks involved in  
14 distributing the issue, and for any operating expenses associated with the issue  
15 (printing, legal, prospectus, etc.). The indirect component represents the  
16 downward pressure on the stock price as a result of the increased supply of stock  
17 from the new issue. The latter component is frequently referred to as "market  
18 pressure."

19 Investors must be compensated for flotation costs on an ongoing basis to  
20 the extent that such costs have not been expensed in the past, and therefore the  
21 adjustment must continue for the entire time that these initial funds are retained in  
22 the firm. Appendix B to my testimony discusses flotation costs in detail, and  
23 shows: (1) why it is necessary to apply an allowance of 5% to the dividend yield  
24 component of equity cost by dividing that yield by 0.95 (100% - 5%) to obtain the

1 fair return on equity capital; (2) why the flotation adjustment is permanently  
2 required to avoid confiscation even if no further stock issues are contemplated;  
3 and (3) that flotation costs are only recovered if the rate of return is applied to  
4 total equity, including retained earnings, in all future years.

5 By analogy, in the case of a bond issue, flotation costs are not expensed  
6 but are amortized over the life of the bond, and the annual amortization charge is  
7 embedded in the cost of service. The flotation adjustment is also analogous to the  
8 process of depreciation, which allows the recovery of funds invested in utility  
9 plant. The recovery of bond flotation expense continues year after year,  
10 irrespective of whether the Company issues new debt capital in the future, until  
11 recovery is complete, in the same way that the recovery of past investments in  
12 plant and equipment through depreciation allowances continues in the future even  
13 if no new construction is contemplated. In the case of common stock that has no  
14 finite life, flotation costs are not amortized. Thus, the recovery of flotation cost  
15 requires an upward adjustment to the allowed return on equity.

16 A simple example will illustrate the concept. A stock is sold for \$100, and  
17 investors require a 10% return, that is, \$10 of earnings. But if flotation costs are  
18 5%, the Company nets \$95 from the issue, and its common equity account is  
19 credited by \$95. In order to generate the same \$10 of earnings to the  
20 shareholders, from a reduced equity base, it is clear that a return in excess of 10%  
21 must be allowed on this reduced equity base, here 10.52%.

22 According to the empirical finance literature discussed in Appendix B,  
23 total flotation costs amount to 4% for the direct component and 1% for the market  
24 pressure component, for a total of 5% of gross proceeds. This in turn amounts to

1 approximately 30 basis points, depending on the magnitude of the dividend yield  
2 component. To illustrate, dividing the average expected dividend yield of  
3 approximately 5.0% for utility stocks by 0.95 yields 5.3%, which is 30 basis  
4 points higher.

5 Sometimes, the argument is made that flotation costs are real and should  
6 be recognized in calculating the fair return on equity, but only at the time when  
7 the expenses are incurred. In other words, the flotation cost allowance should not  
8 continue indefinitely, but should be made in the year in which the sale of  
9 securities occurs, with no need for continuing compensation in future years. This  
10 argument is valid only if the Company has already been compensated for these  
11 costs. If not, the argument is without merit. My own recommendation is that  
12 investors be compensated for flotation costs on an on-going basis rather than  
13 through expensing and that the flotation cost adjustment continue for the entire  
14 time that these initial funds are retained in the firm.

15 There are several sources of equity capital available to a firm including:  
16 common equity issues, conversions of convertible preferred stock, dividend  
17 reinvestment plan, employees' savings plan, warrants, and stock dividend  
18 programs. Each item carries its own set of administrative costs and flotation cost  
19 components, including discounts, commissions, corporate expenses, offering  
20 spread, and market pressure. The flotation cost allowance is a composite factor  
21 that reflects the historical mix of sources of equity. The allowance factor is a  
22 build-up of historical flotation cost adjustments associated and traceable to each  
23 component of equity at its source. It is impractical and prohibitively costly to  
24 start from the inception of a company and determine the source of all present

1 equity. A practical solution is to identify general categories and assign one factor  
2 to each category. My recommended flotation cost allowance is a weighted  
3 average cost factor designed to capture the average cost of various equity vintages  
4 and types of equity capital raised by the Company.

5 Q. Is a flotation cost adjustment required for an operating subsidiary like PCPL that  
6 does not trade publicly?

7 A. Yes, it is. It is sometimes alleged that a flotation cost allowance is inappropriate  
8 if the utility is a subsidiary whose equity capital is obtained from its parent, in this  
9 case, PCPL Group. This objection is unfounded since the parent-subsidary  
10 relationship does not eliminate the costs of a new issue, but merely transfers them  
11 to the parent. It would be unfair and discriminatory to subject parent shareholders  
12 to dilution while individual shareholders are absolved from such dilution. Fair  
13 treatment must consider that, if the utility-subsidary had gone to the capital  
14 markets directly, flotation costs would have been incurred.

### 15 **III. SUMMARY OF COST OF EQUITY RECOMMENDATION**

16 Q. Please summarize your results and recommendation.

17 A. To arrive at my final recommendation, I performed four risk premium analyses.  
18 For the first two risk premium studies, I applied the CAPM and an empirical  
19 approximation of the CAPM using current market data. The other two risk  
20 premium analyses were performed on historical and allowed risk premium data  
21 from electric utility industry aggregate data. I also performed DCF analyses on  
22 two surrogates for PCPL: a group of investment-grade electricity distribution  
23 utilities and a group representative of the electric utility industry, namely,  
24 Moody's Electric Utility Index. The results from all the various tests are



1 summarized in the table below

2	<b>METHODOLOGY</b>	<b>ROE</b>
	CAPM	10.9%
	Empirical CAPM	11.2%
	Historical Risk Premium Elec Utility Industry	10.6%
	Allowed Risk Premium	10.2%
	DCF S&P Elec Distribution Utilities Value Line Growth	11.7%
	DCF S&P Elec Distribution Utilities Zacks Growth	11.2%
	DCF Moody's Elec Utilities Value Line Growth	10.3%
	DCF Moody's Elec Utilities Zacks Growth	11.3%

3

4 The average result from the table is 10.9%. From a broader  
5 methodological standpoint, the average result from the three principal  
6 methodologies is also 10.9%, as shown below:

7	CAPM	11.1%
8	Risk Premium	10.4%
9	DCF	<u>11.1%</u>
10	AVERAGE	10.9%

11 The overall average result is 10.9% for the average electricity distribution  
12 utility. I note that all three methods, including DCF are equally weighted, and  
13 that the DCF results are based on four different tests.

14 Q. Did you adjust these results to account for the fact that PCPL’s risk profile differs  
15 from the average electric utility?

16 A. No, I did not. In my view, PCPL’s lower business risk on account of its status as  
17 a pure “wires” utility unencumbered with the riskier power production function  
18 and its stronger than average common equity ratio offset its higher investment risk  
19 on account of its very small size.

20

1 Q. Please comment on PCPL's size related risks.

2 A. Because of its very small, PCPL's investment risks are higher than those of the  
3 industry. PCPL possesses small revenue and asset bases, both in absolute terms  
4 and relative to other utilities. Investment risk increases as company size  
5 diminishes, all else remaining constant.

6 As the empirical finance literature has clearly demonstrated, small  
7 companies have very different returns than large ones and on average those  
8 returns have been higher. The greater risk of small stocks does not fully account  
9 for their higher returns over many historical periods. The average small stock  
10 premium is very significant over the average stock, more than could be expected  
11 by risk differences alone, suggesting that the cost of equity for small stocks is  
12 considerably larger than for large capitalization stocks. In addition to earning the  
13 highest average rates of return, small stocks also have the highest volatility, as  
14 measured by the standard deviation of returns.

15 Q. Dr. Morin, what is your final conclusion regarding PCPL's cost of common equity  
16 capital?

17 A. Based on the results of all my analyses, the application of my professional  
18 judgment, and the risk circumstances of PCPL, it is my opinion that a just and  
19 reasonable return on the market value of the common equity capital of PCPL's  
20 energy distribution operations in the state of Pennsylvania is 10.9%.

21 Q. Dr. Morin, what capital structure assumption underlies your recommended return  
22 on PCPL's common equity capital?

23 A. My recommended ROE for PCPL is predicated on the adoption of a test year  
24 capital structure consisting of approximately 52% common equity capital.

1 Q. Is there a relationship between financial risk and the authorized ROE?

2 A. There certainly is. A low authorized ROE increases the likelihood the utility will  
3 have to rely increasingly on debt financing for its capital needs. This creates the  
4 specter of a spiraling cycle that further increases risks to both equity and debt  
5 investors; the resulting increase in financing costs is ultimately borne by the  
6 utility's customers through higher capital costs and rates of returns.

7 Q. Is PCPL's financial risk impacted by the authorized ROE?

8 A. Yes, it is. A low ROE increases the likelihood that PCPL will have to rely on debt  
9 financing for its capital needs. As the Company relies more on debt financing, its  
10 capital structure becomes more leveraged. Since debt payments are a fixed  
11 financial obligation to the utility, this decreases net income. If, instead, the  
12 Company attempts to maintain its capitalization ratios by issuing more stock,  
13 lower operating income and more shares outstanding mean less income per share  
14 available for dividend growth. In either case, equity investors face greater  
15 uncertainty about the future dividend potential of the firm. As a result, the  
16 Company's equity becomes a riskier investment. The risk of default on the  
17 Company's bonds also increases, making the utility's debt a riskier investment.  
18 This increases the cost to the utility from both debt and equity financing and]  
19 increases the possibility the Company will not have access to the capital markets  
20 for its outside financing needs, or if so, at prohibitive costs.

21 Q. Finally, Dr. Morin, if capital market conditions change significantly between the  
22 date of filing your prepared testimony and the date your oral testimony is  
23 presented, would this cause you to revise your estimated cost of equity?

24 A. Yes. Interest rates and security prices do change over time, and risk premiums

1 change also, although much more sluggishly. If substantial changes were to occur  
2 between the filing date and the time my oral testimony is presented, I will update  
3 my testimony accordingly.

4 Q. Does this conclude your direct testimony?

5 A. Yes, it does.

PIKE COUNTY LIGHT AND POWER COMPANY

ELECTRIC RATE PANEL

1 Q. Would the members of the Electric Rate Panel ("Panel")  
2 please state their names and business address?

3 A. William Atzl, Lucy Villeta and Ricky Joe, 4 Irving  
4 Place, New York, New York 10003.

5 Q. By whom are you employed, in what capacity, and what  
6 are your professional backgrounds and qualifications?

7 A. **(Atzl)**. I will act as chairman of the Panel. We are  
8 all employed by Consolidated Edison Company of New  
9 York, Inc. ("Con Edison"). I am Director - O&R Rates  
10 in the Con Edison Rate Engineering Department. In this  
11 position, I manage the rate related activities for  
12 Orange and Rockland Utilities, Inc. ("Orange and  
13 Rockland") and its subsidiaries Pike County Light &  
14 Power Company ("Pike" or "the Company") and Rockland  
15 Electric Company. My background is as follows: In  
16 1983, I graduated from the State University of New York  
17 at Stony Brook with a Bachelor of Engineering degree in  
18 Mechanical Engineering. In 1989, I graduated from Pace  
19 University, White Plains, New York with a Master of  
20 Business Administration degree in Management  
21 Information Systems. I am a Licensed Professional  
22 Engineer in the State of New York. My first employment  
23 was with Long Island Lighting Company in 1983 where I  
24 held the position of Assistant Engineer in the New

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1 Business Department. In 1984, I joined Orange and  
2 Rockland as a Commercial and Industrial Representative  
3 in the Commercial Operations Department. At Orange and  
4 Rockland, I also held the positions of Commercial and  
5 Industrial Engineer, Program Administrator - Demand-  
6 Side Management, Manager - Demand-Side Management  
7 Operations, Manager - Energy Services and Pricing, and  
8 Manager - Regulatory Affairs. In October 1999, I  
9 joined Con Edison and held the position Department  
10 Manager - Electric and Gas Rate Design - O&R prior to  
11 my present position. I have testified in numerous  
12 regulatory proceedings before the Pennsylvania Public  
13 Utility Commission ("Commission"), New York Public  
14 Service Commission ("NYPSC") and New Jersey Board of  
15 Public Utilities.

16 A. **(Villeta)**. I am Section Manager of the Cost Analysis  
17 section of the Rate Engineering Department. I received  
18 a Bachelor of Business Administration Degree in Finance  
19 with a minor in Management Information Systems from  
20 Pace University in September 1989. In October 1989,  
21 I began my employment with Con Edison as a Management  
22 Intern with rotational assignments in Forecasting and  
23 Economic Analysis, Accounting Research and Procedures  
24 ("ARP") and Power Generation Services. In June 1990, I

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1       accepted my permanent assignment as an Associate  
2       Accountant in ARP. In 1995, I was promoted to Budget  
3       Analyst in Central Customer Service. In 1998, I was  
4       promoted to Senior Analyst in Customer Operations  
5       responsible for managing the Call Center and Service  
6       Center budget. In 2001, I was promoted to Financial  
7       Manager of Staten Island and Electric Services. I have  
8       been in my current position since November 2005 and  
9       have since testified before the New Jersey Board of  
10      Public Utilities.

11    A.    **(Joe)**. I am a Senior Rate Analyst in the Rate  
12      Engineering Department. In 1993, I graduated from  
13      Rutgers College, New Brunswick, New Jersey with a  
14      Bachelor of Arts degree in Economics. In 2001, I  
15      graduated from the Rutgers Graduate School of  
16      Management with a Master in Business Administration  
17      degree in Finance. I joined Con Edison in 2004 as a  
18      Senior Analyst in the Rate Engineering Department and  
19      was promoted to my current position in 2006. Prior to  
20      joining Con Edison, I was employed by: the New Jersey  
21      Board of Public Utilities from 1993 to 2000,  
22      PricewaterhouseCoopers from 2000 to 2003, and Amerada  
23      Hess Corporation from 2003 to 2004.

24    Q.    What is the purpose of the Panel's testimony?

ELECTRIC RATE PANEL

1 A. Our testimony:

2 (1) presents the Company's Electric Embedded Cost-of-  
3 Service ("ECOS") study;

4 (2) presents the Company's proposal for revenue  
5 allocation and rate design;

6 (3) presents the impact of the proposed rate changes  
7 on customers' bills; and

8 (4) discusses proposed tariff changes.

9 Q. Please summarize your testimony.

10 A. The Panel's testimony covers five sections:

11 First, the Panel presents the Company's ECOS study for  
12 calendar year 2007 which:

- 13 • functionalizes and classifies various electric  
14 system costs to their operating functions;
- 15 • allocates these functionalized costs to the  
16 customer classes;
- 17 • demonstrates each ECOS study class's surplus or  
18 deficiency based on the application of a  $\pm 10\%$   
19 tolerance band around the calculated total system  
20 rate-of-return; and
- 21 • shows a total system rate-of-return of 2.33  
22 percent and rates-of-return for all service  
23 classifications ("SC"). For example, the overall  
24 SC No. 1, Residential return is (1.48%), the SC



ELECTRIC RATE PANEL

1           No. 2, General Service return is 3.56%, and the SC  
2           No. 3, Municipal Street Lighting return is  
3           (1.07%).

4           Second, the Revenue Allocation section of this  
5           testimony explains the process of: (1) adjusting the  
6           incremental revenue requirement to reflect the transfer  
7           of State Tax Adjustment Surcharge ("STAS") revenues to  
8           base rates, (2) realigning revenues to address class  
9           surpluses and deficiencies identified in the ECOS  
10          study, (3) allocating the revenue increase among  
11          customer classes, (4) mitigating certain class-specific  
12          delivery revenue increases, and (5) determining final  
13          class-specific delivery revenue increases and  
14          percentage increases.

15          Third, the Rate Design section of the testimony  
16          describes the application of class-specific delivery  
17          revenue increases to delivery rates of each class,  
18          including the separation of SC No. 2 General Secondary  
19          and Primary subclasses into two distinct groups, and  
20          setting of Customer Charges for the SC No. 1 and SC No.  
21          2 General Secondary and Primary classes.

22          Fourth, the Customer Bill Impacts section describes  
23          exhibits that show customer bill impacts at various  
24          consumption levels.

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1 Fifth, the Tariff Changes section describes our  
2 proposals to implement reconnection and late payment  
3 charges.

4 Q. Is the Panel sponsoring any exhibits?

5 A. Yes, we are sponsoring the following two exhibits:

- 6 • Exhibit (E-7) - Embedded Cost-of-Service Study.
- 7 • Exhibit (E-8) -Electric Present and Proposed Rate  
8 Design.

9 Q. How is the Panel's testimony organized?

10 A. The testimony is divided into the following five  
11 sections: (1) ECOS Study, (2) Revenue Allocation, (3)  
12 Rate Design, (4) Customer Bill Impacts, and (5) Tariff  
13 Changes.

14 **ECOS STUDY**

15 Q. Please describe the ECOS study.

16 A. The ECOS study, which is contained in a document  
17 entitled "PIKE COUNTY LIGHT AND POWER COMPANY - COST-  
18 OF-SERVICE STUDY - ELECTRIC DEPARTMENT - YEAR 2007",  
19 begins with explanatory notes detailing sources of data  
20 and methods used in the preparation of the ECOS study  
21 followed by seven tables of cost data.

22 Q. Please provide a general description of the ECOS study.

23 A. The ECOS study analyzes, on a class basis and for a  
24 past period, revenues and book (accounting) costs for

ELECTRIC RATE PANEL

1 specific cost categories. The results of the study are  
2 expressed as class and total system rates-of-return.

3 Q. What cost categories are analyzed in the ECOS study?

4 A. The ECOS study analyzes costs and revenues associated  
5 with the Company's delivery system, i.e., transmission,  
6 distribution, and customer-related cost categories or  
7 functions. The major supply function costs, e.g.,  
8 purchased power and generation costs are not included  
9 in the ECOS study. Also, revenues and expenses  
10 associated with the System Benefits Charge ("SBC") have  
11 been excluded from the study.

12 Q. What time period does the ECOS study cover?

13 A. It covers the calendar year 2007.

14 Q. What electric revenues are reflected in the ECOS study?

15 A. The study uses the Company's actual 2007 electric  
16 delivery revenues.

17 Q. What customer classes are analyzed in the ECOS study?

18 A. The study analyzes classes of customers corresponding  
19 to SCs contained in our electric rate schedules,  
20 including retail access customers. A description of  
21 the type of customers served under each SC is set forth  
22 in the ECOS study, beginning on page 9 of the ECOS  
23 explanatory notes.

24 Q. How are the results of the ECOS study expressed?

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1 A. The results of the ECOS study are expressed as total  
2 Company ("total system") and class rates of return.

3 Q. What is the total system rate of return as determined  
4 by the ECOS study?

5 A. The total system rate-of-return is 2.33 percent as  
6 shown on Table 1, Page 1, Column (1), Line 15 of the  
7 ECOS study. In addition, Table 1 shows rates-of-return  
8 for all classes shown in the ECOS study. For example,  
9 the overall SC No. 1, Residential return is  
10 (1.48%), the SC No. 2, General Service return is 3.56%,  
11 and the SC No. 3, Municipal Street Lighting return is  
12 (1.07%).

13 Q. Has the Company employed "tolerance bands" around the  
14 system rate-of-return in developing class revenue  
15 responsibilities?

16 A. Yes. Class revenue responsibility has been measured  
17 with respect to a +10% tolerance band around the total  
18 system rate-of-return. Classes would not be considered  
19 "surplus" or "deficient" if the class ECOS rate-of-  
20 return falls within this tolerance band. Classes that  
21 fall outside this range would be either surplus or  
22 deficient by the revenue amount, including appropriate  
23 income taxes, necessary to bring the realized return to  
24 the upper or lower level of the tolerance band.

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1 Q. Based on the application of the +10% tolerance band  
2 around the calculated total system rate of return of  
3 2.33%, what are the ECOS study class surpluses and  
4 deficiencies?

5 A. The revenue surpluses are shown on Table 1, Line 24 and  
6 the revenue deficiencies are shown on Table 1, Line 25.  
7 For example, the Residential SC No. 1 with Space  
8 Heating and the C&I Secondary Non Demand Metered have  
9 revenue deficiencies of \$239,597 and \$11,781  
10 respectively. The C&I SC No. 2 General Service and the  
11 C&I SC No. 2 Separately Metered Space Heating have  
12 revenue surpluses of \$54,681 and \$1,876 respectively.

13 Q. What is the significance, for example, of the SC No. 1  
14 class deficiency?

15 A. The deficiency is the amount of revenue increase, at  
16 current rates, required to bring SC No. 1's return to  
17 the lower level of the tolerance band around the system  
18 rate-of-return.

19 Q. Please describe what is shown on Table 1A of Exhibit E-  
20 7.

21 A. Due to the application of class tolerance bands, the  
22 total of the ECOS surpluses and deficiencies is a net  
23 deficiency. In order that ECOS study indications  
24 are revenue neutral to the Company, and so that no

ELECTRIC RATE PANEL

1 class rate-of-return is below the lower level of the  
2 tolerance band, Table 1A adjusts deficient classes on an  
3 across-the-board percentage basis so that the sum of  
4 surpluses matches the sum of deficiencies. These  
5 adjusted surpluses and deficiencies are used in revenue  
6 allocation, as described later in our testimony.

7 Q. Does the ECOS study develop customer costs by service  
8 class?

9 A. Yes.

10 Q. Please indicate what the customer costs are.

11 A. Please refer to Table 6, Page 1, Line 14 of the ECOS  
12 study. For example, the monthly customer cost for the  
13 overall Residential SC No. 1 class is \$19.15, the  
14 overall C&I SC No. 2, Secondary class is \$36.88, and  
15 the C&I SC No. 2 Primary class is \$669.84.

16 Q. What do customer costs include?

17 A. Customer costs include a distribution customer  
18 component (overhead and underground lines and overhead  
19 and underground transformers), services, meters and  
20 installations, installations on customer premises,  
21 street lighting, customer accounting, uncollectibles  
22 and customer service.

23 Q. Let us now turn to the methodology used in developing  
24 the ECOS study. Please describe the procedures

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- 1 followed in the preparation of this study.
- 2 A. There are two main steps in the preparation of the ECOS  
3 study: (1) functionalization and classification of  
4 costs to operating functions, such as production,  
5 transmission, distribution, customer accounting and  
6 customer service with further division into sub-  
7 functions, such as distribution demand, distribution  
8 customer, services, overhead and underground etc. ;  
9 and (2) allocation of these functionalized costs to  
10 customer classes.
- 11 Q. Please describe the functionalization and  
12 classification step.
- 13 A. The functionalization and classification step assigns  
14 the broad accounting-based cost categories to the more  
15 detailed categories employed in the ECOS study. This  
16 level of detail is required to differentiate, for  
17 example, distribution demand related costs from  
18 distribution customer related costs.
- 19 Q. Why is this necessary?
- 20 A. These data allow the proper allocation to the classes  
21 of the fixed and variable costs, i.e., operation and  
22 maintenance expense, based on cost causation.
- 23 Q. Please continue.
- 24 A. During the process of functionalization, all costs are

## ELECTRIC RATE PANEL

1 classified as being demand-related, energy-related or  
2 customer-related. Demand-related costs are fixed costs  
3 created by the loads placed on the various components  
4 of the electric system. Energy-related costs are  
5 variable costs resulting from the total kilowatthours  
6 delivered during the year. Customer-related costs are  
7 fixed costs, which are caused by the presence of  
8 customers connected to the system, regardless of the  
9 amounts of their demand or energy usage.

10 Q. Please describe the allocation step in the study.

11 A. The allocation step allocates the functionalized and  
12 classified costs to the customer classes based on the  
13 appropriate demand, energy or customer allocation  
14 factors, which are shown on Table 7 of the ECOS study.

### REVENUE ALLOCATION

16 Q. Did the Accounting Panel provide you with the total  
17 incremental revenue requirement for the rate year,  
18 i.e., the 12 months ending March 31, 2009 ("Rate  
19 Year")?

20 A. Yes. We were informed that the total incremental  
21 revenue requirement for the Rate Year amounts to  
22 \$1,171,900.

23 Q. Please describe how you allocated the increased  
24 delivery revenue requirement among Pike's service



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1 classifications.

2 A. First, we added \$7,172 to the incremental revenue  
3 requirement to reflect the transfer to base rates of  
4 the amount Pike is currently recovering in its STAS  
5 Part 1 Rate. Pursuant to the Commission's March 10,  
6 1970 Order establishing STAS, the Company is required  
7 to zero out its STAS in a base rate proceeding and  
8 transfer STAS recovery to base rates. This results in  
9 an adjusted incremental delivery revenue increase of  
10 \$1,179,072.

11 Q. Please describe the next step in the revenue allocation  
12 process.

13 A. Rate Year delivery revenues at the current rate level  
14 for each SC were realigned to reflect the deficiency  
15 and surplus indications from the ECOS study.

16 Q. Did you attempt to eliminate fully the deficiencies and  
17 surpluses indicated by the ECOS study?

18 A. Before making final decisions on the elimination of  
19 deficiencies and surpluses, we allocated the net  
20 delivery revenue increase among the SCs in proportion  
21 to the relative contribution made by each class to the  
22 realigned total Rate Year delivery revenues. We then  
23 reviewed, by class, the combined impact of eliminating  
24 a deficiency or surplus and the impact of the delivery

## ELECTRIC RATE PANEL

1 revenue increase. We found that fully eliminating the  
2 deficiencies associated with certain customer classes,  
3 coupled with the delivery revenue increase, would  
4 result in very large bill impacts for those classes.  
5 Therefore, a mitigation adjustment was made, on an  
6 overall revenue neutral basis, to limit the delivery  
7 increase percentage to any customer class to no more  
8 than 1.5 times the delivery increase percentage for all  
9 classes. Classes having significant deficiencies which  
10 were mitigated in this manner are SC No. 1, Residential  
11 Service, SC No. 3 Municipal Street Lighting, and SC No.  
12 4, Private Outdoor Lighting. Our mitigation  
13 adjustments also limited the delivery increase  
14 percentage to any customer class to no less than 0.5  
15 times the delivery increase percentage for all classes.  
16 The SC No. 2 Primary class was mitigated in this  
17 manner. The realignment of revenues, with the  
18 mitigation adjustments described above, will move these  
19 classes in the direction of more closely matching costs  
20 and revenues while limiting the customer bill impacts  
21 associated with the changes. In the event the multi-  
22 year rate plan proposed by the Accounting Panel is  
23 approved, we intend to further reduce any deficiencies  
24 in the additional rate years.

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1 **RATE DESIGN**

2 Q. Did you restate the Rate Year delivery revenue  
3 increases, as determined above, on a historical period  
4 basis?

5 A. Yes. We restated the Rate Year delivery revenue  
6 increases by service classification on the basis of the  
7 twelve months ended March 31, 2008, i.e., the  
8 historical period for which detailed billing data are  
9 available.

10 Q. Please describe how you developed the delivery revenue  
11 increases for the historical period.

12 A. Revenue ratios were developed for each class by  
13 dividing the historical period delivery revenues for  
14 each class by the Rate Year delivery revenues for each  
15 class at current rate levels. These revenue ratios for  
16 each class were applied to the Rate Year delivery  
17 revenue increase for each class to determine each  
18 class's delivery revenue increase for the historical  
19 period.

20 Q. Please explain how you designed the proposed delivery  
21 rates shown in Exhibit E-8, Schedule 1.

22 A. The first step in the rate design process is a decision  
23 to designate separate rates for the SC No. 2 Secondary  
24 and Primary Classes. These classes currently share a

## ELECTRIC RATE PANEL

1 common rate structure with the exception of the energy  
2 charge for usage in excess of 200 hours use of billing  
3 demand. The ECOS study results demonstrate  
4 significantly different class rates of return for the  
5 SC No. 2 Secondary and Primary classes, therefore we  
6 are proposing to separate their rate structures so  
7 these different rates of return can be addressed in the  
8 rate design process. The second step is to increase  
9 the Customer Charges for SC No. 1, SC No. 2 General  
10 Secondary and Primary to a level that better reflects  
11 the Company's cost to provide service. The current  
12 Customer Charge for SC No. 1 is \$5.29, which is  
13 significantly less than the customer cost of \$19.15.  
14 Based on the SC No. 1 delivery revenue increase  
15 percentage resulting from the revenue allocation  
16 process described previously, this charge would  
17 increase to \$8.06. We have rounded the charge to  
18 \$8.00. We believe this increase makes progress in  
19 moving toward a Customer Charge that more closely  
20 reflects customer cost, while recognizing the customer  
21 bill impact of the change. We then reviewed the  
22 Customer Charge for SC No. 2 which is currently \$5.30  
23 per month and applicable to both secondary and primary  
24 service customers. The ECOS study shows an embedded

ELECTRIC RATE PANEL

1 customer cost of \$36.88 per month for SC No. 2  
2 Secondary and \$669.84 for SC No. 2 Primary customers.  
3 Given the disparity between these customer costs and  
4 current Customer Charges, we propose to increase the  
5 Customer Charge for SC No. 2 Secondary from \$5.30 to  
6 \$10.00 per month. The proposed \$10.00 Customer Charge  
7 for SC No. 2 Secondary represents an increase of three  
8 times the delivery revenue increase percentage  
9 resulting from the revenue allocation process and a  
10 gradual approach to moving Customer Charges closer to  
11 customer costs. The change in the SC No. 2 Secondary  
12 Customer Charge eliminates approximately 15% of the  
13 difference between the current Customer Charge and  
14 customer cost. Similarly, for SC No. 2 Primary, we  
15 propose to eliminate approximately 15% of the  
16 difference between the current Customer Charge of \$5.30  
17 and the customer cost of \$669.84. The result is a  
18 proposed Customer Charge of \$105.00.

19 Q. What is the third step in the rate design process?

20 A. For each class, the delivery revenue increase,  
21 determined in the revenue allocation process, and  
22 adjusted for increased revenue resulting from Customer  
23 Charge increases, was divided by total delivery  
24 revenue, excluding Customer Charge revenue, to

ELECTRIC RATE PANEL

1 establish a percentage by which delivery rates, other  
2 than Customer Charges, would be increased. Delivery  
3 rates within each class, other than Customer Charges  
4 were then increased by these percentages. Exhibit E-8,  
5 Schedule 1 is a summary of the present and proposed  
6 rates for Pike's electric service classifications.

7 **CUSTOMER BILL IMPACTS**

8 Q. Please describe Schedules 2 and 3 of Exhibit E-8.

9 A. Schedule 2 provides a comparison of monthly customer  
10 bills under the present and proposed rates at various  
11 consumption levels for SC Nos. 1 and 2 customers.  
12 Schedule 3, Page 1 of 2, contains information on the  
13 number of customers served and the distribution of base  
14 rate and total revenues by tariff subdivision at  
15 currently effective rates. Schedule 3, Page 2 of 2,  
16 sets forth certain information required of Pike by  
17 Section 53.52 of the Commission's regulations, 52 Pa.  
18 Code § 53.52. Specifically, it shows:

- 19 a) a calculation of the number of customers, by tariff  
20 subdivision, whose bills will be increased;
- 21 b) a calculation of the total increases, in dollars,  
22 by tariff subdivision, projected on an annual  
23 basis;
- 24 c) a calculation of the number of customers, by tariff

ELECTRIC RATE PANEL

1 subdivision, whose bills will be decreased; and  
2 d) a calculation of the total decreases, in dollars,  
3 by tariff subdivision, projected to an annual  
4 basis.

5 We would note that the Company's rate design  
6 methodology will cause the bills of all of Pike's  
7 electric customers to increase.

8 **TARIFF CHANGES**

9 Q. Have you proposed any changes in the Company's service  
10 fees?

11 A. Yes. We have proposed a change to the Company's  
12 reconnection charge and the establishment of a late  
13 payment charge.

14 Q. Please describe the reconnection charge.

15 A. The Company's tariff in the Rules and Regulations  
16 Section 16, Restoration of Service for Residential  
17 Customers, includes the provision for a reconnection  
18 charge. When notified that a previously disconnected  
19 electric service is ready for reconnection, the Company  
20 sends a Meter Technician to the premises to reconnect  
21 the service. Currently, the Company's tariff allows  
22 the assessment of a "reasonable reconnection fee". In  
23 the interest of consistency, the Company proposes to  
24 set a specific reconnection charge.

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1 Q. How was the new reconnection charge determined?

2 A. The charge was determined by applying applicable man-  
3 hour rates to the time associated with completing a  
4 reconnection of electric service. The average time  
5 required for a reconnection of electric service is 20  
6 minutes: 5 minutes of travel time and 15 minutes spent  
7 at the customer's premises. This required time is  
8 multiplied by the applicable hourly rate for a 3rd  
9 Class Meter Technician. The hourly rate during normal  
10 work hours is \$82.35 per hour. The cost for 20 minutes  
11 of a 3rd Class Meter Technician's time is \$27.45. To  
12 establish the fee, we rounded this number. Therefore,  
13 our proposed reconnection fee is \$27.00.

14 Q. Please describe the late payment charge.

15 A. In accordance with Sections 56.21 and 56.22 of the  
16 Commission's regulations, 52 Pa. Code § 56.21 and §  
17 56.22, the majority of Pennsylvania utilities collect a  
18 late payment charge for payments received more than  
19 five days after the due date of the customer bill. The  
20 regulations also state that the maximum interest rate  
21 should be set to no more than 1.5% per month on the  
22 overdue balance of the bill. The Company proposes to  
23 establish a late payment charge of 1.5% to be applied  
24 in accordance with these regulations.



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1 Q. Does this conclude your testimony?

2 A. Yes, it does.

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PIKE COUNTY LIGHT & POWER COMPANY  
DIRECT TESTIMONY OF  
ANGELO M. REGAN

1 Q. Please state your name and business address.

2 A. Angelo M. Regan, 390 West Route 59, Spring Valley, New York 10977.

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

4 A. I am employed by Orange and Rockland Utilities, Inc. (“Orange and Rockland”),  
5 the corporate parent of Pike County Light and Power (“Pike” or the “Company”),  
6 as Director of Electrical Engineering.

7 Q. Please briefly describe your educational and business experience.

8 A. I received a Bachelor of Science degree in Electrical Engineering in 1985, and a  
9 Masters of Science degree in Industrial Engineering Management Science in  
10 1987, both from Fairleigh Dickinson University, in Teaneck, New Jersey. I am a  
11 registered professional engineer in the State of New York. I was employed by  
12 Central Hudson Gas and Electric Corporation as an overhead distribution systems  
13 engineer from 1985 to 1987. Since then, I have worked for Orange and Rockland  
14 as an overhead and underground Systems Engineer, as Manager of the  
15 Distribution Engineering Department, and then as Chief Distribution Engineer,  
16 prior to assuming my present position as Director of Electrical Engineering.

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

18 A. The purpose of my testimony is to present and support Pike’s electric capital  
19 budget and plant additions, the electric operating and maintenance (“O&M”)  
20 budgets, and several system reliability plans and initiatives that the Company is  
21 currently undertaking and proposing for the near future.

PIKE COUNTY LIGHT & POWER COMPANY  
DIRECT TESTIMONY OF  
ANGELO M. REGAN

1           **Plant Additions and Capital Budget**

2       Q.     Are you familiar with planned plant additions and the construction budget for  
3           Pike?

4       A.     Yes.

5       Q.     Was Exhibit E-3, Schedule 8 prepared by you or under your direction?

6       A.     Yes. Exhibit E-3, Schedule 8 shows the major plant additions that Pike proposes  
7           for inclusion in rate base in this proceeding, along with their in-service dates and  
8           the quantified expenditures for each project (including Allowance for Funds Used  
9           During Construction (“AFUDC”) and excluding the Cost of Removal). These  
10          plant additions fall into the following categories: (1) those already underway that  
11          have been completed or are scheduled to be completed during the forecast year  
12          ending March 31, 2009 (“Future Test Year”), and (2) various blanket programs.

13      Q.     Please describe the major capital projects that are scheduled to be completed  
14          during the Future Test Year, including their scheduled in-service dates and capital  
15          costs that Pike proposes for inclusion in rate base.

16      A.     A description of these projects follows. The in-service dates are based on existing  
17          construction and installation schedules. Where projects have been completed, the  
18          costs provided are the final actual costs accrued. Where a project is currently  
19          underway or has not yet been initiated, the forecasted costs have been quantified  
20          through an analysis of current spending and/or anticipated costs to completion,  
21          and will be updated to show actual costs as appropriate.

22           **Line 7 – Double Circuit Route 209**

PIKE COUNTY LIGHT & POWER COMPANY  
DIRECT TESTIMONY OF  
ANGELO M. REGAN

1 Line 7 serves the majority of Pike’s customers in Pennsylvania (approximately  
2 65%), and is the sole feed for the Company’s customers in Milford. The head end  
3 of the existing Line 7 circuit past the Matamoras Substation traverses a marshy  
4 section of tree lined right-of-way (“ROW”). While this ROW has been trimmed  
5 and maintained by the Company utilizing good utility practices, trees from  
6 outside of the ROW have caused outages to customers served from Line 7. This  
7 section of the line has difficult access that does not allow for quick repairs to  
8 damaged facilities and, thus, hinders the restoration of service for all customers  
9 served from this circuit when incidents occur in this area. In order to address this  
10 issue and provide improved reliability and redundancy for the head end of Line 7,  
11 the Company has installed new 34.5kV circuitry that provides a geographically  
12 separate and redundant path for the head end of Line 7 past the Matamoras  
13 Substation. This project was completed in June 2008, and placed into service at a  
14 final cost of \$388,000.

15 **Property Purchase for Future Milford Substation**

16 The Company will purchase property for a future Milford area substation. This  
17 property will be chosen to be relatively near the Borough of Milford so that  
18 adequate local distribution circuitry can be constructed and utilized to improve  
19 local area reliability and redundancy for the existing customers, as well as  
20 enhance load serving capability for future area growth. The Company currently  
21 projects closing on this property by late 2008 or early 2009, for an estimated cost  
22 of between \$500,000 and \$800,000. At this time, the Company anticipates  
23 construction of this substation in the 2011-12 timeframe.

PIKE COUNTY LIGHT & POWER COMPANY  
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1       **Distribution Automation Improvements**

2       The Company will install two new pole-mounted reclosers on Line 7 with  
3       communications capability to allow remote monitoring and control, and retrofit  
4       another existing recloser on Line 7 with that same communications capability.

5       These new distribution automation device improvements will provide the  
6       Company with more real-time operating information and knowledge of how the  
7       system is performing. These devices will also facilitate remote switching from  
8       the Company's energy control center to allow for isolation of incidents and  
9       quicker service restoration following incidents. This project is scheduled to be  
10      completed by the end of 2008, at an anticipated cost of \$150,000.

11      **Program Blankets**

12      Q.     What is included in the category of Blankets set forth in Exhibit E-3, Schedule 8?

13      A.     Blankets include a variety of work, including all materials and labor, which must  
14      be performed regularly so that the Company may continue to provide reliable  
15      service. Blankets are an accounting convention, long employed by the Company  
16      whereby, for the sake of convenience, the costs of certain recurring labor and  
17      equipment are grouped together. Included in the overall blankets category on  
18      Exhibit E-3, Schedule 8 are the Electric Overhead and Underground Distribution  
19      Blankets. The Company uses these blankets to support its electric distribution  
20      business, and they break down to the following sub-categories: New Business,  
21      Streetlights, Road Widening, Telephone Interference Work, Voltage Complaints,  
22      System Integrity, and Customer Complaint Investigations. These are relatively  
23      self-explanatory, and cover routine expenditures on the Electric Distribution

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1 Overhead and Underground systems to connect new customers, address municipal  
2 requirements, and provide necessary funds for daily requirements and upkeep of  
3 the distribution system. Also included in the overall blankets category are the  
4 costs of transformers, tools, meters, and test equipment.

5 **Service Reliability Programs**

6 Q. Does Pike satisfy its obligations regarding the provision of reliable service?

7 A. Yes. The Company fully meets the statutory requirement to provide safe,  
8 adequate and proper service to its customers. Even so, Pike continues to explore  
9 ways to further enhance service reliability in its peninsula-like service area.

10 Q. Has the Company augmented any existing programs and/or is it proposing to  
11 undertake any new programs to enhance service reliability in its service territory?

12 A. Yes. The Company has augmented its existing vegetation management program,  
13 and is proposing to initiate a number of new circuit reliability programs that will  
14 provide our customers with an even higher level of service reliability.

15 Q. Why is Pike proposing these enhanced and new service reliability programs?

16 A. Customers continue to place a greater reliance than ever before on electricity for  
17 highly specialized uses (such as computers, security systems, automatic garage  
18 door openers, timers for outdoor and indoor lighting, clock thermostats, automatic  
19 sprinkler systems, and other programmable devices). Greater dependence on  
20 these technological applications has made the Company's customers less tolerant  
21 of service interruptions. To continue to meet our customers' evolving needs, the  
22 Company has evaluated measures that can be taken to minimize service  
23 interruptions.

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1 In addition, the PAPUC recently issued a final rulemaking order in Docket No. L-  
2 00040167, establishing inspection, maintenance, repair and replacement standards  
3 (“I&M Order”). The Order establishes inspection and maintenance (“I&M”)  
4 standards for a variety of activities including vegetation management, pole  
5 inspections, overhead line inspections, distribution transformer inspections,  
6 recloser inspections and substation inspections. Pursuant to the I&M Order, Pike  
7 may be required to file its initial biennial plan by as early as October 1, 2009, for  
8 implementation of this I&M program to be in full compliance with the I&M  
9 Order commencing on January 1, 2011. Currently, Pike’s I&M programs and  
10 practices comply with some, but not all, requirements contained in the I&M  
11 Order. Pike may need to take steps prior to January 1, 2011, and certainly by  
12 January 1, 2012, to be in full compliance with the I&M Order. In order to  
13 continue improving service reliability and to reduce the fiscal impact of  
14 introducing all of the requirements at once, Pike will introduce some of the  
15 compliance initiatives within this rate proceeding. Exhibits E-3, Schedule 8 and  
16 E-4, Schedule 12 provide the capital and O&M components, respectively, for  
17 these programs.

18 Q. Please describe these enhanced and new service reliability programs.

19 A. **Vegetation Management and Ground-to-Sky Tree-Trimming**

20 The peninsula-like geography and design of the majority of Pike’s electric  
21 delivery system, being radially fed at the end of the Company’s service territory,  
22 have a significant impact on customer hours of interruption when outages occur.  
23 As tree density within Pike’s service territory is substantial, particularly along

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1 certain portions of the Line 7 mainline circuit that extends from Matamoras to  
2 Milford, keeping tree growth in check offers the best opportunity to minimize  
3 outages. As such, in 2006, Pike adopted a three-year tree-trimming cycle to  
4 address the leading cause of outages within its service territory -- tree caused  
5 contacts/interruptions. This tree-trimming cycle meets the PAPUC I&M  
6 standards. The Company's total O&M cost to complete the full tree-trimming  
7 cycle is \$350,000. Even though this trimming cycle is typically completed within  
8 a nine to twelve-month timeframe, the Company will levelize this cost across the  
9 three year cycle period, so that the annual O&M expense is \$116,700.

10 In addition to the Company's recent vegetation management ("VM") program  
11 improvements that reduce the tree-trimming cycle to three years, the Company  
12 will implement a ground-to-sky clearing and danger tree removal project in key  
13 areas of its service territory, particularly in the radial portions of Line 7, as were  
14 described above. Once complete, its maintenance will become a routine part of  
15 the tree trimming cycle program. The Company currently envisions completing  
16 this work in the Route 209 area of Westfall, in the Cummins Hill Road area, and  
17 in the Borough of Milford. The total capital cost of this project is \$500,000.

18 **Phase Identification Project**

19 A project is currently underway throughout the Company's service territory to  
20 correctly phase identify and label key electrical facilities, both in the field and  
21 within the Company's geographic asset information system. This process will  
22 improve the accuracy of the Company's information with respect to identifying  
23 how customers and their respective service transformers are connected to the



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1 exact phase of the distribution system. This will improve identifying the number  
2 of customers affected by specific outage incidents for the Outage Management  
3 System and reliability reporting. This project will also improve the accuracy of  
4 the Company's electrical system models to improve electric system planning and  
5 forecasting. This more accurate information with respect to the system loading  
6 will assist in improving the phase balancing of the distribution circuits as well,  
7 providing more efficient system operation and possible capacity gains, especially  
8 in the high load periods. The O&M cost to complete this project within the Pike  
9 service territory is \$5,200.

10 **Infra-Red Inspection**

11 The Company inspects its overhead electric distribution lines annually utilizing  
12 infra-red thermography. This technology allows the Company to detect electrical  
13 lines, equipment and connections that are operating at elevated temperatures; thus  
14 indicating that a problem exists that will probably lead to imminent failure and,  
15 likely, an outage if it is not addressed. The annual maintenance cost to complete  
16 this infra-red inspection program within the Pike service territory is \$3,200. The  
17 repair work for any deficiencies found will be treated as routine maintenance  
18 expenses.

19 **Comprehensive Pole Inspection and Treatment Program**

20 The Company will commence a proactive and comprehensive pole inspection and  
21 treatment program. There are approximately 4,300 poles in the Pike service  
22 territory. The Company will implement a ten-year cycle program that not only  
23 will inspect and field evaluate every pole in the system on a targeted and

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1 proactive basis, but also is anticipated to extend the field life of those existing  
2 poles that are starting to experience a degradation of structural integrity due to a  
3 variety of causes, including rot, decay and insect damage. This program will  
4 identify those poles that are in need of reinforcement or replacement so as to  
5 prevent catastrophic pole failure and avoid interruptions due to undetected  
6 defective poles existing on the system. The Company believes that if the defective  
7 poles are identified early enough, they will be able to be C-trussed instead of  
8 requiring a complete replacement, thus delaying future replacement for a small  
9 earlier investment. The Company will initiate this program in the fall of 2008,  
10 and estimates annual capital and O&M costs of \$16,200 and \$17,300,  
11 respectively. This is one of the programs mandated by the new PAPUC I&M  
12 standards and is not included in Pike's current maintenance practices.

13 **Circuit Reliability Program**

14 Pike will implement a ten-year circuit reliability program that will provide  
15 enhancements to the existing electric distribution system. This program will  
16 address lightning protection and grounding improvements, switch maintenance,  
17 fused cutout inspections and replacements, fault indicator installations and other  
18 measures such as improved animal protection. These enhancements will improve  
19 overall system performance and reliability for the Pike electric delivery system  
20 throughout this ten-year timeframe. The Company estimates annual capital and  
21 O&M costs of \$10,000 and \$53,000, respectively.

22 **Substation Inspection and Maintenance**

PIKE COUNTY LIGHT & POWER COMPANY  
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1           The Company currently performs inspections and maintenance at the Matamoras  
2           Substation. The Company's class #1 inspections, which are performed on a  
3           monthly basis, include visual inspection of transformers, breakers and all other  
4           major and minor electrical equipment within the substation. Also included in this  
5           monthly site visit are visual inspection of all structures, fences and yard surfaces.  
6           On an annual basis, the Company performs station battery tests, checks for proper  
7           operation of all fans, pumps, heaters and compressors, and conducts a transformer  
8           gas-in-oil analysis. Pike incurs annual O&M costs of \$11,500 to perform these  
9           inspections and maintenance at the Matamoras Substation. These substation  
10          inspection and maintenance cycles meet the PAPUC I&M standards.

11        Q.     What additional future measures will the Company need to take in order to be  
12              fully compliant with the I&M Order?

13        A.     The Company will be required to implement a Distribution Overhead Line  
14              Inspection program and a Distribution Transformer Inspection program. The  
15              Distribution Overhead Line Inspection program will require ground patrols of all  
16              distribution facilities to check for conditions that may adversely affect the  
17              operation of the overhead electric delivery infrastructure. The Distribution  
18              Transformer Inspection program will require checks for visual degradation and  
19              leaks, as well as other local factors that could affect local access and proper  
20              operation of the transformers. The Company estimates future annual O&M  
21              expenses of \$60,000 for the Distribution Overhead Line Inspection program and  
22              \$28,300 for the Distribution Transformer Inspection program. These programs

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1           that are mandated by the new PAPUC I&M standards are not included in Pike's  
2           current maintenance practices.

3    Q.     Does this conclude your testimony?

4    A.     Yes, it does.

PIKE COUNTY LIGHT & POWER COMPANY  
DIRECT TESTIMONY OF  
JANE J. QUIN  
PAPUC CASE NO. \_\_\_\_\_

1 Q. Please state your name and business address.

2 A. Jane J. Quin, 390 W. Route 59, Spring Valley, New York 10977.

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

4 A. I am Director – Customer Energy Services for Orange and Rockland Utilities,  
5 Inc. (“Orange and Rockland”), the corporate parent of Pike County Light &  
6 Power Company (“PCL&P” or the “Company”).

7 Q. Please briefly outline your educational and business experience.

8 A. I received a Bachelor of Arts degree from the University of Michigan in 1977  
9 and a Juris Doctorate degree from the University of Tulsa, College of Law, in  
10 1985. My first employment was as an associate with the energy group of the  
11 Hall, Estill law firm in Tulsa, Oklahoma in 1985. I was subsequently  
12 employed as a senior associate with the energy group of the Baker & Botts  
13 law firm in Washington, D.C. from 1989 to 1993. I joined Orange and  
14 Rockland in 1994 as an attorney responsible for Orange and Rockland’s gas  
15 regulatory matters. In 1999, I accepted a position with the law department at  
16 Consolidated Edison Company of New York, Inc. (“Con Edison”) after the  
17 merger of Orange and Rockland and Con Edison, Inc. I represented both  
18 Orange and Rockland and Con Edison in various gas and electric regulatory  
19 matters, including retail access issues. In May 2005, I accepted the position  
20 of Director – Retail Access and Energy Services for Orange and Rockland.

1 My title recently changed to Director – Customer Energy Services. I have  
2 participated in the preparation of testimony and exhibits in rate cases and  
3 regulatory proceedings in New York and Pennsylvania and at the Federal  
4 Regulatory Energy Commission. I previously testified before the New York  
5 State Public Service Commission (“NYPSC”) in Case No. 05-G-1494, Case  
6 No. 06-E-1433, and Case No. 07-E-0949 and before the Pennsylvania Public  
7 Utility Commission (“PAPUC”) in Docket No. P-00062205.

8 **SUMMARY OF TESTIMONY**

9 Q. What is the purpose of your testimony?

10 A. In my testimony, I will be discussing PCL&P’s proposal to initiate a new low-  
11 income energy efficiency program.

12 Q. Does the Company have experience in providing low-income programs?

13 A. Yes. The Company currently offers the New Start Arrears Forgiveness  
14 Program, which provides assistance to Low-Income Home Energy Assistance  
15 Program (“LIHEAP”) qualified customers who are experiencing difficulty  
16 paying their energy bills. This program provides up to \$250 in arrears  
17 forgiveness per customer from a total annual budget of \$7,500. The Company  
18 also offers the Neighbor Fund, for one-time emergency assistance to  
19 customers who are suffering from a particular hardship. Under this program,  
20 PCL&P’s customers have an opportunity to voluntarily contribute \$1 to the  
21 Neighbor Fund when they pay their PCL&P bill each month. The Company  
22 then matches these customer contributions dollar for dollar. Neighbor Fund  
23 contributions are used to assist low-income customers with their energy needs

1 during exigent circumstances. This program currently has approximately  
2 \$25,000 in available funds. The Company seeks to broaden its low-income  
3 assistance efforts by offering a new direct install energy efficiency program  
4 that will provide weatherization and other measures to conserve energy and  
5 provide educational information regarding practicing energy efficiency to its  
6 electric customers. These measures will be designed to help participating  
7 customers in permanently decreasing their energy usage and, therefore, their  
8 energy bill and thus mitigate the impact caused to low-income customers by  
9 increased energy costs.

10 Q. Does the Company have experience offering low-income direct install  
11 weatherization programs?

12 A. Yes. Although the Company has not operated direct install weatherization  
13 assistance programs in Pennsylvania, Pike's parent company, Orange and  
14 Rockland, has operated such programs. At present, Orange and Rockland is  
15 operating a Low-Income Energy Efficiency Program ("LEEP") in Rockland  
16 County, New York, which provides weatherization and other measures for  
17 low-income customers. To date, Orange and Rockland has provided energy  
18 efficiency measures to nearly 400 low-income customers under this program.  
19 Orange and Rockland has also installed weatherization measures for 25 low-  
20 income housing units in Middletown, New York operated by the Regional  
21 Economic Community Action Program ("RECAP"). Additionally, Orange  
22 and Rockland provides marketing and outreach and education assistance to  
23 the New York State Energy Research and Development Authority for its

1 EmPower New York Program, which provides energy efficiency and  
2 weatherization measures to low-income customers in New York.

3 Q. What types of measures are provided to customers in the LEEP and RECAP  
4 programs?

5 A. In both of these programs, the first step is to have an energy audit professional  
6 evaluate the energy efficiency needs of each home. After completion of the  
7 audit, improvements are implemented according to the identified needs.

8 Participants qualify for assistance under the Home Energy Assistance  
9 Program (“HEAP”) in New York. This program is equivalent to the LIHEAP  
10 program in Pennsylvania. Measures available for direct installation include  
11 free compact fluorescent light bulbs, weather stripping, insulation for pipe,  
12 furnace or water tank wrapping, limited insulation improvements and low  
13 flow water devices. In selected cases, the RECAP program provided new  
14 heating units and refrigerators.

15 Q. What forms of assistance does the Company propose to offer to qualified  
16 LIHEAP customers in its service territory under its proposed low-income  
17 energy efficiency program?

18 A. The Company proposes to offer a low-income Direct Install Weatherization  
19 Program (“DIW”) for a three-year period to qualifying electric customers.  
20 This program will provide qualified LIHEAP recipients with several types of  
21 energy efficiency and conservation measures that include compact fluorescent  
22 light bulbs; weather stripping; low-flow water control devices; insulated  
23 wrapping for water pipes, water heaters and furnaces; window and door



1 replacement; appliance replacement, including refrigerators and air  
2 conditioning units; and other industry standard measures needed to practice  
3 effective energy efficiency in homes. An appointment will be made in  
4 advance for each participant to be provided with an energy audit by the  
5 Company's contractor to evaluate home needs. After the contractor has  
6 reviewed the findings with the customer, they will schedule a return visit to  
7 install the most appropriate and cost effective energy efficiency measures.

8 Q. What level of funding and cost recovery mechanism does the Company  
9 propose for the DIW Program?

10 A. The Company was recently ordered by the PAPUC in its Order entered June  
11 11, 2008 in Docket No. M-00061973 to add \$35,000 to its Neighbor Fund  
12 program as a result of the settlement of a billing dispute. At present, the  
13 Neighbor Fund, which has a current balance of approximately \$25,000, is  
14 seriously undersubscribed. Despite the Company's various efforts to promote  
15 the Neighbor Fund over the past three years, by such means as mailings, bill  
16 inserts, outbound telephone calls, and advertisements on local cable television  
17 stations and radio, participation remains low and the fund balance has not  
18 decreased. In the Company's opinion, its customers will receive a greater  
19 benefit if this \$35,000 is not allocated to the Neighbor Fund. Rather, the  
20 Company proposes to re-direct these funds to its proposed DIW Program, as a  
21 more effective means of immediately addressing the needs of its low-income  
22 customers. This \$35,000 would serve as initial funding to establish the DIW  
23 Program in Year One (i.e., twelve months ending March 31, 2010). The

1 Company also proposes spending an additional \$70,000, collected from  
2 customers through the System Benefits Charge (“SBC”), for a total of  
3 \$105,000 over the three-year period from April 1, 2009 through March 31,  
4 2012. For Year One, the Company proposes a total funding level of  
5 approximately \$58,300 consisting of the \$35,000 re-directed from the  
6 Neighbor Fund and \$23,300 from the SBC. Years Two (i.e., twelve months  
7 ending March 31, 2011) and Three (i.e., twelve months ending March 31,  
8 2012) would be funded at \$23,300 annually from the SBC. PCL&P proposes  
9 to front-load the DIW Program funding so as to aggressively launch the  
10 program and expedite completion of the direct install measures. The  
11 Company also seeks the flexibility to move funds between years as necessary.  
12 The Company estimates that of the total funding level of \$105,000,  
13 approximately \$15,000 would be required for marketing and internal program  
14 administration, leaving approximately \$90,000 for the direct installation of  
15 energy efficiency and conservation measures. At approximately \$1000 per  
16 home, including contractor costs, approximately 90 LIHEAP qualified  
17 customers would receive service from the DIW Program. If customer  
18 participation is lower or higher than anticipated, PCL&P proposes that it have  
19 the flexibility to increase or decrease the per household measures over the  
20 course of the three-year program, provided, however, that total measure costs  
21 per household would be capped at \$2,000.

22 Q. How does the Company propose to implement the DIW Program?

1 A. Consistent with the administration and implementation of Orange and  
2 Rockland's LEEP and RECAP programs, PCL&P would utilize contractors to  
3 conduct energy audits and install cost effective energy savings measures. The  
4 Company would issue an RFP to solicit professional energy efficiency  
5 contractors to perform the work required in the program. A full program  
6 description is attached as Exhibit \_\_\_ (E-11).

7 Q. How does the Company propose to recover the costs associated with its DIW  
8 Program?

9 A. As noted above, the Company proposes to re-direct the \$35,000 required by  
10 the PAPUC's Order entered June 11, 2008 in Docket No. M-00061973 to its  
11 proposed DIW Program. The remaining \$70,000 would be recovered through  
12 additional SBC charges. The Company proposes that the DIW Program  
13 would have an initial term of three-years. In the third year, depending on the  
14 Company's experience, the Company would make a filing with the PAPUC to  
15 continue, modify, or terminate the DIW Program.

16 Q. What is the Company's estimated rate impact on all PCL&P's electric  
17 customers of increasing the SBC by \$70,000 to offer the proposed DIW  
18 program?

19 A. The rate impacts of the Company's DIW Program proposal are addressed in  
20 the testimony of Company's Electric Rate Panel.

21 Q. Will the Company undertake an evaluation of the DIW Program?

22 A. Participant satisfaction will be measured by means of a customer survey form  
23 that will be provided to customers upon completion of all direct install

1                   measures in their homes. The results of the survey will be reported to the

2                   PAPUC annually.

3           Q.       Does this conclude your testimony?

4           A.       Yes.

Pike County Light And Power Company  
Index of Schedules  
Balance Sheet and Supporting Schedules, Income Statement,  
and Joint Operating Agreement Charges for the Test Year

Exhibit E-1

<u>Schedule</u>	<u>Title of Schedule</u>	<u>Witness</u>
(1)	Balance Sheet	Accounting Panel
(2)	Detail of Electric and Gas Plant in Service and associated Depreciation Reserves	Accounting Panel
(3)	Income Statement for the Test Year, the Twelve Month Period Ending March 31, 2008	Accounting Panel
(4)	Income Statement-Electric for the Twelve Month Period Ended March 31, 2007 and March 31, 2008	Accounting Panel
(5)	Joint Operating Agreement Charges for the Test Year, the Twelve Month Period Ending March 31, 2008	Accounting Panel
(6)	Intercompany Accounts Payable to Orange and Rockland Utilities Inc.	Accounting Panel

Pike County Light And Power Company  
Balance Sheet  
As of March 31, 2008 And 2007

Exhibit E-1  
Schedule 1  
Page 1 of 2

<u>ASSETS AND OTHER DEBITS</u>	March 31, 2008	March 31, 2007
<u>Utility Plant</u>		
Electric Plant in Service	\$ 12,465,625	\$ 11,952,027
Gas Plant in Service	1,725,933	1,565,084
Construction Work in Progress	394,942	42,626
Total Utility Plant	<u>14,586,500</u>	<u>13,559,737</u>
 <u>Accumulated Provision for Depreciation</u>		
Electric	3,030,208	2,769,423
Gas	360,520	345,726
Total Accumulated Provision for Depreciation	<u>3,390,728</u>	<u>3,115,149</u>
 Net Utility Plant	 <u>11,195,772</u>	 <u>10,444,588</u>
 <u>Current and Accrued Assets</u>		
Cash	148,135	1,918,883
Working Funds	377	44
Temporary Cash Investments	682,269	117,578
Customer Accounts Receivable	148,446	209,906
Other Accounts Receivable	724,432	611,434
Accumulated Provision for Uncollectible Accounts	(124,100)	(107,322)
Accounts Receivable from Associated Companies	2,555,305	1,060,337
Materials and Supplies	118,677	98,621
Prepayments	412,639	663,538
Accrued Utility Revenue	139,438	208,437
Derivative Instrument Asset Hedges	-	76,570
Total Current and Accrued Assets	<u>4,805,617</u>	<u>4,858,026</u>
 <u>Deferred Debits</u>		
Deferred Fuel Costs	225,282	20,982
Unamortized Debt Expense	139,754	154,232
Regulatory Assets	1,188,855	1,223,853
Miscellaneous Deferred Debits	6,241	53,538
Accumulated Deferred Federal Income Tax	519,248	487,212
Total Deferred Debits	<u>2,079,380</u>	<u>1,939,817</u>
 Total Assets and Other Debits	 <u>\$ 18,080,769</u>	 <u>\$ 17,242,431</u>

Pike County Light And Power Company  
 Balance Sheet  
 Liabilities and Stockholder's Equity  
 As of: March 2008 And 2007

Exhibit E-1  
 Schedule 1  
 Page 2 of 2

Liabilities and Other Credits

	March 31, 2008	March 31, 2007
<u>Proprietary Capital</u>		
Common Stock Issued	\$ 137,000	\$ 137,000
Miscellaneous Paid-In Capital	500,000	500,000
Retained Earnings	3,828,428	3,493,285
Other Comprehensive Income	-	11,255
Total Proprietary Capital	4,465,428	4,141,540
 <u>Long-Term Debt</u>		
Bonds-LT	3,200,000	3,200,000
Total Capitalization	7,665,428	7,341,540
 <u>Noncurrent Liabilities</u>		
Provision for Rate Refunds	28,000	28,000
Pension and Benefits Reserve	390,196	417,378
Total Noncurrent Liabilities	418,196	445,378
 <u>Current and Accrued Liabilities</u>		
Accounts Payable	2,230,782	5,875,563
Accounts Payable to Associated Companies	3,947,068	89,761
Customer Deposits	158,702	133,951
Taxes Accrued	(49,740)	203,960
Interest Accrued	158,097	152,624
Other Current Liabilities	20,848	77,502
Total Current and Accrued Liabilities	6,465,756	6,533,360
 <u>Deferred Credits</u>		
Customer Advances for Construction	61,404	66,220
Other Deferred Credits	604,239	236,880
Regulatory Liabilities	197,593	178,290
Future Deferred Income Taxes	58,410	58,658
Accumulated Deferred Investment Tax Credits	25,601	31,687
Accumulated Deferred Income Taxes	2,584,142	2,350,418
Total Deferred Credits	3,531,388	2,922,153
Total Liabilities and Equity	\$ 18,080,769	\$ 17,242,431

Pike County Light And Power Company  
 Net Book Value of Electric and Gas Plant in Service  
 March 31, 2008

Exhibit E-1  
 Schedule 2

<u>Intangible Plant</u>	Electric Plant in Service	Accumulated Provision for Depreciation & Amortization	Net Book Value
Franchise and Consents	\$ 2,675	\$ -	\$ 2,675
Total Intangible Plant	<u>2,675</u>	<u>-</u>	<u>2,675</u>

<u>Distribution Plant</u>	Electric Plant in Service	Accumulated Provision for Depreciation & Amortization	Net Book Value
Land and Land Rights	46,091	19,826	26,266
Structures and Improvements	150,918	9,268	141,650
Station Equipment	1,517,825	124,986	1,392,839
Poles, Towers, and Fixtures	2,827,647	957,272	1,870,375
Overhead Conductors and Devices	3,074,508	511,049	2,563,459
Underground Conduit	346,078	55,591	290,487
Underground Conductors and Devices	877,125	144,311	732,814
Line Transformers	2,025,659	744,682	1,280,977
Services	949,000	330,618	618,382
Meters	458,969	56,813	402,156
Elec Demand Rec & Meters - Purchases	56,170	19,154	37,016
Street Lighting & Signal Systems	132,959	81,648	51,312
Total Distribution Plant	<u>12,462,950</u>	<u>3,055,218</u>	<u>9,407,732</u>
Retirement Work in Progress	-	-	-
Total	<u>\$ 12,465,625</u>	<u>\$ 3,055,218</u>	<u>\$ 9,410,407</u>

<u>Distribution Plant</u>	Gas Plant in Service	Accumulated Provision for Depreciation & Amortization	Net Book Value
Land and Land Rights	\$ 1,551	\$ 631	\$ 920
Mains	884,061	176,271	707,790
Meas. And Reg. Equip. - General	77,776	42,579	35,197
Services	511,868	97,562	414,306
Meter Installations	217,018	40,099	176,919
House Regulator Installations	16,514	1,926	14,588
Industrial Measuring and Regulating Equipment	17,146	1,452	15,694
Total Gas Plant	<u>\$ 1,725,933</u>	<u>\$ 360,520</u>	<u>\$ 1,365,413</u>
Retirement Work in Progress	-	-	-
Total	<u>\$ 1,725,933</u>	<u>\$ 360,520</u>	<u>\$ 1,365,413</u>



Pike County Light And Power Company  
Statement of Income for Twelve Months Ending March 31, 2008

Exhibit E-1  
Schedule 3

	Company Total	Electric Department	Gas Department
<u>Operating Revenues:</u>			
Residential Sales	\$ 3,240,310	\$ 1,840,378	\$ 1,399,933
Small C&I Sales	3,600,136	3,286,424	313,712
Large Commerical Sales	268,214	268,214	-
Public Lighting Sales	43,769	43,769	-
Total Sales and Delivery of Electricity	7,152,430	5,438,785	1,713,644
<u>Other Operating Revenues</u>			
Miscellaneous Service Revenues	(15,607)	(21,214)	5,607
Rent from Electric Property	35,557	35,557	-
Other Electric Revenues	(11,520)	(11,520)	-
Total Other Operating Revenues	8,431	2,823	5,607
Total Operating Revenues	7,160,860	5,441,609	1,719,252
<u>Operating Expenses:</u>			
Other Power Supply Expenses	1,869,724	1,869,724	-
Other Gas Supply Expenses	1,397,678	-	1,397,678
Transmission Expenses	4,607	4,607	-
Distribution Expenses	696,801	450,498	246,303
Customer Accounts Expenses	378,960	337,730	41,230
Customer Service Expenses	30,564	28,217	2,347
Sales Expenses	6	6	-
Administrative And General Expenses	1,193,813	1,090,497	103,316
Depreciation Expense	364,149	334,520	29,629
Taxes other than Income	386,601	379,888	6,713
State Income Taxes	6,509	12,060	(5,551)
Federal Income Taxes	155,574	207,388	(51,814)
Total Operating Expenses	6,484,985	4,715,136	1,769,849
Income from Utility Operations	675,875	726,473	(50,598)
<u>Other Income</u>			
Non-Operating Rental Income	-	-	-
Interest and Dividend Income	3,628	3,115	513
Miscellaneous Non-Operating Income	-	-	-
Total Other Income	3,628	3,115	513
<u>Taxes - Other Income Deductions:</u>			
Federal Income Taxes	(3,385)	(3,092)	(293)
Other Income Deductions	7,492	6,635	857
Total Taxes - Other Income Deductions	4,107	3,543	564
<u>Interest Charges:</u>			
Interest on Long Term Debt	226,240	199,355	26,885
Amortization of Debt Discount & Expense	14,478	12,758	1,720
Other Interest Expense	103,364	92,146	11,217
Allowance for Borrowed Funds Used During Construction	(3,830)	(3,830)	-
Total Interest Charges	340,252	300,429	39,823
Net Income	\$ 335,145	\$ 425,616	\$ (90,472)

Pike County Light And Power Company  
Statement of Income - Electric  
Twelve Months Ended March 31, 2008 and 2007

Exhibit E-1  
Schedule 4

<u>Operating Revenues:</u>	<u>March 31, 2008</u>	<u>March 31, 2007</u>
Residential Sales	\$ 1,840,378	\$ 2,099,766
Small C&I Sales	3,286,424	3,860,560
Large Commercial Sales	268,214	154,617
Public Lighting Sales	43,769	48,576
Total Sales and Delivery of Electricity	5,438,785	6,163,519
<u>Other Operating Revenues:</u>		
Revenues Subject to Rate Refund	-	-
Miscellaneous Service Revenues	(21,214)	(6,367)
Rent from Electric Property	35,557	28,921
Other Electric Revenues	(11,520)	(1,257)
Total Other Electric Revenues	2,823	21,298
Total Electric Operating Revenues	5,441,609	6,184,817
<u>Operating Expenses:</u>		
Other Power Supply Expenses	1,869,724	2,313,684
Transmission Expenses	4,607	5,990
Distribution Expenses	450,498	398,806
Customer Accounts Expenses	337,730	417,116
Customer Service Expenses	28,217	26,176
Sales Expenses	6	27
Admin. And General Expenses	1,090,497	1,307,679
Depreciation Expense	334,520	323,450
Taxes other than Income	379,888	389,599
State Income Taxes	12,060	27,418
Federal Income Taxes	207,388	221,016
Total Operating Expense	4,715,136	5,430,961
Total Income from Electric Utility Operations	726,473	753,856
<u>Other Income</u>		
Non-Operating Rental Income	-	-
Interest and Dividend Income	3,115	35,053
Miscellaneous Non-Operating Income	-	-
Total Other Income	3,115	35,053
<u>Taxes - Other Deductions:</u>		
Federal Income Taxes	(3,092)	8,316
Other Income Deductions	6,635	4,737
Total Taxes - Other Income Deductions	3,543	13,053
<u>Interest Charges:</u>		
Interest on Long Term Debt	199,355	199,870
Amortization of Debt Discount & Expense	12,758	12,792
Other Interest Expense	92,146	101,528
Allowance for Borrowed Funds Used During Construction	(3,830)	(1,985)
Total Interest Charges	300,429	312,205
Net Income - Electric Operations	\$ 425,616	\$ 463,650

**PIKE COUNTY LIGHT & POWER COMPANY**  
**Statement of Charges Made by Orange and Rockland Utilities, Inc. to**  
**Pike County Light & Power Company Electric Operations Under the Terms of the**  
**Joint Operating Agreement**  
**Twelve Months Ended March 31, 2008**

	<u>Direct Charges</u>	<u>Allocated Charges</u>	<u>Total Charges</u>
<u>ARTICLE 2.</u>			
<u>Charges for Operations</u>			
Operation and Maintenance Expenses	\$583,233	\$679,628	\$1,262,861
Other Charges for Operations	(915,555)	(13,652)	(929,207)
Total	(332,322)	665,976	333,654
<u>ARTICLE 3.</u>			
<u>Charges for Jointly Used Property</u>			
Investment Costs	55,083	-	55,083
Federal Income Taxes	8,406	-	8,406
Depreciation Expenses	76,509	-	76,509
Property Taxes	41,606	-	41,606
Insurance	(639)	-	(639)
Total	180,965	-	180,965
Total Charges During Year	(\$151,357)	\$665,976	\$514,619

**PIKE COUNTY LIGHT & POWER COMPANY**  
**Joint Operating Agreement**  
**Billings Under Article 2 - Charges for Operations**  
**Twelve Months Ended March 31, 2008**

	Direct Charges	Allocated Charges	Total Charges
<u>Operation and Maintenance Expenses</u>			
<u>Other Power Supply Expense</u>			
555 Purchased Power	(\$898)	-	(\$898)
<u>Transmission Expenses - Operation</u>			
560 Operation Supervision and Engineering	2,937	-	2,937
562 Station Expenses	1,670	-	1,670
Total Operation	4,607	-	4,607
Total Transmission Expenses	4,607	-	4,607
<u>Distribution Expenses - Operation</u>			
580 Operation Supervision and Engineering	77,803	-	77,803
581 Load Dispatching	4,133	-	4,133
582 Station Expenses	14,950	-	14,950
583 Overhead Line Expenses	43,768	-	43,768
584 Underground Line Expenses	3,487	-	3,487
586 Meter Expenses	31,229	-	31,229
587 Customer Installations Expenses	638	-	638
588 Miscellaneous Distribution Expenses	42,292	-	42,292
589 Rents	320	-	320
Total Operation	218,620	-	218,620
<u>Distribution Expenses - Maintenance</u>			
592 Maintenance of Station Equipment	1,014	-	1,014
593 Maintenance of Overhead Lines	155,226	-	155,226
594 Maintenance of Underground Lines	14,883	-	14,883
596 Maintenance of Street Lighting & Sig. Sys.	3,406	-	3,406
597 Maintenance of Meters	7,061	-	7,061
Total Maintenance	181,590	-	181,590
Total Distribution Expenses	\$400,210	-	\$400,210

**PIKE COUNTY LIGHT & POWER COMPANY**  
**Joint Operating Agreement**  
**Billings Under Article 2 - Charges for Operations**  
**Twelve Months Ended March 31, 2008**

	Direct Charges	Allocated Charges	Total Charges
<u>Customer Accounts Expenses - Operation</u>			
901 Supervision		\$10	\$10
902 Meter Reading Expenses		34,603	34,603
903 Customer Records & Collection Expenses	47,054	110,696	157,750
Total Customer Accounts Expenses	<u>47,054</u>	<u>145,309</u>	<u>192,363</u>
<u>Customer Service &amp; Information Expenses - Operation</u>			
909 Supervision	4,434	5,813	10,247
910 Customer Assistance Expense		9,529	9,529
911 Informational Advertising Expenses	238	27	265
912 Miscellaneous Customer Service Expenses		6	6
913 Rents		7	7
Total Customer Service & Inform. Expenses	<u>4,672</u>	<u>15,382</u>	<u>20,054</u>
<u>Sales Expense</u>			
917 Promotional Advertising Expense		6	6
Total Customer Service & Inform. Expenses	<u>-</u>	<u>6</u>	<u>6</u>
<u>Administrative and General Expenses - Operation</u>			
920 Administrative and General Salaries	8,592	52,196	60,788
921 Office Supplies and Expenses	1,851	35,723	37,574
922 Administrative Expenses Transferred - Cr.	1,386	107,028	108,414
923 Outside Services Employed	10,060	7,071	17,131
924 Property Insurance		2,876	2,876
925 Injuries and Damages	12,723	6,428	19,151
926 Employee Pensions and Benefits	93,087	294,925	388,012
930.1 General Advertising Expenses	891	38	929
930.2 Miscellaneous General Expenses	(1,109)	4,074	2,965
930.4 Corporate and Fiscal Expenses		1,748	1,748
931.1 Rents		576	576
931.2 Expense of Data Processing Equipment	107	4,398	4,505
Total Operation	<u>127,588</u>	<u>517,081</u>	<u>644,669</u>
<u>Administrative and General Expenses - Maintenance</u>			
932 Maintenance of General Plant		1,850	1,850
Total Maintenance	<u>-</u>	<u>1,850</u>	<u>1,850</u>
Total Administrative and General Exp.	<u>127,588</u>	<u>518,931</u>	<u>646,519</u>
Total Operations and Maintenance	<u>\$583,233</u>	<u>\$679,628</u>	<u>\$1,262,861</u>

**PIKE COUNTY LIGHT & POWER COMPANY**  
**Joint Operating Agreement**  
**Billings Under Article 2 - Charges for Operations**  
**Twelve Months Ended March 31, 2008**

	Direct Charges	Allocated Charges	Total Charges
<u>Other Charges for Operations</u>			
<u>Income Statement Accounts</u>			
408 Taxes Other than Income	\$51,928	(\$19,255)	\$32,673
421 Miscellaneous Non-Operating Income/Exp	-	3,777	3,777
426 Miscellaneous Income Deductions	4,623	1,826	6,449
430 Interest on Debt to Associated Companies	81,204	-	81,204
451 Miscellaneous Service Revenues	21,223	-	21,223
 <u>Balance Sheet Accounts</u>			
101 Electric Plant In Service	8,080	-	8,080
108 Accumulated Provision for Depreciation	(16,004)	-	(16,004)
131 Cash & TCI's	(760,903)	-	(760,903)
142 Customer Accounts Receivable	(278,351)	-	(278,351)
150 Materials and Supplies	8,549	-	8,549
165 Prepayments	11,000	-	11,000
182 Extraordinary Property Losses	(72,853)	-	(72,853)
190 Accumulated Deferred Income Tax	(12,000)	-	(12,000)
228 Accumulated Provision for Pension, Benefits	27,185	-	27,185
232 Accounts Payable	(2,198)	-	(2,198)
253 Other Deferred Credits	962	-	962
283 Accumulated Deferred Income Tax	12,000	-	12,000
Total Other Charges for Operations	<u>(915,555)</u>	<u>(13,652)</u>	<u>(929,207)</u>
 Total Charges for Operations	 <u><u>(\$332,322)</u></u>	 <u><u>\$665,976</u></u>	 <u><u>\$333,654</u></u>

**Exhibit E-1  
Schedule 6**

**PIKE COUNTY LIGHT & POWER COMPANY  
Intercompany Account - Payable to Orange & Rockland Utilities, Inc.  
Account 234  
March 31, 2008**

Payable to Orange and Rockland Utilities, Inc.  
at March 31, 2007 4,377

Power Supply Agreement FERC Rate Schedule No.61  
Cost of Electricity Purchased.

Summary of Charges - Article 3 (A):

Expense:

Sec. 3.11 - Power Production Expense	1,490,189
Sec. 3.12 - Transmission Expense	88,875
Sec. 3.13 - Distribution Expense	243
Sec. 3.14 - Workmen's Compensation, Public Liability Insurance & FICA	5,679

Total	1,584,986
-------	-----------

Fixed Costs:

Sec. 3.21 - Return on Investment	103,569
Sec. 3.22 - Federal Income Tax	31,073
Sec. 3.23 - Property Insurance	831
Sec. 3.24 - Depreciation	39,708
Sec. 3.25 - Amortization Expense	336
Sec. 3.26 - Property Taxes	38,780

Total	214,297
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Sec. 3.3 - Credit for Sales to Other Utilities	(38,891)
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Total Charges Under Power Supply Agreement	1,760,392
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Purchased Gas Costs 1,281,380

Joint Operating Agreement (BPU Docket No. 769-937  
dated February 5, 1976) Cost of Shared Operations  
and Jointly Used Property Per Detail on Schedule 5 562,925

Direct Energy Power Supplier 3,890,413

Payments Made During Year (3,604,342)

Payable to Orange and Rockland Utilities, Inc.  
at March 31, 2008 3,895,145

(A) Net of Reimbursements to Pike County Light And Power Company in  
Accordance with Article 8 of Power Supply Agreement

Pike County Light And Power Company  
Index of Schedules  
Rate of Return

Exhibit E-2

<u>Schedule</u>	<u>Title of Schedule</u>	<u>Witness</u>
(1)	Consolidated Capitalization of Orange and Rockland Utilities	Accounting Panel
(2)	Long Term Debt Schedule of Orange and Rockland Utilities	Accounting Panel
(3)	Consolidated Cost of Money for Pike County Light and Power Company	Accounting Panel



Pike County Light And Power Company  
Consolidated Capitalization of Orange and Rockland Utilities, Inc.

	<u>March 31, 2008 (Actual)</u>		<u>March 31, 2009 (Forecast)</u>	
	<u>Amount</u>		<u>Amount</u>	
	<u>(000s)</u>	<u>Percent</u>	<u>(000s)</u>	<u>Percent</u>
Long Term Debt:				
Orange and Rockland	\$ 347,659		\$ 438,277	
Rockland Electric	0		0	
Pike County	3,200		3,200	
Total Long Term Debt	<u>350,859</u>	<u>44.72%</u>	<u>441,477</u>	<u>48.03%</u>
Common Stock Equity:				
Common Stock	5		5	
Premium on Capital Stock	234,657		264,057	
Capital Stock Expense	(150)		(150)	
Retained Earnings	199,223		213,826	
Total Common Stock Equity	<u>433,735</u>	<u>55.28%</u>	<u>477,738</u>	<u>51.97%</u>
Total Capitalization	<u>\$ 784,594</u>	<u>100.00%</u>	<u>\$ 919,215</u>	<u>100.00%</u>

**PIKE COUNTY LIGHT AND POWER COMPANY**

**ORANGE AND ROCKLAND UTILITIES, INC. AND SUBSIDIARIES**  
**LONG TERM DEBT**  
 Forecast at March 31, 2009

Orange and Rockland Utilities, Inc.	Issue Date	Maturity Date	Amount Outstanding	Original Issue Amount	Premium or Discount	Expense of Issuance	Net Proceeds	Actual Cost of Money	Effective Annual Cost
<b>Debtures:</b>									
Series F, 6.50%	12/18/97	12/1/27	80,000,000	80,000,000	0	901,750	79,098,250	6.59%	5,272,000
Series G, 7.00%	3/9/99	3/1/29	45,000,000	45,000,000	(693,900)	1,338,234	42,967,866	7.38%	3,321,000
Series A, 2000, 7.50%	6/12/00	6/15/10	55,000,000	55,000,000	(925,700)	204,220	53,870,080	7.80%	4,290,000
Series A, 2005, 5.30%	4/1/05	4/1/15	40,000,000	40,000,000	(80,000)	495,000	39,425,000	5.49%	2,196,000
Series A, 2006, 5.45%	10/4/06	10/1/16	75,000,000	75,000,000	(136,500)	562,500	74,301,000	5.57%	4,177,500
Series A, 2008, 6.10%	8/1/08	8/1/18	50,000,000	50,000,000	0	625,000	49,375,000	6.27%	3,135,000
Series B, 2008, 6.74%	9/1/08	9/1/38	50,000,000	50,000,000	0	737,500	49,262,500	6.86%	3,430,000
			<u>395,000,000</u>					<u>6.54%</u>	<u>25,821,500</u>
<b>Pollution Control Debt:</b>									
1995, Variable Rate	8/1/95	8/1/15	44,000,000	44,000,000	0	3,571,683	40,428,317	3.71%*	1,632,400
			<u>44,000,000</u>					<u>3.71%</u>	<u>1,632,400</u>
<b>Sub Total ORU Debt</b>			<b>439,000,000</b>						
<b>Unamortized Debt Discount</b>			<b>(723,260)</b>						
<b>Total ORU</b>			<b>438,276,740</b>						
<b>Pike County Light &amp; Power Company</b>									
<b>First Mortgage Bonds:</b>									
Series C, 7.07%	11/10/98	10/1/18	3,200,000	3,200,000	0	284,129	2,915,871	7.97%	255,040
			<u>3,200,000</u>					<u>7.97%</u>	<u>255,040</u>
<b>Total Pike</b>									
<b>Consolidated Total</b>			<b>442,200,000</b>						
<b>Long Term Debt</b>			<b>442,200,000</b>						
<b>Unamortized Debt Discount</b>			<b>(723,260)</b>						
			<u>441,476,740</u>					<u>6.27%</u>	<u>27,708,940</u>

\* Updated Annually

Pike County Light And Power Company  
Consolidated Cost of Money

Forecast at March 31, 2009

	<u>Percent of Capital</u>	<u>Cost of Component</u>	<u>Weighted Cost</u>
Long Term Debt	48.03%	6.27%	3.01%
Common Stock Equity	51.97%	10.00%	5.20%
Total Capitalization	<u>100.00%</u>		<u>8.21%</u>

Pike County Light And Power Company  
Index of Schedules  
Electric Rate Base

Exhibit E-3

<u>Schedule</u>	<u>Title of Schedule</u>	<u>Witness</u>
Summary	Electric Rate Base	Accounting Panel
(1)	Electric Plant - Additions & Retirements	Accounting Panel
(2)	Electric Depreciation Reserve - Existing & Proposed Depreciation Rates	Accounting Panel
(3)	Electric Working Capital Requirements	Accounting Panel
(4)	Changes to Rate Base for Deferred Debits	Accounting Panel
(5)	Changes to Rate Base for Deferred Credits	Accounting Panel
(6)	Changes to Rate Base for deferred gain from sale of Milford Office	Accounting Panel
(7)	Accumulated Deferred Income Taxes	Accounting Panel
(8)	Electric Capital Expenditures	Angelo M. Regan

Pike County Light And Power Company  
Electric Rate Base  
At March 31, 2008 And 2009

Description	Actual Per Books at 3/31/08 (a)	Difference Between Historical and Future Years		Future Year at 3/31/09 (d)=(a)+(c)	Schedule No.
		Reference (b)	Amount (c)		
<b>Utility Plant:</b>					
Electric Plant in Service	\$ 12,465,600	(1a)	\$ 2,058,500	\$ 14,524,100	1
Common Plant in Service (Allocated)	-	(1b)	39,900	39,900	1
CWIP not taking interest	63,600		-	63,600	
<b>Total Utility Plant</b>	<b>12,529,200</b>		<b>2,098,400</b>	<b>14,627,600</b>	
<b>Utility Plant Reserves:</b>					
Accumulated Provision For Depreciation of Electric Plant in Service - Existing Rates	3,030,200	(2a)	421,500	3,451,700	2
- Proposed Rates	-	(2b)	(13,200)	(13,200)	2
Accumulated Provision For Depreciation of Common Plant in Service (Allocated)	-	(2c)	8,000	8,000	2
<b>Total Utility Plant Reserves</b>	<b>3,030,200</b>		<b>416,300</b>	<b>3,446,500</b>	
<b>Net Plant</b>	<b>9,499,000</b>		<b>1,682,100</b>	<b>11,181,100</b>	
<b>Additions to Net Plant</b>					
Working Capital Requirements:					
Cash Working Capital	201,600	(3)	146,000	347,600	3
Materials and Supplies	92,600		-	92,600	
Prepayments	394,100		-	394,100	
Deferred Debits (Net of Tax)	(20,500)	(4)	234,000	213,500	4
<b>Total Additions</b>	<b>667,800</b>		<b>380,000</b>	<b>1,047,800</b>	
<b>Deductions to Net Plant:</b>					
Deferred Credits (Net of Tax)	(33,300)	(5)	-	(33,300)	5
Deferred Gain - Sale of Milford Office	-	(6)	(51,100)	(51,100)	6
Accumulated Deferred Income Taxes	(1,266,100)	(7)	(180,300)	(1,446,400)	7
<b>Total Deductions</b>	<b>(1,299,400)</b>		<b>(231,400)</b>	<b>(1,530,800)</b>	
<b>Electric Rate Base</b>	<b>\$ 8,867,400</b>		<b>\$ 1,830,700</b>	<b>\$ 10,698,100</b>	

Pike County Light And Power Company  
Changes in Electric Rate Base  
For the 12 Months Ended March 31, 2009

Exhibit E-3  
Summary  
Page 2 of 2

<u>Adjustment Number</u>	<u>Description</u>	<u>Amount</u>
(1a)	Changes in Plant in Service - Additions & Retirements	\$ 2,058,500
(1b)	Changes to Common Plant	39,900
(2a)	Changes to Depreciation Reserve - Existing Depreciation Rates	421,500
(2b)	Changes to Depreciation Reserve - Proposed Depreciation Rates	(13,200)
(2c)	Changes to Common Plant - Depreciation	8,000
(3)	Changes in Working Capital Requirements (O&M)	146,000
(4)	Changes to Rate Base for Deferred Debits	234,000
(5)	Changes to Rate Base for Deferred Credits	-
(6)	Changes to Rate Base for Unamortized Gain from sale of Milford Office	(51,100)
(7)	Changes in Deferred Income Taxes	(180,300)

Pike County Light And Power Company  
Statement in Support of Change No. (1a)  
To Electric Plant in Service  
For the Twelve Months Ended March 31, 2009

<u>Electric Plant in Service</u>	<u>Amount</u>
Balance at March 31, 2008	\$ 12,465,600
Additions - April 1, 2008 thru March 31, 2009	\$ 2,029,100
Additions - April 1, 2009 thru September 30, 2009	<u>177,000</u>
Total Additions	<u>2,206,100</u>
Retirements - April 1, 2008 thru March 31, 2009	98,400
Retirements - April 1, 2009 thru September 30, 2009	<u>49,200</u>
Total Retirements	<u>147,600</u>
<b>Net Additions (Change No. 1a)</b>	<u>2,058,500</u>
Ending Balance at September 30, 2009	<u><u>\$ 14,524,100</u></u>

Pike County Light And Power Company  
Statement in Support of Change No. (1b)  
To Common Plant in Service  
For the Twelve Months Ended March 31, 2009

<u>Common Plant in Service (Allocated)</u>	<u>Amount</u>
Balance at March 31, 2008	\$ -
<u>Additions - April 1, 2008 thru March 31, 2009</u>	
Structures & Improvements	-
Milford Office Furniture & Equipment	39,900
Total Additions	<u>39,900</u>
<u>Retirements - April 1, 2008 thru March 31, 2009</u>	
Total Retirements	<u>-</u>
<b>Net Additions (Change No. 1b)</b>	<u>39,900</u>
Ending Balance at March 31, 2009	<u><u>\$ 39,900</u></u>



Pike County Light And Power Company  
Statement in Support of Change No. (2a and 2b)  
To Electric Depreciation Reserve  
For the Twelve Months Ended March 31, 2009

<u>Accumulated Provision for Depreciation of Electric Plant in Service At Existing Rates</u>	<u>Amount</u>
Balance at March 31, 2008	\$ 3,030,200
Additions - April 1, 2008 thru March 31, 2009	\$ 368,600
Additions - April 1, 2009 thru September 30, 2009	<u>200,500</u>
Total Additions	<u>569,100</u>
Retirements - April 1, 2008 thru March 31, 2009	98,400
Retirements - April 1, 2009 thru September 30, 2009	<u>49,200</u>
Total Retirements	<u>147,600</u>
<b>Net Additions (Change No. 2a)</b>	<b><u>421,500</u></b>
Ending Balance at September 30, 2009	<b><u><u>\$ 3,451,700</u></u></b>

Electric Plant at September 30, 2009	14,524,100
Less: Non-Depreciable Plant	<u>26,205</u>
Depreciable Plant at September 30, 2009	<u>14,497,895</u>
x Proposed Composite Book Depreciation Rate	<u>2.56%</u>

<u>Calculated Accruals to Depreciation Expense</u>	
For The Twelve Months Ended March 31, 2009	371,400
Less: Accruals to Depreciation Expense	<u>368,600</u>
Adjustment to Reserve Balance	\$ 2,800

<u>Theoretical Depreciation Reserve</u>	
Based On Proposed Rates	2,564,133
Based On Existing Rates	<u>2,980,451</u>
Theoretical Excess Reserve	(416,318)
(Composite Book Life of 39 years - Average Age of 13 years)	<u>26</u>
Adjustment to Reserve to Reflect first year Amortization of difference between book and theoretical reserve	<u>(16,000)</u>
<b>Total Increase/(Decrease) to Reserve Balance (Change No. 2b)</b>	<b><u><u>\$(13,200)</u></u></b>

Pike County Light Power  
Statement in Support of Change No. (2c)  
To Common Depreciation Reserve  
For the Twelve Months Ended March 31, 2009

	Amount
<u>Accumulated Provision for Depreciation of Common Plant in Service At Existing Rates</u>	
Balance at March 31, 2008	\$ -
<u>Additions - April 1, 2008 thru March 31, 2009</u>	-
Structures & Improvements	-
Office Furniture & Equipment	8,000
Total Additions	8,000
<u>Retirements - April 1, 2008 thru March 31, 2009</u>	
Milford Office	-
Total Retirements	-
<b>Net Additions (Change No. 2c)</b>	8,000
Ending Balance at March 31, 2009	\$ 8,000

Pike County Light And Power Company  
Statement in Support of Change No. (3)  
For The Twelve Months Ending March 31, 2009

Exhibit E-3  
Schedule 3  
Page 1 of 3

	<u>Reference</u>	<u>Amount</u>	<u>(Lead) / Lag Days</u>	<u>T&amp;D Dollar Days</u>
Revenue Recovery	I	\$ 4,435,900	43.6	\$ 193,513,926
Sales tax	I	<u>261,500</u>	<u>43.6</u>	<u>11,407,807</u>
		4,697,400		204,921,733
 Purchased Power Expenses:				
O&R	II	1,756,400	45.0	79,038,000
Deferred Purchased Power Expense		-	-	-
Salaries & Wages	III	481,731	8.1	3,921,488
Pensions	XII	197,489	0.4	88,247
OPEBs	IV	77,444	94.1	7,285,001
Employee Welfare Expenses	IV	105,871	12.2	1,287,423
Joint Operating Expense	II	209,148	45.0	9,411,660
Uncollectible Accounts Accrual	V	93,746	43.6	4,089,623
Material & Supplies issues	XI	-	-	-
Other O&M	VI	762,840	12.6	9,649,420
Amortizations:				
Rate Case Costs		80,000	-	-
PUC Assessment		12,932	-	-
OPEBs		64,400	-	-
Depreciation & Amortization	XI	392,300	-	-
Taxes Other Than Income Taxes	VII	52,800	14.0	740,296
Pennsylvania Sales & Use Tax	VII-A	-	35.4	-
Pennsylvania GRT	VIII	261,500	(109.0)	(28,503,500)
Gain on Disposition of Utility Plant		(21,700)	-	-
Income Taxes:				
Federal Income Tax	IX	(186,300)	36.5	(6,799,950)
Deferred Federal Income Tax	XI	180,300	-	-
Investment Tax Credit	XI	(3,000)	-	-
Corporate Business Tax (State)	X	(59,100)	36.5	(2,157,150)
Return on Invested Capital	XI	<u>238,600</u>	<u>-</u>	<u>-</u>
 Total Requirement		 <u>\$ 4,697,400</u>	 <u>16.6</u>	 <u>78,050,558</u>
 Net Lag			 <u>27.0</u>	 <u>\$ 126,871,175</u>
 <b>Net Requirement (Net Lag / 365 )</b>				 <b><u>\$ 347,592</u></b>
 Historical Cash Working Capital				 <u>201,600</u>
 Net Change				 <u>\$ 145,992</u>
 Rounded				 <u>\$ 146,000</u>

Pike County Light Power Company  
Statement in Support of Change No. (3)  
Electric Working Capital Materials and Supplies

Exhibit E-3  
Schedule 3  
Page 2 of 3

Month	Electric Plant Material and Stores Exp (1)	Common Plant Material and Stores Exp (2)	Total (3)=(1)+(2)
APR '07	\$ 73,309	\$ 14,391	\$ 87,700
MAY '07	73,721	15,264	88,985
JUN '07	71,798	14,727	86,526
JULY '07	71,538	14,039	85,577
AUG '07	72,730	14,914	87,644
SEP '07	71,058	14,367	85,424
OCT '07	71,408	15,203	86,611
NOV '07	85,799	14,659	100,458
DEC '07	81,732	14,584	96,315
JAN '08	82,896	15,999	98,894
FEB '08	84,230	16,107	100,337
MAR '08	91,447	14,808	106,254
Twelve Month Total	<u>\$ 931,665</u>	<u>\$ 179,061</u>	<u>\$ 1,110,726</u>
Twelve Month Average	<u>\$ 77,639</u>	<u>\$ 14,922</u>	<u>\$ 92,560</u>
Rounded			<u>\$ 92,600</u>

Pike County Light And Power Company  
Statement in Support of Change (3)  
Electric Working Capital Prepayments

Exhibit E-3  
Schedule 3  
Page 3 of 3

Month	Capital Stock	Gross Earnings	Penn Corp. Net Income	PUC Assessment	Property Insurance	Total
APR '07	\$ 21,376	\$ 491,609	\$ 59,236	\$ 2,491	\$ 770	\$ 574,712
MAY '07	19,609	468,265	43,628	1,246	616	532,748
JUN '07	24,469	442,661	51,634	-	462	518,764
JULY '07	22,702	416,502	36,747	-	308	475,951
AUG '07	20,934	391,443	52,322	-	154	464,699
SEP '07	21,023	369,719	72,643	12,146	-	475,531
OCT '07	19,255	348,551	81,477	10,797	-	460,080
NOV '07	17,488	325,856	78,182	9,447	-	430,973
DEC '07	15,721	171,674	67,279	8,097	-	262,771
JAN '08	14,340	-	65,973	6,722	-	87,035
FEB '08	13,019	(42)	64,131	5,377	-	82,485
MAR '08	15,308	273,263	70,620	4,033	-	363,224
Twelve Month Total	<u>\$ 225,244</u>	<u>\$ 3,699,501</u>	<u>\$ 743,872</u>	<u>\$ 60,356</u>	<u>\$ 2,308</u>	<u>\$ 4,728,974</u>
Twelve Month Average	<u>\$ 18,770</u>	<u>\$ 308,292</u>	<u>\$ 61,989</u>	<u>\$ 5,030</u>	<u>\$ 192</u>	<u>\$ 394,081</u>
Rounded						<u>\$ 394,100</u>

Pike County Light And Power Company  
Statement in Support of Change (4)  
For the Twelve Months Ended March 31, 2009

Exhibit E-3  
Schedule 4

Deferred Debit Items	Before Tax	After Tax *	Rounded
OPEB Deferral Balance	\$ 295,408		
Less: Accrued OPEB Reserve (87.41%)	(341,070)		
	\$ (45,662)	\$ (26,715)	\$ (26,700)
 System Benefit Charge	 \$ 10,604	 \$ 6,204	 \$ 6,200
Balance at March 31, 2008			\$ (20,500)
 Estimated Rate Case Costs (Change No. 6)	 \$ 400,000	 \$ 234,026	 \$ 234,000
Ending Balance at March 31, 2009			\$ 213,500

\* Net of SIT & FIT (1/1-41.4935%)

Pike County Light And Power Company  
Statement in Support of Change (5)  
For the Twelve Months Ended March 31, 2009

Exhibit E-3  
Schedule 5

<u>Deferred Credit Items</u>	<u>Before Tax</u>	<u>After Tax *</u>	<u>Rounded</u>
Electric Tax Refund	<u>\$ (26,566)</u>	<u>\$ (15,543)</u>	<u>\$ (15,500)</u>
Depreciation Benefits - PSA	<u>\$ (30,400)</u>	<u>\$ (17,786)</u>	<u>\$ (17,800)</u>
Balance at March 31, 2008			<u>\$ (33,300)</u>
Net Changes (Change No. 5)			<u>\$ -</u>
Ending Balance at March 31, 2009			<u>\$ (33,300)</u>

\* Net of SIT & FIT (1/1-41.4935%)

Pike County Light And Power Company  
Statement in Support of Change No. (6)  
For The Twelve Months Ended March 31, 2009

Exhibit E-3  
Schedule 6

Gain From Sale of Property  
219 1/2 Broad Street, Milford, Pennsylvania

	Allocation		Total
	Utility Plant 50%	Non-Utility Plant 50%	
<b>Contract Selling Price</b>	\$ 180,500	\$ 180,500	\$ 361,000
<b>Selling Expenses:</b>			
- Legal & Other	1,934	1,934	3,868
Net Proceeds from Sale	178,566	178,566	357,132
<b>Cost of Land &amp; Structures:</b>			
- Land	3,770	3,770	7,540
- Building	5,670	5,670	11,340
Original Purchase Price	9,440	9,440	18,880
- Building Improvements	30,613	27,897	58,510
- Less Depreciation 6/30/04	(23,040)	(20,803)	(43,843)
Book Value 6/30/04	17,013	16,534	33,547
<b>Site Cleanup Costs:</b>			
- BSB Construction	6,376	6,376	12,752
- Clayton Environmental	2,525	2,525	5,050
- Miller Environmental	4,157	4,157	8,314
Site Remediation Costs	13,058	13,058	26,116
Other Retirement WIP Charges	11,402	11,402	22,804
Retirement WIP at 6/30/04	24,460	24,460	48,920
Gain on Sale Before Tax	137,093	137,572	274,665
<b>Income Taxes:</b>			
PA Corporate Tax (9.99%)	13,696	13,743	27,439
Federal income Tax (35%)	43,189	43,340	86,529
Income Taxes	56,885	57,083	113,968
<b>Gain on Sale After Tax</b>	80,208	\$ 80,489	\$ 160,697
Less Amortization (1/5)	(16,042)		
Net Rate Base Deduction	\$ 64,166		
Rounded	\$ 64,200		
<b>Allocation To:</b>			
- Electric (79.55%)	\$ 51,100		
- Gas (20.45%)	\$ 13,100		



Pike County Light And Power Company  
Statement in Support of Change No. (7)  
To Accumulated Deferred Income Taxes  
For the Twelve Months Ended March 31, 2009

Exhibit E-3  
Schedule 7

<u>Accumulated Deferred Income Taxes</u>	<u>Amount</u>
Balance at March 31, 2008	\$ 1,266,100
<u>Additions - April 1, 2008 thru March 31, 2009</u>	
Tax Depreciation - Normalized	51,400
Tax Depreciation - CIAC	7,200
Capitalized Overhead Section 263A	<u>121,700</u>
Net Additions (Change No. 7)	<u>180,300</u>
Ending Balance at March 31, 2009	<u><u>\$ 1,446,400</u></u>

Pike County Light And Power Company  
 Electrical Capital Expenditures  
 For the Twelve Months Ended March 31, 2009

Exhibit E-3  
 Schedule 8

<u>Project Description</u>	<u>In Service</u> <u>Date</u>	<u>April 1, 2008</u> <u>through</u>		<u>Total</u>
		<u>at 3/31/08</u>	<u>September 2009</u>	
Line 7 - Double Circuit Route 209	May-08	\$ 342.2	\$ 45.8	\$ 388.0
Distribution Automation Improvements	Oct-08	-	150.0	150.0
Property Purchase - Future Milford Substation	Dec-08	-	650.0	650.0
Electric Distribution Blankets - Overhead	Monthly	-	232.1	232.1
Electric Distribution Blankets - Underground	Monthly	-	106.5	106.5
Electric Meter Purchases -	Monthly	-	84.0	84.0
Electric Meter 1st Install Blanket	Monthly	-	69.3	69.3
Ground to Sky Tree Trimming	Monthly	-	500.0	500.0
Circuit Reliability Blanket	Monthly	-	10.0	10.0
Pole Inspection Blanket	Monthly	-	16.2	16.2

Pike County Light And Power Company  
Index of Schedules  
Electric Cost of Service

Exhibit E-4

Schedule	Title of Schedule	Witness
Summary	Electric Cost of Service	Accounting Panel
(1)	Changes to Adjust for Sales Growth, eliminate hedging gains and SBC charges	Accounting Panel / Forecasting Panel
(2)	Passback of 1993-94 Investigation Proceeds	Accounting Panel
(3)	Changes in Purchased Power Supply Expense	Accounting Panel
(4)	Changes to Reflect Increase in Wages & Salaries and for additional employees	Accounting Panel
(5)	Changes to reflect increases in Payroll Ancillary Costs	Accounting Panel
(6)	Changes in Operation and Maintenance Expenses to reflect increases in Post Retiree Expense other than Pension Costs (OPEB)	Accounting Panel
(7)	Changes in Operation and Maintenance Expense to Reflect Rents for Milford Office	Accounting Panel
(8)	Changes in Operation and Maintenance Expense to Reflect a five year average of Outside Legal Fees	Accounting Panel
(9)	Changes in Operation and Maintenance Expense to Reflect Recovery of Rate Case Expense	Accounting Panel
(10)	Changes in Operation and Maintenance Expenses to reflect true-up of Joint Use Operating Expense	Accounting Panel
(11)	Changes in Operation and Maintenance Expense to Reflect uncollectible expenses	Accounting Panel
(12)	System Reliability Programs	Angelo Regan
(13)	Changes in Depreciation Expenses - Plant additions at existing and proposed rates, common plant depreciation, for net salvage, for reserve excess, and passback of PSA depreciation.	Charles D. Hutcheson / Accounting Panel
(14)	Changes in Taxes Other than income to reflect Changes in Payroll Tax, Gross Earnings Tax and STAS recoveries	Accounting Panel
(15)	Changes in Gain on Sale of Utility Plant to Reflect the amortization of the net gain from the sale of the Milford Office	Accounting Panel
(16)	Calculation of Income Tax Expense	Accounting Panel

Pike County Light And Power Company  
 Electric Cost of Service  
 For the Twelve Months Ended March 31, 2008  
 and the Twelve Months Ended March 31, 2009

	12 mos. Ended March 31, 2008 (1)	Difference Between Historical and Future Years		Future Year		
		Reference (2)	Amount (3)	12 mos. Ended March 31, 2009 (4)=(1+3)	Proposed Rate Change (5)	As Adjusted for Add'l Revenue (6)
<b>Operating Revenues:</b>						
Sales of Electricity - Retail Sales	\$ 5,438,800	(1a)	\$ (178,100)	\$ 4,689,000	\$ 1,172,100	\$ 5,861,100
- Hedging Gains		(1b)	(571,700)			
Other Operating Revenues	2,800	(2)	5,600	8,400	-	8,400
Total Operating Revenues	<u>5,441,600</u>		<u>(744,200)</u>	<u>4,697,400</u>	<u>1,172,100</u>	<u>5,869,500</u>
<b>Operating Expenses:</b>						
Power Supply Expense - Energy & Capacity	1,869,700	(3)	(117,600)	1,756,400	-	1,756,400
- Fixed & Variable		(4a)	4,300			
Deferred Purchased Power Expense						
Other Operation and Maintenance Expenses	1,911,600	(1c)	(9,900)	2,085,600	9,500	2,095,100
		(4b)	32,000			
		(4c)	23,400			
		(5)	9,800			
		(6a)	38,800			
		(6b)	64,400			
		(7)	30,600			
		(8)	(306,400)			
		(9)	80,000			
		(10)	28,200			
		(11)	(24,100)			
		(12)	207,200			
Depreciation Expense	334,500	(13a)	33,700	392,300	-	392,300
		(13b)	8,000			
		(13c)	(16,000)			
		(13d)	38,200			
		(13e)	(6,100)			
Taxes other than Income	379,900	(14a)	(60,300)	314,300	69,200	383,500
		(14b)	(5,300)			
Gain on disposition of Utility Plant	-	(15)	(21,700)	(21,700)	-	(21,700)
Total Operating Expenses	<u>4,495,700</u>		<u>31,200</u>	<u>4,526,900</u>	<u>78,700</u>	<u>4,605,600</u>
Operating Income Before Income Taxes:	945,900		(775,400)	170,500	1,093,400	1,263,900
State Income Tax	22,400	(16)	(81,500)	(59,100)	109,200	50,100
Federal Income Tax	238,400	(16)	(247,400)	(9,000)	344,500	335,500
Operating Income after Taxes	<u>\$ 685,100</u>		<u>\$ (446,500)</u>	<u>\$ 238,600</u>	<u>\$ 639,700</u>	<u>\$ 878,300</u>
Rate Base	<u>\$ 8,867,400</u>		<u>\$ 1,830,700</u>	<u>\$ 10,698,100</u>	<u>\$ -</u>	<u>\$ 10,698,100</u>
Rate of Return	<u>7.73%</u>			<u>2.23%</u>		<u>8.21%</u>

Pike County Light And Power Company  
 Calculation of Electric Revenue Requirement  
 For the Twelve Months Ended March 31, 2009

	Amount
Rate base at 3/31/09	\$ 10,698,100
Rate of Return at 3/31/09	8.21%
Total Return Required	878,314
Total Earned Return (Per Exhibit E-4, Summary, Page 1 of 3)	238,600
Addition Return Required	639,714
Multiplied by Retention Factor*	1.8322
Total Revenue Requirement	\$ 1,172,093
Rounded	\$ 1,172,100

* Retention Factor:		
Additional Revenue	100.0000	1,172,100
Less: Revenue Taxes @5.9%	5.9000	69,200
Less: Uncollectibles	0.8133	9,500
	93.2867	1,093,400
Less: State Income Tax @ 9.99%	9.3193	109,200
	83.9674	984,200
Less: Federal Income Tax @ 35%	29.3886	344,500
Retention Factor	54.5788	639,700
	1.0000	
	0.5458	
	1.8322	

Pike County Light And Power Company  
Changes in Electric Cost of Service  
For the Year Ended March 31, 2009

Adjustment Number	Description	Amount
(1a)	Change in forecast revenues	\$ (178,100)
(1b)	Elimination of Non recurring Hedging Gains	(571,700)
(1c)	Adjustment of SBC Recoveries	\$ (9,900)
(2)	Passback of 1993-94 Investigation Proceeds	5,600
(3)	Change in Purchased Power Supply Expense	(117,600)
(4a)	Changes in Power Supply Expense to Reflect Increase in Wages and Salaries	4,300
(4b)	Changes in Operations and Maintenance Expenses to Reflect Increase in Wages and Salaries	32,000
(4c)	Changes in Operations and Maintenance Expenses to Reflect Additional Employee Positions	23,400
(5)	Changes in Operation and Maintenance Expense to Reflect Estimated Payroll Ancillary Costs -- Health Insurance, Workers Comp, 401K Match	9,800
(6a)	Changes in Operation and Maintenance Expense to Reflect Estimated Employee OPEB and Pension Expense	38,800
(6b)	Changes in Operation and Maintenance Expense to Reflect Estimated Recovery of Deferred OPEB Expense	64,400
(7)	Changes in Operation and Maintenance Expense to Reflect Rents for Milford Office	30,600
(8)	Changes in Operation and Maintenance Expense to Reflect a five year average of Outside Legal Fees	(306,400)
(9)	Changes in Operation and Maintenance Expense to Reflect Recovery of Rate Case Expense	80,000
(10)	Changes in Operation and Maintenance Expense - True-up of Joint Use Operating Expense	28,200
(11)	Change in Uncollectible Expense	(24,100)
(12)	Additional Reliability Programs	207,200
(13a)	Changes in Depreciation Expense -- At Existing & Proposed Rates	33,700
(13b)	Changes in Depreciation Expense -- Common Plant Depreciation	8,000
(13c)	Changes in Depreciation Expense - Annual allowance for Net Salvage	(16,000)
(13d)	Changes in Depreciation Expense -- Amortization of Reserve Excess	38,200
(13e)	Changes in Depreciation Expense -- Pass back of PSA Depreciation	(6,100)
(14a)	Changes in Taxes Other than income to reflect Changes in Payroll Tax, Gross Earnings Tax and STAS recoveries	(60,300)
(14b)	Changes in Taxes Other than income to reflect passback of deferred property tax refunds	(5,300)
(15)	Changes in Gain on Sale of Utility Plant to Reflect the amortization of the net gain from the sale of the Milford Office	(21,700)
(16)	Calculation of Income Tax Expense for the Twelve Months Ended March 31, 2009	
	State Income Tax Adjustment	(81,500)
	Federal Income Tax Adjustment	(247,400)

Pike County Light And Power Company  
Statement in Support of Change No. (1a)  
To Adjust For Sales Growth  
For the Twelve Months Ended March 31, 2009

12 Months Ending March 31, 2009	Revenues	Kwhr Sales	Average cents / per kwhr
Delivery Revenue -- Retail Customers	\$ 689,000	18,192,000	\$ 0.0379
-- POLR Customers	2,252,000	57,459,000	0.0392
Subtotal -- Firm Revenue	2,941,000	75,651,000	0.0389
Recovery of Purchased Power Costs	1,481,900		
SBC Recoveries	4,600		
Gross Receipts Tax	261,500		
Total	\$ 4,689,000	75,651,000	
<hr style="border: 0.5px solid black;"/>			
12 Months Ending March 31, 2008			
Delivery Revenue	744,300	19,295,400	\$ 0.0386
POLR	2,197,800	56,100,900	0.0392
Subtotal -- Firm Revenue	2,942,100	75,396,300	0.0390
Recovery of Purchased Power Costs	1,585,800		
SBC Recoveries	14,500		
Gross Receipts Tax (incl grt on hedging gains)	324,700		
Total (excl. Hedging Gains)	\$ 4,867,100	75,396,300	
Increase / (Decrease) in Revenues / Sales	\$ (178,100)	254,700	
Rounded	\$ (178,100)		

Pike County Light And Power Company  
Statement in Support of Change No. (1b)  
To Power Supply Expense  
For the Twelve Months Ended March 31, 2009

Exhibit E-4  
Schedule 1  
Page 2 of 3

Total Revenues -- 12 Months Ending March 31, 2008 (excl. Hedging Gains)	\$	4,867,100
Total Revenues -- 12 Months Ending March 31, 2008		<u>5,438,800</u>
Net Adjustment	\$	<u>(571,700)</u>
Rounded	\$	<u><u>(571,700)</u></u>



Pike County Light And Power Company  
Statement in Support of Change No. (1c)  
To Power Supply Expense  
For the Twelve Months Ended March 31, 2009

Exhibit E-4  
Schedule 1  
Page 3 of 3

SBC Recoveries -- 12 Months Ending March 31, 2009	\$	4,600
SBC Recoveries -- 12 Months Ending March 31, 2008		<u>14,500</u>
Net Adjustment	\$	<u>(9,900)</u>
Rounded	\$	<u><u>(9,900)</u></u>

Pike County Light And Power Company

Exhibit E-4  
Schedule 2

Statement in Support of Change No. (2)  
To Adjust For Sales Growth  
For the Twelve Months Ended March 31, 2009

Adjustment To Pass Back Deferred Revenues -- 1993-94 Investigation

Deferred Balance 3/31/08	28,000	
Amortization Period for Deferred Balance (Years)	<u>5</u>	
Annual Amortization		<u>\$ 5,600</u>
Rounded		<u><u>\$ 5,600</u></u>

Pike County Light And Power Company

Exhibit E-4  
Schedule 3

Statement in Support of Change No. (3)  
To Power Supply Expense  
For the Twelve Months Ended March 31, 2009

	<u>March 31, 2009</u>	<u>March 31, 2008</u>	<u>Net Change</u>
Power Supply Expense - Energy & Capacity			
-- Purchased Power	\$ 1,481,900	1,585,800	\$ (103,900)
-- O&R Hedging Costs	-	13,700	(13,700)
-- Fixed Charges (Return on Net Plant)	181,100	181,100	-
-- Variable Charges (T&D -- O&M)	89,100	89,100	-
Power Supply Expense - Energy & Capacity	<u>\$ 1,752,100</u>	<u>1,869,700</u>	<u>\$ (117,600)</u>
 Rounded			 <u><u>\$ (117,600)</u></u>

Pike County Light And Power Company  
Statement in Support of Change No. (4a)  
To Power Supply Expense  
For the Twelve Months Ended March 31, 2009

Monthly Wage and Salary Increases		
Normalizing Adjustment applicable to the 12 Months Ended March 31, 2008	\$ 29,167	
Wage Increase and Annualization 4/1/08 through 3/31/09	1,531,195	
Wage Increase and Annualization 4/1/09 through 3/31/10	1,613,533	
Additional Employee Positions 4/1/08 through 3/31/09	623,488	
Additional Employee Positions 4/1/09 through 3/31/10	<u>520,334</u>	
Total Monthly Wage and Annualization Increases		<u>4,317,717</u>
Transmission Expenses 4,317,717 x (.012) x (.9340) x (.0421)		\$ 2,037
Distribution Expense 4,317,717 x (.012) x (.0077) x (.0164)		<u>7</u>
Total Monthly Wage and Annualization Increases		<u>2,044</u>
Weekly Wage and Salary Increases		
Normalizing Adjustment applicable to the 12 Months Ended March 31, 2008	288,966	
Wage Increase and Annualization 4/1/08 through 3/31/09	2,036,633	
Wage Increase and Annualization 4/1/09 through 3/31/10	2,149,547	
Additional Employee Positions 4/1/08 through 3/31/09	447,132	
Additional Employee Positions 4/1/09 through 3/31/10	<u>257,307</u>	
Total Weekly Wage and Annualization Increases		<u>5,179,585</u>
Transmission Expenses 5,179,585 x (.0120) x (.9934) x (.0421)		2,444
Distribution Expense 5,179,585 x (.0120) x (.0077) x (.0164)		<u>8</u>
Total Weekly Wage and Annualization Increases		<u>2,452</u>
Total Monthly & Weekly Wage and Annualization Increases		<u>4,496</u>
Charges from Pike to ORU		
Monthly Wage and Salary Increase	4,317,717	
Weekly Wage and Salary Increase	<u>5,179,585</u>	
Total Monthly and Weekly Wage and Annualization Increase		<u>9,497,302</u>
Distribution Expense 4,317,717 x (.6711) x (.0380) x (.0007)		(77)
5,179,585 x (.6711) x (.0380) x (.0007)		<u>(92)</u>
Total Charges From Pike to ORU		<u>(170)</u>
Net Adjustment		<u>\$ 4,326</u>
Rounded		<u>\$ 4,300</u>

Pike County Light And Power Company  
Statement in Support of Change No. (4b)  
To Power Supply Expense  
For the Twelve Months Ended March 31, 2009

Exhibit E-4  
Schedule 4  
Page 2 of 4

Monthly Wage and Salary Increases

Normalizing Adjustment applicable to the 12 Months Ended March 31, 2008	\$ 29,167
Wage Increase and Annualization 4/1/08 through 3/31/09	1,531,195
Wage Increase and Annualization 4/1/09 through 3/31/10	<u>1,613,533</u>
Total Monthly Wage and Annualization Increases	<u>3,173,895</u>
Wage increase applicable to electric operation and maintenance expense	<u>13,154</u>

Weekly Wage and Salary Increases

Normalizing Adjustment applicable to the 12 Months Ended March 31, 2008	288,966
Wage Increase and Annualization 4/1/08 through 3/31/09	2,036,633
Wage Increase and Annualization 4/1/09 through 3/31/10	<u>2,149,547</u>
Total Weekly Wage and Annualization Increases	<u>4,475,146</u>
Wage increase applicable to electric operation and maintenance expense	<u>18,843</u>
Total Wage Increase Applicable to Pike Electric O&M Expense	<u>\$ 31,998</u>
Rounded	<u><u>\$ 32,000</u></u>

Pike County Light And Power Company  
Statement in Support of Change No. (4c)  
To Power Supply Expense  
For the Twelve Months Ended March 31, 2009

Exhibit E-4  
Schedule 4  
Page 3 of 4

<u>Additional Monthly Employee Positions</u>	
Additional Employee Positions 4/1/08 through 3/31/09	\$ 623,488
Additional Employee Positions 4/1/09 through 3/31/10	<u>520,334</u>
Total Additional Monthly Employee Positions	<u>1,143,822</u>
Additional employee positions applicable to electric operation and maintenance expense	<u>7,606</u>
<u>Additional Weekly Employee Positions</u>	
Additional Employee Positions 4/1/08 through 3/31/09	447,132
Additional Employee Positions 4/1/09 through 3/31/10	257,307
Total Additional Weekly Employee Positions	<u>704,439</u>
Additional employee positions applicable to electric operation and maintenance expense	<u>15,770</u>
Total Additional Employees Applicable to Pike Electric O&M Expense	<u>\$ 23,376</u>
Rounded Total	<u><u>\$ 23,400</u></u>

Statement in Support of  
 Additional Employee Positions  
 For the Twelve Months Ended March 31, 2009

	<u>Number</u>	<u>Date Added</u>	<u>Consolidated Cost Allocated To</u>	
			<u>Pike Elect O&amp;M</u>	<u>Pike Gas O&amp;M</u>
<u>Weekly Paid Positions</u>				
Overhead Linemen, 3rd Class	2	Jul-08	Yes	No
Drafting Technician	1	Jul-08	Yes	No
Drafting Technician	1	Jul-09	Yes	No
Service Layout Estimator (LTS)	1	Jul-09	Yes	Yes
Customer Service Representative	1	Jun-08	Yes	Yes
	<u>6</u>			
<u>Monthly Paid Positions</u>				
Reliability Engineer	1	Apr-08	Yes	No
WMS Support Specialist	1	Sep-08	Yes	No
Compliance Specialist	1	Jul-08	Yes	No
Community Relations Manager	1	Jul-08	Yes	Yes
Systems Specialist	1	Jul-08	Yes	Yes
Engineer (Career Development Rotation Program)	1	Jul-08	Yes	No
Engineer (Career Development Rotation Program)	1	Jul-10	Yes	No
Customer Programs Analyst	1	Jul-08	Yes	Yes
Labor Relations Administrator	1	Jul-09	Yes	Yes
Training Position	1	Jul-10	Yes	Yes
Mobil Workforce Administrator	1	Jul-09	Yes	No
Mobil Workforce Systems Analyst	1	Jul-10	Yes	No
Systems Specialist (ECC) - Operations Support	2	Jul-09	Yes	No
Supervisor (LTS)	1	Jul-09	Yes	No
	<u>15</u>			
Total	<u>21</u>			

Pike County Light And Power Company

Exhibit E-4  
Schedule 5

Statement in Support of Change No. (5)  
To Power Supply Expense  
For the Twelve Months Ended March 31, 2009

<u>Change in Payroll Ancillary Costs (Health Insurance &amp; Workers Compensation)</u>	
Wage Increase and Annualization -- PSA Payroll	\$ 4,326
-- JOA Payroll	31,998
Additional Staffing	<u>23,376</u>
Total Increases in Wage and Salaries	\$ 59,700
Fringe Benefit Rate (Health Insurance, Workers Compensation, 401K)	<u>16.36%</u>
Total Benefit Costs	<u>\$ 9,764</u>
Rounded Total	<u><u>\$ 9,800</u></u>

<sup>1</sup> Per Exhibit E-4, Schedule 4, page 1



Pike County Light And Power Company  
Statement in Support of Change No. (6a)  
To Other Operation and Maintenance Expense  
For the Twelve Months Ended March 31, 2009

Adjustment to Other Operations & Maintenance Expense to Reflect  
Increases in Pension and Employee Post Retirement (OPEB) Costs:

Forecast - SFAS 87 Pension Expense (12 Months Ended 12/31/08)*	263,976	
Less: Capitalized / Recovered Pension Costs (25%)	(66,488)	
Pension Expense - 12 Months Ending 12/31/08	197,489	197,489
Actual - SFAS 87 Pension Expense (12 Months Ending 3/31/08)	262,728	
Less: Capitalized / Recovered Pension Costs (25%)	(66,173)	
Pension Expense - 12 Months Ending 3/31/08	196,555	196,555
Adjustment for SFAS 87 Pension Cost		\$ 934
Forecast - SFAS 106 OPEB Expense (12 Months Ended 12/31/08)	138,046	
Less: VEBA Health Insurance Reimbursements (18.4%)	(25,400)	
Capitalized / Recovered OPEB Costs (25.5%)	(35,202)	
OPEB Expense - 12 Months Ending 12/31/08	77,444	77,444
Actual - SFAS 106 OPEB Expense (12 Months Ended 3/31/08)	126,434	
Less: VEBA Health Insurance Reimbursements (18.4%)	(21,053)	
Capitalized / Recovered OPEB Costs (25.5%)	(39,328)	
	66,053	
Less: Amounts Deferred	(26,453)	
OPEB Expense - 12 Months Ending 3/31/08	39,600	39,600
Adjustment for SFAS 106 OPEB Cost		\$ 37,844
Total Pension and OPEB Costs		\$ 38,778
Rounded Total		\$ 38,800

\* Source: Actuarial Study by Buck Consultants, dated March 28, 2008

Statement in Support of Change No. (6b)  
 To Other Operation and Maintenance Expense  
 For the Twelve Months Ended March 31, 2009

Adjustment to Other Operations & Maintenance Expense to Reflect  
 Recovery of Deferred OPEB Costs

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Balance as of March 31, 2008	295,468	
Plus: 9 Months of Deferred Pension and OPEB Amounts		
OPEB Deferral: April - December 2008 <sup>1</sup>	<u>26,453</u>	
Subtotal Deferred OPEB Costs		321,921
/ Recovery Period = 5 years		<u>5</u>
Total Expense Recovery for Deferred Pension and OPEB Costs		<u>\$ 64,384</u>
Rounded Total		<u><u>\$ 64,400</u></u>

<sup>1</sup> Per Exhibit E-6, Schedule 6, page 1

Pike County Light And Power Company

Exhibit E-4  
Schedule 7

Statement in Support of Change No. (7)  
To Other Operation and Maintenance Expense  
For the Twelve Months Ended March 31, 2009

Adjustment to Other Operations & Maintenance Expense to Reflect  
Rent of Millford Office

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Annual Rent -- Effective April 1, 2008	\$	35,000
Percentage allocable to electric		<u>87.41%</u>
Annual Expense Recovery		<u>30,594</u>
Rounded Total	\$	<u><u>30,600</u></u>

Pike County Light And Power Company

Exhibit E-4  
Schedule 8

Statement in Support of Change No. (8)  
To Other Operation and Maintenance Expense  
For the Twelve Months Ended March 31, 2009

Adjustment to Other Operations & Maintenance Expense to normalize  
outside legal fees

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Ten Year average of outside legal fees	\$ 96,878
Less: Level In Test Year	<u>403,294</u>
Annual Expense Recovery	<u>(306,416)</u>
Rounded Total	<u><u>\$ (306,400)</u></u>

Pike County Light And Power Company

Exhibit E-4  
Schedule 9

Statement in Support of Change No. (9)  
Rate Case Costs  
For the Twelve Months Ended March 31, 2009

Adjustment to Other Operations & Maintenance Expense to  
Reflect Rate Case Costs

Estimated Rate Case Costs	\$	400,000
/ Amortization Period - Years		<u>5</u>
Annual Rate Case Expense	\$	<u>80,000</u>
Rounded	\$	<u><u>80,000</u></u>

Pike County Light And Power Company

Exhibit E-4  
Schedule 10

Statement in Support of Change No. (10)  
To Electric Operation and Maintenance Expense  
For the Twelve Months Ended March 31, 2009

<u>True-up of Joint Use Operating Expense</u>	
Annualized Joint Use Operating Expense based on billing rate in effect at March 31, 2008	\$ 209,148
Less: Joint Operating Expense billings reflected in Operation And Maintenance Expense for the Twelve Months Ending March 31, 2008.	<u>180,963</u>
Net Change in Joint Operating Expense	<u>\$ 28,185</u>
Rounded Total	<u><u>\$ 28,200</u></u>

Pike County Light And Power Company

Exhibit E-4  
Schedule 11

Statement in Support of Change No. (11)  
To Gas Operation and Maintenance Expense  
For the Twelve Months Ended March 31, 2009

Uncollectible Accounts Expense	Kwh's	
Operating Revenues Before Rate Change -- Twelve Months Ending March 31, 2009		\$ 4,689,000
Retail supply revenues billed on behalf of Marketers @ \$0.119 per kwh	57,459,000	<u>6,837,621</u>
Total Revenues Billed		\$ 11,526,621
Uncollectible writeoffs / revenues -- Twelve Months Ending March 31, 2008		<u>0.008133</u>
		\$ 93,746
Less: Uncollectible Expense reflected in Operation And Maintenance Expense for the Twelve Months Ending March 31, 2008.		
Account 904000 07	100,729	
904011 07	<u>17,086</u>	<u>117,814</u>
Net Change in Joint Operating Expense		<u>\$ (24,068)</u>
Rounded Total		<u><u>\$ (24,100)</u></u>

Pike County Light And Power Company

Exhibit E-4  
Schedule 12

Statement in Support of Change No. (12)  
To Electric Operation and Maintenance Expense  
For the Twelve Months Ended March 31, 2009

<u>Additional Reliability Programs</u>	
Tree Trimming	\$ 116,700
Phase ID	5,200
Infra Red Inspection	3,500
Pole Inspection and Treatment	17,300
Circuit Reliability	53,000
Maintenance / Inspection Matamoros Substation	<u>11,500</u>
Total Reliability Programs	<u>\$ 207,200</u>



Pike County Light And Power  
Statement in Support of Change No. (13a)  
To Depreciation Expense  
For the Twelve Months Ended March 31, 2009

Exhibit E-4  
Schedule 13  
Page 1 of 5

	Amount	
	Electric Plant	Adjustment
<u>Electric Plant in Service</u>		
At March 31, 2008 Per Exhibit E-3, Schedule 1	\$ 12,465,625	
Less: Non-Depreciable Plant	26,205	
Depreciable Plant at March 31, 2008	12,439,420	
<u>Additions - April 1, 2008 thru March 31, 2009</u>		
Distribution	2,029,100	
<u>Additions - April 1, 2009 thru September 30, 2009</u>		
Distribution	177,000	
Total Additions	2,206,100	
<u>Retirements - April 1, 2008 thru March 31, 2009</u>		
Distribution	98,400	
<u>Retirements - April 1, 2009 thru September 30, 2009</u>		
Distribution	49,200	
Total Retirements	147,600	
<u>Electric Depreciable Plant at March 31, 2009</u>	14,497,920	
x Book Basis Average Composite Depreciation Rate	2.56%	
<u>Calculated Accruals to Depreciation Expense</u>		
For The Twelve Months Ended March 31, 2009	371,400	
Less: Depreciation Expense as of March 31, 2008	334,500	
Increase In Depreciation Expense		\$ 36,900
<u>Proposed Depreciation Rate Change</u>		
Depreciable Plant at March 31, 2009	14,497,920	
x Proposed Basis Depreciation Rate	2.54%	
Depreciation Expense at Proposed Rates (See E-4, Summary)	368,247	
Existing Rates	371,400	
Variation between Current and Proposed Rates		(3,153)
Total Increase/(Decrease) in Depreciation Expense		\$ 33,747
Rounded Total		\$ 33,700

Pike County Light Power  
Statement in Support of Change No. (13b)  
To Common Depreciation Reserve  
For the Twelve Months Ended March 31, 2009

Exhibit E-4  
Schedule 13  
Page 2 of 5

	Amount
<u>Accumulated Provision for Depreciation of Common Plant in Service At Existing Rates</u>	
Balance at March 31, 2008	\$ -
<u>Additions - April 1, 2008 thru March 31, 2009</u>	
Structures & Improvements	-
Office Furniture & Equipment	39,900
Total Additions	39,900
<u>Retirements - April 1, 2008 thru March 31, 2009</u>	
Milford Office	-
Total Retirements	-
Net Additions	39,900
Amortization Period (Years)	5
Annual Amortization Expense	\$ 7,980
Ending Balance at March 31, 2009	\$ 8,000

Pike County Light Power Company  
Statement in Support of Change No. (13c)  
To Depreciation Expense  
For the Twelve Months Ended March 31, 2009

Exhibit E-4  
Schedule 13  
Page 3 of 5

Changes in Depreciation Expense - Amortization of the difference between the Actual and Theoretical Depreciation Reserve.	\$ Amount
<u>Electric Depreciation Reserve Measured At December 31, 2007</u>	
Computed Reserve For Depreciation Based on Proposed Rates	2,564,133
Actual Reserve For Depreciation Based on Existing Rates	2,980,451
Excess of Book over Theoretical Reserve	\$ (416,318)
Amortization Period - Remaining Life - Years (Composite Book Life of 39 years - Average Age of 13 years)	26
Annual Amortization	\$ (16,012)
Rounded	\$ (16,000)

Pike County Light Power Company

Exhibit E-4

Schedule 13

Page 4 of 5

Statement in Support of Change No. (13d)  
 To Depreciation Expense  
 For the Twelve Months Ended March 31, 2009

Account Number	Electric Plant	Five Year Cumulative Net Salvage	Average Per Year	Current Salvage Allowance	(Reduction) or Additional Amount Required
361	Structures & Improvements	\$ -	\$ -	\$ 103	\$ (103)
362	Station Equipment	7,600	1,520	2,605	(1,085)
364	Poles, Towers and Fixtures	110,655	22,131	16,560	5,571
365	O/H Conductors & Devices	110,188	22,038	424	21,613
3651	Capacitors	12,536	2,507	413	2,094
366	U/G Conduit	1,772	354	(129)	484
367	U/G Conductors	3,373	675	-	675
368	Line Transformers	26,282	5,256	2,037	3,220
3691	O/H Services	30,834	6,167	1,016	5,151
3692	U/G Services	1,204	241	9	231
370	Meters	(1,434)	(287)	73	(360)
3731	Street Lights	4,826	965	284	681
	Total	<u>\$ 307,837</u>	<u>\$ 61,567</u>	<u>\$ 23,395</u>	<u>\$ 38,172</u>
	Rounded				<u><u>\$ 38,200</u></u>

Pike County Light Power Company  
Statement in Support of Change No. (13e)  
To Depreciation Expense  
For the Twelve Months Ended March 31, 2009

Exhibit E-4  
Schedule 13  
Page 5 of 5

Adjustment To Purchase Power Expense to amortize depreciation & property  
tax refunds allocated to Pike through the PSA

Deferred Depreciation Benefits	(30,400)	
Amortization Period for Deferred Balance (Years)	<u>5</u>	
Adjustment for Depreciation		<u>\$ (6,080)</u>
Rounded		<u><u>\$ (6,100)</u></u>

Pike County Light Power Company

Exhibit E-4

Schedule 14

Page 1 of 2

Statement in Support of Change No. (14a)  
 To Other Tax Expense  
 For the Twelve Months Ended March 31, 2009

Changes in Taxes Other	Actual 3/31/2009 (1)	Changes (2)	Future Year 3/31/2009 (3)
Payroll Taxes	\$ 51,500	\$ 56,100	\$ 4,600
Payroll Taxes Capitalized	(19,300)	(21,000)	\$ (1,700)
Pa. Gross Earnings	324,700	261,500	(63,200)
Pa. Capital Stock	19,900	19,900	-
PA. Realty	1,900	1,900	-
Misc. Other Taxes	1,200	1,200	-
Total	\$ 379,900	\$ 319,600	\$ (60,300)
Rounded			\$ (60,300)

Pike County Light Power Company

Exhibit E-4  
Schedule 14  
Page 2 of 2

Statement in Support of Change No. (14b)  
To Depreciation and Property Tax Expense  
For the Twelve Months Ended March 31, 2009

Adjustment To Purchase Power Expense to amortize depreciation & property  
tax refunds allocated to Pike through the PSA

Deferred Property Tax Refunds	\$ (26,566)	
Amortization Period for Deferred Balance (Years)	<u>5</u>	
Adjustment for Depreciation		<u>\$ (5,313)</u>
Rounded		<u><u>\$ (5,300)</u></u>

Pike County Light And Power Company  
Statement in Support of Change No. (15)  
For The Twelve Months Ended March 31, 2009

Exhibit E-4  
Schedule 15

Gain From Sale of Property  
219 1/2 Broad Street, Milford, Pennsylvania

	Allocation		Total
	Utility Plant 50%	Non-Utility Plant 50%	
<b>Contract Selling Price</b>	\$ 180,500	\$ 180,500	\$361,000
<b>Selling Expenses:</b>			
- Legal & Other	1,934	1,934	3,868
Net Proceeds from Sale	178,566	178,566	357,132
<b>Cost of Land &amp; Structures:</b>			
- Land	3,770	3,770	7,540
- Building	5,670	5,670	11,340
Original Purchase Price	9,440	9,440	18,880
- Building Improvements	30,613	27,897	58,510
- Less Depreciation 12/31/07	(23,040)	(20,803)	(43,843)
Book Value 12/31/07	17,013	16,534	33,547
<b>Site Cleanup Costs:</b>			
- BSB Construction	6,376	6,376	12,752
- Clayton Environmental	2,525	2,525	5,050
- Miller Environmental	4,157	4,157	8,314
Site Remediation Costs	13,058	13,058	26,116
Other Retirement WIP Charges	12,278	12,278	24,556
Retirement WIP at 12/31/07	25,336	25,336	33,017
 Gain on Sale Before Tax	 136,217	 136,696	 290,568
 Annual Amortization (5 Years)	 27,243		
Allocation To Electric	79.72%		
 Net Amortization	 \$ 21,718		
 Rounded	 \$ 21,700		



Pike County Light And Power Company  
 Calculation of Electric Income Taxes  
 For The Twelve Months Ended March 31, 2009

Exhibit E-4  
 Schedule 16  
 Page 1 of 3

	12 Months Ended 3/31/2009 (1)	Proposed Rate Change (2)	As Adjusted For Additional Revenue (3) = (1) + (2)
	<u>          </u>	<u>          </u>	<u>          </u>
Operating Income Before Income Taxes	\$ 170,500	\$ 1,093,400	\$ 1,263,900
Interest Expense (E-4 Sch 15, Page 3)	322,000	-	322,000
Book Income Before FIT	<u>(151,500)</u>	<u>1,093,400</u>	<u>941,900</u>
<u>Section I - Flow Thru Items:</u>			
Add: Additional Taxable Income and Unallowable Deductions:			
Excess Book Prov Over Write Off / COR	53,200	-	53,200
Book Depreciation	354,100	-	354,100
Total	<u>407,300</u>	<u>-</u>	<u>407,300</u>
Deduct: Non-Taxable Income and Additional Allowable Deductions			
AFUDC	-	-	-
Loss on Disp of Sect. 1231 Property	-	-	-
Cost of Removal	25,300	-	25,300
Tax Depreciation	278,700	-	278,700
Medicare Reimbursement	27,500	-	27,500
Total	<u>331,500</u>	<u>-</u>	<u>331,500</u>
Pretax Income	(75,700)	1,093,400	1,017,700
<u>Section II - Normalized Items:</u>			
Deduct: Non-Taxable Income and Allowable Deductions			
Tax Depreciation - Normalized	147,000	-	147,000
Tax Depreciation CIAC	20,600	-	20,600
Capitalized Overhead Section 263A	347,700	-	347,700
Total	<u>515,300</u>	<u>-</u>	<u>515,300</u>
Taxable Income	(591,000)	1,093,400	502,400
Less: Current State Income Tax @ 9.99%	<u>(59,000)</u>	<u>109,200</u>	<u>50,200</u>
Ordinary Income or (loss)	<u>(532,000)</u>	<u>984,200</u>	<u>452,200</u>

Pike County Light And Power Company  
 Calculation of Electric Income Taxes  
 For the Twelve Months Ended December 31, 2009

	<u>12 Months Ended 3/31/2009 (1)</u>	<u>Proposed Rate Change (2)</u>	<u>As Adjusted For Additional Revenue (3) = (1) + (2)</u>
Current Federal Income Tax Expense: Ordinary Income @ 35%	<u>\$ (186,300)</u>	<u>\$ 310,100</u>	<u>\$ 123,800</u>
<u>Deferred Federal Income Tax Applicable To:</u>			
Tax Depreciation - Normalized	51,400	-	51,400
Tax Depreciation - CIAC	7,200	-	7,200
Capitalized Overhead Section 263A	<u>121,700</u>	<u>-</u>	<u>121,700</u>
Total	<u>180,300</u>	<u>-</u>	<u>180,300</u>
 Amortization of Deferred ITC	 <u>(3,000)</u>	 <u>-</u>	 <u>(3,000)</u>
<u>Summary of Federal Income Taxes:</u>			
Current Federal Income Tax	(186,300)	310,100	123,800
Deferred Federal Income Tax	180,300	-	180,300
Amortization of Deferred ITC	(3,000)	-	(3,000)
Total	<u><u>\$ (9,000)</u></u>	<u><u>\$ 310,100</u></u>	<u><u>\$ 301,100</u></u>

Pike County Light And Power Company

Exhibit E-4

Schedule 16

Calculation of Electric Income Taxes

Page 3 of 3

Interest Synchronization

For The Twelve Months Ended March 31, 2009

	12 Months Ended 3/31/2008 (1)	Proposed Rate Change (2)	As Adjusted For Additional Revenue (3) = (1) + (2)
Rate Base	\$ 8,867,400	\$ 1,830,700	\$ 10,698,100
Interest Component of Capitalization	3.01%	3.01%	3.01%
Interest Expense	<u>\$ 266,909</u>	<u>\$ 55,104</u>	<u>\$ 322,013</u>

Pike County Light Power Company  
Index of Schedules  
Electric Cost of Service

Exhibit E-5

Schedule	Title of Schedule	Witness
Summary	Electric Cost of Service and Rate Base	Accounting Panel
(1)	Changes to Adjust for Sales Growth, eliminate hedging gains and SBC charges	Accounting Panel
(2)	Changes in Power Supply and Operation and Maintenance Expenses to Reflect Increase in Wages & Salaries	Accounting Panel
(3)	Changes in Operation and Maintenance Expense to Reflect Estimated Payroll Ancillary Costs -- Health Insurance, Workers Comp, 401K Match, Pension and OPEB	Accounting Panel
(4)	Inflation Increase in other O&M Expense	Accounting Panel
(5)	Change in Uncollectible Expense	Accounting Panel
(6)	Changes in Depreciation Expense	Accounting Panel
(7)	Changes in Taxes Other than income to reflect Changes in Payroll Tax & GRT	Accounting Panel
(8)	Calculation of Income Tax Expense	Accounting Panel
(9)	Electric Plant - Additions & Retirements	Accounting Panel
(10)	Depreciation Reserve	Accounting Panel
(11)	Electric Working Capital Requirements	Accounting Panel
(12)	Changes to Rate Base for Deferred Debits	Accounting Panel
(13)	Changes to Rate Base for Deferred Credits	Accounting Panel
(14)	Changes to Rate Base for deferred gain from sale of Milford Office	Accounting Panel
(15)	Accumulated Deferred Income Taxes	Accounting Panel

Pike County Light And Power Company  
Electric Cost of Service  
For the Twelve Months Ended March 31, 2009, March 31, 2010 and March 31, 2011

	Rate Year 1 Exhibit E-4 Summary Pg. 1	Ref.	Rate Year 2 Adjustments	12 mos. Ended March 31, 2010 (4)=(1+3)	Proposed Rate Change (5)	Rate Year 2 Adjusted for Proposed Increase	Amount (7)	12 mos. Ended March 31, 2011 (8)=(6+7)	Proposed Rate Change (9)	Rate Year 3 Adjusted for Proposed Increase
<b>Operating Revenues:</b>										
Sales of Electricity - Retail Sales	\$ 5,861,100	(1)	\$ 26,500	\$ 5,887,600	\$ 56,400	\$ 5,944,000	\$ 47,500	\$ 5,991,500	\$ 23,200	\$ 6,014,700
Other Operating Revenues	8,400			8,400		8,400		8,400		8,400
Total Operating Revenues	<u>5,869,500</u>		<u>26,500</u>	<u>5,896,000</u>	<u>56,400</u>	<u>5,952,400</u>	<u>47,500</u>	<u>5,999,900</u>	<u>23,200</u>	<u>6,023,100</u>
<b>Operating Expenses:</b>										
Power Supply Expense - Energy & Capacity	1,756,400	(2a)	4,500	1,760,900		1,760,900	4,600	1,765,500		1,765,500
- Fixed & Variable										
Deferred Purchased Power Expense	2,095,100	(2b)	33,100	2,165,800	500	2,166,300	34,300	2,239,600	200	2,239,800
Other Operation and Maintenance Expenses		(3)	25,900				26,800			
		(4)	11,500				11,800			
		(5)	200				400			
Depreciation Expense	392,300	(6)	6,000	398,300		398,300	5,600	403,900		403,900
Taxes other than Income	383,500	(7)	3,400	386,900	3,300	390,200	4,700	394,900	1,400	396,300
Gain on disposition of Utility Plant	(21,700)			(21,700)		(21,700)		(21,700)		(21,700)
Total Operating Expenses	<u>4,605,600</u>		<u>84,600</u>	<u>4,690,200</u>	<u>3,800</u>	<u>4,694,000</u>	<u>88,200</u>	<u>4,782,200</u>	<u>1,600</u>	<u>4,783,800</u>
Operating Income Before Income Taxes:	1,263,900		(58,100)	1,205,800	52,600	1,258,400	(40,700)	1,217,700	21,600	1,239,300
State Income Tax	50,100	(15)	(5,700)	44,400	5,300	49,700	(3,500)	46,200	2,200	48,400
Federal Income Tax	335,500	(15)	(17,400)	318,100	16,600	334,700	(10,500)	324,200	6,800	331,000
Operating Income after Taxes	\$ 878,300		\$ (35,000)	\$ 843,300	\$ 30,700	\$ 874,000	\$ (26,700)	\$ 847,300	\$ 12,600	\$ 859,900
Rate Base	\$ 10,698,100		\$ (25,400)	\$ 10,672,700	\$ -	\$ 10,672,700	\$ (172,500)	\$ 10,500,200	\$ -	\$ 10,500,200
Rate of Return	8.21%		7.90%	8.19%	8.07%	8.19%		8.07%		8.19%

Pike County Light And Power Company  
 Electric Cost of Service  
 For the Twelve Months Ended  
 March 31, 2010 and March 31, 2011

	Rate Year 2	Rate Year 3
Rate base at	\$ 10,672,700	\$ 10,500,200
Rate of Return at	8.19%	8.19%
Total Return Required	874,094	859,966
Total Earned Return (Per Exhibit E-5, Summary, Page 1 of 3)	843,300	847,300
Addition Return Required	30,794	12,666
Multiplied by Retention Factor*	1.8322	1.8322
Total Revenue Requirement	\$ 56,421	\$ 23,208
Rounded	\$ 56,400	\$ 23,200

\* Retention Factor:

Additional Revenue	100.0000	\$ 56,400	\$ 23,200
Less: Revenue Taxes @ 5.9%	5.9000	3,300	1,400
Less: Uncollectibles @ .08133%	0.8133	500	200
	93.2867	52,600	21,600
Less: State Income Tax @ 9.99%	9.3193	5,300	2,200
	83.9674	47,300	19,400
Less: Federal Income Tax @ 35%	29.3886	16,600	6,800
Retention Factor	54.5788	\$ 30,700	\$ 12,600
	1.0000		
	0.5458		

Pike County Light And Power Company  
 Changes in Electric Cost of Service  
 For the Twelve Months Ended March 31, 2010 and March 31, 2011

Adjustment Number	Description	Rate Year 2 Adjustment	Rate Year 3 Adjustment
(1)	Sales Growth in Electric Base Revenues	26,500	47,500
(2a)	Changes in Power Supply Expense to Reflect Increase in Wages and Salaries	4,500	4,600
(2b)	Changes in Operations and Maintenance Expenses to Reflect Increase in Wages and Salaries	33,100	34,300
(3)	Changes in Operation and Maintenance Expense to Reflect Estimated Payroll Ancillary Costs -- Health Insurance, Workers Comp, 401K Match, Pension and OPEB	25,900	26,800
(4)	Inflation Increase in other O&M Expense	11,500	11,800
(5)	Change in Uncollectible Expense	200	400
(6)	Changes in Depreciation Expense	6,000	5,600
(7)	Changes in Taxes Other than income to reflect Changes in Payroll Tax & GRT	3,400	4,700
(8)	Calculation of Income Tax Expense for the Twelve Months Ended March 31, 2009		
	State Income Tax Adjustment	(5,700)	(3,500)
	Federal Income Tax Adjustment	(17,400)	(10,500)

Pike County Light And Power Company  
 Levelized Rate Increase  
 For the Twelve Months Ended  
 March 31, 2009, March 31, 2010 and March 31, 2011

ShortTerm Interest Rate 5.0%

Rate Increase	Twelve Months Ending			Cumulative Total
	March 31, 2009	March 31, 2010	March 31, 2011	
R Y - 1	\$1,172,100	\$1,172,100	\$1,172,100	\$3,516,300
R Y - 2		56,400	56,400	112,800
R Y - 3			23,200	23,200
Total	<u>\$ 1,172,100</u>	<u>\$ 1,228,500</u>	<u>\$ 1,251,700</u>	<u>\$ 3,652,300</u>
Annual rate increase w/o interest				
R Y - 1	\$ 608,717	\$ 608,717	\$ 608,717	\$ 1,826,150
R Y - 2		608,717	608,717	1,217,433
R Y - 3			608,717	608,717
Total	<u>\$ 608,717</u>	<u>\$ 1,217,433</u>	<u>\$ 1,826,150</u>	<u>\$ 3,652,300</u>
Interest	<u>\$ 8,505</u>	<u>\$ 17,177</u>	<u>\$ 8,672</u>	<u>\$ 34,354</u>
Annual rate increase w/ interest				
R Y - 1	\$ 614,442	\$ 614,442	\$ 614,442	\$ 1,843,327
R Y - 2		614,442	614,442	1,228,885
R Y - 3			614,442	614,442
Total	<u>\$ 614,442</u>	<u>\$ 1,228,885</u>	<u>\$ 1,843,327</u>	<u>\$ 3,686,654</u>
Rounded	<u>\$ 614,400</u>	<u>\$ 1,228,900</u>	<u>\$ 1,843,300</u>	<u>\$ 3,686,700</u>



Pike County Light And Power Company  
Impact of Rate Increase  
For the Twelve Months Ended  
March 31, 2009, March 31, 2010 and March 31, 2011

Total Revenue Before Rate Increases: \$12,148,677

**Impacts of Rate Increases:**

	<u>Rate Increase</u>	<u>% Impact - Total Bill</u>
RY1 Base Rate Increase:	\$1,172,100	9.6%
RY2 Base Rate Increase:	56,400	0.5%
RY3 Base Rate Increase:	23,200	0.2%
<hr/>		
Levelized Annual Rate Increase	\$614,400	5.1%

Pike County Light And Power Company  
 Electric Rate Base  
 At March 31, 2009, 2010 And 2011

Description	Actual Per Books at 3/31/09 (a)	Reference (b)	Rate Year 2 Adjustments (c)	Rate Year 2 As Adjusted (d)=(a)+(c)	Rate Year 3 Adjustments	Rate Year 3 As Adjusted	Schedule No.
<u>Utility Plant:</u>							
Electric Plant in Service	\$ 14,524,100	(9)	\$ 234,500	\$ 14,758,600	\$ 220,400	\$ 14,979,000	9
Common Plant in Service (Allocated)	39,900		-	39,900	-	39,900	
CWIP not taking interest	63,600		-	63,600	-	63,600	
Total Utility Plant	<u>14,627,600</u>		<u>234,500</u>	<u>14,862,100</u>	<u>220,400</u>	<u>15,082,500</u>	
<u>Utility Plant Reserves:</u>							
Accumulated Provision For Depreciation of Electric Plant in Service - Existing Rates - Proposed Rates	3,451,700 (13,200)	(10a)	305,400 -	3,757,100 (13,200)	331,000 -	4,088,100 (13,200)	10
Accumulated Provision For Depreciation of Common Plant in Service (Allocated)	- 8,000	(10b)	8,000	16,000	8,000	24,000	10
Total Utility Plant Reserves	<u>3,446,500</u>		<u>313,400</u>	<u>3,759,900</u>	<u>339,000</u>	<u>4,098,900</u>	
Net Plant	<u>11,181,100</u>		<u>(78,900)</u>	<u>11,102,200</u>	<u>(118,600)</u>	<u>10,983,600</u>	
<u>Additions to Net Plant</u>							
Working Capital Requirements:							
Cash Working Capital	347,600	(11 a & b)	116,000	463,600	8,600	472,200	11
Materials and Supplies	92,600		-	92,600	-	92,600	
Prepayments	394,100		-	394,100	-	394,100	
Deferred Debits (Net of Tax)	213,500	(12)	(84,500)	129,000	(84,500)	44,500	12
Total Additions	<u>1,047,800</u>		<u>31,500</u>	<u>1,079,300</u>	<u>(75,900)</u>	<u>1,003,400</u>	
<u>Deductions to Net Plant:</u>							
Deferred Credits (Net of Tax)	(33,300)	(13)	9,900	(23,400)	9,900	(13,500)	13
Deferred Gain - Sale of Milford Office	(51,100)	(14)	12,800	(38,300)	12,800	(25,500)	14
Accumulated Deferred Income Taxes	(1,446,400)	(15)	(700)	(1,447,100)	(700)	(1,447,800)	15
Total Deductions	<u>(1,530,800)</u>		<u>22,000</u>	<u>(1,508,800)</u>	<u>22,000</u>	<u>(1,486,800)</u>	
Electric Rate Base	<u>\$ 10,698,100</u>		<u>\$ (25,400)</u>	<u>\$ 10,672,700</u>	<u>\$ (172,500)</u>	<u>\$ 10,500,200</u>	

Pike County Light Power Company  
 Changes in Electric Rate Base  
 For the 12 Months Ending March 31, 2010 and March 31, 2011

Adjustment Number	Description	RY2 Amount	RY3 Amount
(9)	Changes in Plant in Service - Additions & Retirements	\$ 234,500	\$ 220,400
(10a)	Changes to Depreciation Reserve - Existing Depreciation Rates	305,400	331,000
(10b)	Changes to Common Plant - Depreciation	8,000	8,000
(11 a & b)	Changes in Working Capital Requirements (O&M)	116,000	8,600
(12)	Changes to Rate Base for Deferred Debits	(84,500)	(84,500)
(13)	Changes to Rate Base for Deferred Credits	9,900	9,900
(14)	Changes to Rate Base for Unamortized Gain from sale of Milford Office	12,800	12,800
(15)	Changes in Deferred Income Taxes	(700)	(700)

Statement in Support of Change No. (1)  
To Adjust Electric Sales  
For the Twelve Months Ended March 31, 2010 and March 31, 2011

<u>12 Months Ending March 31, 2009</u>		<u>Rate Year 2 Adjustment</u>	<u>Rate Year 3 Adjustment</u>
Delivery Revenue -- Retail Customers	\$ 689,000		
-- POLR Customers	<u>2,252,000</u>		
Total	<u>\$ 2,941,000</u>		
Growth Rate Adjustment		0.9%	1.6%
Delivery Revenue -- Retail Customers		6,201	11,123
-- POLR Customers		<u>20,268</u>	<u>36,356</u>
		<u>\$ 26,469</u>	<u>\$ 47,480</u>
Rounded		<u>\$ 26,500</u>	<u>\$ 47,500</u>
		<u>Year 2 Forecast</u>	<u>Year 3 Forecast</u>
Kwhr Sales	<u>75,651,000</u>	76,303,000	77,555,000
Kwhr Increase		652,000	1,252,000
Kwhr % Growth Rate		0.9%	1.6%

Statement in Support of Change No. (2a)  
To Electric Power Supply Expense  
For the Twelve Months Ended March 31, 2010 and March 31, 2011

		Rate Year 2 Adjustment	Rate Year 3 Adjustment
<u>Monthly Wage and Salary Increases <sup>1</sup></u>			
Normalizing Adjustment applicable to the 12 Months Ended March 31, 2008	\$ 29,167		
Wage Increase and Annualization 4/1/08 through 3/31/09	1,531,195		
Wage Increase and Annualization 4/1/09 through 3/31/10	1,613,533		
Additional Employee Positions 4/1/08 through 3/31/09	623,488		
Additional Employee Positions 4/1/09 through 3/31/10	520,334		
Total Monthly Wage and Annualization Increases	4,317,717		
Monthly Wage and Annualization with 3.5% Increase		151,120	156,409
Transmission Expenses			
4,317,717 x (.012) x (.9340) x (.0421)		2,109	2,182
Distribution Expense			
4,317,717 x (.012) x (.0077) x (.0164)		7	7
Total Monthly Wage and Annualization Increases		2,115	2,189
<u>Monthly Wage and Salary Increases <sup>1</sup></u>			
Normalizing Adjustment applicable to the 12 Months Ended March 31, 2008	288,966		
Wage Increase and Annualization 4/1/08 through 3/31/09	2,036,633		
Wage Increase and Annualization 4/1/09 through 3/31/10	2,149,547		
Additional Employee Positions 4/1/08 through 3/31/09	447,132		
Additional Employee Positions 4/1/09 through 3/31/10	257,307		
Total Weekly Wage and Annualization Increases	5,179,585		
Monthly Wage and Annualization with 3.5% Increase		181,285	187,630
Transmission Expenses			
Monthly Wage and Annualization x (.0120) x (.9934) x (.0421)		2,530	2,618
Distribution Expense			
Monthly Wage and Annualization x (.0120) x (.0077) x (.0164)		8	8
Total Weekly Wage and Annualization Increases		2,538	2,627
Total Monthly & Weekly Wage and Annualization Increases		4,653	4,816
<u>Charges from Pike to ORU</u>			
Monthly Wage and Salary Increase	4,317,717		
Weekly Wage and Salary Increase	5,179,585		
Total Monthly and Weekly Wage and Annualization Increase	9,497,302		
Monthly Wage and Annualization with 3.5% Increase		151,120	156,409
Weekly Wage and Annualization with 3.5% Increase		181,285	187,630
Distribution Expense			
Monthly Wage x (.6711) x (.0380) x (.0007)		(80)	(83)
Weekly Wage x (.6711) x (.0380) x (.0007)		(96)	(99)
Total Charges From Pike to ORU		(175)	(182)
Net Adjustment		\$ 4,478	\$ 4,634
Rounded		\$ 4,500	\$ 4,600

Statement in Support of Change No. (2b)  
To Electric Operation and Maintenance Expense  
For the Twelve Months Ended March 31, 2010 and March 31, 2011

		<u>Increase 3.5% per yr.</u>	
		<u>Rate Year 2</u>	<u>Rate Year 3</u>
		<u>Adjustment</u>	<u>Adjustment</u>
<u>Monthly Wage and Salary Increases <sup>1</sup></u>			
Normalizing Adjustment applicable to the 12 Months Ended March 31, 2008	\$ 29,167		
Wage Increase and Annualization 4/1/08 through 3/31/09	1,531,195		
Wage Increase and Annualization 4/1/09 through 3/31/10	<u>1,613,533</u>		
Total Monthly Wage and Annualization Increases	<u>3,173,895</u>		
Wage increase applicable to electric operation and maintenance expense	<u>13,154</u>		
Monthly Wage and Annualization with 3.5% Increase		<u>\$ 13,615</u>	<u>\$ 14,091</u>
<u>Weekly Wage and Salary Increases</u>			
Normalizing Adjustment applicable to the 12 Months Ended March 31, 2008	288,966		
Wage Increase and Annualization 4/1/08 through 3/31/09	2,036,633		
Wage Increase and Annualization 4/1/09 through 3/31/10	<u>2,149,547</u>		
Total Weekly Wage and Annualization Increases	<u>4,475,146</u>		
Wage increase applicable to electric operation and maintenance expense	<u>18,843</u>		
Monthly Wage and Annualization with 3.5% Increase		<u>19,503</u>	<u>20,186</u>
Total Wage Increase Applicable to Electric O&M Expense with 3.5% Increase	<u>\$ 31,998</u>	<u>\$ 33,118</u>	<u>\$ 34,277</u>
Rounded	<u>\$ 32,000</u>	<u>\$ 33,100</u>	<u>\$ 34,300</u>

Statement in Support of Change No. (3)  
To Electric Operations and Maintenance Expense  
For the Twelve Months Ended March 31, 2010 and March 31, 2011

Change in Payroll Ancillary Costs (Health Insurance & Workers Compensation) <sup>1</sup>		Increase 3.5% per yr.	
		Rate Year 2 Adjustment	Rate Year 3 Adjustment
Wage Increase and Annualization -- PSA Payroll	\$ 4,326	\$ 4,478	\$ 4,634
-- JOA Payroll	31,998	33,118	34,277
Additional Staffing	23,376	-	-
Total Increases in Wage and Salaries	<u>\$ 59,700</u>	<u>\$ 37,595</u>	<u>\$ 38,911</u>
Fringe Benefit Rate	<u>16.36%</u>	<u>16.36%</u>	<u>16.36%</u>
Total Benefit Costs	<u>\$ 9,764</u>	<u>\$ 6,149</u>	<u>\$ 6,364</u>
Pensions	(a)	34.18%	34.2%
Total Pensions		<u>\$ 12,850</u>	<u>\$ 13,300</u>
OPEB's	(a)	18.42%	18.42%
Total OPEB's		<u>\$ 6,925</u>	<u>\$ 7,167</u>
Total Benefits, Pensions and OPEBs	<u>\$ 9,764</u>	<u>\$ 25,924</u>	<u>\$ 26,831</u>
Rounded Total	<u><u>\$ 9,800</u></u>	<u><u>\$ 25,900</u></u>	<u><u>\$ 26,800</u></u>

<sup>1</sup> Per Exhibit E-4, Schedule 5

Statement in Support of Change No. (4)  
To Electric Operations and Maintenance Expense  
For the Twelve Months Ended March 31, 2010 and March 31, 2011

<u>Adjustment to All Other Operations &amp; Maintenance Expenses:</u>		<u>Rate Year 2 Adjustment</u>	<u>Rate Year 3 Adjustment</u>
As Adjusted Rate Year 2009 Total O&M Expenses <sup>1</sup>	\$ 2,095,100		
<u>Less:</u>			
Salaries & Wages	(481,731)		
Pensions & OPEBs	(274,933)		
Employee Welfare Expenses	(105,871)		
Joint Operating Expense	(209,148)		
Uncollectible Accounts Accrual	(93,746)		
Amortizations	(157,332)		
PA GRT	(261,500)		
Uncollectible on Additional Revenue	(9,600)		
<u>Total Other O&amp;M Costs</u>	<u>\$ 501,240</u>		
x 2.3% Inflation Rate per year	2.3%	<u>\$ 11,529</u>	<u>\$ 11,794</u>
Rounded Total		<u><u>\$ 11,500</u></u>	<u><u>\$ 11,800</u></u>



Statement in Support of Change No. (5)  
To Electric Operations and Maintenance Expense  
For the Twelve Months Ended March 31, 2010 and March 31, 2011

Uncollectible Accounts Expense	Rate Year 2 Adjustment	Rate Year 3 Adjustment
Revenue Adjustment due to increase in Sales <sup>1</sup>	\$ 26,500	\$ 47,500
x Uncollectible writeoffs / revenues -- Twelve Months Ending March 31, 2008	0.008133	0.008133
Net Change in Uncollectible Accounts Expense	\$ 216	\$ 386
Rounded Total	\$ 200	\$ 400

<sup>1</sup> Per Exhibit E-5, Schedule 1

Statement in Support of Change No. (6)  
For Proposed Changes in Depreciation Expense  
For the Twelve Months Ended March 31, 2010 and March 31, 2011

	<u>Amount</u>	
	<u>Electric Plant</u>	<u>Adjustment</u>
<u>Proposed Depreciation Rate Change</u> <sup>1</sup>		
Depreciable Plant at March 31, 2009	14,497,920	
x Proposed Basis Depreciation Rate	<u>2.54%</u>	
Depreciation Expense at Proposed Rates	368,247	
 Total Increase/(Decrease) in Depreciation Expense		<u>\$ 33,747</u>
 <u>Additions - Rate Year 2</u>		
Distribution	332,900	
<u>Retirements - Rate Year 2</u>		
Distribution	<u>(98,400)</u>	
Net Activity - Additions/Retirements	<u>234,500</u>	
 Depreciable Plant at Rate Year 2	14,732,420	
x Proposed Basis Depreciation Rate	<u>2.54%</u>	
Depreciation Expense at Rate Year 2	374,203	
 Total Increase in Depreciation Expense - Rate Year 2		<u>\$ 5,956</u>
 Rounded Total		<u><u>\$ 6,000</u></u>
 <u>Additions - Rate Year 3</u>		
Distribution	318,800	
<u>Retirements - Rate Year 3</u>		
Distribution	<u>(98,400)</u>	
Net Activity - Additions/Retirements	<u>220,400</u>	
 <u>Gas Depreciable Plant at Rate Year 3</u>	14,952,820	
x Proposed Composite Book Depreciation Rate	<u>2.54%</u>	
Depreciation Expense at Rate Year 3	379,802	
 Total Increase in Depreciation Expense - Rate Year 3		<u>\$ 5,598</u>
 Rounded Total		<u><u>\$ 5,600</u></u>

Statement in Support of Change No. (7)  
To Other Tax Expense  
For the Twelve Months Ended March 31, 2010 and March 31, 2011

<u>Changes in Taxes Other</u>	<u>Future Year 3/31/2009</u>	<u>Rate Year 2 Adjustment</u>	<u>Rate Year 3 Adjustment</u>
Payroll Taxes	\$ 4,600	\$ 2,900	\$ 3,000
Payroll Taxes Capitalized	(1,700)	(1,100)	(1,100)
Pa. Gross Earnings	<u>(63,200)</u>	<u>1,600</u>	<u>2,800</u>
	<u>\$ (60,300)</u>	<u>\$ 3,400</u>	<u>\$ 4,700</u>
Rounded	<u><u>\$ (60,300)</u></u>	<u><u>\$ 3,400</u></u>	<u><u>\$ 4,700</u></u>
Payroll Taxes (See Exhibit E-5, Schedule 2)		\$ 37,595	\$ 38,911
Payroll Tax Rate		7.74%	7.74%
		<u>\$ 2,910</u>	<u>\$ 3,012</u>
		<u><u>\$ 2,900</u></u>	<u><u>\$ 3,000</u></u>

Adjustment No. (8)  
 Calculation of Electric State Income Taxes  
 For The Twelve Months Ended March 31, 2010

	12 Months Ended 3/31/2009 (1)	Proposed Rate Change (2)	As Adjusted For Additional Revenue (3) = (1) + (2)
Operating Income Before Income Taxes	\$ (58,100)	\$ 21,600	\$ (36,500)
Interest Expense (E-4 Sch 15, Page 3)	(800)	-	\$ (800)
Book Income Before FIT	<u>(57,300)</u>	<u>21,600</u>	<u>(35,700)</u>
<u>Section I - Flow Thru Items:</u>			
Add: Additional Taxable Income and Unallowable Deductions:			
Excess Book Prov Over Write Off / COR	-	-	-
Book Depreciation	6,000	-	6,000
Total	<u>6,000</u>	<u>-</u>	<u>6,000</u>
Deduct: Non-Taxable Income and Additional Allowable Deductions			
Cost of Removal	-	-	-
Tax Depreciation	4,000	-	4,000
Medicare Reimbursement	-	-	-
Total	<u>4,000</u>	<u>-</u>	<u>4,000</u>
Pretax Income	(55,300)	21,600	(33,700)
<u>Section II - Normalized Items:</u>			
Deduct: Non-Taxable Income and Allowable Deductions			
Tax Depreciation - Normalized	2,000	-	2,000
Tax Depreciation CIAC	-	-	-
Capitalized Overhead Section 263A	-	-	-
Total	<u>2,000</u>	<u>-</u>	<u>2,000</u>
Taxable Income	(57,300)	21,600	(35,700)
Less: Current State Income Tax @ 9.99%	<u>(5,700)</u>	<u>2,200</u>	<u>(3,600)</u>
Ordinary Income or (loss)	<u>(51,600)</u>	<u>19,400</u>	<u>(32,100)</u>

Adjustment No. (8)  
 Calculation of Electric Income Taxes  
 For the Twelve Months Ended December 31, 2010

	12 Months Ended 3/31/2009 (1)	Proposed Rate Change (2)	As Adjusted For Additional Revenue (3) = (1) + (2)
Current Federal Income Tax Expense:			
Ordinary Income @ 35%	\$ (18,100)	\$ 6,800	\$ (11,300)
<u>Deferred Federal Income Tax Applicable To:</u>			
Tax Depreciation - Normalized	700	-	700
Tax Depreciation - CIAC	-	-	-
Capitalized Overhead Section 263A	-	-	-
Total	700	-	700
Amortization of Deferred ITC	-	-	-
<u>Summary of Federal Income Taxes:</u>			
Current Federal Income Tax	(18,100)	\$ 6,800	(11,300)
Deferred Federal Income Tax	700	-	700
Amortization of Deferred ITC	-	-	-
Total	<u>\$ (17,400)</u>	<u>\$ 6,800</u>	<u>\$ (10,600)</u>

Adjustment No. (8)  
 Calculation of Electric State Income Taxes  
 For The Twelve Months Ended March 31, 2011

	12 Months Ended 3/31/2010 (1)	Proposed Rate Change (2)	As Adjusted For Additional Revenue (3) = (1) + (2)
Operating Income Before Income Taxes	\$ (40,700)	\$ 21,600	\$ (19,100)
Interest Expense (E-4 Sch 15, Page 3)	(5,200)	-	\$ (5,200)
Book Income Before FIT	<u>(35,500)</u>	<u>21,600</u>	<u>(13,900)</u>
<u>Section I - Flow Thru Items:</u>			
Add: Additional Taxable Income and Unallowable Deductions:			
Excess Book Prov Over Write Off / COR	-	-	-
Book Depreciation	5,600	-	5,600
Total	<u>5,600</u>	<u>-</u>	<u>5,600</u>
Deduct: Non-Taxable Income and Additional Allowable Deductions			
Cost of Removal	-	-	-
Tax Depreciation	3,700	-	3,700
Medicare Reimbursement	-	-	-
Total	<u>3,700</u>	<u>-</u>	<u>3,700</u>
Pretax Income	(33,600)	21,600	(12,000)
<u>Section II - Normalized Items:</u>			
Deduct: Non-Taxable Income and Allowable Deductions			
Tax Depreciation - Normalized	1,900	-	1,900
Tax Depreciation CIAC	-	-	-
Capitalized Overhead Section 263A	-	-	-
Total	<u>1,900</u>	<u>-</u>	<u>1,900</u>
Taxable Income	(35,500)	21,600	(13,900)
Less: Current State Income Tax @ 9.99%	<u>(3,500)</u>	<u>2,200</u>	<u>(1,400)</u>
Ordinary Income or (loss)	<u>(32,000)</u>	<u>19,400</u>	<u>(12,500)</u>

Adjustment No. (8)  
 Calculation of Electric Income Taxes  
 For the Twelve Months Ended December 31, 2011

	12 Months Ended 3/31/2010 (1)	Proposed Rate Change (2)	As Adjusted For Additional Revenue (3) = (1) + (2)
Current Federal Income Tax Expense:			
Ordinary Income @ 35%	\$ (11,200)	\$ 6,800	\$ (4,400)
<u>Deferred Federal Income Tax Applicable To:</u>			
Tax Depreciation - Normalized	700	-	700
Tax Depreciation - CIAC	-	-	-
Capitalized Overhead Section 263A	-	-	-
Total	700	-	700
Amortization of Deferred ITC	-	-	-
<u>Summary of Federal Income Taxes:</u>			
Current Federal Income Tax	(11,200)	\$ 6,800	(4,400)
Deferred Federal Income Tax	700	-	700
Amortization of Deferred ITC	-	-	-
Total	<u>\$ (10,500)</u>	<u>\$ 6,800</u>	<u>\$ (3,700)</u>

Pike County Light And Power Company

Exhibit E-5

Schedule 8

Page 5 of 5

Adjustment No. (8)

Calculation of Electric Interest Expense

For The Twelve Months Ended March 31, 2010 and March 31, 2011

	12 Months Ended 3/31/2009 (1)	Proposed Rate Change (2)	As Adjusted For Additional Revenue (3) = (1) + (2)
Rate Base	\$ 10,698,100	\$ (25,400)	\$ 10,672,700
Interest Component of Capitalization	<u>3.01%</u>	<u>3.01%</u>	<u>3.01%</u>
Interest Expense	<u>\$ 322,013</u>	<u>\$ (765)</u>	<u>\$ 321,248</u>
Rounded	<u>\$ 322,000</u>	<u>\$ (800)</u>	<u>\$ 321,200</u>

	12 Months Ended 3/31/2010 (1)	Proposed Rate Change (2)	As Adjusted For Additional Revenue (3) = (1) + (2)
Rate Base	\$ 10,672,700	\$ (172,500)	\$ 10,500,200
Interest Component of Capitalization	<u>3.01%</u>	<u>3.01%</u>	<u>3.01%</u>
Interest Expense	<u>\$ 321,248</u>	<u>\$ (5,192)</u>	<u>\$ 316,056</u>
Rounded	<u>\$ 321,200</u>	<u>\$ (5,200)</u>	<u>\$ 316,100</u>



Pike County Light And Power Company  
Statement in Support of Change No. (9)  
To Electric Plant in Service  
For the Twelve Months Ending March 31, 2010 and March 31 2011

Exhibit E-5  
Schedule 9

Electric Plant in Service

Rate Year 1 <u>Balance</u>	Rate Year 2		Rate Year 2 As Adjusted	Rate Year 3		Rate Year 3 As Adjusted
	Additions	Retirements		Additions	Retirements	
\$ 14,524,100	\$ 332,900	\$ (98,400)	\$ 14,758,600	\$ 318,800	\$ (98,400)	\$ 14,979,000

Pike County Light And Power Company  
Statement in Support of Change No. (10a)  
To Electric Depreciation Reserve  
For the Twelve Months Ending March 31, 2010 and March 31, 2011

Exhibit E-5  
Schedule 10  
Page 1 of 2

Accumulated Provision for Depreciation of Electric Plant in Service

Rate Year 1 <u>Balance</u>	Rate Year 2 <u>Additions</u>	Rate Year 2 <u>Retirements</u>	Rate Year 2 <u>As Adjusted</u>	Rate Year 3 <u>Additions</u>	Rate Year 3 <u>Retirements</u>	Rate Year 3 <u>As Adjusted</u>
\$ 3,438,500	\$ 403,800	\$ (98,400)	\$ 3,743,900	\$ 429,400	\$ (98,400)	\$ 4,074,900

Pike County Light And Power Company  
Statement in Support of Change No. (10b)  
To Common Depreciation Reserve  
For the Twelve Months Ending March 31, 2010 and March 31, 2011

Exhibit E-5  
Schedule 10  
Page 2 of 2

Accumulated Provision for Depreciation of Common Plant in Service

Rate Year 1 <u>Balance</u>	<u>Rate Year 2</u>		<u>Rate Year 2</u>	<u>Rate Year 3</u>		<u>Rate Year 3</u>
	<u>Additions</u>	<u>Retirements</u>	<u>As Adjusted</u>	<u>Additions</u>	<u>Retirements</u>	<u>As Adjusted</u>
\$ 8,000	\$ 8,000	\$ -	\$ 16,000	\$ 8,000	\$ -	\$ 24,000

Pike County Light And Power Company  
Statement in Support of Change No. (11a)  
For the Twelve Months Ending March 31, 2010

Exhibit E-5  
Schedule 11  
Page 1 of 2

	<u>Reference</u>	<u>Amount</u>	<u>(Lead) / Lag Days</u>	<u>T&amp;D Dollar Days</u>
Revenue Recovery	I	\$ 5,565,300	43.6	\$ 242,783,438
Sales tax	I	<u>330,700</u>	<u>43.6</u>	<u>14,426,623</u>
		5,896,000		257,210,061
Purchased Power Expenses:				
O&R	II	1,760,900	45.0	79,240,500
Deferred Purchased Power Expense		-	-	-
Salaries & Wages	III	514,831	8.1	4,190,936
Pensions	XII	210,489	0.4	94,056
OPEBs	IV	84,344	94.1	7,934,071
Employee Welfare Expenses	IV	111,971	12.2	1,361,602
Joint Operating Expense	II	209,148	45.0	9,411,660
Uncollectible Accounts Accrual	V	103,446	43.6	4,512,781
Other O&M	VI	774,240	12.6	9,793,622
Amortizations:				
Rate Case Costs		80,000	-	-
PUC Assessment		12,932	-	-
OPEBs		64,400	-	-
Depreciation & Amortization	XI	398,300	-	-
Taxes Other Than Income Taxes	VII	56,200	14.0	787,967
Pennsylvania GRT	VIII	330,700	(109.0)	(36,046,300)
Gain on Disposition of Utility Plant		(21,700)	-	-
Income Taxes:				
Federal Income Tax	IX	140,100	36.5	5,113,650
Deferred Federal Income Tax	XI	181,000	-	-
Investment Tax Credit	XI	(3,000)	-	-
Corporate Business Tax (State)	X	44,400	36.5	1,620,600
Return on Invested Capital	XI	<u>843,300</u>	<u>-</u>	<u>-</u>
 Total Requirement		 <u>\$ 5,896,000</u>	 <u>14.9</u>	 <u>88,015,145</u>
Net Lag		\$ -	<u>28.7</u>	<u>\$ 169,194,916</u>
 <b>Net Requirement (Net Lag / 365 )</b>				 <b><u>\$ 463,548</u></b>
 Rate Year Cash Working Capital				 <u>347,592</u>
 Net Change				 <u>\$ 115,955</u>
 Rounded (11a)				 <u>\$ 116,000</u>

Pike County Light And Power Company  
Statement in Support of Change No. (11b)  
For the Twelve Months Ending March 31, 2011

Exhibit E-5  
Schedule 11  
Page 2 of 2

	<u>Reference</u>	<u>Amount</u>	<u>(Lead) / Lag Days</u>	<u>T&amp;D Dollar Days</u>
Revenue Recovery	I	\$ 5,665,900	43.6	\$ 247,172,063
Sales tax	I	<u>334,000</u>	<u>43.6</u>	<u>14,570,583</u>
		5,999,900		261,742,646
Purchased Power Expenses:				
O&R	II	1,765,500	45.0	79,447,500
Deferred Purchased Power Expense		-	-	-
Salaries & Wages	III	549,131	8.1	4,470,152
Pensions	XII	223,789	0.4	99,999
OPEBs	IV	91,544	94.1	8,611,362
Employee Welfare Expenses	IV	118,271	12.2	1,438,212
Joint Operating Expense	II	209,148	45.0	9,411,660
Uncollectible Accounts Accrual	V	104,346	43.6	4,552,043
Material & Supplies issues	XI	-	-	-
Other O&M	VI	786,040	12.6	9,942,886
Amortizations:				
Rate Case Costs		80,000	-	-
PUC Assessment		12,932	-	-
OPEBs		64,400	-	-
Depreciation & Amortization	XI	403,900	-	-
Taxes Other Than Income Taxes	VII	60,900	14.0	853,864
Pennsylvania GRT	VIII	334,000	(109.0)	(36,406,000)
Gain on Disposition of Utility Plant		(21,700)	-	-
Income Taxes:				
Federal Income Tax	IX	145,500	36.5	5,310,750
Deferred Federal Income Tax	XI	181,700	-	-
Investment Tax Credit	XI	(3,000)	-	-
Corporate Business Tax (State)	X	46,200	36.5	1,686,300
Return on Invested Capital	XI	<u>847,300</u>	<u>-</u>	<u>-</u>
Total Requirement		<u>\$ 5,999,900</u>	<u>14.9</u>	<u>89,418,729</u>
		\$ -		
Net Lag			<u>28.7</u>	<u>\$ 172,323,918</u>
<b>Net Requirement (Net Lag / 365 )</b>				<u><b>\$ 472,120</b></u>
RY2 Working Capital				<u>463,548</u>
Net Change				<u>\$ 8,573</u>
Rounded (11b)				<u><u>\$ 8,600</u></u>

Pike County Light And Power Company  
Statement in Support of Change No. (12)  
For the Twelve Months Ending March 31, 2010 and March 31, 2011

Exhibit E-5  
Schedule 12

Deferred Debits

	Actual Per Books at 3/31/09	Rate Year 2 Adjustments	Rate Year 2 As Adjusted	Rate Year 3 Adjustments	Rate Year 3 As Adjusted
<u>Before Tax</u>					
Estimated Rate Case Costs	\$ 400,000	\$ (80,000)	\$ 320,000	\$ (80,000)	\$ 240,000
OPEBs	321,921	(64,384)	257,537	(64,384)	193,153
	<u>\$ 721,921</u>	<u>\$ (144,384)</u>	<u>\$ 577,537</u>	<u>\$ (144,384)</u>	<u>\$ 433,153</u>
After Tax	\$ 422,371	\$ (84,474)	\$ 337,897	\$ (84,474)	\$ 253,423
Rounded	\$ 422,400	\$ (84,500)	\$ 337,900	\$ (84,500)	\$ 253,400

Pike County Light And Power Company  
Statement in Support of Change No. (13)  
For the Twelve Months Ending March 31, 2010 and March 31, 2011

Exhibit E-5  
Schedule 13

Deferred Credits

	<u>Actual Per Books at 3/31/09</u>	<u>Rate Year 2 Adjustments</u>	<u>Rate Year 2 As Adjusted</u>	<u>Rate Year 3 Adjustments</u>	<u>Rate Year 3 As Adjusted</u>
<u>Before Tax</u>					
Investigation Proceeds	\$ (28,000)	\$ 5,600	\$ (22,400)	\$ 5,600	\$ (16,800)
Electric Tax Refund	(26,566)	5,313	(21,253)	5,313	(15,940)
Depreciation Benefits - PSA	(30,400)	6,080	(24,320)	6,080	(18,240)
	<u>\$ (84,966)</u>	<u>\$ 16,993</u>	<u>\$ (67,973)</u>	<u>\$ 16,993</u>	<u>\$ (50,980)</u>
After Tax	\$ (49,711)	\$ 9,942	\$ (39,769)	\$ 9,942	\$ (29,826)
Rounded	\$ (49,700)	\$ 9,900	\$ (39,800)	\$ 9,900	\$ (29,900)

Pike County Light And Power Company  
Statement in Support of Change No. (14)  
For the Twelve Months Ending March 31, 2010 and March 31, 2011

Exhibit E-5  
Schedule 14

Deferred Gain From Sale of Property

	<u>Actual Per Books at 3/31/09</u>	<u>Rate Year 2 Adjustments</u>	<u>Rate Year 2 As Adjusted</u>	<u>Rate Year 3 Adjustments</u>	<u>Rate Year 3 As Adjusted</u>
Before Tax	\$(109,057)	\$ 21,811	\$ (87,246)	\$ 21,811	\$ (65,434)
After Tax	\$ (63,806)	\$ 12,761	\$ (51,045)	\$ 12,761	\$ (38,283)
Rounded	\$ (63,800)	\$ 12,800	\$ (51,000)	\$ 12,800	\$ (38,200)



Pike County Light And Power Company  
Statement in Support of Change No. (15)  
To Accumulated Deferred Income Taxes  
For the Twelve Months Ending March 31, 2010 and March 31, 2011

Exhibit E-5  
Schedule 15

	<u>Rate Year 1</u>	<u>Rate Year 2</u>	<u>Rate Year 3</u>
Beginning Balance	\$ 1,446,400	\$ 1,447,100	
Tax Depreciation - Normalized		700	700
Tax Depreciation - CIAC		-	-
Capitalized Overhead Section 263A		-	-
Net Additions (Change No. 15)		<u>700</u>	<u>700</u>
Ending Balance	<u>\$ 1,446,400</u>	<u>\$ 1,447,100</u>	<u>\$ 1,447,800</u>

Pike County Light & Power Co.  
Exhibit E-6 Electric Sales and Revenue

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<u>Schedule</u>	<u>Description</u>	<u>Pages</u>
1	Forecasted Electric Sales Volumes and Revenues	1

**PIKE COUNTY LIGHT & POWER COMPANY - ELECTRIC  
ELECTRIC SALES VOLUMES AND REVENUES FROM SALES VOLUMES BY SERVICE CLASSIFICATION  
FORECASTED 12 MONTHS ENDING MARCH 31, 2009**

Service Classification	Volumes (Thousands KWHR) (Column 1)	Sum of Monthly Billable Demand (MW) (Column 2)	REVENUES (\$000s) T&D Revenues at Current Rates (Column 3)
1 Residential	28,783		\$1,216
2 Secondary	31,889	108	\$1,235
2 Primary	14,995	33	\$447
03	208		\$36
04	<u>214</u>		<u>\$24</u>
Total Lighting	422		\$60
<b>Total Billed</b>	<b>76,089</b>	<b>141</b>	<b>\$2,958</b>
<b>Total Unbilled</b>	<b>(438)</b>		<b>(\$17)</b>
<b>Grand Total</b>	<b>75,651</b>	<b>141</b>	<b>\$2,941</b>

EXHIBIT\_\_(E-6)

*Note: Excludes Company Use Revenues and Sales*

EXHIBIT \_\_\_\_\_ (E-7)

**PIKE COUNTY LIGHT AND POWER COMPANY**

**COST OF SERVICE STUDY - ELECTRIC DEPARTMENT  
YEAR 2007**

**EXPLANATION OF DATA SOURCES AND COSTING METHODS**

**TABLE OF CONTENTS**

<b><u>SECTION</u></b>		<b><u>PAGE</u></b>
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III	Description of Allocation Factors - Table 7	5
IV	Description of Customer Classes	9
V	Rate of Return Statement - Table 1	11
VI	Rate Base - Table 2	12
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X	Customer Cost by Class - Table 6	22

**PIKE COUNTY LIGHT AND POWER COMPANY  
EMBEDDED COST OF SERVICE STUDY  
ELECTRIC DEPARTMENT  
YEAR 2007**

**I - SUMMARY**

The Embedded Cost of Service (ECOS) study allocates PIKE County Light and Power Company's costs among their respective service classes based on an analysis of the rate base, including book cost of plant, and the operating expenses, including operation and maintenance for the Electric Department for the calendar year 2007. The ECOS study methodology is based on a two-step procedure. First, the costs are functionalized and classified to **Operating Functions**, as shown in the ECOS study on **Tables 2** through **5**. The costs within each function are then allocated to **Customer Classes** based on appropriate physical quantities, such as coincident peak kW, or other appropriate bases of allocation, such as book cost of meters. The bases of cost allocation are shown in detail on **Table 7** as **Allocation Factors** and are further described below. The details of allocations by customer class are shown on **Tables 2** through **5**. The results of the cost allocation study are combined with class revenues to yield the rate of return statement by class shown on **Table 1**. The monthly average **Customer Costs by Class** is shown on **Table 6**. Revenues and costs allocated in this ECOS study are based on booked 2007 data. The revenues comprise the annual sales revenues for PIKE service classes. They exclude commodity related revenues, the System Benefits Charge (SBC) and gross receipts tax (GRT) revenues and represent a delivery revenue requirement.

**II - DESCRIPTION OF OPERATING FUNCTIONS – Tables 2, 3 and 5**

The operating functions shown on **Table 2, Rate Base, Table 3, Operating Expenses, and Table 5, Federal Income Taxes** are described below. Where applicable, these functions include fixed costs including an allocation of associated operating expenses, administrative & general (a & g) expenses, and federal income taxes (FIT).

**Line 1, Production**

The Production function is zero for this study.

**Line 2, Transmission**

The Transmission function represents Pike's share of transmission expenses as allocated according to the Power Supply Agreement (PSA) with O & R.

**Line 3, High Tension**

The (High Tension) function includes the fixed costs for the substations and feeders that provide the source of supply from the generating stations to the lower voltage substations and to the primary voltage high tension customers.

**Low Tension Distribution System-Demand Component:**

**Line 4, O.H. Transformers – Demand**

**Line 5, U.G. Transformers – Demand**

**Line 6, O.H. Lines – Demand**

**Line 7, U.G. Lines – Demand**

The fixed costs for the above functions are subdivided to show separately the functions associated with overhead (OH) and underground (UG) line transformers and the overhead and underground lines. The demand component includes the transformers and the evaluated costs of that portion of the secondary system for OH and UG Lines required to supply the connected load, above a base of zero load. The remainder is the customer component shown below on **Lines 8, 9, 10 and 11.**

**Low Tension Distribution System-Customer Component:**

**Line 8, O.H. Transformers – Customer**

**Line 9, U.G. Transformers – Customer**

**Line 10, O.H. Lines – Customer**

**Line 11, U.G. Lines – Customer**

The fixed costs for these functions are considered to be joint customer costs as distinguished from direct customer costs, since they represent the estimated costs of the minimum-size jointly-used network of distribution lines needed to serve customers under the existing conditions of customer density and geographical dispersion, on the assumption of little or no use of the service by any customer. Expressed in

another manner, the customer component is the cost of the smallest secondary system theoretically needed to physically connect all of the existing service points to line transformers, if the system was not required to supply any load.

**Line 12, Service Costs – O.H.**

**Line 13, Service Costs – U.G.**

These fixed costs represent overhead and underground service connections. The costs for these functions are considered to be direct customer costs since their service connections are attaching the customer to the distribution system.

**Line 14, Meter & Meter Installations**

The Meter and Meter Installations function includes the fixed costs for metering equipment on customers' premises. The costs for these functions are considered to be direct customer costs.

**Line 15, Install. on Custr. Premises**

The Installations on Customers' Premises function consists of O & M expenses for the services rendered principally for the inspection of new or altered customer installations, investigating and adjusting service complaints and performing emergency repairs. These costs are considered to be direct customer costs.

**Line 16, Street Lighting**

The Street Lighting function includes the fixed costs for street lighting and signal systems for the municipal class and residential and commercial lighting classes.

**Line 17, Customer Accounting**

The Customer Accounting function consists of meter reading expenses, customer records and collection expenses and billing and accounting expenses.

**Line 18, Uncollectibles**

The Uncollectibles function includes the operation and maintenance expenses for uncollectibles accounts.



**Line 19, Customer Service**

Customer Service expenses were reduced for SBC expenses. The remainder of the account includes expenses related to customer service and informational expenses and informational and instructional advertising expenses.

**Line 20, Revenue Items**

The Revenue function is used in Working Capital, Table 2, Page 13 and Payroll & Miscellaneous Taxes Table 3, Page 7.

**III - DESCRIPTION OF ALLOCATION FACTORS - Table 7, Pages 1 through 3**

<b><u>Factor</u></b>	<b><u>Line No.</u></b>	<b><u>Description and Source</u></b>
<b>D01</b>	<b>2</b>	<b><u>Transmission</u></b>  The D01, Transmission, allocation factor, summer system peak responsibility demand, is based on the highest five day, four-hour averages.
<b>D02</b>	<b>5</b>	<b><u>High Tension</u></b>  The D02, High Tension allocation factor is based on the Non-coincident maximum high tension class demand at generating stations.
<b>D03</b>	<b>8</b>	<b><u>Low Tension – Overhead and Underground</u></b>  The D03, Low Tension – Overhead and Underground, allocation factor was based on the associated book costs using the average of non-coincident maximum 60 cycle class demands and individual customer billing demands for summer and winter seasons.
<b>E01</b>	<b>11</b>	<b><u>Annual kWh Sales</u></b>  E01, Annual kWh Sales, is the total annual kilowatt-hour sales for Pike’s service classes.

C01	14	<p><b><u>O.H. Lines and U.G. Lines &amp; Transformers - Customer Component</u></b></p> <p>C01, Overhead and Underground Lines &amp; Transformers – Customer is allocated to service classes based on the number of customers excluding the primary commercial and industrial class. Number of luminaires was used to allocate these costs to the Street Lighting classes.</p>
C02	17	<p><b><u>Services – Overhead and Underground</u></b></p> <p>The C02 allocation factor is based on the Non-coincident maximum high tension class demand at generating stations. These costs were not allocated to the Municipal Street Lighting and Residential &amp; Commercial Private Lighting classes.</p>
C03	20	<p><b><u>Install. on Customers' Premises</u></b></p> <p>The C03, Installations on Customers' Premises, allocation factor is based on the direct allocation of expenses related to installations on customers' premises.</p>
C04	23	<p><b><u>Street Lighting</u></b></p> <p>The C04, Street Lighting, allocation factor is based on individual customer maximum demands of the lighting classes.</p>
S01	26	<p><b><u>Meter &amp; Meter Installations</u></b></p> <p>The S01, Meter &amp; Meter Installations, allocation factor is the year-end book cost of meters and meter installations and was based on a detailed study of customers' meters for each service classification.</p>

S02	29	<p><b><u>Customer Account Expense</u></b></p> <p>The S02, Customer Account Expense, allocation factor was developed by allocating the accounts that comprise the total customer accounting expenses. The allocation factor consists of Account 902, Meter Reading allocated to the service classes based on the number of meters, Account 903, Customer Records allocated based on the number of customers, Account 901, Supervision and Account 905, Miscellaneous allocated based on the sum of allocations of Account 902 and Account 903.</p>
S03	32	<p><b><u>Uncollectibles</u></b></p> <p>The S03, Uncollectibles Expense, allocation factor is based on class revenues.</p>
S04	35	<p><b><u>Customer Service</u></b></p> <p>The S04, Customer Service Expenses, are allocated based on number of customers.</p>
S05	38	<p><b><u>Payroll &amp; Miscellaneous Taxes</u></b></p> <p>The S05 allocator was used to allocate State Income Tax - Pike Corporate Business Tax to the classes on the basis of revenues.</p>
S06	41	<p><b><u>Working Capital</u></b></p> <p>The S06 allocator was used to allocate PA Corporate Net Income Taxes to the classes on the basis of revenues.</p>
R01	44	<p><b><u>Revenues from Sales</u></b></p> <p>The R01, Revenues from Sales, allocation factor is based on annual delivery revenues.</p>

**R02**            **47**            **Other Revenues**

The R02, Other Electric Revenues, is comprised of miscellaneous revenue items allocated to the classes based on revenues.

**R99**            **50**            **Null Revenue Factor**

**K01**            **52**            **Number of Customers**

K01, Number of Customers, is the annual number of customers for Pike's service classes.

#### IV - DESCRIPTION OF CUSTOMER CLASSES

The customer classes consist of:

<b>Total Company</b>	<b><u>Total Company</u></b> - The sum of Pike's service classes, (Powerpick customers priced as full service).
<b>Total Residential</b>	<b><u>Total Residential</u></b> - The sum of Pike's residential service classes.
<b>Total C&amp;I Secondary</b>	<b><u>Total C&amp;I Secondary</u></b> - The sum of Pike's commercial & industrial secondary classes.
<b>Total C&amp;I Primary</b>	<b><u>Total C&amp;I Primary</u></b> - The sum of Pike's commercial & industrial primary classes.
<b>Total Muni Str. Ltg</b>	<b><u>Total Muni Str. Ltg</u></b> - Pike's municipal street lighting class.
<b>Total Pvt. Ltg.</b>	<b><u>Total Com Pvt. Ltg</u></b> - The sum of Pike's private lighting classes.
<b>S.C. No. 1 w Sp Htg.</b>	<b><u>Residential w Space Heating</u></b> - Applicable to residential customers with permanently installed electric space heating as the sole source of space heating on the premises.
<b>S.C. No. 1 w Sp &amp; Wtr. Htg.</b>	<b><u>Residential w Space &amp; Water Heating</u></b> - Applicable to residential customers with both space and water heating.
<b>S.C. No. 2 General Service</b>	<b><u>General Service</u></b> - Applicable to general non-residential customers.
<b>S.C. No. 2 Sep Met Sp Htg</b>	<b><u>Separately Metered Space Heating</u></b> - Separately metered service applicable to non-residential customers with 10 kW or more of permanently installed space heating equipment.

**S.C. No. 2 Sec Non Met**

**Secondary Non Metered** - Applicable to non-residential customers with equipment having a total rated capacity of less than 2 kW at any one location that is operated on a fixed schedule and has a definitely determinable demand.

**S.C. No. 2 Sec Non Dem Met**

**Secondary Non Demand Metered** - Applicable to non-residential customers with demands below 5 kW.

**S.C. No. 2 Primary**

**Primary** - Applicable to non-residential primary metered customers.

**S.C. No. 3 Muni Str. Ltg .**

**Municipal Street Lighting** - Applicable to lighting of streets, highways, roadways and ways open to the public use.

**S.C. No. 4 Res Pvt. Ltg.**

**Residential Private Lighting** - Applicable to residential outdoor lighting areas, beyond the limits of public streets, highways or roadways.

**S.C. No. 4 Com Pvt. Ltg.**

**Commercial Private Lighting** - Applicable to commercial outdoor lighting areas, beyond the limits of public streets, highways or roadways.

**V – RATE OF RETURN STATEMENT – Table 1, Pages 1 through 3**

The class allocations of the functional elements shown on **Table 2, Pages 19 through 21, Total Rate Base; Operating Expenses, Table 3, Pages 1 through 12; Operating Revenues, Table 4, Pages 1 through 3; and Federal Income Taxes, Table 5, Pages 1 through 6**, were consolidated and tabulated in summary form on the **Rate of Return Statement, Table 1, Pages 1 through 3** detailed below:

**Line 1, Total Operating Revenues**

Total Operating Revenues are from **Table 4, Pages 1 through 3, Line 4**.

**Line 4, Operation & Maintenance**

Total Operation & Maintenance Expenses are from **Table 3, Pages 1 through 3, Line 27**.

**Line 5, Depreciation & Amortization**

Total Depreciation & Amortization are from **Table 3, Pages 4 through 6, Line 27**.

**Line 6, Payroll & Misc. Taxes**

Total Payroll & Misc. Taxes are from **Table 3, Pages 7 through 9, Line 27**.

**Line 7, Federal Income Tax**

Total Federal Income Tax Computation is from **Table 5, Pages 4 through 6, Line 27**.

**Line 9, Total Operating Expenses**

Total Operating Expenses including Income Taxes is the sum of **Lines 4 through 7**.

**Line 11, Utility Operating Income**

Total Utility Operating Income (return) is Total Operating Revenues on **Line 1** less Total Operating Expenses on **Line 9**.

**Line 13, Utility Rate Base**

Total Utility Rate Base (Total Rate Base) is from **Table 2, Pages 19 through 21, Line 27**.

**Line 15, Rate of Return (%)**

The Rate of Return on Utility Rate Base (system rate of return) shown on **Line 15** is calculated by dividing Utility Operating Income on **Line 11** by Utility Rate Base on **Line 13**.

### **Line 17, Index**

The Index (Relative Rate of Return), **Line 17**, is the ratio of the class rate of return to the system rate of return of 2.33%.

### **Line 19, Deviation**

The Deviation is the extent (in percentage points) by which the actual rate of return for each customer class deviates from the total system rate of return.

### **Line 21 and 22, $\pm$ 10% Tolerance Bands**

A  $\pm$ 10 tolerance band has been computed around the system rate of return and is shown on **Lines 21 and 22**, respectively.

### **Lines 24 and 25, Revenue Surplus and Deficiency**

The Revenue Surplus or Deficiency for returns that fall outside the tolerance band are shown on **Lines 24 and 25**, respectively.

## **VI - RATE BASE - Table 2, Pages 1 through 21**

The Rate Base is shown on **Table 2, Pages 1 through 21**. The Total Rate Base shown on **Table 2, Pages 19 through 21** is the sum of book costs for **Plant in Service, Table 2, Pages 1 through 3**, for distribution plant, less the corresponding **Reserve for Depreciation, Table 2, Pages 4 through 6** plus **Non-Interest Bearing CWIP, Table 2, Pages 7 through 9** (resulting in **Net Plant, Table 2, Pages 10 through 12**) plus **Working Capital, Table 2, Pages 13 through 15** plus **Rate Base Adjustments, Table 2, Pages 16 through 18**.

### **Plant in Service - Table 2, Pages 1 through 3**

The total book costs for electric plant in service shown on **Table 2, Pages 1 through 3** are costs comprised of the distribution plant in service book costs from the Company's accounting data organized by Account shown functionalized on work paper **Book Cost of Plant Summary 2007**.



**Description of Plant in Service – Table 2, Pages 1 through 3**

**Account 301 through Account 303 – Intangible Plant**

This cost was functionalized on Distribution Plant.

**Account 310 through Account 346 - Production**

The book cost for production plant is zero.

**Account 350 through Account 359 – Transmission**

The book cost for transmission plant is zero.

**Distribution Plant in Service Book Costs:**

**Account 360, Land and Land Rights**

The cost is for land occupied by substations and distribution facilities and was functionalized to the High Tension function.

**Accounts 361 and Account 362, Structures and Improvement and Station Equipment**

The costs represent the substation structures and equipment plant. These costs were functionalized to the High Tension function.

**Account 364, Poles, Towers and Fixtures**

These costs represent the book costs for Poles, Towers and Fixtures used for High Tension conductors and Low Tension conductors. The property record data for Account 365 - provided the footage for Overhead Conductors broken down between primary and secondary voltages or High and Low Tension respectively. The Poles, Towers and Fixtures book cost were then multiplied by the primary and secondary percentages of the overhead conductors. The primary costs were directly assigned to the High Tension function. The secondary costs were subdivided into demand and customer components utilizing the Overhead Conductors percentages from the minimum system as described in Accounts 364-367, Low Tension Demand and Customer Component below.

### **Account 365, Overhead Conductors**

These costs were obtained from book cost data. The property record data for Account 365 provided the breakdown of primary and secondary voltages. The cost associated with primary voltage was directly assigned to the High Tension 60 Cycle function. The secondary voltage cost was subdivided into demand and customer components utilizing the Overhead Conductor percentages from the minimum system as described in Accounts 364-367, Low Tension Demand and Customer Component below.

### **Account 366, Underground Conduit**

These costs were functionalized on the same basis as Account 367, Underground Conductors as described in PSC Accounts 364-367, Low Tension Demand and Customer Component below.

### **Account 367, Underground Conductors**

The costs for Account 367 are obtained from book cost data. The property record data for Account 367 provided the breakdown between primary and secondary voltages. The primary voltage costs associated with high tension were directly assigned to the High Tension function. The low-tension (secondary voltage) costs were subdivided into demand and customer components utilizing the Underground Conductor percentages from the minimum system as described in Accounts 364-367, Low Tension Demand and Customer Component below.

### **Accounts 364-367, Low Tension Demand and Customer Component**

The total low-tension cost was further subdivided into demand and customer components using a minimum system methodology. This methodology employs the "Minimum Size" method to classify low-tension distribution plant as either demand-related or customer-related.

### **Account 368, Line Transformers**

The total book cost of transformers and rectifiers was subdivided into demand and customer components using a minimum system methodology. This methodology employs the "Minimum Size" method to classify low-tension distribution plant as either demand-related or customer-related.

### **Account 369, Services**

The total book cost of services was directly assigned to the overhead and underground services functions based on the Company's property records data.

### **Account 370, Meter and Meter Installations**

The total book cost of Meter and Meter Installations was functionalized direct to the Meter and Meter Installation function.

### **Account 373, Street Lighting and Signal Systems**

The total book cost for street lighting and signal systems was assigned directly to the Street Lighting function.

### **Total Plant**

Total plant is the sum of Accounts 301 - 373.

### **Reserve for Depreciation - Table 2, Pages 4 through 6**

The **Reserve for Depreciation** is shown by function on **Table 2, Pages 4 through 6**. The total costs were functionalized based on the corresponding book cost of plant. The **Retirement Work in Progress** was functionalized on total distribution book cost of plant.

### **Non-Interest Bearing CWIP (Construction Work In Progress) -Table 2, Pages 7 through 9**

The year end balance of Non-Interest Bearing Construction Work in Progress on which interest is not capitalized, is shown in total on **Line 27 of Table 2, Pages 7 through 9**. This amount was functionalized based on total distribution book cost of plant shown on **Table 2, Pages 1 through 3**.

### **Net Plant-Table 2, Pages 10 through 12**

**Net Plant** shown on **Table 2, Pages 10 through 12** by function by class is the sum of **Table 2, Pages 1 through 3, Book Cost of Plant (Plant in Service)**, less **Table 2, Pages 4 through 6, Reserve for Depreciation**, plus **Table 2, Pages 7 through 9, Non-Interest Bearing CWIP**.

### Working Capital – Table 2, Pages 13 through 15

Working Capital appears on **Table 2, Pages 13 through 15** and is composed of the cost of materials and supplies on hand, prepayments of operating taxes, insurance, and a cash allowance for operation and maintenance expenses representing a lag of revenue collection over payments for costs incurred.

### Rate Base Adjustments – Table 2, Pages 16 through 18

The year end balance of Rate Base Adjustments is shown in total on Line 27 of **Table 2, Pages 16 through 18**.

### Total Rate Base – Table 2, Pages 19 through 21

The sum of **Net Plant, Pages 10 through 12, Working Capital, Pages 13 through 15** and **Rate Base Adjustments, Pages 16 through 18** comprises the **Total Rate Base**, shown on **Table 2, Pages 19 through 21**.

## VII – OPERATING EXPENSES – Table 3, Pages 1 through 12

Total Operating Expenses are shown on **Table 3, Pages 1 through 12**. **Table 3, Pages 10 through 12, Total Operating Expenses** represents the sum of expenses by function, by class of **Table 3, Pages 1 through 3, Operation & Maintenance Expenses** and Total Other Expenses (**Table 3, Pages 4 through 6, Depreciation & Amortization, and Table 3, Pages 7 through 9, Payroll & Misc. Taxes**). The major types of operation and maintenance expenses are for Transmission, Distribution, Customer Accounting, Uncollectibles and Customer Service including Miscellaneous Revenue Credits and Administrative and General Expenses.

### Operation & Maintenance Expenses – Table 3, Pages 1 through 3

The total operation and maintenance expenses shown in **Table 3, Pages 1 through 3, Operation & Maintenance** are comprised of the transmission, distribution, customer accounting and customer service expenses as reflected in the Company's accounting data organized by account including allocations for miscellaneous revenue credits and administrative and general expenses shown functionalized on **work paper, Operation and Maintenance Expenses Summary** described below:

**Production Operation and Maintenance Expenses:**

**Accounts 500 through 557, Production Expenses**

Production expenses are not reflected in this study.

**Accounts 560 through 572, Transmission Expenses**

These costs represent transmission expenses for the transmission portion of the PSA, functionalized directly to the Transmission function.

**Account 580, Supervision and Engineering**

The Supervision and Engineering expense related to Operation was reallocated (based on the column titled “Reallocation”) to PSC Accounts 581 through 588.

**Account 581, Load Distribution**

These costs were assigned directly to the High Tension function.

**Account 582, Station Equipment**

These costs were functionalized to the High Tension function based on their related book cost.

**Account 583, Overhead Lines**

These costs were functionalized based on the functionalization of the book costs of Account 364 Poles, Towers and Fixtures, Account 365 Overhead Conductors and Account 368 Line Transformers - Overhead.

**Account 584, Underground Lines**

These costs were functionalized based on the book costs of PSC Account 366 Underground Conduit, Account 367, Underground Conductors and Account 368 Line Transformers - Underground.

**Account 585, Street Lighting**

The costs were zero for this account.

**Account 586, Meters**

The costs were functionalized directly to the Meter & Meter Installation function.

**Account 587, Customer Installations Expenses**

The costs were functionalized directly to the Installation on Customers' Premises function.

**Account 588, Miscellaneous Distribution Expenses**

The costs were functionalized based on the book costs of the total distribution plant.

**Total Distribution Operation Expense**

Total of Accounts 580 through 588.

**Account 590, Supervision and Engineering**

The costs were zero for this account.

**Account 591, Structures**

The costs were zero for this account.

**Account 592, Station Equipment**

The costs were functionalized to the High Tension function based on Account 362, Station Equipment.

**Account 593, Overhead Lines**

The costs were functionalized based on Account 364 Poles, Towers and Fixtures, Account 365 Overhead Conductors and Account 369 Services.

**Account 594, Underground Lines**

The costs were functionalized based on Account 366 Underground Conduit, Account 367 Underground Conductors and Account 369 Services.

**Account 595, Line Transformers**

The costs were zero for this account.

**Account 596, Street Lighting**

The costs were functionalized directly to the Street Lighting function.

**Account 597, Meters**

The costs were functionalized directly to the Meter & Meter Installation function.

**Account 598, Miscellaneous Distribution Plant**

The costs were functionalized on total Distribution plant.

**Total Distribution Maintenance Expenses**

Total of PSC Accounts 590 through 598.

**Total Distribution Excluding Rents**

The sum of Total Distribution Operation and Maintenance Expenses.

**Account 589, Distribution Rents**

The costs were functionalized based on book costs of total distribution plant and adjusted to reflect a portion of the PSA adjustment.

**Account 599, Joint Expenses**

The costs were functionalized on total Distribution plant.

**Total Rents**

The sum of Account 589 and 599.

**Total Distribution Expenses**

The sum of Total Distribution Expenses and Total Rent Expenses.

**Total Customer Accounting**

The total customer accounting expenses of PSC Accounts 901 through 906 were functionalized directly to the Customer Accounting function.

**Uncollectibles**

Account 904, Uncollectible expenses were functionalized directly to the Uncollectibles function.

**Accounts 907 through 916, Customer Service**

Customer Service expenses, excluding costs related to the system benefit charge were functionalized directly to the Customer Service function.

**Accounts 920 through 931, Administrative and General Expenses**

Administrative and General Expenses consist of Accounts 920 through 931. Labor was used as the basis of functionalization for Accounts 920, 921, 922, 923, 926, 929, 930.2, 930.4, 931.2 and 932. PSC Accounts 924, 925, 928 and 930.1, 931.1 and 933.1 were functionalized based on distribution operation and maintenance expenses excluding rents.

**Unadjusted Total O & M**

The sum of total O & M and A&G expenses.

**Miscellaneous Revenue Credits**

The functionalized Miscellaneous Revenue Credits on **Line 62** represent the adjusted sum of PSC Accounts 449, 451, 454 and 456. (Excluding normalizations, revenues included in priced-out revenues, and other electric revenues.)

**Total Adjusted O & M**

The sum of Total Adjusted O & M and Miscellaneous Revenue Credits.

**Other Expenses:**

**Payroll & Misc. Taxes**

The Payroll & Miscellaneous Taxes shown on **Table 3, Pages 7 through 9** were functionalized on a labor basis.

**Depreciation & Amortization**

The Depreciation & Amortization Expenses shown on **Table 3, Pages 4 through 6**, were identified with each plant account or group of accounts and functionalized in proportion to the corresponding depreciation reserve costs shown on **Table 2, Pages 4 through 6**.

**Total Other Expenses**

The Total Other Expenses is the sum of Payroll & Miscellaneous Taxes, and Depreciation & Amortization.



### **Total Operating Expenses**

The Grand Total tabulated on **Table 3, Pages 10 through 12, Total Operating Expenses**, is the sum of Total Adjusted O & M and Total Other Expenses.

### **VIII - OPERATING REVENUES – Table 4, Pages 1 through 3**

Operating Revenues are tabulated on **Table 4, Pages 1 through 3**. The **Total Operating Revenues** are shown on **Line 4** calculated by the sum of **Lines 1 through 2** as shown below:

#### **Line 1, Revenue from Sales**

Revenues from Sales are the annual T&D revenues.

#### **Line 2, Other Revenues**

Other Revenues are the annual miscellaneous electric revenues.

#### **Line 4, Total Operating Revenues**

Total Operating Revenues are the sum of **Line 1** and **Line 2**.

### **IX - FEDERAL INCOME TAXES – Table 5, Pages 1 through 6**

**Federal Income Taxes** are shown on **Table 5, Pages 1-6**. **Total Federal Income Taxes** appearing on **Table 5, Pages 4-6** are calculated at 35% of taxable income plus **Table 5, Pages 1-3, FIT Adjustments** from work paper, Functionalization of Total FIT Adjustments. These FIT amounts by function are not the final FIT amounts because they do not include the revenue functional amounts that are determined in subsequent calculations. Results are presented on a functional basis to maintain a consistent report format. The results shown on a total basis on **Line 27 of Table 5, Pages 4-6**, represent the total federal income tax by class.

#### **Federal Income Tax Adjustments - Pages 1-3**

FIT Adjustments including Interest Synchronization are the sum of FIT Deductions and FIT Additions. The adjustments are calculated in three steps:

First - FIT Deductions are listed and each individual cost causation (for functionalization purposes) are identified. Each individual deduction item is multiplied by 35% and the resulting sign is reversed.

Second - FIT Additions are listed and matched to their corresponding tax deduction. Individual deductions from above are added to the corresponding tax additions resulting in a net tax adjustment for each individual tax item. Any net tax adjustment of an individual item resulting in less than \$1000 is then adjusted to zero for simplification.

Third - The resulting net tax adjustment of all individual tax items with the same cost causation are aggregated and then functionalized on the applicable bases. This results in a total FIT Adjustment by function, as shown in **Table 5, Pages 1-3**.

#### **Federal Income Tax Computation - Pages 4-6**

To determine total Federal Income Taxes, the following procedure is utilized:

- 1) Operating expenses are subtracted from Total Revenues, to yield Operating Income before FIT (transmission expenses from the PSA adjustment are excluded from this calculation as they represent fully loaded revenue requirement dollars).
- 2) The Operating Income before FIT is multiplied by the Federal tax rate of 35%, producing the FIT.
- 3) FIT Adjustments are added to the FIT calculation, to produce the Total Federal Income Tax by class, appearing on the last line of **Table 5, Pages 4-6**.

#### **X – CUSTOMER COST BY CLASS - Table 6, Pages 1 through 3**

These are electric system costs considered to be customer-related and are shown, by class, on **Table 6, Pages 1 through 3**.

#### **Line 1, Number of Customers**

The number of customers in each class from the allocation factor **K01**.

#### **Line 3, Rate Base**

The customer-related rate base shown for each class from **Table 2, Pages 19 through 21, Line 24**.

**Line 5, Total Customer Operating Exps.**

The customer-related operating expenses shown from **Table 3, Pages 10 through 12, Line 24.**

**Line 6, Monthly Op. Exps Cost/Cust**

The monthly amount for operating expenses per customer shown on **Line 6** is calculated starting with **Line 5** divided by **Line 1**, then the results are divided by 12.

**Line 8, Return @ 2.33% (Customer)**

The applied rate of return on rate base of 2.33% is the Total System Rate of Return developed in this study, shown on **Table 1, Page 1, Column 1, Line 15.**

**Line 9, F.I.T. Percent on Return**

The F.I.T. Percent on Return, **Line 9** developed by dividing the sum of the Total Company Federal Income Taxes as shown on **Table 1, Page 1, Column 1, Line 7** by the Total System Utility Operating Income (return) shown on **Table 1, Column 1, Line 11.**

**Line 10, Income Tax On Return**

The Return of **Line 8** multiplied by the F.I.T. Percent on Return **Line 9**, results in the Income Taxes on Return on a class-by-class basis.

**Line 11, Total Return & F.I.T.**

The Total Return & F.I.T. shown on **Line 11** is the sum of **Line 8**, Return and **Line 10**, Income Tax on Return.

**Line 12, Monthly Ret. FIT Cost/Cust.**

The monthly amount for Return and Income Taxes per customer is calculated starting with **Line 11** divided by **Line 1**, then the results are divided by 12.

**Line 14, Monthly Customer Costs**

The Monthly Customer Costs are the sum of **Line 6** and **Line 12.**

	TOTAL COMPANY (1)	TOTAL RESIDENTIAL (2)	TOTAL C&I SECONDARY (3)	TOTAL C&I PRIMARY (4)	TOTAL MUNI STR LTG (5)	TOTAL PVT LTG (6)	
<b>RATE OF RETURN STATEMENT</b>							
1	TOTAL OPERATING REVENUES	2,933,742	1,196,154	1,233,261	451,861	32,335	20,131
2							
3	OPERATING EXPENSES						
4	OPERATION & MAINTENANCE	2,250,191	1,120,171	882,374	194,866	25,683	27,096
5	DEPRECIATION	330,457	148,336	135,743	31,661	8,516	6,200
6	PAYROLL & MISC. TAXES	63,159	29,470	25,817	6,389	802	680
7	FEDERAL INCOME TAX	86,303	(45,263)	60,711	76,970	(1,187)	(4,929)
8							
9	TOTAL OPERATING EXPENSES	2,730,111	1,252,715	1,104,646	309,886	33,815	29,048
10							
11	UTILITY OPERATING INCOME	203,631	(56,561)	128,615	141,975	(1,480)	(8,917)
12							
13	UTILITY RATE BASE	8,725,589	3,833,857	3,723,801	940,670	137,756	89,505
14							
15	RATE OF RETURN (%)	2.33%	-1.48%	3.45%	15.09%	-1.07%	-9.96%
16							
17	INDEX	1.00	-0.63	1.48	6.47	-0.46	-4.27
18							
19	DEVIATION	0.00	-3.81	1.12	12.76	-3.41	-12.30
20							
21	TOLERANCE BAND +10%	2.57%					
22	TOLERANCE BAND -10%	2.10%					
23							
24	REVENUE SURPLUS	269,222	24,894	63,056	181,272	0	0
25	REVENUE DEFICIENCY	274,716	239,597	11,781	0	6,728	16,611

	RESID SC1 W/ SP HTG (7)	RESID SC1 W/SP & WTR HTG (8)	C&I SC2 GENERAL SERVICE (9)	C&I SC2 SEP MET SP HTG (10)	C&I SC2 SEC NON MET (11)	
<b>RATE OF RETURN STATEMENT</b>						
1	TOTAL OPERATING REVENUES	967,586	228,568	1,177,796	13,604	23,933
2						
3	OPERATING EXPENSES					
4	OPERATION & MAINTENANCE	959,927	160,244	835,177	8,809	13,739
5	DEPRECIATION	127,702	20,635	129,892	1,332	1,772
6	PAYROLL & MISC. TAXES	25,125	4,346	24,599	260	375
7	FEDERAL INCOME TAX	(58,836)	13,573	60,731	1,057	2,699
8						
9	TOTAL OPERATING EXPENSES	1,053,918	198,797	1,050,400	11,458	18,586
10						
11	UTILITY OPERATING INCOME	(86,332)	29,771	127,396	2,147	5,347
12						
13	UTILITY RATE BASE	3,304,470	529,387	3,578,108	36,115	43,741
14						
15	RATE OF RETURN (%)	-2.61%	5.62%	3.56%	5.94%	12.22%
16						
17	INDEX	-1.12	2.41	1.53	2.55	5.24
18						
19	DEVIATION	-4.95	3.29	1.23	3.61	9.89
20						
21	TOLERANCE BAND +10%					
22	TOLERANCE BAND -10%					
23						
24	REVENUE SURPLUS	0	24,894	54,681	1,876	6,499
25	REVENUE DEFICIENCY	239,597	0	0	0	0
		=====	=====	=====	=====	=====

	C&I SC2 SEC NON DM ME (12)	C&I SC2 PRIMARY (13)	SC3 MUNI STR LTG (14)	SC4 RES PVT LTG (15)	SC4 COM PVT LTG (16)	
<b>RATE OF RETURN STATEMENT</b>						
1	TOTAL OPERATING REVENUES	17,928	451,861	32,335	4,873	15,258
2						
3	OPERATING EXPENSES					
4	OPERATION & MAINTENANCE	24,650	194,866	25,683	8,233	18,863
5	DEPRECIATION	2,747	31,661	8,516	1,698	4,503
6	PAYROLL & MISC. TAXES	583	6,389	802	201	479
7	FEDERAL INCOME TAX	(3,776)	76,970	(1,187)	(1,892)	(3,037)
8						
9	TOTAL OPERATING EXPENSES	24,203	309,886	33,815	8,240	20,808
10						
11	UTILITY OPERATING INCOME	(6,275)	141,975	(1,480)	(3,367)	(5,550)
12						
13	UTILITY RATE BASE	65,837	940,670	137,756	26,839	62,666
14						
15	RATE OF RETURN (%)	-9.53%	15.09%	-1.07%	-12.55%	-8.86%
16						
17	INDEX	-4.08	6.47	-0.46	-5.38	-3.79
18						
19	DEVIATION	-11.86	12.76	-3.41	-14.88	-11.19
20						
21	TOLERANCE BAND +10%					
22	TOLERANCE BAND -10%					
23						
24	REVENUE SURPLUS	0	181,272	0	0	0
25	REVENUE DEFICIENCY	11,781	0	6,728	6,048	10,563

			TOTAL COMPANY (1)	TOTAL RESIDENTIAL (2)	TOTAL C&I SECONDARY (3)	TOTAL C&I PRIMARY (4)	TOTAL MUNI STR LTG (5)	TOTAL PVT LTG (6)
<b>PLANT IN SERVICE</b>								
1	PRODUCTION	E E01	0	0	0	0	0	0
2	TRANSMISSION	D D01	0	0	0	0	0	0
3	HIGH TENSION	D D02	6,340,373	2,253,986	2,929,200	1,117,935	19,626	19,626
4	TRANSFORMERS - OH - DEMAND	D D03	362,855	166,621	194,047	0	1,088	1,099
5	TRANSFORMERS - UG - DEMAND	D D03	193,909	89,042	103,698	0	581	587
6	OH LINES DEMAND	D D03	1,630,448	748,694	871,927	0	4,888	4,938
7	UG LINES DEMAND	D D03	13,498	6,198	7,218	0	40	41
8	TRANSFORMERS - OH - CUSTOMER	C C01	1,124,537	810,026	205,886	0	74,083	34,542
9	TRANSFORMERS - UG - CUSTOMER	C C01	336,574	242,441	61,621	0	22,173	10,338
10	OH LINES CUSTOMER	C C01	767,172	552,609	140,457	0	50,541	23,565
11	UG LINES CUSTOMER	C C01	37,636	27,110	6,891	0	2,479	1,156
12	SERVICES - OH	C C02	592,793	212,049	275,572	105,172	0	0
13	SERVICES - UG	C C02	342,369	122,469	159,157	60,743	0	0
14	METER & METER INSTALLATIONS	C S01	516,930	252,341	260,359	4,230	0	0
15	INSTALL. ON CUSTR PREMISES	C C03	0	0	0	0	0	0
16	STREET LIGHTING	C C04	132,181	0	0	0	65,423	66,756
17	CUSTOMER ACCOUNTING	C S02	0	0	0	0	0	0
18	UNCOLLECTIBLES	C S03	0	0	0	0	0	0
19	CUSTOMER SERVICE	C S04	0	0	0	0	0	0
20	REVENUES	R R99	0	0	0	0	0	0
21								
22	TOTAL DEMAND	D	8,541,083	3,264,542	4,106,091	1,117,935	26,224	26,292
23	TOTAL ENERGY	E	0	0	0	0	0	0
24	TOTAL CUSTOMER	C	3,850,192	2,219,045	1,109,943	170,145	214,700	136,359
25	TOTAL REVENUE	R	0	0	0	0	0	0
26								
27	TOTAL		12,391,275	5,483,587	5,216,034	1,288,080	240,923	162,651

			RESID SC1 W/ SP HTG (7)	RESID SC1 W/SP & WTR HTG (8)	C&I SC2 GENERAL SERVICE (9)	C&I SC2 SEP MET SP HTG (10)	C&I SC2 SEC NON MET (11)
<b>PLANT IN SERVICE</b>							
1	PRODUCTION	E E01	0	0	0	0	0
2	TRANSMISSION	D D01	0	0	0	0	0
3	HIGH TENSION	D D02	1,961,858	292,127	2,863,151	26,042	20,758
4	TRANSFORMERS - OH - DEMAND	D D03	143,766	22,855	188,742	2,164	1,155
5	TRANSFORMERS - UG - DEMAND	D D03	76,828	12,214	100,864	1,157	617
6	OH LINES DEMAND	D D03	645,996	102,698	848,092	9,726	5,190
7	UG LINES DEMAND	D D03	5,348	850	7,021	81	43
8	TRANSFORMERS - OH - CUSTOMER	C C01	685,721	124,306	160,190	2,480	16,475
9	TRANSFORMERS - UG - CUSTOMER	C C01	205,236	37,205	47,945	742	4,931
10	OH LINES CUSTOMER	C C01	467,806	84,803	109,284	1,692	11,240
11	UG LINES CUSTOMER	C C01	22,950	4,160	5,361	83	551
12	SERVICES - OH	C C02	184,566	27,482	269,358	2,450	1,953
13	SERVICES - UG	C C02	106,597	15,873	155,568	1,415	1,128
14	METER & METER INSTALLATIONS	C S01	218,600	33,740	249,566	2,725	0
15	INSTALL. ON CUSTR PREMISES	C C03	0	0	0	0	0
16	STREET LIGHTING	C C04	0	0	0	0	0
17	CUSTOMER ACCOUNTING	C S02	0	0	0	0	0
18	UNCOLLECTIBLES	C S03	0	0	0	0	0
19	CUSTOMER SERVICE	C S04	0	0	0	0	0
20	REVENUES	R R99	0	0	0	0	0
21							
22	TOTAL DEMAND	D	2,833,797	430,745	4,007,870	39,170	27,764
23	TOTAL ENERGY	E	0	0	0	0	0
24	TOTAL CUSTOMER	C	1,891,476	327,569	997,273	11,587	36,278
25	TOTAL REVENUE	R	0	0	0	0	0
26							
27	TOTAL		4,725,273	758,314	5,005,142	50,757	64,042



			C&I SC2 SEC NON DM ME' (12)	C&I SC2 PRIMARY (13)	SC3 MUNI STR LTG (14)	SC4 RES PVT LTG (15)	SC4 COM PVT LTG (16)
<b>PLANT IN SERVICE</b>							
1	PRODUCTION	E E01	0	0	0	0	0
2	TRANSMISSION	D D01	0	0	0	0	0
3	HIGH TENSION	D D02	19,249	1,117,935	19,626	4,529	15,097
4	TRANSFORMERS - OH - DEMAND	D D03	1,985	0	1,088	247	852
5	TRANSFORMERS - UG - DEMAND	D D03	1,061	0	581	132	455
6	OH LINES DEMAND	D D03	8,919	0	4,888	1,109	3,830
7	UG LINES DEMAND	D D03	74	0	40	9	32
8	TRANSFORMERS - OH - CUSTOMER	C C01	26,740	0	74,083	13,027	21,515
9	TRANSFORMERS - UG - CUSTOMER	C C01	8,003	0	22,173	3,899	6,440
10	OH LINES CUSTOMER	C C01	18,242	0	50,541	8,887	14,678
11	UG LINES CUSTOMER	C C01	895	0	2,479	436	720
12	SERVICES - OH	C C02	1,811	105,172	0	0	0
13	SERVICES - UG	C C02	1,046	60,743	0	0	0
14	METER & METER INSTALLATIONS	C S01	8,069	4,230	0	0	0
15	INSTALL. ON CUSTR PREMISES	C C03	0	0	0	0	0
16	STREET LIGHTING	C C04	0	0	65,423	14,687	52,071
17	CUSTOMER ACCOUNTING	C S02	0	0	0	0	0
18	UNCOLLECTIBLES	C S03	0	0	0	0	0
19	CUSTOMER SERVICE	C S04	0	0	0	0	0
20	REVENUES	R R99	0	0	0	0	0
21							
22	TOTAL DEMAND	D	31,288	1,117,935	26,224	6,025	20,266
23	TOTAL ENERGY	E	0	0	0	0	0
24	TOTAL CUSTOMER	C	64,806	170,145	214,700	40,936	95,424
25	TOTAL REVENUE	R	0	0	0	0	0
26							
27	TOTAL		96,093	1,288,080	240,923	46,961	115,690

			TOTAL COMPANY (1)	TOTAL RESIDENTIAL (2)	TOTAL C&I SECONDARY (3)	TOTAL C&I PRIMARY (4)	TOTAL MUNI STR LTG (5)	TOTAL PVT LTG (6)
<b>ACCUM. PROV. FOR DEPRECIATION</b>								
1	PRODUCTION	E E01	0	0	0	0	0	0
2	TRANSMISSION	D D01	0	0	0	0	0	0
3	HIGH TENSION	D D02	1,187,848	422,277	548,776	209,441	3,677	3,677
4	TRANSFORMERS - OH - DEMAND	D D03	131,538	60,402	70,344	0	394	398
5	TRANSFORMERS - UG - DEMAND	D D03	70,294	32,279	37,592	0	211	213
6	OH LINES DEMAND	D D03	388,360	178,333	207,686	0	1,164	1,176
7	UG LINES DEMAND	D D03	2,131	979	1,140	0	6	6
8	TRANSFORMERS - OH - CUSTOMER	C C01	407,656	293,643	74,636	0	26,856	12,522
9	TRANSFORMERS - UG - CUSTOMER	C C01	122,011	87,887	22,338	0	8,038	3,748
10	OH LINES CUSTOMER	C C01	182,735	131,628	33,456	0	12,038	5,613
11	UG LINES CUSTOMER	C C01	5,943	4,281	1,088	0	392	183
12	SERVICES - OH	C C02	201,610	72,118	93,722	35,769	0	0
13	SERVICES - UG	C C02	116,440	41,652	54,129	20,659	0	0
14	METER & METER INSTALLATIONS	C S01	76,410	37,300	38,485	625	0	0
15	INSTALL. ON CUSTR PREMISES	C C03	0	0	0	0	0	0
16	STREET LIGHTING	C C04	78,424	0	0	0	38,816	39,608
17	CUSTOMER ACCOUNTING	C S02	0	0	0	0	0	0
18	UNCOLLECTIBLES	C S03	0	0	0	0	0	0
19	CUSTOMER SERVICE	C S04	0	0	0	0	0	0
20	REVENUES	R R99	0	0	0	0	0	0
21								
22	TOTAL DEMAND	D	1,780,171	694,269	865,537	209,441	5,453	5,471
23	TOTAL ENERGY	E	0	0	0	0	0	0
24	TOTAL CUSTOMER	C	1,191,229	668,508	317,855	57,053	86,140	61,673
25	TOTAL REVENUE	R	0	0	0	0	0	0
26								
27	TOTAL		2,971,400	1,362,777	1,183,392	266,495	91,593	67,144

			RESID SC1 W/ SP HTG (7)	RESID SC1 WSP & WTR HTG (8)	C&I SC2 GENERAL SERVICE (9)	C&I SC2 SEP MET SP HTG (10)	C&I SC2 SEC NON MET (11)
<b>ACCUM. PROV. FOR DEPRECIATION</b>							
1	PRODUCTION	E E01	0	0	0	0	0
2	TRANSMISSION	D D01	0	0	0	0	0
3	HIGH TENSION	D D02	367,548	54,729	536,402	4,879	3,889
4	TRANSFORMERS - OH - DEMAND	D D03	52,116	8,285	68,421	785	419
5	TRANSFORMERS - UG - DEMAND	D D03	27,851	4,428	36,564	419	224
6	OH LINES DEMAND	D D03	153,871	24,462	202,009	2,317	1,236
7	UG LINES DEMAND	D D03	844	134	1,108	13	7
8	TRANSFORMERS - OH - CUSTOMER	C C01	248,581	45,062	58,071	899	5,972
9	TRANSFORMERS - UG - CUSTOMER	C C01	74,400	13,487	17,380	269	1,788
10	OH LINES CUSTOMER	C C01	111,428	20,199	26,031	403	2,677
11	UG LINES CUSTOMER	C C01	3,624	657	847	13	87
12	SERVICES - OH	C C02	62,771	9,347	91,609	833	664
13	SERVICES - UG	C C02	36,254	5,398	52,909	481	384
14	METER & METER INSTALLATIONS	C S01	32,312	4,987	36,890	403	0
15	INSTALL. ON CUSTR PREMISES	C C03	0	0	0	0	0
16	STREET LIGHTING	C C04	0	0	0	0	0
17	CUSTOMER ACCOUNTING	C S02	0	0	0	0	0
18	UNCOLLECTIBLES	C S03	0	0	0	0	0
19	CUSTOMER SERVICE	C S04	0	0	0	0	0
20	REVENUES	R R99	0	0	0	0	0
21							
22	TOTAL DEMAND	D	602,231	92,038	844,504	8,412	5,775
23	TOTAL ENERGY	E	0	0	0	0	0
24	TOTAL CUSTOMER	C	569,370	99,138	283,736	3,302	11,572
25	TOTAL REVENUE	R	0	0	0	0	0
26							
27	TOTAL		1,171,601	191,176	1,128,240	11,714	17,347

			C&I SC2 SEC NON DM ME' (12)	C&I SC2 PRIMARY (13)	SC3 MUNI STR LTG (14)	SC4 RES PVT LTG (15)	SC4 COM PVT LTG (16)
<b>ACCUM. PROV. FOR DEPRECIATION</b>							
1	PRODUCTION	E E01	0	0	0	0	0
2	TRANSMISSION	D D01	0	0	0	0	0
3	HIGH TENSION	D D02	3,606	209,441	3,677	849	2,828
4	TRANSFORMERS - OH - DEMAND	D D03	720	0	394	89	309
5	TRANSFORMERS - UG - DEMAND	D D03	385	0	211	48	165
6	OH LINES DEMAND	D D03	2,125	0	1,164	264	912
7	UG LINES DEMAND	D D03	12	0	6	1	5
8	TRANSFORMERS - OH - CUSTOMER	C C01	9,693	0	26,856	4,722	7,799
9	TRANSFORMERS - UG - CUSTOMER	C C01	2,901	0	8,038	1,413	2,334
10	OH LINES CUSTOMER	C C01	4,345	0	12,038	2,117	3,496
11	UG LINES CUSTOMER	C C01	141	0	392	69	114
12	SERVICES - OH	C C02	616	35,769	0	0	0
13	SERVICES - UG	C C02	356	20,659	0	0	0
14	METER & METER INSTALLATIONS	C S01	1,193	625	0	0	0
15	INSTALL. ON CUSTR PREMISES	C C03	0	0	0	0	0
16	STREET LIGHTING	C C04	0	0	38,816	8,714	30,894
17	CUSTOMER ACCOUNTING	C S02	0	0	0	0	0
18	UNCOLLECTIBLES	C S03	0	0	0	0	0
19	CUSTOMER SERVICE	C S04	0	0	0	0	0
20	REVENUES	R R99	0	0	0	0	0
21							
22	TOTAL DEMAND	D	6,846	209,441	5,453	1,251	4,220
23	TOTAL ENERGY	E	0	0	0	0	0
24	TOTAL CUSTOMER	C	19,245	57,053	86,140	17,035	44,638
25	TOTAL REVENUE	R	0	0	0	0	0
26							
27	TOTAL		26,092	266,495	91,593	18,287	48,858

			TOTAL COMPANY (1)	TOTAL RESIDENTIAL (2)	TOTAL C&I SECONDARY (3)	TOTAL C&I PRIMARY (4)	TOTAL MUNI STR LTG (5)	TOTAL PVT LTG (6)
<b>NON-INTEREST BEARING CWIP</b>								
1	PRODUCTION	E E01	0	0	0	0	0	0
2	TRANSMISSION	D D01	0	0	0	0	0	0
3	HIGH TENSION	D D02	78,030	27,739	36,049	13,758	242	242
4	TRANSFORMERS - OH - DEMAND	D D03	4,466	2,051	2,388	0	13	14
5	TRANSFORMERS - UG - DEMAND	D D03	2,386	1,096	1,276	0	7	7
6	OH LINES DEMAND	D D03	20,066	9,214	10,731	0	60	61
7	UG LINES DEMAND	D D03	166	76	89	0	0	1
8	TRANSFORMERS - OH - CUSTOMER	C C01	13,840	9,969	2,534	0	912	425
9	TRANSFORMERS - UG - CUSTOMER	C C01	4,142	2,984	758	0	273	127
10	OH LINES CUSTOMER	C C01	9,442	6,801	1,729	0	622	290
11	UG LINES CUSTOMER	C C01	463	334	85	0	31	14
12	SERVICES - OH	C C02	7,296	2,610	3,392	1,294	0	0
13	SERVICES - UG	C C02	4,214	1,507	1,959	748	0	0
14	METER & METER INSTALLATIONS	C S01	6,362	3,106	3,204	52	0	0
15	INSTALL. ON CUSTR PREMISES	C C03	0	0	0	0	0	0
16	STREET LIGHTING	C C04	1,627	0	0	0	805	822
17	CUSTOMER ACCOUNTING	C S02	0	0	0	0	0	0
18	UNCOLLECTIBLES	C S03	0	0	0	0	0	0
19	CUSTOMER SERVICE	C S04	0	0	0	0	0	0
20	REVENUES	R R99	0	0	0	0	0	0
21								
22	TOTAL DEMAND	D	105,114	40,176	50,533	13,758	323	324
23	TOTAL ENERGY	E	0	0	0	0	0	0
24	TOTAL CUSTOMER	C	47,386	27,310	13,661	2,094	2,642	1,678
25	TOTAL REVENUE	R	0	0	0	0	0	0
26								
27	TOTAL		152,500	67,487	64,194	15,852	2,965	2,002

			RESID SC1 W/ SP HTG (7)	RESID SC1 W/SP & WTR HTG (8)	C&I SC2 GENERAL SERVICE (9)	C&I SC2 SEP MET SP HTG (10)	C&I SC2 SEC NON MET (11)
<b>NON-INTEREST BEARING CWIP</b>							
1	PRODUCTION	E E01	0	0	0	0	0
2	TRANSMISSION	D D01	0	0	0	0	0
3	HIGH TENSION	D D02	24,144	3,595	35,236	320	255
4	TRANSFORMERS - OH - DEMAND	D D03	1,769	281	2,323	27	14
5	TRANSFORMERS - UG - DEMAND	D D03	945	150	1,241	14	8
6	OH LINES DEMAND	D D03	7,950	1,264	10,438	120	64
7	UG LINES DEMAND	D D03	66	10	86	1	1
8	TRANSFORMERS - OH - CUSTOMER	C C01	8,439	1,530	1,972	31	203
9	TRANSFORMERS - UG - CUSTOMER	C C01	2,526	458	590	9	61
10	OH LINES CUSTOMER	C C01	5,758	1,044	1,345	21	138
11	UG LINES CUSTOMER	C C01	282	51	66	1	7
12	SERVICES - OH	C C02	2,272	338	3,315	30	24
13	SERVICES - UG	C C02	1,312	195	1,915	17	14
14	METER & METER INSTALLATIONS	C S01	2,690	415	3,071	34	0
15	INSTALL. ON CUSTR PREMISES	C C03	0	0	0	0	0
16	STREET LIGHTING	C C04	0	0	0	0	0
17	CUSTOMER ACCOUNTING	C S02	0	0	0	0	0
18	UNCOLLECTIBLES	C S03	0	0	0	0	0
19	CUSTOMER SERVICE	C S04	0	0	0	0	0
20	REVENUES	R R99	0	0	0	0	0
21							
22	TOTAL DEMAND	D	34,875	5,301	49,324	482	342
23	TOTAL ENERGY	E	0	0	0	0	0
24	TOTAL CUSTOMER	C	23,279	4,031	12,274	143	446
25	TOTAL REVENUE	R	0	0	0	0	0
26							
27	TOTAL		58,154	9,333	61,598	625	788

			C&I SC2 SEC NON DM ME (12)	C&I SC2 PRIMARY (13)	SC3 MUNI STR LTG (14)	SC4 RES PVT LTG (15)	SC4 COM PVT LTG (16)
<b>NON-INTEREST BEARING CWIP</b>							
1	PRODUCTION	E E01	0	0	0	0	0
2	TRANSMISSION	D D01	0	0	0	0	0
3	HIGH TENSION	D D02	237	13,758	242	56	186
4	TRANSFORMERS - OH - DEMAND	D D03	24	0	13	3	10
5	TRANSFORMERS - UG - DEMAND	D D03	13	0	7	2	6
6	OH LINES DEMAND	D D03	110	0	60	14	47
7	UG LINES DEMAND	D D03	1	0	0	0	0
8	TRANSFORMERS - OH - CUSTOMER	C C01	329	0	912	160	265
9	TRANSFORMERS - UG - CUSTOMER	C C01	98	0	273	48	79
10	OH LINES CUSTOMER	C C01	225	0	622	109	181
11	UG LINES CUSTOMER	C C01	11	0	31	5	9
12	SERVICES - OH	C C02	22	1,294	0	0	0
13	SERVICES - UG	C C02	13	748	0	0	0
14	METER & METER INSTALLATIONS	C S01	99	52	0	0	0
15	INSTALL. ON CUSTR PREMISES	C C03	0	0	0	0	0
16	STREET LIGHTING	C C04	0	0	805	181	641
17	CUSTOMER ACCOUNTING	C S02	0	0	0	0	0
18	UNCOLLECTIBLES	C S03	0	0	0	0	0
19	CUSTOMER SERVICE	C S04	0	0	0	0	0
20	REVENUES	R R99	0	0	0	0	0
21							
22	TOTAL DEMAND	D	385	13,758	323	74	249
23	TOTAL ENERGY	E	0	0	0	0	0
24	TOTAL CUSTOMER	C	798	2,094	2,642	504	1,174
25	TOTAL REVENUE	R	0	0	0	0	0
26							
27	TOTAL		1,183	15,852	2,965	578	1,424

		TOTAL COMPANY (1)	TOTAL RESIDENTIAL (2)	TOTAL C&I SECONDARY (3)	TOTAL C&I PRIMARY (4)	TOTAL MUNI STR LTG (5)	TOTAL PVT LTG (6)
<b>NET PLANT</b>							
1	PRODUCTION	E	0	0	0	0	0
2	TRANSMISSION	D	0	0	0	0	0
3	HIGH TENSION	D	5,230,555	1,859,449	2,416,474	922,252	16,191
4	TRANSFORMERS - OH - DEMAND	D	235,783	108,270	126,091	0	714
5	TRANSFORMERS - UG - DEMAND	D	126,001	57,859	67,383	0	382
6	OH LINES DEMAND	D	1,262,154	579,575	674,972	0	3,823
7	UG LINES DEMAND	D	11,533	5,296	6,168	0	35
8	TRANSFORMERS - OH - CUSTOMER	C	730,721	526,353	133,784	0	22,445
9	TRANSFORMERS - UG - CUSTOMER	C	218,705	157,537	40,041	0	6,718
10	OH LINES CUSTOMER	C	593,879	427,783	108,730	0	18,242
11	UG LINES CUSTOMER	C	32,156	23,163	5,887	0	988
12	SERVICES - OH	C	398,479	142,540	185,241	70,698	0
13	SERVICES - UG	C	230,143	82,325	106,987	40,832	0
14	METER & METER INSTALLATIONS	C	446,882	218,147	225,079	3,657	0
15	INSTALL. ON CUSTR PREMISES	C	0	0	0	0	0
16	STREET LIGHTING	C	55,384	0	0	0	27,972
17	CUSTOMER ACCOUNTING	C	0	0	0	0	0
18	UNCOLLECTIBLES	C	0	0	0	0	0
19	CUSTOMER SERVICE	C	0	0	0	0	0
20	REVENUES	R	0	0	0	0	0
21							
22	TOTAL DEMAND	D	6,866,026	2,610,449	3,291,087	922,252	21,094
23	TOTAL ENERGY	E	0	0	0	0	0
24	TOTAL CUSTOMER	C	2,706,349	1,577,847	805,749	115,186	76,365
25	TOTAL REVENUE	R	0	0	0	0	0
26							
27	TOTAL		9,572,375	4,188,297	4,096,836	1,037,438	152,296



		RESID SC1 W/ SP HTG (7)	RESID SC1 W/SP & WTR HTG (8)	C&I SC2 GENERAL SERVICE (9)	C&I SC2 SEP MET SP HTG (10)	C&I SC2 SEC NON MET (11)
<b>NET PLANT</b>						
1	PRODUCTION	E	0	0	0	0
2	TRANSMISSION	D	0	0	0	0
3	HIGH TENSION	D	1,618,455	240,994	2,361,985	21,484
4	TRANSFORMERS - OH - DEMAND	D	93,419	14,851	122,644	1,406
5	TRANSFORMERS - UG - DEMAND	D	49,923	7,937	65,541	752
6	OH LINES DEMAND	D	500,075	79,500	656,521	7,529
7	UG LINES DEMAND	D	4,569	726	5,999	69
8	TRANSFORMERS - OH - CUSTOMER	C	445,579	80,774	104,091	1,612
9	TRANSFORMERS - UG - CUSTOMER	C	133,362	24,175	31,155	482
10	OH LINES CUSTOMER	C	362,136	65,647	84,598	1,310
11	UG LINES CUSTOMER	C	19,608	3,555	4,581	71
12	SERVICES - OH	C	124,067	18,474	181,064	1,647
13	SERVICES - UG	C	71,655	10,670	104,574	951
14	METER & METER INSTALLATIONS	C	188,978	29,168	215,748	2,355
15	INSTALL. ON CUSTR PREMISES	C	0	0	0	0
16	STREET LIGHTING	C	0	0	0	0
17	CUSTOMER ACCOUNTING	C	0	0	0	0
18	UNCOLLECTIBLES	C	0	0	0	0
19	CUSTOMER SERVICE	C	0	0	0	0
20	REVENUES	R	0	0	0	0
21						
22	TOTAL DEMAND	D	2,266,441	344,008	3,212,690	31,239
23	TOTAL ENERGY	E	0	0	0	0
24	TOTAL CUSTOMER	C	1,345,385	232,462	725,811	8,428
25	TOTAL REVENUE	R	0	0	0	0
26						
27	TOTAL		3,611,826	576,470	3,938,501	39,668

		C&I SC2 SEC NON DM ME (12)	C&I SC2 PRIMARY (13)	SC3 MUNI STR LTG (14)	SC4 RES PVT LTG (15)	SC4 COM PVT LTG (16)
<b>NET PLANT</b>						
1	PRODUCTION	E	0	0	0	0
2	TRANSMISSION	D	0	0	0	0
3	HIGH TENSION	D	15,879	922,252	16,191	3,736
4	TRANSFORMERS - OH - DEMAND	D	1,290	0	707	160
5	TRANSFORMERS - UG - DEMAND	D	689	0	378	86
6	OH LINES DEMAND	D	6,905	0	3,784	858
7	UG LINES DEMAND	D	63	0	35	8
8	TRANSFORMERS - OH - CUSTOMER	C	17,375	0	48,139	8,465
9	TRANSFORMERS - UG - CUSTOMER	C	5,200	0	14,408	2,534
10	OH LINES CUSTOMER	C	14,121	0	39,124	6,880
11	UG LINES CUSTOMER	C	765	0	2,118	372
12	SERVICES - OH	C	1,217	70,698	0	0
13	SERVICES - UG	C	703	40,832	0	0
14	METER & METER INSTALLATIONS	C	6,975	3,657	0	0
15	INSTALL. ON CUSTR PREMISES	C	0	0	0	0
16	STREET LIGHTING	C	0	0	27,412	6,154
17	CUSTOMER ACCOUNTING	C	0	0	0	0
18	UNCOLLECTIBLES	C	0	0	0	0
19	CUSTOMER SERVICE	C	0	0	0	0
20	REVENUES	R	0	0	0	0
21						
22	TOTAL DEMAND	D	24,826	922,252	21,094	4,848
23	TOTAL ENERGY	E	0	0	0	0
24	TOTAL CUSTOMER	C	46,358	115,186	131,202	24,404
25	TOTAL REVENUE	R	0	0	0	0
26						
27	TOTAL		71,184	1,037,438	152,296	29,253
			=====	=====	=====	=====

			TOTAL COMPANY (1)	TOTAL RESIDENTIAL (2)	TOTAL C&I SECONDARY (3)	TOTAL C&I PRIMARY (4)	TOTAL MUNI STR LTG (5)	TOTAL PVT LTG (6)
<b>WORKING CAPITAL</b>								
1	PRODUCTION	E E01	0	0	0	0	0	0
2	TRANSMISSION	D D01	0	0	0	0	0	0
3	HIGH TENSION	D D02	136,663	48,583	63,137	24,096	423	423
4	TRANSFORMERS - OH - DEMAND	D D03	5,382	2,471	2,878	0	16	16
5	TRANSFORMERS - UG - DEMAND	D D03	(16)	(7)	(9)	0	(0)	(0)
6	OH LINES DEMAND	D D03	39,680	18,221	21,220	0	119	120
7	UG LINES DEMAND	D D03	56	26	30	0	0	0
8	TRANSFORMERS - OH - CUSTOMER	C C01	16,681	12,016	3,054	0	1,099	512
9	TRANSFORMERS - UG - CUSTOMER	C C01	(27)	(19)	(5)	0	(2)	(1)
10	OH LINES CUSTOMER	C C01	18,672	13,450	3,419	0	1,230	574
11	UG LINES CUSTOMER	C C01	159	115	29	0	10	5
12	SERVICES - OH	C C02	12,267	4,388	5,703	2,176	0	0
13	SERVICES - UG	C C02	5,253	1,879	2,442	932	0	0
14	METER & METER INSTALLATIONS	C S01	29,385	14,344	14,800	240	0	0
15	INSTALL. ON CUSTR PREMISES	C C03	557	557	0	0	0	0
16	STREET LIGHTING	C C04	2,828	0	0	0	1,400	1,428
17	CUSTOMER ACCOUNTING	C S02	52,552	40,656	10,829	73	46	948
18	UNCOLLECTIBLES	C S03	0	0	0	0	0	0
19	CUSTOMER SERVICE	C S04	3,195	2,484	632	4	4	72
20	REVENUES	R S06	55,226	22,516	23,217	8,506	609	379
21								
22	TOTAL DEMAND	D	181,765	69,294	87,257	24,096	558	560
23	TOTAL ENERGY	E	0	0	0	0	0	0
24	TOTAL CUSTOMER	C	141,522	89,869	40,902	3,426	3,787	3,538
25	TOTAL REVENUE	R	55,226	22,516	23,217	8,506	609	379
26								
27	TOTAL		378,513	181,678	151,375	36,029	4,954	4,477

			RESID SC1	RESID SC1	C&I SC2	C&I SC2	C&I SC2
			W/ SP HTG	WSP & WTR HTG	GENERAL SERVICE	SEP MET SP HTG	SEC NON MET
			(7)	(8)	(9)	(10)	(11)
<b>WORKING CAPITAL</b>							
1	PRODUCTION	E E01	0	0	0	0	0
2	TRANSMISSION	D D01	0	0	0	0	0
3	HIGH TENSION	D D02	42,287	6,297	61,714	561	447
4	TRANSFORMERS - OH - DEMAND	D D03	2,132	339	2,799	32	17
5	TRANSFORMERS - UG - DEMAND	D D03	(6)	(1)	(8)	(0)	(0)
6	OH LINES DEMAND	D D03	15,722	2,499	20,640	237	126
7	UG LINES DEMAND	D D03	22	4	29	0	0
8	TRANSFORMERS - OH - CUSTOMER	C C01	10,172	1,844	2,376	37	244
9	TRANSFORMERS - UG - CUSTOMER	C C01	(16)	(3)	(4)	(0)	(0)
10	OH LINES CUSTOMER	C C01	11,386	2,064	2,660	41	274
11	UG LINES CUSTOMER	C C01	97	18	23	0	2
12	SERVICES - OH	C C02	3,819	569	5,574	51	40
13	SERVICES - UG	C C02	1,636	244	2,387	22	17
14	METER & METER INSTALLATIONS	C S01	12,426	1,918	14,187	155	0
15	INSTALL. ON CUSTR PREMISES	C C03	557	0	0	0	0
16	STREET LIGHTING	C C04	0	0	0	0	0
17	CUSTOMER ACCOUNTING	C S02	34,423	6,233	8,711	125	665
18	UNCOLLECTIBLES	C S03	0	0	0	0	0
19	CUSTOMER SERVICE	C S04	2,103	381	491	8	51
20	REVENUES	R S06	18,213	4,302	22,173	256	451
21							
22	TOTAL DEMAND	D	60,156	9,138	85,174	830	591
23	TOTAL ENERGY	E	0	0	0	0	0
24	TOTAL CUSTOMER	C	76,601	13,267	36,404	439	1,293
25	TOTAL REVENUE	R	18,213	4,302	22,173	256	451
26							
27	TOTAL		154,971	26,707	143,751	1,525	2,335

			C&I SC2 SEC NON DM ME (12)	C&I SC2 PRIMARY (13)	SC3 MUNI STR LTG (14)	SC4 RES PVT LTG (15)	SC4 COM PVT LTG (16)
<b>WORKING CAPITAL</b>							
1	PRODUCTION	E E01	0	0	0	0	0
2	TRANSMISSION	D D01	0	0	0	0	0
3	HIGH TENSION	D D02	415	24,096	423	98	325
4	TRANSFORMERS - OH - DEMAND	D D03	29	0	16	4	13
5	TRANSFORMERS - UG - DEMAND	D D03	(0)	0	(0)	(0)	(0)
6	OH LINES DEMAND	D D03	217	0	119	27	93
7	UG LINES DEMAND	D D03	0	0	0	0	0
8	TRANSFORMERS - OH - CUSTOMER	C C01	397	0	1,099	193	319
9	TRANSFORMERS - UG - CUSTOMER	C C01	(1)	0	(2)	(0)	(1)
10	OH LINES CUSTOMER	C C01	444	0	1,230	216	357
11	UG LINES CUSTOMER	C C01	4	0	10	2	3
12	SERVICES - OH	C C02	37	2,176	0	0	0
13	SERVICES - UG	C C02	16	932	0	0	0
14	METER & METER INSTALLATIONS	C S01	459	240	0	0	0
15	INSTALL. ON CUSTR PREMISES	C C03	0	0	0	0	0
16	STREET LIGHTING	C C04	0	0	1,400	314	1,114
17	CUSTOMER ACCOUNTING	C S02	1,328	73	46	358	590
18	UNCOLLECTIBLES	C S03	0	0	0	0	0
19	CUSTOMER SERVICE	C S04	82	4	4	27	45
20	REVENUES	R S06	337	8,506	609	92	287
21							
22	TOTAL DEMAND	D	662	24,096	558	128	431
23	TOTAL ENERGY	E	0	0	0	0	0
24	TOTAL CUSTOMER	C	2,766	3,426	3,787	1,110	2,428
25	TOTAL REVENUE	R	337	8,506	609	92	287
26							
27	TOTAL		3,765	36,029	4,954	1,330	3,147

			TOTAL COMPANY (1)	TOTAL RESIDENTIAL (2)	TOTAL C&I SECONDARY (3)	TOTAL C&I PRIMARY (4)	TOTAL MUNI STR LTG (5)	TOTAL PVT LTG (6)
<b>RATE BASE ADJUSTMENTS</b>								
1	PRODUCTION	E E01	0	0	0	0	0	0
2	TRANSMISSION	D D01	0	0	0	0	0	0
3	HIGH TENSION	D D02	(669,531)	(238,016)	(309,318)	(118,052)	(2,072)	(2,072)
4	TRANSFORMERS - OH - DEMAND	D D03	(30,181)	(13,859)	(16,140)	0	(90)	(91)
5	TRANSFORMERS - UG - DEMAND	D D03	(16,129)	(7,406)	(8,625)	0	(48)	(49)
6	OH LINES DEMAND	D D03	(161,560)	(74,188)	(86,399)	0	(484)	(489)
7	UG LINES DEMAND	D D03	(1,476)	(678)	(789)	0	(4)	(4)
8	TRANSFORMERS - OH - CUSTOMER	C C01	(93,535)	(67,375)	(17,125)	0	(6,162)	(2,873)
9	TRANSFORMERS - UG - CUSTOMER	C C01	(27,995)	(20,165)	(5,125)	0	(1,844)	(860)
10	OH LINES CUSTOMER	C C01	(76,019)	(54,758)	(13,918)	0	(5,008)	(2,335)
11	UG LINES CUSTOMER	C C01	(4,116)	(2,965)	(754)	0	(271)	(126)
12	SERVICES - OH	C C02	(51,007)	(18,246)	(23,712)	(9,050)	0	0
13	SERVICES - UG	C C02	(29,459)	(10,538)	(13,695)	(5,227)	0	0
14	METER & METER INSTALLATIONS	C S01	(57,203)	(27,924)	(28,811)	(468)	0	0
15	INSTALL. ON CUSTR PREMISES	C C03	0	0	0	0	0	0
16	STREET LIGHTING	C C04	(7,089)	0	0	0	(3,509)	(3,580)
17	CUSTOMER ACCOUNTING	C S02	0	0	0	0	0	0
18	UNCOLLECTIBLES	C S03	0	0	0	0	0	0
19	CUSTOMER SERVICE	C S04	0	0	0	0	0	0
20	REVENUES	R R99	0	0	0	0	0	0
21								
22	TOTAL DEMAND	D	(878,877)	(334,147)	(421,271)	(118,052)	(2,700)	(2,707)
23	TOTAL ENERGY	E	0	0	0	0	0	0
24	TOTAL CUSTOMER	C	(346,423)	(201,971)	(103,139)	(14,744)	(16,794)	(9,775)
25	TOTAL REVENUE	R	0	0	0	0	0	0
26								
27	TOTAL		(1,225,300)	(536,118)	(524,411)	(132,796)	(19,494)	(12,481)

			RESID SC1	RESID SC1	C&I SC2	C&I SC2	C&I SC2
			W/ SP HTG	W/SP & WTR HTG	GENERAL SERVICE	SEP MET SP HTG	SEC NON MET
			(7)	(8)	(9)	(10)	(11)
<b>RATE BASE ADJUSTMENTS</b>							
1	PRODUCTION	E E01	0	0	0	0	0
2	TRANSMISSION	D D01	0	0	0	0	0
3	HIGH TENSION	D D02	(207,168)	(30,848)	(302,343)	(2,750)	(2,192)
4	TRANSFORMERS - OH - DEMAND	D D03	(11,958)	(1,901)	(15,699)	(180)	(96)
5	TRANSFORMERS - UG - DEMAND	D D03	(6,390)	(1,016)	(8,390)	(96)	(51)
6	OH LINES DEMAND	D D03	(64,011)	(10,176)	(84,037)	(964)	(514)
7	UG LINES DEMAND	D D03	(585)	(93)	(768)	(9)	(5)
8	TRANSFORMERS - OH - CUSTOMER	C C01	(57,036)	(10,339)	(13,324)	(206)	(1,370)
9	TRANSFORMERS - UG - CUSTOMER	C C01	(17,071)	(3,095)	(3,988)	(62)	(410)
10	OH LINES CUSTOMER	C C01	(46,355)	(8,403)	(10,829)	(168)	(1,114)
11	UG LINES CUSTOMER	C C01	(2,510)	(455)	(586)	(9)	(60)
12	SERVICES - OH	C C02	(15,881)	(2,365)	(23,177)	(211)	(168)
13	SERVICES - UG	C C02	(9,172)	(1,366)	(13,386)	(122)	(97)
14	METER & METER INSTALLATIONS	C S01	(24,190)	(3,734)	(27,617)	(302)	0
15	INSTALL. ON CUSTR PREMISES	C C03	0	0	0	0	0
16	STREET LIGHTING	C C04	0	0	0	0	0
17	CUSTOMER ACCOUNTING	C S02	0	0	0	0	0
18	UNCOLLECTIBLES	C S03	0	0	0	0	0
19	CUSTOMER SERVICE	C S04	0	0	0	0	0
20	REVENUES	R R99	0	0	0	0	0
21							
22	TOTAL DEMAND	D	(290,113)	(44,034)	(411,236)	(3,999)	(2,858)
23	TOTAL ENERGY	E	0	0	0	0	0
24	TOTAL CUSTOMER	C	(172,215)	(29,756)	(92,907)	(1,079)	(3,220)
25	TOTAL REVENUE	R	0	0	0	0	0
26							
27	TOTAL		(462,327)	(73,790)	(504,143)	(5,078)	(6,078)

			C&I SC2 SEC NON DM ME (12)	C&I SC2 PRIMARY (13)	SC3 MUNI STR LTG (14)	SC4 RES PVT LTG (15)	SC4 COM PVT LTG (16)
<b>RATE BASE ADJUSTMENTS</b>							
1	PRODUCTION	E E01	0	0	0	0	0
2	TRANSMISSION	D D01	0	0	0	0	0
3	HIGH TENSION	D D02	(2,033)	(118,052)	(2,072)	(478)	(1,594)
4	TRANSFORMERS - OH - DEMAND	D D03	(165)	0	(90)	(21)	(71)
5	TRANSFORMERS - UG - DEMAND	D D03	(88)	0	(48)	(11)	(38)
6	OH LINES DEMAND	D D03	(884)	0	(484)	(110)	(379)
7	UG LINES DEMAND	D D03	(8)	0	(4)	(1)	(3)
8	TRANSFORMERS - OH - CUSTOMER	C C01	(2,224)	0	(6,162)	(1,084)	(1,790)
9	TRANSFORMERS - UG - CUSTOMER	C C01	(666)	0	(1,844)	(324)	(536)
10	OH LINES CUSTOMER	C C01	(1,808)	0	(5,008)	(881)	(1,454)
11	UG LINES CUSTOMER	C C01	(98)	0	(271)	(48)	(79)
12	SERVICES - OH	C C02	(156)	(9,050)	0	0	0
13	SERVICES - UG	C C02	(90)	(5,227)	0	0	0
14	METER & METER INSTALLATIONS	C S01	(893)	(468)	0	0	0
15	INSTALL. ON CUSTR PREMISES	C C03	0	0	0	0	0
16	STREET LIGHTING	C C04	0	0	(3,509)	(788)	(2,793)
17	CUSTOMER ACCOUNTING	C S02	0	0	0	0	0
18	UNCOLLECTIBLES	C S03	0	0	0	0	0
19	CUSTOMER SERVICE	C S04	0	0	0	0	0
20	REVENUES	R R99	0	0	0	0	0
21							
22	TOTAL DEMAND	D	(3,178)	(118,052)	(2,700)	(621)	(2,086)
23	TOTAL ENERGY	E	0	0	0	0	0
24	TOTAL CUSTOMER	C	(5,934)	(14,744)	(16,794)	(3,124)	(6,651)
25	TOTAL REVENUE	R	0	0	0	0	0
26							
27	TOTAL		(9,112)	(132,796)	(19,494)	(3,744)	(8,737)



			TOTAL COMPANY (1)	TOTAL RESIDENTIAL (2)	TOTAL C&I SECONDARY (3)	TOTAL C&I PRIMARY (4)	TOTAL MUNI STR LTG (5)	TOTAL PVT LTG (6)
<b>TOTAL RATE BASE</b>								
1	PRODUCTION	E	0	0	0	0	0	0
2	TRANSMISSION	D	0	0	0	0	0	0
3	HIGH TENSION	D	4,697,687	1,670,015	2,170,293	828,296	14,541	14,541
4	TRANSFORMERS - OH - DEMAND	D	210,984	96,883	112,829	0	633	639
5	TRANSFORMERS - UG - DEMAND	D	109,856	50,445	58,749	0	329	333
6	OH LINES DEMAND	D	1,140,274	523,609	609,793	0	3,418	3,454
7	UG LINES DEMAND	D	10,113	4,644	5,408	0	30	31
8	TRANSFORMERS - OH - CUSTOMER	C	653,867	470,993	119,713	0	43,076	20,085
9	TRANSFORMERS - UG - CUSTOMER	C	190,683	137,353	34,911	0	12,562	5,857
10	OH LINES CUSTOMER	C	536,532	386,475	98,231	0	35,346	16,480
11	UG LINES CUSTOMER	C	28,199	20,312	5,163	0	1,858	866
12	SERVICES - OH	C	359,739	128,683	167,232	63,824	0	0
13	SERVICES - UG	C	205,937	73,666	95,734	36,537	0	0
14	METER & METER INSTALLATIONS	C	419,064	204,567	211,068	3,429	0	0
15	INSTALL. ON CUSTR PREMISES	C	557	557	0	0	0	0
16	STREET LIGHTING	C	51,123	0	0	0	25,303	25,820
17	CUSTOMER ACCOUNTING	C	52,552	40,656	10,829	73	46	948
18	UNCOLLECTIBLES	C	0	0	0	0	0	0
19	CUSTOMER SERVICE	C	3,195	2,484	632	4	4	72
20	REVENUES	R	55,226	22,516	23,217	8,506	609	379
21								
22	TOTAL DEMAND	D	6,168,914	2,345,596	2,957,072	828,296	18,952	18,997
23	TOTAL ENERGY	E	0	0	0	0	0	0
24	TOTAL CUSTOMER	C	2,501,448	1,465,745	743,512	103,868	118,195	70,128
25	TOTAL REVENUE	R	55,226	22,516	23,217	8,506	609	379
26								
27	TOTAL		8,725,589	3,833,857	3,723,801	940,670	137,756	89,505

		RESID SC1 W/ SP HTG (7)	RESID SC1 W/SP & WTR HTG (8)	C&I SC2 GENERAL SERVICE (9)	C&I SC2 SEP MET SP HTG (10)	C&I SC2 SEC NON MET (11)
<b>TOTAL RATE BASE</b>						
1	PRODUCTION	E	0	0	0	0
2	TRANSMISSION	D	0	0	0	0
3	HIGH TENSION	D	1,453,573	216,442	2,121,356	19,295
4	TRANSFORMERS - OH - DEMAND	D	83,593	13,289	109,745	1,259
5	TRANSFORMERS - UG - DEMAND	D	43,526	6,920	57,143	655
6	OH LINES DEMAND	D	451,785	71,823	593,124	6,802
7	UG LINES DEMAND	D	4,007	637	5,260	60
8	TRANSFORMERS - OH - CUSTOMER	C	398,715	72,278	93,143	1,442
9	TRANSFORMERS - UG - CUSTOMER	C	116,275	21,078	27,163	421
10	OH LINES CUSTOMER	C	327,167	59,308	76,429	1,183
11	UG LINES CUSTOMER	C	17,195	3,117	4,017	62
12	SERVICES - OH	C	112,005	16,678	163,461	1,487
13	SERVICES - UG	C	64,119	9,547	93,575	851
14	METER & METER INSTALLATIONS	C	177,215	27,353	202,318	2,209
15	INSTALL. ON CUSTR PREMISES	C	557	0	0	0
16	STREET LIGHTING	C	0	0	0	0
17	CUSTOMER ACCOUNTING	C	34,423	6,233	8,711	125
18	UNCOLLECTIBLES	C	0	0	0	0
19	CUSTOMER SERVICE	C	2,103	381	491	8
20	REVENUES	R	18,213	4,302	22,173	256
21						
22	TOTAL DEMAND	D	2,036,485	309,111	2,886,628	28,071
23	TOTAL ENERGY	E	0	0	0	0
24	TOTAL CUSTOMER	C	1,249,772	215,973	669,308	7,788
25	TOTAL REVENUE	R	18,213	4,302	22,173	256
26						
27	TOTAL		3,304,470	529,387	3,578,108	36,115

		C&I SC2 SEC NON DM ME (12)	C&I SC2 PRIMARY (13)	SC3 MUNI STR LTG (14)	SC4 RES PVT LTG (15)	SC4 COM PVT LTG (16)
<b>TOTAL RATE BASE</b>						
1	PRODUCTION	E	0	0	0	0
2	TRANSMISSION	D	0	0	0	0
3	HIGH TENSION	D	14,262	828,296	14,541	3,356
4	TRANSFORMERS - OH - DEMAND	D	1,154	0	633	143
5	TRANSFORMERS - UG - DEMAND	D	601	0	329	75
6	OH LINES DEMAND	D	6,238	0	3,418	775
7	UG LINES DEMAND	D	55	0	30	7
8	TRANSFORMERS - OH - CUSTOMER	C	15,548	0	43,076	7,574
9	TRANSFORMERS - UG - CUSTOMER	C	4,534	0	12,562	2,209
10	OH LINES CUSTOMER	C	12,758	0	35,346	6,215
11	UG LINES CUSTOMER	C	671	0	1,858	327
12	SERVICES - OH	C	1,099	63,824	0	0
13	SERVICES - UG	C	629	36,537	0	0
14	METER & METER INSTALLATIONS	C	6,541	3,429	0	0
15	INSTALL. ON CUSTR PREMISES	C	0	0	0	0
16	STREET LIGHTING	C	0	0	25,303	5,680
17	CUSTOMER ACCOUNTING	C	1,328	73	46	358
18	UNCOLLECTIBLES	C	0	0	0	0
19	CUSTOMER SERVICE	C	82	4	4	27
20	REVENUES	R	337	8,506	609	92
21						
22	TOTAL DEMAND	D	22,310	828,296	18,952	4,356
23	TOTAL ENERGY	E	0	0	0	0
24	TOTAL CUSTOMER	C	43,190	103,868	118,195	22,391
25	TOTAL REVENUE	R	337	8,506	609	92
26						
27	TOTAL		65,837	940,670	137,756	26,839

			TOTAL COMPANY (1)	TOTAL RESIDENTIAL (2)	TOTAL C&I SECONDARY (3)	TOTAL C&I PRIMARY (4)	TOTAL MUNI STR LTG (5)	TOTAL PVT LTG (6)
<b>OPERATION &amp; MAINTENANCE</b>								
1	PRODUCTION	E E01	0	0	0	0	0	0
2	TRANSMISSION	D D01	86,298	30,244	40,687	15,367	0	0
3	HIGH TENSION	D D02	793,769	282,183	366,715	139,957	2,457	2,457
4	TRANSFORMERS - OH - DEMAND	D D03	27,244	12,510	14,569	0	82	83
5	TRANSFORMERS - UG - DEMAND	D D03	(8,974)	(4,121)	(4,799)	0	(27)	(27)
6	OH LINES DEMAND	D D03	240,986	110,660	128,874	0	722	730
7	UG LINES DEMAND	D D03	(203)	(93)	(109)	0	(1)	(1)
8	TRANSFORMERS - OH - CUSTOMER	C C01	84,434	60,819	15,459	0	5,562	2,594
9	TRANSFORMERS - UG - CUSTOMER	C C01	(15,574)	(11,218)	(2,851)	0	(1,026)	(478)
10	OH LINES CUSTOMER	C C01	113,393	81,679	20,761	0	7,470	3,483
11	UG LINES CUSTOMER	C C01	(558)	(402)	(102)	0	(37)	(17)
12	SERVICES - OH	C C02	72,544	25,950	33,724	12,871	0	0
13	SERVICES - UG	C C02	26,997	9,657	12,550	4,790	0	0
14	METER & METER INSTALLATIONS	C S01	213,568	104,254	107,567	1,748	0	0
15	INSTALL. ON CUSTR PREMISES	C C03	4,534	4,534	0	0	0	0
16	STREET LIGHTING	C C04	17,518	0	0	0	8,671	8,847
17	CUSTOMER ACCOUNTING	C S02	440,904	341,098	90,852	615	386	7,953
18	UNCOLLECTIBLES	C S03	126,504	51,579	53,180	19,484	1,394	868
19	CUSTOMER SERVICE	C S04	26,807	20,840	5,299	35	30	605
20	REVENUES	R R99	0	0	0	0	0	0
21								
22	TOTAL DEMAND	D	1,139,120	431,383	545,938	155,324	3,234	3,242
23	TOTAL ENERGY	E	0	0	0	0	0	0
24	TOTAL CUSTOMER	C	1,111,071	688,788	336,437	39,542	22,450	23,855
25	TOTAL REVENUE	R	0	0	0	0	0	0
26								
27	TOTAL		2,250,191	1,120,171	882,374	194,866	25,683	27,096

			RESID SC1 W/ SP HTG (7)	RESID SC1 W/SP & WTR HTG (8)	C&I SC2 GENERAL SERVICE (9)	C&I SC2 SEP MET SP HTG (10)	C&I SC2 SEC NON MET (11)
<b>OPERATION &amp; MAINTENANCE</b>							
1	PRODUCTION	E E01	0	0	0	0	0
2	TRANSMISSION	D D01	26,880	3,364	39,772	362	293
3	HIGH TENSION	D D02	245,610	36,572	358,446	3,260	2,599
4	TRANSFORMERS - OH - DEMAND	D D03	10,794	1,716	14,171	163	87
5	TRANSFORMERS - UG - DEMAND	D D03	(3,556)	(565)	(4,668)	(54)	(29)
6	OH LINES DEMAND	D D03	95,481	15,179	125,351	1,437	767
7	UG LINES DEMAND	D D03	(80)	(13)	(106)	(1)	(1)
8	TRANSFORMERS - OH - CUSTOMER	C C01	51,486	9,333	12,028	186	1,237
9	TRANSFORMERS - UG - CUSTOMER	C C01	(9,497)	(1,722)	(2,219)	(34)	(228)
10	OH LINES CUSTOMER	C C01	69,145	12,534	16,153	250	1,661
11	UG LINES CUSTOMER	C C01	(340)	(62)	(79)	(1)	(8)
12	SERVICES - OH	C C02	22,587	3,363	32,963	300	239
13	SERVICES - UG	C C02	8,406	1,252	12,267	112	89
14	METER & METER INSTALLATIONS	C S01	90,314	13,940	103,107	1,126	0
15	INSTALL. ON CUSTR PREMISES	C C03	4,534	0	0	0	0
16	STREET LIGHTING	C C04	0	0	0	0	0
17	CUSTOMER ACCOUNTING	C S02	288,800	52,297	73,081	1,052	5,576
18	UNCOLLECTIBLES	C S03	41,722	9,856	50,788	587	1,032
19	CUSTOMER SERVICE	C S04	17,641	3,198	4,122	64	424
20	REVENUES	R R99	0	0	0	0	0
21							
22	TOTAL DEMAND	D	375,129	56,253	532,966	5,168	3,716
23	TOTAL ENERGY	E	0	0	0	0	0
24	TOTAL CUSTOMER	C	584,798	103,991	302,211	3,641	10,022
25	TOTAL REVENUE	R	0	0	0	0	0
26							
27	TOTAL		959,927	160,244	835,177	8,809	13,739

			C&I SC2 SEC NON DM ME (12)	C&I SC2 PRIMARY (13)	SC3 MUNI STR LTG (14)	SC4 RES PVT LTG (15)	SC4 COM PVT LTG (16)
<b>OPERATION &amp; MAINTENANCE</b>							
1	PRODUCTION	E E01	0	0	0	0	0
2	TRANSMISSION	D D01	261	15,367	0	0	0
3	HIGH TENSION	D D02	2,410	139,957	2,457	567	1,890
4	TRANSFORMERS - OH - DEMAND	D D03	149	0	82	19	64
5	TRANSFORMERS - UG - DEMAND	D D03	(49)	0	(27)	(6)	(21)
6	OH LINES DEMAND	D D03	1,318	0	722	164	566
7	UG LINES DEMAND	D D03	(1)	0	(1)	(0)	(0)
8	TRANSFORMERS - OH - CUSTOMER	C C01	2,008	0	5,562	978	1,615
9	TRANSFORMERS - UG - CUSTOMER	C C01	(370)	0	(1,026)	(180)	(298)
10	OH LINES CUSTOMER	C C01	2,696	0	7,470	1,314	2,169
11	UG LINES CUSTOMER	C C01	(13)	0	(37)	(6)	(11)
12	SERVICES - OH	C C02	222	12,871	0	0	0
13	SERVICES - UG	C C02	82	4,790	0	0	0
14	METER & METER INSTALLATIONS	C S01	3,334	1,748	0	0	0
15	INSTALL. ON CUSTR PREMISES	C C03	0	0	0	0	0
16	STREET LIGHTING	C C04	0	0	8,671	1,946	6,901
17	CUSTOMER ACCOUNTING	C S02	11,142	615	386	3,000	4,953
18	UNCOLLECTIBLES	C S03	773	19,484	1,394	210	658
19	CUSTOMER SERVICE	C S04	689	35	30	228	376
20	REVENUES	R R99	0	0	0	0	0
21							
22	TOTAL DEMAND	D	4,088	155,324	3,234	743	2,499
23	TOTAL ENERGY	E	0	0	0	0	0
24	TOTAL CUSTOMER	C	20,562	39,542	22,450	7,490	16,364
25	TOTAL REVENUE	R	0	0	0	0	0
26							
27	TOTAL		24,650	194,866	25,683	8,233	18,863

			TOTAL COMPANY (1)	TOTAL RESIDENTIAL (2)	TOTAL C&I SECONDARY (3)	TOTAL C&I PRIMARY (4)	TOTAL MUNI STR LTG (5)	TOTAL PVT LTG (6)
<b>DEPRECIATION &amp; AMORTIZATION</b>								
1	PRODUCTION	E E01	0	0	0	0	0	0
2	TRANSMISSION	D D01	0	0	0	0	0	0
3	HIGH TENSION	D D02	154,985	55,097	71,602	27,327	480	480
4	TRANSFORMERS - OH - DEMAND	D D03	11,725	5,384	6,270	0	35	36
5	TRANSFORMERS - UG - DEMAND	D D03	6,266	2,877	3,351	0	19	19
6	OH LINES DEMAND	D D03	42,241	19,397	22,590	0	127	128
7	UG LINES DEMAND	D D03	281	129	150	0	1	1
8	TRANSFORMERS - OH - CUSTOMER	C C01	36,339	26,176	6,653	0	2,394	1,116
9	TRANSFORMERS - UG - CUSTOMER	C C01	10,876	7,834	1,991	0	717	334
10	OH LINES CUSTOMER	C C01	19,876	14,317	3,639	0	1,309	611
11	UG LINES CUSTOMER	C C01	784	565	144	0	52	24
12	SERVICES - OH	C C02	14,999	5,365	6,973	2,661	0	0
13	SERVICES - UG	C C02	8,663	3,099	4,027	1,537	0	0
14	METER & METER INSTALLATIONS	C S01	16,586	8,096	8,354	136	0	0
15	INSTALL. ON CUSTR PREMISES	C C03	0	0	0	0	0	0
16	STREET LIGHTING	C C04	6,836	0	0	0	3,383	3,453
17	CUSTOMER ACCOUNTING	C S02	0	0	0	0	0	0
18	UNCOLLECTIBLES	C S03	0	0	0	0	0	0
19	CUSTOMER SERVICE	C S04	0	0	0	0	0	0
20	REVENUES	R R99	0	0	0	0	0	0
21								
22	TOTAL DEMAND	D	215,498	82,884	103,963	27,327	661	663
23	TOTAL ENERGY	E	0	0	0	0	0	0
24	TOTAL CUSTOMER	C	114,959	65,452	31,780	4,334	7,855	5,537
25	TOTAL REVENUE	R	0	0	0	0	0	0
26								
27	TOTAL		330,457	148,336	135,743	31,661	8,516	6,200

			RESID SC1	RESID SC1	C&I SC2	C&I SC2	C&I SC2
			W/ SP HTG	W/SP & WTR HTG	GENERAL SERVICE	SEP MET SP HTG	SEC NON MET
			(7)	(8)	(9)	(10)	(11)
<b>DEPRECIATION &amp; AMORTIZATION</b>							
1	PRODUCTION	E E01	0	0	0	0	0
2	TRANSMISSION	D D01	0	0	0	0	0
3	HIGH TENSION	D D02	47,956	7,141	69,987	637	507
4	TRANSFORMERS - OH - DEMAND	D D03	4,646	739	6,099	70	37
5	TRANSFORMERS - UG - DEMAND	D D03	2,483	395	3,259	37	20
6	OH LINES DEMAND	D D03	16,736	2,661	21,972	252	134
7	UG LINES DEMAND	D D03	111	18	146	2	1
8	TRANSFORMERS - OH - CUSTOMER	C C01	22,159	4,017	5,176	80	532
9	TRANSFORMERS - UG - CUSTOMER	C C01	6,632	1,202	1,549	24	159
10	OH LINES CUSTOMER	C C01	12,120	2,197	2,831	44	291
11	UG LINES CUSTOMER	C C01	478	87	112	2	11
12	SERVICES - OH	C C02	4,670	695	6,815	62	49
13	SERVICES - UG	C C02	2,697	402	3,936	36	29
14	METER & METER INSTALLATIONS	C S01	7,014	1,083	8,007	87	0
15	INSTALL. ON CUSTR PREMISES	C C03	0	0	0	0	0
16	STREET LIGHTING	C C04	0	0	0	0	0
17	CUSTOMER ACCOUNTING	C S02	0	0	0	0	0
18	UNCOLLECTIBLES	C S03	0	0	0	0	0
19	CUSTOMER SERVICE	C S04	0	0	0	0	0
20	REVENUES	R R99	0	0	0	0	0
21							
22	TOTAL DEMAND	D	71,932	10,952	101,464	998	700
23	TOTAL ENERGY	E	0	0	0	0	0
24	TOTAL CUSTOMER	C	55,770	9,682	28,428	335	1,072
25	TOTAL REVENUE	R	0	0	0	0	0
26							
27	TOTAL		127,702	20,635	129,892	1,332	1,772



			C&I SC2 SEC NON DM ME (12)	C&I SC2 PRIMARY (13)	SC3 MUNI STR LTG (14)	SC4 RES PVT LTG (15)	SC4 COM PVT LTG (16)
<b>DEPRECIATION &amp; AMORTIZATION</b>							
1	PRODUCTION	E E01	0	0	0	0	0
2	TRANSMISSION	D D01	0	0	0	0	0
3	HIGH TENSION	D D02	471	27,327	480	111	369
4	TRANSFORMERS - OH - DEMAND	D D03	64	0	35	8	28
5	TRANSFORMERS - UG - DEMAND	D D03	34	0	19	4	15
6	OH LINES DEMAND	D D03	231	0	127	29	99
7	UG LINES DEMAND	D D03	2	0	1	0	1
8	TRANSFORMERS - OH - CUSTOMER	C C01	864	0	2,394	421	695
9	TRANSFORMERS - UG - CUSTOMER	C C01	259	0	717	126	208
10	OH LINES CUSTOMER	C C01	473	0	1,309	230	380
11	UG LINES CUSTOMER	C C01	19	0	52	9	15
12	SERVICES - OH	C C02	46	2,661	0	0	0
13	SERVICES - UG	C C02	26	1,537	0	0	0
14	METER & METER INSTALLATIONS	C S01	259	136	0	0	0
15	INSTALL. ON CUSTR PREMISES	C C03	0	0	0	0	0
16	STREET LIGHTING	C C04	0	0	3,383	760	2,693
17	CUSTOMER ACCOUNTING	C S02	0	0	0	0	0
18	UNCOLLECTIBLES	C S03	0	0	0	0	0
19	CUSTOMER SERVICE	C S04	0	0	0	0	0
20	REVENUES	R R99	0	0	0	0	0
21							
22	TOTAL DEMAND	D	802	27,327	661	152	511
23	TOTAL ENERGY	E	0	0	0	0	0
24	TOTAL CUSTOMER	C	1,945	4,334	7,855	1,546	3,992
25	TOTAL REVENUE	R	0	0	0	0	0
26							
27	TOTAL		2,747	31,661	8,516	1,698	4,503

			TOTAL COMPANY (1)	TOTAL RESIDENTIAL (2)	TOTAL C&I SECONDARY (3)	TOTAL C&I PRIMARY (4)	TOTAL MUNI STR LTG (5)	TOTAL PVT LTG (6)
<b>PAYROLL &amp; MISC. TAXES</b>								
1	PRODUCTION	E E01	0	0	0	0	0	0
2	TRANSMISSION	D D01	0	0	0	0	0	0
3	HIGH TENSION	D D02	23,709	8,428	10,953	4,180	73	73
4	TRANSFORMERS - OH - DEMAND	D D03	856	393	458	0	3	3
5	TRANSFORMERS - UG - DEMAND	D D03	(5)	(2)	(3)	0	(0)	(0)
6	OH LINES DEMAND	D D03	6,678	3,067	3,571	0	20	20
7	UG LINES DEMAND	D D03	15	7	8	0	0	0
8	TRANSFORMERS - OH - CUSTOMER	C C01	2,654	1,912	486	0	175	82
9	TRANSFORMERS - UG - CUSTOMER	C C01	(8)	(6)	(1)	0	(1)	(0)
10	OH LINES CUSTOMER	C C01	3,142	2,263	575	0	207	97
11	UG LINES CUSTOMER	C C01	40	29	7	0	3	1
12	SERVICES - OH	C C02	1,978	708	920	351	0	0
13	SERVICES - UG	C C02	850	304	395	151	0	0
14	METER & METER INSTALLATIONS	C S01	4,883	2,384	2,459	40	0	0
15	INSTALL. ON CUSTR PREMISES	C C03	88	88	0	0	0	0
16	STREET LIGHTING	C C04	398	0	0	0	197	201
17	CUSTOMER ACCOUNTING	C S02	6,819	5,275	1,405	10	6	123
18	UNCOLLECTIBLES	C S03	0	0	0	0	0	0
19	CUSTOMER SERVICE	C S04	303	236	60	0	0	7
20	REVENUES	R S05	10,759	4,386	4,524	1,657	119	74
21								
22	TOTAL DEMAND	D	31,253	11,893	14,988	4,180	96	96
23	TOTAL ENERGY	E	0	0	0	0	0	0
24	TOTAL CUSTOMER	C	21,147	13,192	6,306	552	587	510
25	TOTAL REVENUE	R	10,759	4,386	4,524	1,657	119	74
26								
27	TOTAL		63,159	29,470	25,817	6,389	802	680

			RESID SC1	RESID SC1	C&I SC2	C&I SC2	C&I SC2
			W/ SP HTG	W/SP & WTR HTG	GENERAL SERVICE	SEP MET SP HTG	SEC NON MET
			(7)	(8)	(9)	(10)	(11)
<b>PAYROLL &amp; MISC. TAXES</b>							
1	PRODUCTION	E E01	0	0	0	0	0
2	TRANSMISSION	D D01	0	0	0	0	0
3	HIGH TENSION	D D02	7,336	1,092	10,706	97	78
4	TRANSFORMERS - OH - DEMAND	D D03	339	54	445	5	3
5	TRANSFORMERS - UG - DEMAND	D D03	(2)	(0)	(3)	(0)	(0)
6	OH LINES DEMAND	D D03	2,646	421	3,474	40	21
7	UG LINES DEMAND	D D03	6	1	8	0	0
8	TRANSFORMERS - OH - CUSTOMER	C C01	1,618	293	378	6	39
9	TRANSFORMERS - UG - CUSTOMER	C C01	(5)	(1)	(1)	(0)	(0)
10	OH LINES CUSTOMER	C C01	1,916	347	448	7	46
11	UG LINES CUSTOMER	C C01	24	4	6	0	1
12	SERVICES - OH	C C02	616	92	899	8	7
13	SERVICES - UG	C C02	265	39	386	4	3
14	METER & METER INSTALLATIONS	C S01	2,065	319	2,357	26	0
15	INSTALL. ON CUSTR PREMISES	C C03	88	0	0	0	0
16	STREET LIGHTING	C C04	0	0	0	0	0
17	CUSTOMER ACCOUNTING	C S02	4,467	809	1,130	16	86
18	UNCOLLECTIBLES	C S03	0	0	0	0	0
19	CUSTOMER SERVICE	C S04	199	36	47	1	5
20	REVENUES	R S05	3,546	839	4,320	50	88
21							
22	TOTAL DEMAND	D	10,325	1,568	14,630	142	102
23	TOTAL ENERGY	E	0	0	0	0	0
24	TOTAL CUSTOMER	C	11,253	1,939	5,650	67	186
25	TOTAL REVENUE	R	3,546	839	4,320	50	88
26							
27	TOTAL		25,125	4,346	24,599	260	375

			C&I SC2 SEC NON DM ME (12)	C&I SC2 PRIMARY (13)	SC3 MUNI STR LTG (14)	SC4 RES PVT LTG (15)	SC4 COM PVT LTG (16)
<b>PAYROLL &amp; MISC. TAXES</b>							
1	PRODUCTION	E E01	0	0	0	0	0
2	TRANSMISSION	D D01	0	0	0	0	0
3	HIGH TENSION	D D02	72	4,180	73	17	56
4	TRANSFORMERS - OH - DEMAND	D D03	5	0	3	1	2
5	TRANSFORMERS - UG - DEMAND	D D03	(0)	0	(0)	(0)	(0)
6	OH LINES DEMAND	D D03	37	0	20	5	16
7	UG LINES DEMAND	D D03	0	0	0	0	0
8	TRANSFORMERS - OH - CUSTOMER	C C01	63	0	175	31	51
9	TRANSFORMERS - UG - CUSTOMER	C C01	(0)	0	(1)	(0)	(0)
10	OH LINES CUSTOMER	C C01	75	0	207	36	60
11	UG LINES CUSTOMER	C C01	1	0	3	0	1
12	SERVICES - OH	C C02	6	351	0	0	0
13	SERVICES - UG	C C02	3	151	0	0	0
14	METER & METER INSTALLATIONS	C S01	76	40	0	0	0
15	INSTALL. ON CUSTR PREMISES	C C03	0	0	0	0	0
16	STREET LIGHTING	C C04	0	0	197	44	157
17	CUSTOMER ACCOUNTING	C S02	172	10	6	46	77
18	UNCOLLECTIBLES	C S03	0	0	0	0	0
19	CUSTOMER SERVICE	C S04	8	0	0	3	4
20	REVENUES	R S05	66	1,657	119	18	56
21							
22	TOTAL DEMAND	D	113	4,180	96	22	74
23	TOTAL ENERGY	E	0	0	0	0	0
24	TOTAL CUSTOMER	C	404	552	587	161	349
25	TOTAL REVENUE	R	66	1,657	119	18	56
26							
27	TOTAL		583	6,389	802	201	479

		TOTAL COMPANY (1)	TOTAL RESIDENTIAL (2)	TOTAL C&I SECONDARY (3)	TOTAL C&I PRIMARY (4)	TOTAL MUNI STR LTG (5)	TOTAL PVT LTG (6)
<b>TOTAL OPERATING EXPENSES</b>							
1	PRODUCTION	E	0	0	0	0	0
2	TRANSMISSION	D	86,298	30,244	40,687	15,367	0
3	HIGH TENSION	D	972,463	345,708	449,270	171,465	3,010
4	TRANSFORMERS - OH - DEMAND	D	39,825	18,287	21,298	0	119
5	TRANSFORMERS - UG - DEMAND	D	(2,713)	(1,246)	(1,451)	0	(8)
6	OH LINES DEMAND	D	289,905	133,123	155,035	0	869
7	UG LINES DEMAND	D	93	43	50	0	0
8	TRANSFORMERS - OH - CUSTOMER	C	123,427	88,907	22,598	0	8,131
9	TRANSFORMERS - UG - CUSTOMER	C	(4,706)	(3,390)	(862)	0	(310)
10	OH LINES CUSTOMER	C	136,411	98,260	24,975	0	8,987
11	UG LINES CUSTOMER	C	266	192	49	0	18
12	SERVICES - OH	C	89,521	32,023	41,616	15,883	0
13	SERVICES - UG	C	36,510	13,060	16,972	6,478	0
14	METER & METER INSTALLATIONS	C	235,037	114,734	118,380	1,923	0
15	INSTALL. ON CUSTR PREMISES	C	4,622	4,622	0	0	0
16	STREET LIGHTING	C	24,752	0	0	0	12,251
17	CUSTOMER ACCOUNTING	C	447,723	346,373	92,258	625	392
18	UNCOLLECTIBLES	C	126,504	51,579	53,180	19,484	1,394
19	CUSTOMER SERVICE	C	27,110	21,075	5,359	35	30
20	REVENUES	R	10,759	4,386	4,524	1,657	119
21							
22	TOTAL DEMAND	D	1,385,871	526,159	664,888	186,832	3,991
23	TOTAL ENERGY	E	0	0	0	0	0
24	TOTAL CUSTOMER	C	1,247,177	767,433	374,523	44,427	30,892
25	TOTAL REVENUE	R	10,759	4,386	4,524	1,657	119
26							
27	TOTAL		2,643,808	1,297,978	1,043,935	232,916	35,002

			RESID SC1	RESID SC1	C&I SC2	C&I SC2	C&I SC2
			W/ SP HTG	W/SP & WTR HTG	GENERAL SERVICE	SEP MET SP HTG	SEC NON MET
			(7)	(8)	(9)	(10)	(11)
<b>TOTAL OPERATING EXPENSES</b>							
1	PRODUCTION	E	0	0	0	0	0
2	TRANSMISSION	D	26,880	3,364	39,772	362	293
3	HIGH TENSION	D	300,902	44,805	439,139	3,994	3,184
4	TRANSFORMERS - OH - DEMAND	D	15,779	2,508	20,715	238	127
5	TRANSFORMERS - UG - DEMAND	D	(1,075)	(171)	(1,411)	(16)	(9)
6	OH LINES DEMAND	D	114,863	18,260	150,797	1,729	923
7	UG LINES DEMAND	D	37	6	48	1	0
8	TRANSFORMERS - OH - CUSTOMER	C	75,263	13,644	17,582	272	1,808
9	TRANSFORMERS - UG - CUSTOMER	C	(2,870)	(520)	(670)	(10)	(69)
10	OH LINES CUSTOMER	C	83,181	15,079	19,432	301	1,999
11	UG LINES CUSTOMER	C	162	29	38	1	4
12	SERVICES - OH	C	27,872	4,150	40,677	370	295
13	SERVICES - UG	C	11,367	1,693	16,590	151	120
14	METER & METER INSTALLATIONS	C	99,393	15,341	113,472	1,239	0
15	INSTALL. ON CUSTR PREMISES	C	4,622	0	0	0	0
16	STREET LIGHTING	C	0	0	0	0	0
17	CUSTOMER ACCOUNTING	C	293,267	53,106	74,212	1,069	5,663
18	UNCOLLECTIBLES	C	41,722	9,856	50,788	587	1,032
19	CUSTOMER SERVICE	C	17,841	3,234	4,168	65	429
20	REVENUES	R	3,546	839	4,320	50	88
21							
22	TOTAL DEMAND	D	457,386	68,773	649,060	6,307	4,518
23	TOTAL ENERGY	E	0	0	0	0	0
24	TOTAL CUSTOMER	C	651,821	115,612	336,289	4,043	11,281
25	TOTAL REVENUE	R	3,546	839	4,320	50	88
26							
27	TOTAL		1,112,754	185,224	989,668	10,401	15,886

		C&I SC2 SEC NON DM ME (12)	C&I SC2 PRIMARY (13)	SC3 MUNI STR LTG (14)	SC4 RES PVT LTG (15)	SC4 COM PVT LTG (16)
<b>TOTAL OPERATING EXPENSES</b>						
1	PRODUCTION	E	0	0	0	0
2	TRANSMISSION	D	261	15,367	0	0
3	HIGH TENSION	D	2,952	171,465	3,010	695
4	TRANSFORMERS - OH - DEMAND	D	218	0	119	27
5	TRANSFORMERS - UG - DEMAND	D	(15)	0	(8)	(2)
6	OH LINES DEMAND	D	1,588	0	869	197
7	UG LINES DEMAND	D	1	0	0	0
8	TRANSFORMERS - OH - CUSTOMER	C	2,935	0	8,131	1,430
9	TRANSFORMERS - UG - CUSTOMER	C	(112)	0	(310)	(55)
10	OH LINES CUSTOMER	C	3,244	0	8,987	1,580
11	UG LINES CUSTOMER	C	6	0	18	3
12	SERVICES - OH	C	273	15,883	0	0
13	SERVICES - UG	C	112	6,478	0	0
14	METER & METER INSTALLATIONS	C	3,669	1,923	0	0
15	INSTALL. ON CUSTR PREMISES	C	0	0	0	0
16	STREET LIGHTING	C	0	0	12,251	2,750
17	CUSTOMER ACCOUNTING	C	11,315	625	392	3,047
18	UNCOLLECTIBLES	C	773	19,484	1,394	210
19	CUSTOMER SERVICE	C	696	35	30	231
20	REVENUES	R	66	1,657	119	18
21						
22	TOTAL DEMAND	D	5,003	186,832	3,991	917
23	TOTAL ENERGY	E	0	0	0	0
24	TOTAL CUSTOMER	C	22,911	44,427	30,892	9,197
25	TOTAL REVENUE	R	66	1,657	119	18
26						
27	TOTAL		27,979	232,916	35,002	10,132

			TOTAL COMPANY (1)	TOTAL RESIDENTIAL (2)	TOTAL C&I SECONDARY (3)	TOTAL C&I PRIMARY (4)	TOTAL MUNI STR LTG (5)	TOTAL PVT LTG (6)
<b>OPERATING REVENUES</b>								
1	REVENUES FROM SALES	R R01	2,934,404	1,196,425	1,233,539	451,963	32,342	20,135
2	OTHER ELECTRIC REVENUES	R R02	(662)	(271)	(278)	(102)	(7)	(4)
3								
4	TOTAL OPERATING REVENUES		2,933,742	1,196,154	1,233,261	451,861	32,335	20,131



			RESID SC1 W/ SP HTG (7)	RESID SC1 W/SP & WTR HTG (8)	C&I SC2 GENERAL SERVICE (9)	C&I SC2 SEP MET SP HTG (10)	C&I SC2 SEC NON MET (11)
<b>OPERATING REVENUES</b>							
1	REVENUES FROM SALES	R R01	967,806	228,619	1,178,062	13,607	23,938
2	OTHER ELECTRIC REVENUES	R R02	(220)	(51)	(266)	(3)	(5)
3			-----	-----	-----	-----	-----
4	TOTAL OPERATING REVENUES		967,586	228,568	1,177,796	13,604	23,933
			=====	=====	=====	=====	=====

			C&I SC2 SEC NON DM ME (12)	C&I SC2 PRIMARY (13)	SC3 MUNI STR LTG (14)	SC4 RES PVT LTG (15)	SC4 COM PVT LTG (16)
<b>OPERATING REVENUES</b>							
1	REVENUES FROM SALES	R R01	17,932	451,963	32,342	4,874	15,261
2	OTHER ELECTRIC REVENUES	R R02	(4)	(102)	(7)	(1)	(3)
3			-----	-----	-----	-----	-----
4	TOTAL OPERATING REVENUES		17,928	451,861	32,335	4,873	15,258
			=====	=====	=====	=====	=====

			TOTAL COMPANY (1)	TOTAL RESIDENTIAL (2)	TOTAL C&I SECONDARY (3)	TOTAL C&I PRIMARY (4)	TOTAL MUNI STR LTG (5)	TOTAL PVT LTG (6)
<b>FIT ADJUSTMENTS</b>								
1	PRODUCTION	E E01	0	0	0	0	0	0
2	TRANSMISSION	D D01	0	0	0	0	0	0
3	HIGH TENSION	D D02	(57,060)	(20,285)	(26,361)	(10,061)	(177)	(177)
4	TRANSFORMERS - OH - DEMAND	D D03	(2,512)	(1,153)	(1,343)	0	(8)	(8)
5	TRANSFORMERS - UG - DEMAND	D D03	(1,229)	(564)	(657)	0	(4)	(4)
6	OH LINES DEMAND	D D03	(14,021)	(6,438)	(7,498)	0	(42)	(42)
7	UG LINES DEMAND	D D03	(111)	(51)	(59)	0	(0)	(0)
8	TRANSFORMERS - OH - CUSTOMER	C C01	(7,785)	(5,608)	(1,425)	0	(513)	(239)
9	TRANSFORMERS - UG - CUSTOMER	C C01	(2,133)	(1,536)	(391)	0	(141)	(66)
10	OH LINES CUSTOMER	C C01	(6,598)	(4,753)	(1,208)	0	(435)	(203)
11	UG LINES CUSTOMER	C C01	(309)	(223)	(57)	0	(20)	(9)
12	SERVICES - OH	C C02	(4,754)	(1,701)	(2,210)	(843)	0	0
13	SERVICES - UG	C C02	(2,674)	(957)	(1,243)	(474)	0	0
14	METER & METER INSTALLATIONS	C S01	(5,661)	(2,763)	(2,851)	(46)	0	0
15	INSTALL. ON CUSTR PREMISES	C C03	(22)	(22)	0	0	0	0
16	STREET LIGHTING	C C04	(218)	0	0	0	(108)	(110)
17	CUSTOMER ACCOUNTING	C S02	(1,673)	(1,294)	(345)	(2)	(1)	(30)
18	UNCOLLECTIBLES	C S03	0	0	0	0	0	0
19	CUSTOMER SERVICE	C S04	(75)	(58)	(15)	(0)	(0)	(2)
20	REVENUES	R R99	0	0	0	0	0	0
21								
22	TOTAL DEMAND	D	(74,933)	(28,492)	(35,919)	(10,061)	(230)	(231)
23	TOTAL ENERGY	E	0	0	0	0	0	0
24	TOTAL CUSTOMER	C	(31,902)	(18,914)	(9,744)	(1,367)	(1,218)	(659)
25	TOTAL REVENUE	R	0	0	0	0	0	0
26								
27	TOTAL		(106,835)	(47,406)	(45,664)	(11,427)	(1,448)	(890)

			RESID SC1 W/ SP HTG (7)	RESID SC1 W/SP & WTR HTG (8)	C&I SC2 GENERAL SERVICE (9)	C&I SC2 SEP MET SP HTG (10)	C&I SC2 SEC NON MET (11)
<b>FIT ADJUSTMENTS</b>							
1	PRODUCTION	E E01	0	0	0	0	0
2	TRANSMISSION	D D01	0	0	0	0	0
3	HIGH TENSION	D D02	(17,656)	(2,629)	(25,767)	(234)	(187)
4	TRANSFORMERS - OH - DEMAND	D D03	(995)	(158)	(1,307)	(15)	(8)
5	TRANSFORMERS - UG - DEMAND	D D03	(487)	(77)	(639)	(7)	(4)
6	OH LINES DEMAND	D D03	(5,555)	(883)	(7,293)	(84)	(45)
7	UG LINES DEMAND	D D03	(44)	(7)	(58)	(1)	(0)
8	TRANSFORMERS - OH - CUSTOMER	C C01	(4,747)	(861)	(1,109)	(17)	(114)
9	TRANSFORMERS - UG - CUSTOMER	C C01	(1,301)	(236)	(304)	(5)	(31)
10	OH LINES CUSTOMER	C C01	(4,023)	(729)	(940)	(15)	(97)
11	UG LINES CUSTOMER	C C01	(188)	(34)	(44)	(1)	(5)
12	SERVICES - OH	C C02	(1,480)	(220)	(2,160)	(20)	(16)
13	SERVICES - UG	C C02	(833)	(124)	(1,215)	(11)	(9)
14	METER & METER INSTALLATIONS	C S01	(2,394)	(369)	(2,733)	(30)	0
15	INSTALL. ON CUSTR PREMISES	C C03	(22)	0	0	0	0
16	STREET LIGHTING	C C04	0	0	0	0	0
17	CUSTOMER ACCOUNTING	C S02	(1,096)	(198)	(277)	(4)	(21)
18	UNCOLLECTIBLES	C S03	0	0	0	0	0
19	CUSTOMER SERVICE	C S04	(49)	(9)	(12)	(0)	(1)
20	REVENUES	R R99	0	0	0	0	0
21							
22	TOTAL DEMAND	D	(24,737)	(3,755)	(35,064)	(341)	(244)
23	TOTAL ENERGY	E	0	0	0	0	0
24	TOTAL CUSTOMER	C	(16,133)	(2,781)	(8,794)	(102)	(293)
25	TOTAL REVENUE	R	0	0	0	0	0
26							
27	TOTAL		(40,871)	(6,536)	(43,857)	(443)	(537)

			C&I SC2 SEC NON DM ME (12)	C&I SC2 PRIMARY (13)	SC3 MUNI STR LTG (14)	SC4 RES PVT LTG (15)	SC4 COM PVT LTG (16)
<b>FIT ADJUSTMENTS</b>							
1	PRODUCTION	E E01	0	0	0	0	0
2	TRANSMISSION	D D01	0	0	0	0	0
3	HIGH TENSION	D D02	(173)	(10,061)	(177)	(41)	(136)
4	TRANSFORMERS - OH - DEMAND	D D03	(14)	0	(8)	(2)	(6)
5	TRANSFORMERS - UG - DEMAND	D D03	(7)	0	(4)	(1)	(3)
6	OH LINES DEMAND	D D03	(77)	0	(42)	(10)	(33)
7	UG LINES DEMAND	D D03	(1)	0	(0)	(0)	(0)
8	TRANSFORMERS - OH - CUSTOMER	C C01	(185)	0	(513)	(90)	(149)
9	TRANSFORMERS - UG - CUSTOMER	C C01	(51)	0	(141)	(25)	(41)
10	OH LINES CUSTOMER	C C01	(157)	0	(435)	(76)	(126)
11	UG LINES CUSTOMER	C C01	(7)	0	(20)	(4)	(6)
12	SERVICES - OH	C C02	(15)	(843)	0	0	0
13	SERVICES - UG	C C02	(8)	(474)	0	0	0
14	METER & METER INSTALLATIONS	C S01	(88)	(46)	0	0	0
15	INSTALL. ON CUSTR PREMISES	C C03	0	0	0	0	0
16	STREET LIGHTING	C C04	0	0	(108)	(24)	(86)
17	CUSTOMER ACCOUNTING	C S02	(42)	(2)	(1)	(11)	(19)
18	UNCOLLECTIBLES	C S03	0	0	0	0	0
19	CUSTOMER SERVICE	C S04	(2)	(0)	(0)	(1)	(1)
20	REVENUES	R R99	0	0	0	0	0
21							
22	TOTAL DEMAND	D	(271)	(10,061)	(230)	(53)	(178)
23	TOTAL ENERGY	E	0	0	0	0	0
24	TOTAL CUSTOMER	C	(555)	(1,367)	(1,218)	(231)	(428)
25	TOTAL REVENUE	R	0	0	0	0	0
26							
27	TOTAL		(826)	(11,427)	(1,448)	(284)	(605)

			TOTAL COMPANY (1)	TOTAL RESIDENTIAL (2)	TOTAL C&I SECONDARY (3)	TOTAL C&I PRIMARY (4)	TOTAL MUNI STR LTG (5)	TOTAL PVT LTG (6)
<b>FEDERAL INCOME TAX COMPUTATION</b>								
1	PRODUCTION	E E01	0	0	0	0	0	0
2	TRANSMISSION	D D01	0	0	0	0	0	0
3	HIGH TENSION	D D02	(365,975)	(130,103)	(169,078)	(64,529)	(1,133)	(1,133)
4	TRANSFORMERS - OH - DEMAND	D D03	(14,651)	(6,728)	(7,835)	0	(44)	(44)
5	TRANSFORMERS - UG - DEMAND	D D03	682	313	365	0	2	2
6	OH LINES DEMAND	D D03	(107,401)	(49,318)	(57,436)	0	(322)	(325)
7	UG LINES DEMAND	D D03	(77)	(35)	(41)	0	(0)	(0)
8	TRANSFORMERS - OH - CUSTOMER	C C01	(45,407)	(32,708)	(8,313)	0	(2,991)	(1,395)
9	TRANSFORMERS - UG - CUSTOMER	C C01	1,183	852	217	0	78	36
10	OH LINES CUSTOMER	C C01	(50,537)	(36,403)	(9,253)	0	(3,329)	(1,552)
11	UG LINES CUSTOMER	C C01	(216)	(155)	(39)	0	(14)	(7)
12	SERVICES - OH	C C02	(33,146)	(11,857)	(15,409)	(5,881)	0	0
13	SERVICES - UG	C C02	(13,754)	(4,920)	(6,394)	(2,440)	0	0
14	METER & METER INSTALLATIONS	C S01	(85,360)	(41,669)	(42,993)	(698)	0	0
15	INSTALL. ON CUSTR PREMISES	C C03	(1,640)	(1,640)	0	0	0	0
16	STREET LIGHTING	C C04	(8,226)	0	0	0	(4,071)	(4,154)
17	CUSTOMER ACCOUNTING	C S02	(158,376)	(122,525)	(32,635)	(221)	(139)	(2,857)
18	UNCOLLECTIBLES	C S03	(44,277)	(18,052)	(18,613)	(6,819)	(488)	(304)
19	CUSTOMER SERVICE	C S04	(9,564)	(7,435)	(1,890)	(12)	(11)	(216)
20	REVENUES	R R99	1,023,044	417,119	430,058	157,571	11,276	7,020
21								
22	TOTAL DEMAND	D	(487,422)	(185,871)	(234,025)	(64,529)	(1,497)	(1,501)
23	TOTAL ENERGY	E	0	0	0	0	0	0
24	TOTAL CUSTOMER	C	(449,319)	(276,511)	(135,322)	(16,072)	(10,965)	(10,448)
25	TOTAL REVENUE	R	1,023,044	417,119	430,058	157,571	11,276	7,020
26								
27	TOTAL		86,303	(45,263)	60,711	76,970	(1,187)	(4,929)

			RESID SC1 W/ SP HTG (7)	RESID SC1 W/SP & WTR HTG (8)	C&I SC2 GENERAL SERVICE (9)	C&I SC2 SEP MET SP HTG (10)	C&I SC2 SEC NON MET (11)
<b>FEDERAL INCOME TAX COMPUTATION</b>							
1	PRODUCTION	E E01	0	0	0	0	0
2	TRANSMISSION	D D01	0	0	0	0	0
3	HIGH TENSION	D D02	(113,241)	(16,862)	(165,265)	(1,503)	(1,198)
4	TRANSFORMERS - OH - DEMAND	D D03	(5,805)	(923)	(7,621)	(87)	(47)
5	TRANSFORMERS - UG - DEMAND	D D03	270	43	355	4	2
6	OH LINES DEMAND	D D03	(42,553)	(6,765)	(55,866)	(641)	(342)
7	UG LINES DEMAND	D D03	(30)	(5)	(40)	(0)	(0)
8	TRANSFORMERS - OH - CUSTOMER	C C01	(27,688)	(5,019)	(6,468)	(100)	(665)
9	TRANSFORMERS - UG - CUSTOMER	C C01	722	131	169	3	17
10	OH LINES CUSTOMER	C C01	(30,816)	(5,586)	(7,199)	(111)	(740)
11	UG LINES CUSTOMER	C C01	(131)	(24)	(31)	(0)	(3)
12	SERVICES - OH	C C02	(10,320)	(1,537)	(15,061)	(137)	(109)
13	SERVICES - UG	C C02	(4,282)	(638)	(6,250)	(57)	(45)
14	METER & METER INSTALLATIONS	C S01	(36,097)	(5,572)	(41,211)	(450)	0
15	INSTALL. ON CUSTR PREMISES	C C03	(1,640)	0	0	0	0
16	STREET LIGHTING	C C04	0	0	0	0	0
17	CUSTOMER ACCOUNTING	C S02	(103,739)	(18,786)	(26,251)	(378)	(2,003)
18	UNCOLLECTIBLES	C S03	(14,603)	(3,450)	(17,776)	(205)	(361)
19	CUSTOMER SERVICE	C S04	(6,294)	(1,141)	(1,471)	(23)	(151)
20	REVENUES	R R99	337,414	79,705	410,717	4,744	8,346
21							
22	TOTAL DEMAND	D	(161,359)	(24,512)	(228,437)	(2,228)	(1,585)
23	TOTAL ENERGY	E	0	0	0	0	0
24	TOTAL CUSTOMER	C	(234,890)	(41,621)	(121,549)	(1,460)	(4,062)
25	TOTAL REVENUE	R	337,414	79,705	410,717	4,744	8,346
26							
27	TOTAL		(58,836)	13,573	60,731	1,057	2,699

			C&I SC2 SEC NON DM ME' (12)	C&I SC2 PRIMARY (13)	SC3 MUNI STR LTG (14)	SC4 RES PVT LTG (15)	SC4 COM PVT LTG (16)
<b>FEDERAL INCOME TAX COMPUTATION</b>							
1	PRODUCTION	E E01	0	0	0	0	0
2	TRANSMISSION	D D01	0	0	0	0	0
3	HIGH TENSION	D D02	(1,111)	(64,529)	(1,133)	(261)	(871)
4	TRANSFORMERS - OH - DEMAND	D D03	(80)	0	(44)	(10)	(34)
5	TRANSFORMERS - UG - DEMAND	D D03	4	0	2	0	2
6	OH LINES DEMAND	D D03	(588)	0	(322)	(73)	(252)
7	UG LINES DEMAND	D D03	(0)	0	(0)	(0)	(0)
8	TRANSFORMERS - OH - CUSTOMER	C C01	(1,080)	0	(2,991)	(526)	(869)
9	TRANSFORMERS - UG - CUSTOMER	C C01	28	0	78	14	23
10	OH LINES CUSTOMER	C C01	(1,202)	0	(3,329)	(585)	(967)
11	UG LINES CUSTOMER	C C01	(5)	0	(14)	(2)	(4)
12	SERVICES - OH	C C02	(101)	(5,881)	0	0	0
13	SERVICES - UG	C C02	(42)	(2,440)	0	0	0
14	METER & METER INSTALLATIONS	C S01	(1,332)	(698)	0	0	0
15	INSTALL. ON CUSTR PREMISES	C C03	0	0	0	0	0
16	STREET LIGHTING	C C04	0	0	(4,071)	(914)	(3,240)
17	CUSTOMER ACCOUNTING	C S02	(4,002)	(221)	(139)	(1,078)	(1,779)
18	UNCOLLECTIBLES	C S03	(271)	(6,819)	(488)	(74)	(230)
19	CUSTOMER SERVICE	C S04	(246)	(12)	(11)	(81)	(134)
20	REVENUES	R R99	6,252	157,571	11,276	1,699	5,321
21							
22	TOTAL DEMAND	D	(1,775)	(64,529)	(1,497)	(344)	(1,157)
23	TOTAL ENERGY	E	0	0	0	0	0
24	TOTAL CUSTOMER	C	(8,253)	(16,072)	(10,965)	(3,247)	(7,201)
25	TOTAL REVENUE	R	6,252	157,571	11,276	1,699	5,321
26							
27	TOTAL		(3,776)	76,970	(1,187)	(1,892)	(3,037)



	TOTAL COMPANY (1)	TOTAL RESIDENTIAL (2)	TOTAL C&I SECONDARY (3)	TOTAL C&I PRIMARY (4)	TOTAL MUNI STR LTG (5)	TOTAL PVT LTG (6)	
<b>CUSTOMER COST BY CLASS</b>							
1	NUMBER OF CUSTOMERS	4,585	3,565	906	6	5	103
2							
3	RATE BASE	2,516,607	1,474,441	748,205	104,816	118,720	70,425
4							
5	TOTAL CUSTOMER OPERATING EXPS.	1,251,887	770,043	376,134	44,746	30,997	29,967
6	MONTHLY OP. EXPS. COST/CUST	22.75	18.00	34.60	621.47	516.62	24.15
7							
8	RETURN @ 2.33% (CUSTOMER)	58,730	34,409	17,461	2,446	2,771	1,644
9	F.I.T. PERCENT ON RETURN	42.38%					
10	INCOME TAX ON RETURN	24,891	14,583	7,400	1,037	1,174	697
11	TOTAL RETURN & F.I.T.	83,621	48,992	24,861	3,483	3,945	2,340
12	MONTHLY RET. & F.I.T. COST/CUST	1.52	1.15	2.29	48.37	65.75	1.89
13							
14	MONTHLY CUSTOMER COSTS	24.27	19.15	36.88	669.84	582.37	26.03
		=====	=====	=====	=====	=====	=====

	RESID SC1 W/ SP HTG (7)	RESID SC1 W/SP & WTR HTG (8)	C&I SC2 GENERAL SERVICE (9)	C&I SC2 SEP MET SP HTG (10)	C&I SC2 SEC NON MET (11)	
<b>CUSTOMER COST BY CLASS</b>						
1	NUMBER OF CUSTOMERS	3,018	547	705	11	73
2						
3	RATE BASE	1,256,699	217,743	673,482	7,844	23,468
4						
5	TOTAL CUSTOMER OPERATING EXPS.	653,905	116,138	337,763	4,063	11,343
6	MONTHLY OP. EXPS. COST/CUST	18.06	17.69	39.93	31.01	13.04
7						
8	RETURN @ 2.33% (CUSTOMER)	29,328	5,081	15,717	183	548
9	F.I.T. PERCENT ON RETURN					
10	INCOME TAX ON RETURN	12,430	2,154	6,661	78	232
11	TOTAL RETURN & F.I.T.	41,757	7,235	22,378	261	780
12	MONTHLY RET. & F.I.T. COST/CUST	1.15	1.10	2.65	1.99	0.90
13						
14	MONTHLY CUSTOMER COSTS	19.21	18.80	42.57	33.00	13.93
		=====	=====	=====	=====	=====

	C&I SC2 SEC NON DM ME (12)	C&I SC2 PRIMARY (13)	SC3 MUNI STR LTG (14)	SC4 RES PVT LTG (15)	SC4 COM PVT LTG (16)	
<b>CUSTOMER COST BY CLASS</b>						
1	NUMBER OF CUSTOMERS	118	6	5	39	64
2						
3	RATE BASE	43,412	104,816	118,720	22,468	47,957
4						
5	TOTAL CUSTOMER OPERATING EXPS.	22,965	44,746	30,997	9,213	20,754
6	MONTHLY OP. EXPS. COST/CUST	16.26	621.47	516.62	19.69	26.85
7						
8	RETURN @ 2.33% (CUSTOMER)	1,013	2,446	2,771	524	1,119
9	F.I.T. PERCENT ON RETURN					
10	INCOME TAX ON RETURN	429	1,037	1,174	222	474
11	TOTAL RETURN & F.I.T.	1,442	3,483	3,945	747	1,594
12	MONTHLY RET. & F.I.T. COST/CUST	1.02	48.37	65.75	1.60	2.06
13						
14	MONTHLY CUSTOMER COSTS	17.29	669.84	582.37	21.28	28.91
		=====	=====	=====	=====	=====

			TOTAL COMPANY (1)	TOTAL RESIDENTIAL (2)	TOTAL C&I SECONDARY (3)	TOTAL C&I PRIMARY (4)	TOTAL MUNI STR LTG (5)	TOTAL PVT LTG (6)
<b>ALLOCATION FACTORS</b>								
1	TRANSMISSION		16,213	5,682	7,644	2,887	0	0
2	PERCENT	D01	100.000000%	35.045951%	47.147351%	17.806698%	0.000000%	0.000000%
3								
4	HIGH TENSION		16,799	5,972	7,761	2,962	52	52
5	PERCENT	D02	100.000000%	35.549735%	46.199179%	17.632002%	0.309542%	0.309542%
6								
7	LOW TENSION - OH & UG		16,178	7,429	8,652	0	49	49
8	PERCENT	D03	100.000000%	45.919550%	53.477770%	0.000000%	0.299794%	0.302885%
9								
10	KWH SALES		75,433,633	28,279,484	31,555,811	15,174,435	207,590	216,313
11	PERCENT	E01	100.000000%	37.489224%	41.832548%	20.116272%	0.275196%	0.286759%
12								
13	OH & UG LINES & TRANSF. CUST. COMP.		804,808	579,719	147,348	0	53,020	24,721
14	PERCENT	C01	100.000000%	72.031963%	18.308466%	0.000000%	6.587907%	3.071664%
15								
16	BOOK COST - SERVICES OH & UG		935,162	334,518	434,729	165,915	0	0
17	PERCENT	C02	100.000000%	35.771128%	46.487026%	17.741846%	0.000000%	0.000000%
18								
19	BOOK COST-INSTALL. ON CUST. PREM.		1,127	1,127	0	0	0	0
20	PERCENT	C03	100.000000%	100.000000%	0.000000%	0.000000%	0.000000%	0.000000%
21								
22	BOOK COST-STREET LIGHTING		132,181	0	0	0	65,423	66,758
23	PERCENT	C04	100.000000%	0.000000%	0.000000%	0.000000%	49.495011%	50.504989%
24								
25	BOOK COST-METERS & METER INSTALL		516,818	252,286	260,303	4,229	0	0
26	PERCENT	S01	100.000000%	48.815250%	50.366473%	0.818276%	0.000000%	0.000000%
27								
28	CUSTOMER ACCOUNTS EXPENSE		205,727	159,157	42,392	287	180	3,711
29	PERCENT	S02	100.000000%	77.363205%	20.605949%	0.139505%	0.087495%	1.803847%
30								
31	UNCOLLECTIBLES ACCOUNTS		126,503	51,578	53,179	19,484	1,394	868
32	PERCENT	S03	100.000000%	40.772156%	42.037738%	15.402006%	1.101950%	0.686150%
33								
34	CUSTOMER SERVICE EXPENSES		16,311	12,680	3,224	21	18	368
35	PERCENT	S04	100.000000%	77.738949%	19.765802%	0.128747%	0.110355%	2.256146%
36								
37	REVENUES-PAYROLL & MISC.		10,758	4,385	4,523	1,657	119	74
38	PERCENT	S05	100.000000%	40.760364%	42.043131%	15.402491%	1.106154%	0.687860%
39								
40	REVENUES-WORKING CAPITAL		55,225	22,515	23,216	8,506	609	379
41	PERCENT	S06	100.000000%	40.769579%	42.038932%	15.402445%	1.102761%	0.686283%
42								
43	REVENUES FROM SALES		2,934,404	1,196,425	1,233,539	451,963	32,342	20,135
44	PERCENT	R01	100.000000%	40.772334%	42.037121%	15.402205%	1.102176%	0.686164%
45								
46	OTHER ELECTRIC REVENUES		(662)	(271)	(278)	(102)	(7)	(4)
47	PERCENT	R02	100.000000%	40.936556%	41.993958%	15.407855%	1.057402%	0.604230%
48								
49	NULL REVENUE FACTOR		0	0	0	0	0	0
50	PERCENT	R99	0.000000%	0.000000%	0.000000%	0.000000%	0.000000%	0.000000%
51								
52	NUMBER OF CUSTOMERS	K01	4,585	3,565	906	6	5	103

			RESID SC1	RESID SC1	C&I SC2	C&I SC2	C&I SC2
			W/ SP HTG	WSP & WTR HTG	GENERAL SERVICE	SEP MET SP HTG	SEC NON MET
			(7)	(8)	(9)	(10)	(11)
<b>ALLOCATION FACTORS</b>							
1	TRANSMISSION		5,050	632	7,472	68	55
2	PERCENT	D01	31.147844%	3.898106%	46.086474%	0.419417%	0.339234%
3							
4	HIGH TENSION		5,198	774	7,586	69	55
5	PERCENT	D02	30.942318%	4.607417%	45.157450%	0.410739%	0.327400%
6							
7	LOW TENSION - OH & UG		6,410	1,019	8,415	97	52
8	PERCENT	D03	39.620775%	6.298775%	52.015886%	0.596498%	0.318338%
9							
10	KWH SALES		22,362,951	5,916,533	30,415,883	445,792	450,979
11	PERCENT	E01	29.645862%	7.843362%	40.321382%	0.590972%	0.597849%
12							
13	OH & UG LINES & TRANSF. CUST. COMP.		490,756	88,963	114,645	1,775	11,791
14	PERCENT	C01	60.978022%	11.053941%	14.245012%	0.220549%	1.465070%
15							
16	BOOK COST - SERVICES OH & UG		291,163	43,355	424,926	3,865	3,081
17	PERCENT	C02	31.135033%	4.636095%	45.438758%	0.413297%	0.329462%
18							
19	BOOK COST-INSTALL. ON CUST. PREM.		1,127	0	0	0	0
20	PERCENT	C03	100.000000%	0.000000%	0.000000%	0.000000%	0.000000%
21							
22	BOOK COST-STREET LIGHTING		0	0	0	0	0
23	PERCENT	C04	0.000000%	0.000000%	0.000000%	0.000000%	0.000000%
24							
25	BOOK COST-METERS & METER INSTALL		218,553	33,733	249,512	2,724	0
26	PERCENT	S01	42.288194%	6.527056%	48.278504%	0.527071%	0.000000%
27							
28	CUSTOMER ACCOUNTS EXPENSE		134,755	24,402	34,100	491	2,602
29	PERCENT	S02	65.501854%	11.861350%	16.575364%	0.238666%	1.264783%
30							
31	UNCOLLECTIBLES ACCOUNTS		41,722	9,856	50,787	587	1,032
32	PERCENT	S03	32.981036%	7.791120%	40.146874%	0.464021%	0.815791%
33							
34	CUSTOMER SERVICE EXPENSES		10,734	1,946	2,508	39	258
35	PERCENT	S04	65.808350%	11.930599%	15.376127%	0.239102%	1.581755%
36							
37	REVENUES-PAYROLL & MISC.		3,546	839	4,319	50	88
38	PERCENT	S05	32.961517%	7.798847%	40.146867%	0.464770%	0.817996%
39							
40	REVENUES-WORKING CAPITAL		18,213	4,302	22,172	256	451
41	PERCENT	S06	32.979629%	7.789950%	40.148483%	0.463558%	0.816659%
42							
43	REVENUES FROM SALES		967,806	228,619	1,178,062	13,607	23,938
44	PERCENT	R01	32.981341%	7.790993%	40.146541%	0.463712%	0.815787%
45							
46	OTHER ELECTRIC REVENUES		(220)	(51)	(266)	(3)	(5)
47	PERCENT	R02	33.232628%	7.703927%	40.181269%	0.453172%	0.755287%
48							
49	NULL REVENUE FACTOR		0	0	0	0	0
50	PERCENT	R99	0.000000%	0.000000%	0.000000%	0.000000%	0.000000%
51							
52	NUMBER OF CUSTOMERS	K01	3,018	547	705	11	73

			C&I SC2 SEC NON DM ME (12)	C&I SC2 PRIMARY (13)	SC3 MUNI STR LTG (14)	SC4 RES PVT LTG (15)	SC4 COM PVT LTG (16)
<b>ALLOCATION FACTORS</b>							
1	TRANSMISSION		49	2,887	0	0	0
2	PERCENT	D01	0.302227%	17.806698%	0.000000%	0.000000%	0.000000%
3							
4	HIGH TENSION		51	2,962	52	12	40
5	PERCENT	D02	0.303589%	17.632002%	0.309542%	0.071433%	0.238109%
6							
7	LOW TENSION - OH & UG		89	0	49	11	38
8	PERCENT	D03	0.547048%	0.000000%	0.299794%	0.067995%	0.234891%
9							
10	KWH SALES		243,157	15,174,435	207,590	47,483	168,830
11	PERCENT	E01	0.322346%	20.116272%	0.275196%	0.062947%	0.223813%
12							
13	OH & UG LINES & TRANSF. CUST. COMP.		19,137	0	53,020	9,323	15,398
14	PERCENT	C01	2.377834%	0.000000%	6.587907%	1.158413%	1.913251%
15							
16	BOOK COST - SERVICES OH & UG		2,857	165,915	0	0	0
17	PERCENT	C02	0.305509%	17.741846%	0.000000%	0.000000%	0.000000%
18							
19	BOOK COST-INSTALL. ON CUST. PREM.		0	0	0	0	0
20	PERCENT	C03	0.000000%	0.000000%	0.000000%	0.000000%	0.000000%
21							
22	BOOK COST-STREET LIGHTING		0	0	65,423	14,687	52,071
23	PERCENT	C04	0.000000%	0.000000%	49.495011%	11.111279%	39.393710%
24							
25	BOOK COST-METERS & METER INSTALL		8,067	4,229	0	0	0
26	PERCENT	S01	1.560898%	0.818276%	0.000000%	0.000000%	0.000000%
27							
28	CUSTOMER ACCOUNTS EXPENSE		5,199	287	180	1,400	2,311
29	PERCENT	S02	2.527135%	0.139505%	0.087495%	0.680513%	1.123333%
30							
31	UNCOLLECTIBLES ACCOUNTS		773	19,484	1,394	210	658
32	PERCENT	S03	0.611053%	15.402006%	1.101950%	0.166004%	0.520146%
33							
34	CUSTOMER SERVICE EXPENSES		419	21	18	139	229
35	PERCENT	S04	2.568819%	0.128747%	0.110355%	0.852186%	1.403961%
36							
37	REVENUES-PAYROLL & MISC.		66	1,657	119	18	56
38	PERCENT	S05	0.613497%	15.402491%	1.106154%	0.167317%	0.520543%
39							
40	REVENUES-WORKING CAPITAL		337	8,506	609	92	287
41	PERCENT	S06	0.610231%	15.402445%	1.102761%	0.166591%	0.519692%
42							
43	REVENUES FROM SALES		17,932	451,963	32,342	4,874	15,261
44	PERCENT	R01	0.611101%	15.402205%	1.102176%	0.166089%	0.520074%
45							
46	OTHER ELECTRIC REVENUES		(4)	(102)	(7)	(1)	(3)
47	PERCENT	R02	0.604230%	15.407855%	1.057402%	0.151057%	0.453172%
48							
49	NULL REVENUE FACTOR		0	0	0	0	0
50	PERCENT	R99	0.000000%	0.000000%	0.000000%	0.000000%	0.000000%
51							
52	NUMBER OF CUSTOMERS	K01	118	6	5	39	64

Pike County Light And Power Company  
Electric Embedded Cost-of-Service Study Results  
For the Year 2007

<u>Service Classification</u>	<u>Rate of Return</u>	<u>Initial Surplus/Deficiency*</u>	<u>Adjustment**</u>	<u>Adjusted Surplus/Deficiency*</u>
Total System	2.33%			
SC 1 Residential-W/SP HTG	-2.61%	(239,597)	4,792	(234,805)
SC 1 Residential-W/SP & WTR HTG	5.62%	24,894		24,894
SC 2 C&I - General Service	3.56%	54,681		54,681
SC 2 C&I - Sep Met Sep Htg	5.94%	1,876		1,876
SC 2 C&I - Secondary Non Metered	12.22%	6,499		6,499
SC 2 C&I - Secondary Non DM Metered	-9.53%	(11,781)	236	(11,545)
SC 2 C&I - Primary	15.09%	181,272		181,272
SC 3 Municipal Street Lighting	-1.07%	(6,728)	135	(6,593)
SC 4 Residential Private Lighting	-12.55%	(6,048)	121	(5,927)
SC 4 Commercial Private Lighting	-8.86%	(10,563)	211	(10,352)
Total System		(5,495)	5,495 5,495	0

\* Deficiencies shown as negative

\*\* Applied to deficiency only

**Pike County Light And Power Company**

Index of Schedules

ELECTRIC RATE DESIGN

<u>Schedule</u>	<u>Title of Schedule</u>	<u>Witness</u>
1	Present and Proposed Rates (In Brief)	Rate Panel
2	Monthly Bill Comparisons	Rate Panel
3	Statements of Operating Revenues, Number of Customers and Annual Increases	Rate Panel



**PIKE COUNTY LIGHT AND POWER COMPANY**

Present and Proposed Rates (In Brief)

<u>Present SC1</u>		<u>Proposed SC1</u>	
Customer Charge	\$5.29	Customer Charge	\$8.00
First 1,000 kWh	3.8143 ¢/kWh	First 1,000 kWh	5.8232 ¢/kWh
Over 1,000 kWh	3.2960 ¢/kWh	Over 1,000 kWh	5.0319 ¢/kWh
Plus: SBC	0.0251 ¢/kWh	Plus: SBC	0.0251 ¢/kWh
Plus: STAS - Part 1	0.23%	Plus: STAS - Part 1	0.00%
Plus: Default Service	Variable * ¢/kWh	Plus: Default Service	Variable * ¢/kWh
Plus: STAS - Part 2	0.29%	Plus: STAS - Part 2	0.29%
Minimum Charge:		Minimum Charge:	
\$ 5.29 per month		\$ 8.00 per month	

<u>Present SC1 - Water Heating</u>		<u>Proposed SC1 - Water Heating</u>	
Customer Charge	\$5.29	Customer Charge	\$8.00
First 300 kWh	3.8143 ¢/kWh	First 300 kWh	5.8232 ¢/kWh
Next 400 kWh	3.2960 ¢/kWh	Next 400 kWh	5.0319 ¢/kWh
Next 300 kWh	3.8143 ¢/kWh	Next 300 kWh	5.8232 ¢/kWh
Over 1,000 kWh	3.2960 ¢/kWh	Over 1,000 kWh	5.0319 ¢/kWh
Plus: SBC	0.0251 ¢/kWh	Plus: SBC	0.0251 ¢/kWh
Plus: STAS - Part 1	0.23%	Plus: STAS - Part 1	0.00%
Plus: Default Service	Variable *	Plus: Default Service	Variable *
Plus: STAS - Part 2	0.29%	Plus: STAS - Part 2	0.29%
Minimum Charge:		Minimum Charge:	
\$ 5.29 per month		\$ 8.00 per month	

\* Applies to customers, who do not procure their electric supply requirements from an Electric Generation Supplier.

**PIKE COUNTY LIGHT AND POWER COMPANY**

Present and Proposed Rates (In Brief)

<u>Present SC2 - Secondary</u>		<u>Proposed SC2 - Secondary</u>	
Customer Charge	\$5.30	Customer Charge	\$10.00
First 5 kW	\$0.00 /kW	First 5 kW	\$0.00 /kW
Over 5 kW	\$2.67 /kW	Over 5 kW	\$3.37 /kW
First 100 HU		First 100 HU	
First 300 kWh	4.8460 ¢/kWh	First 300 kWh	6.1166 ¢/kWh
Next 700 kWh	4.4702 ¢/kWh	Next 700 kWh	5.6423 ¢/kWh
Over 1,000 kWh	3.4670 ¢/kWh	Over 1,000 kWh	4.3760 ¢/kWh
Next 100 HU	3.0301 ¢/kWh	Next 100 HU	3.8246 ¢/kWh
Over 200 HU	2.9429 ¢/kWh	Over 200 HU	3.7145 ¢/kWh
Separately Metered Space Heating:		Separately Metered Space Heating:	
All kWh	3.2482 ¢/kWh	All kWh	4.0999 ¢/kWh
Plus: SBC	0.0251 ¢/kWh	Plus: SBC	0.0251 ¢/kWh
Plus: STAS - Part 1	0.23%	Plus: STAS - Part 1	0.00%
Plus: Default Service	Variable *	Plus: Default Service	Variable *
Plus: STAS - Part 2	0.29%	Plus: STAS - Part 2	0.29%
Minimum Charge:		Minimum Charge:	
\$ 5.30 per month		\$ 10.00 per month	

\* Applies to customers, who do not procure their electric supply requirements from an Electric Generation Supplier.

**PIKE COUNTY LIGHT AND POWER COMPANY**

Present and Proposed Rates (In Brief)

<u>Present SC2 - Primary</u>		<u>Proposed SC2 - Primary</u>	
Customer Charge	\$5.30	Customer Charge	\$105.00
First 5 kW	\$0.00 /kW	First 5 kW	\$0.00 /kW
Over 5 kW	\$2.67 /kW	Over 5 kW	\$3.13 /kW
First 100 HU		First 100 HU	
First 300 kWh	4.8460 ¢/kWh	First 300 kWh	5.6820 ¢/kWh
Next 700 kWh	4.4702 ¢/kWh	Next 700 kWh	5.2414 ¢/kWh
Over 1,000 kWh	3.4670 ¢/kWh	Over 1,000 kWh	4.0651 ¢/kWh
Next 100 HU	3.0301 ¢/kWh	Next 100 HU	3.5528 ¢/kWh
Over 200 HU	1.9957 ¢/kWh	Over 200 HU	2.3400 ¢/kWh
Plus: SBC	0.0251 ¢/kWh	Plus: SBC	0.0251 ¢/kWh
Plus: STAS - Part 1	0.23%	Plus: STAS - Part 1	0.00%
Plus: Default Service	Variable *	Plus: Default Service	Variable *
Plus: STAS - Part 2	0.29%	Plus: STAS - Part 2	0.29%
Minimum Charge:		Minimum Charge:	
\$ 5.30 per month		\$ 105.00 per month	

\* Applies to customers, who do not procure their electric supply requirements from an Electric Generation Supplier.

**PIKE COUNTY LIGHT AND POWER COMPANY**

Present and Proposed Rates (In Brief)

<u>Present SC3</u> <u>(Municipal Street Lighting - Monthly)</u>			<u>Proposed SC3</u> <u>(Municipal Street Lighting - Monthly)</u>		
<u>Lumens</u>	<u>Luminaire Type</u>	<u>Charge</u>	<u>Lumens</u>	<u>Luminaire Type</u>	<u>Charge</u>
Street Lighting Luminaries:			Street Lighting Luminaries:		
5,800	Sodium Vapor	\$9.35	5800	Sodium Vapor	\$14.25
9,500	Sodium Vapor	10.24	9500	Sodium Vapor	15.60
16,000	Sodium Vapor	11.63	16000	Sodium Vapor	17.72
27,500	Sodium Vapor	14.91	27500	Sodium Vapor	22.72
46,000	Sodium Vapor	19.64	46000	Sodium Vapor	29.93
Flood Lighting Luminaries:			Flood Lighting Luminaries:		
27,500	Sodium Vapor	15.82	27500	Sodium Vapor	24.11
46,000	Sodium Vapor	20.10	46000	Sodium Vapor	30.63
Obsolete Luminaries*:			Obsolete Luminaries*:		
4,000	Mercury Vapor	6.67	4000	Mercury Vapor	10.16
7,900	Mercury Vapor	8.34	7900	Mercury Vapor	12.71
12,000	Mercury Vapor	11.17	12000	Mercury Vapor	17.02
22,500	Mercury Vapor	14.91	22500	Mercury Vapor	22.72
1,000	Incandescent	4.84	1000	Incandescent	7.38
2,500	Incandescent	7.06	2500	Incandescent	10.76
Fifteen Foot Brackets		0.29	Fifteen Foot Brackets		0.44
Underground Service:			Underground Service:		
Company Owned		11.11	Company Owned		16.93
Company Owned		2.69	Company Owned		4.10

\* These luminaries will no longer be replaced.

\* These luminaries will no longer be replaced.

**PIKE COUNTY LIGHT AND POWER COMPANY**

Present and Proposed Rates (In Brief)

<u>Present SC4</u> <u>(Private Area Lighting - Monthly)</u>			<u>Present SC4</u> <u>(Private Area Lighting - Monthly)</u>		
<u>Lumens</u>	<u>Luminaire Type</u>	<u>Charge</u>	<u>Lumens</u>	<u>Luminaire Type</u>	<u>Charge</u>
Open Bottom Luminaries:			Open Bottom Luminaries:		
4,000 M.V.	Mercury Vapor	\$5.95	4,000 M.V.	Mercury Vapor	\$8.97
7,900 M.V.	Mercury Vapor	7.33	7,900 M.V.	Mercury Vapor	11.06
Closed Bottom Luminaries:			Closed Bottom Luminaries:		
4,000 M.V.	Mercury Vapor	6.63	4,000 M.V.	Mercury Vapor	10.00
7,900 M.V.	Mercury Vapor	8.03	7,900 M.V.	Mercury Vapor	12.11
Closed Bottom and Floodlighting:			Closed Bottom and Floodlighting:		
12,000 M.V.	Mercury Vapor	10.46	12,000 M.V.	Mercury Vapor	15.78
22,500 M.V.	Mercury Vapor	13.60	22,500 M.V.	Mercury Vapor	20.51
59,000 M.V.	Mercury Vapor	27.01	59,000 M.V.	Mercury Vapor	40.74
46,000 S.V.	Sodium Vapor	16.48	46,000 S.V.	Sodium Vapor	24.86
Fifteen Foot Brackets		0.29	Fifteen Foot Brackets		0.44
92 Watt Incandescent		4.80	92 Watt Incandescent		7.24

**PIKE COUNTY LIGHT & POWER COMPANY**

Monthly Billing Comparison  
 Reflecting Proposed Delivery Rate Changes

***SC1 Residential***

Monthly Usage (kWh)	Bill at Present Rates	Bill at Proposed Rates	Change	
			Amount	Percent
0	\$5.30	\$8.00	\$2.70	50.9
50	13.19	16.89	3.70	28.1
100	21.08	25.78	4.70	22.3
200	\$36.87	\$43.57	\$6.70	18.2
250	44.76	52.46	7.70	17.2
300	52.65	61.35	8.70	16.5
400	\$68.43	\$79.13	\$10.70	15.6
500	84.22	96.91	12.69	15.1
750	123.67	141.37	17.70	14.3
1,000	\$163.13	\$185.83	\$22.70	13.9
1,500	239.45	270.79	31.34	13.1
2,000	315.76	355.74	39.98	12.7

**PIKE COUNTY LIGHT & POWER COMPANY**

Monthly Billing Comparison  
 Reflecting Proposed Default Svc Rate Change

***SC1 Residential with Water Heating***

Monthly Usage (kWh)	Bill at Present Rates	Bill at Proposed Rates	Change	
			Amount	Percent
0	\$5.30	\$8.00	\$2.70	50.9
50	13.19	16.89	3.70	28.1
100	21.08	25.78	4.70	22.3
200	\$36.87	\$43.57	\$6.70	18.2
250	44.76	52.46	7.70	17.2
300	52.65	61.35	8.70	16.5
400	\$67.91	\$78.34	\$10.43	15.4
500	83.18	95.33	12.15	14.6
750	121.59	138.21	16.62	13.7
1,000	\$161.05	\$182.66	\$21.61	13.4
1,500	237.37	267.62	30.25	12.7
2,000	313.68	352.58	38.90	12.4

**PIKE COUNTY LIGHT & POWER COMPANY**

Monthly Billing Comparison  
 Reflecting Proposed Delivery Rate Changes

***SC2 General Service - Non-Demand Metered***

<u>Demand (kW)</u>	<u>Monthly Usage (kWh)</u>	<u>Bill at Present Rates</u>	<u>Bill at Proposed Rates</u>	<u>Change Amount</u>	<u>Percent</u>
0	0	\$5.31	\$10.00	\$4.69	88.2
0	100	22.13	28.08	5.95	26.9
0	200	38.95	46.15	7.21	18.5
0	300	\$55.76	\$64.23	\$8.47	15.2
0	400	72.20	81.83	9.63	13.3
0	500	88.64	99.43	10.79	12.2
0	750	\$129.74	\$143.44	\$13.69	10.6
0	1,000	170.84	187.44	16.60	9.7
0	1,250	209.43	228.28	18.85	9.0
0	1,500	\$248.02	\$269.12	\$21.10	8.5
0	1,750	286.60	309.96	23.36	8.1
0	2,000	325.19	350.80	25.61	7.9



**PIKE COUNTY LIGHT & POWER COMPANY**

Monthly Billing Comparison  
Reflecting Proposed Delivery Rate Changes

***SC2 General Service Secondary***

<u>Demand (kW)</u>	<u>Monthly Usage (kWh)</u>	<u>Bill at Present Rates</u>	<u>Bill at Proposed Rates</u>	<u>Change Amount</u>	<u>Percent</u>
7	700	\$126.88	\$141.38	\$14.50	11.4
7	1,400	231.85	251.87	20.01	8.6
7	2,100	336.22	361.58	25.37	7.5
7	2,800	440.58	471.30	30.72	7.0
10	1,000	\$184.22	\$204.29	\$20.07	10.9
10	2,000	334.19	362.13	27.94	8.4
10	3,000	483.29	518.88	35.59	7.4
10	4,000	632.38	675.62	43.24	6.8
25	2,500	\$455.89	\$499.88	\$43.99	9.6
25	5,000	830.80	894.48	63.68	7.7
25	7,500	1,203.54	1,286.34	82.80	6.9
25	10,000	1,576.27	1,678.19	101.92	6.5
50	5,000	\$908.66	\$992.52	\$83.87	9.2
50	10,000	1,658.49	1,781.73	123.24	7.4
50	15,000	2,403.96	2,565.44	161.48	6.7
50	20,000	3,149.43	3,349.14	199.72	6.3
100	10,000	\$1,814.19	\$1,977.81	\$163.61	9.0
100	20,000	3,313.87	3,556.23	242.36	7.3
100	30,000	4,804.80	5,123.64	318.84	6.6
100	40,000	6,295.74	6,691.05	395.32	6.3
150	15,000	\$2,719.73	\$2,963.09	\$243.36	8.9
150	30,000	4,969.24	5,330.72	361.48	7.3
150	45,000	7,205.65	7,681.84	476.20	6.6
150	60,000	9,442.05	10,032.96	590.92	6.3

**PIKE COUNTY LIGHT & POWER COMPANY**

Monthly Billing Comparison  
Reflecting Proposed Delivery Rate Changes

***SC2 General Service Primary***

<u>Demand (kW)</u>	<u>Monthly Usage (kWh)</u>	<u>Bill at Present Rates</u>	<u>Bill at Proposed Rates</u>	<u>Change Amount</u>	<u>Percent</u>
100	20,000	\$3,313.87	\$3,569.21	\$255.34	7.7
100	30,000	4,709.86	4,999.17	289.31	6.1
100	40,000	6,105.86	6,429.13	323.27	5.3
100	50,000	7,501.86	7,859.09	357.24	4.8
150	30,000	\$4,969.24	\$5,302.60	\$333.36	6.7
150	45,000	7,063.24	7,447.54	384.31	5.4
150	60,000	9,157.23	9,592.49	435.25	4.8
150	75,000	11,251.23	11,737.43	486.20	4.3
200	40,000	\$6,624.62	\$7,035.99	\$411.37	6.2
200	60,000	9,416.61	9,895.92	479.30	5.1
200	80,000	12,208.60	12,755.84	547.23	4.5
200	100,000	15,000.60	15,615.76	615.16	4.1
500	100,000	\$16,556.88	\$17,436.34	\$879.46	5.3
500	150,000	23,536.86	24,586.14	1,049.29	4.5
500	200,000	30,516.83	31,735.94	1,219.11	4.0
500	250,000	37,496.81	38,885.75	1,388.93	3.7
750	150,000	\$24,833.76	\$26,103.29	\$1,269.54	5.1
750	225,000	35,303.72	36,828.00	1,524.27	4.3
750	300,000	45,773.69	47,552.70	1,779.01	3.9
750	375,000	56,243.66	58,277.40	2,033.74	3.6
1,000	200,000	\$33,110.64	\$34,770.25	\$1,659.61	5.0
1,000	300,000	47,070.59	49,069.85	1,999.25	4.2
1,000	400,000	61,030.55	63,369.45	2,338.90	3.8
1,000	500,000	74,990.51	77,669.06	2,678.55	3.6

**PIKE COUNTY LIGHT AND POWER COMPANY**

Statement of Revenues for the  
Twelve Months Ending March 31, 2009  
(At Current Rates)

<u>Customer Classification</u>	<u>Base Rate Revenue (\$)</u>	<u>Total Revenue (\$)</u>
SC 1 - Residential	\$1,292,242	\$4,737,565
SC 2 Secondary - Commercial	1,312,434	5,129,271
SC 2 Primary - Commercial	475,027	2,269,472
SC 3 - Municipal Street Lighting	38,257	63,221
SC 4 - Private Area Lighting	<u>25,505</u>	<u>51,157</u>
Total	\$3,143,465	\$12,250,687

Note: Pike has other operating revenues of \$8,400

Statement of Total Number of Customers  
Served at March 31, 2009

SC 1 - Residential	3,606
SC 2 Secondary - Commercial	907
SC 2 Primary - Commercial	7
SC 3 - Municipal Street Lighting	5
SC 4 - Private Area Lighting	<u>104</u>
Total	<u>4,629</u>

**PIKE COUNTY LIGHT AND POWER COMPANY**

Tariff Regulations 52 Pa. Code § 53.52(b)(3) to (6)

53.52(b)(3) to (4) -- Statement of the number of gas customers whose bills will be increased and the annual increase in dollars.

<u>Customer Classification</u>	<u>Customers @ March 31, 2009</u>	<u>Annual Increase (\$)</u>
SC 1 - Residential	3,606	\$674,311
SC 2 Secondary - Commercial	907	376,645
SC 2 Primary - Commercial	7	87,987
SC 3 - Municipal Street Lighting	5	19,947
SC 4 - Private Area Lighting	104	12,907
Total	<u>4,629</u>	<u>\$1,171,797</u>

53.52(b)(5) to (6) -- Statement of the number of gas customers whose bills will be decreased and the annual decrease in dollars.

<u>Customer Classification</u>	<u>Customers @ March 31, 2009</u>	<u>Annual Decrease (\$)</u>
SC 1 - Residential	0	\$0
SC 2 Secondary - Commercial	0	0
SC 2 Primary - Commercial	0	0
SC 3 - Municipal Street Lighting	0	0
SC 4 - Private Area Lighting	<u>0</u>	<u>0</u>
Total	<u>0</u>	<u>\$0</u>

Pike County Light & Power Co.  
Exhibit E-9 Cost of Equity

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RAM Exhibit	Description	Pages
1	Resume of Roger A. Morin	20
2	Electric Utilities Beta Estimates	3
3	Electric Industry Historical Risk Premium	2
4	Distribution Utility Companies	5
5	S&P Distribution Electric Utilities - DCF Analysis: Value Line Growth Projections	2
6	S&P Distribution Electric Utilities - DCF Analysis: Analysts' Growth Forecasts	2
7	Moody's Electric Utilities - DCF Analysis: Value Line Growth Projections	4
8	Moody's Electric Utilities - DCF Analysis: Analysts' Growth Forecasts	3
Appendix A	CAPM, Empirical CAPM	15
Appendix B	Flotation Cost Allowance	9

## **RESUME OF ROGER A. MORIN**

**(Spring 2008)**

**NAME:** Roger A. Morin

**ADDRESS:** 9 King Ave.  
Jekyll Island, GA 31527, USA

87 Paddys Head Rd  
Peggy's Cove Hway  
Nova Scotia, Canada B3A 3N6

**TELEPHONE:** (912) 635-3233 business office  
(912) 635-3233 business fax  
(404) 229-2857 cellular  
(902) 823-0000 summer office

**E-MAIL ADDRESS:** profmorin@mac.com

**DATE OF BIRTH:** 3/5/1945

**PRESENT EMPLOYER:** Georgia State University  
Robinson College of Business  
Atlanta, GA 30303

**RANK:** Emeritus Professor of Finance

**HONORS:** Professor of Finance for Regulated Industry  
Director Center for the Study of Regulated Industry,  
Robinson College of Business, Georgia State University.

### **EDUCATIONAL HISTORY**

- Bachelor of Electrical Engineering, McGill University, Montreal, Canada, 1967.
- Master of Business Administration, McGill University, Montreal, Canada, 1969.
- PhD in Finance & Econometrics, Wharton School of Finance, University of Pennsylvania, 1976.

## **EMPLOYMENT HISTORY**

- Lecturer, Wharton School of Finance, Univ. of Pennsylvania, 1972-3
- Assistant Professor, University of Montreal School of Business, 1973-1976.
- Associate Professor, University of Montreal School of Business, 1976-1979.
- Professor of Finance, Georgia State University, 1979-2008
- Professor of Finance for Regulated Industry and Director, Center for the Study of Regulated Industry, Robinson College of Business, Georgia State University, 1985-2008
- Visiting Professor of Finance, Amos Tuck School of Business, Dartmouth College, Hanover, N.H., 1986
- Emeritus Professor of Finance, Georgia State University, 2007-8

## **OTHER BUSINESS ASSOCIATIONS**

- Communications Engineer, Bell Canada, 1962-1967.
- Member of the Board of Directors, Financial Research Institute of Canada, 1974-1980.
- Co-founder and Director, Canadian Finance Research Foundation, 1977.
- Vice-President of Research, Garmaise-Thomson & Associates, Investment Management Consultants, 1980-1981.
- Executive Visions Inc., Board of Directors, Member.
- Board of External Advisors, College of Business, Georgia State University, Member 1987-1991.

**PROFESSIONAL CLIENTS**

AGL Resources  
AT & T Communications  
Alagasco - Energen  
Alaska Anchorage Municipal Light & Power  
Alberta Power Ltd.  
Allete  
Ameren  
American Water Works Company  
Ameritech  
Arkansas Western Gas  
Baltimore Gas & Electric – Constellation Energy  
Bangor Hydro-Electric  
B.C. Telephone  
B C GAS  
Bell Canada  
Bellcore  
Bell South Corp.  
Bruncor (New Brunswick Telephone)  
Burlington-Northern  
C & S Bank  
Cajun Electric  
Canadian Radio-Television & Telecomm. Commission  
Canadian Utilities  
Canadian Western Natural Gas  
Cascade Natural Gas  
Centel  
Centra Gas  
Central Illinois Light & Power Co  
Central Telephone



Central & South West Corp.  
Chattanooga Gas Company  
Cincinnati Gas & Electric  
Cinergy Corp.  
Citizens Utilities  
City Gas of Florida  
CN-CP Telecommunications  
Commonwealth Telephone Co.  
Columbia Gas System  
Consolidated Natural Gas  
Constellation Energy  
Delmarva Power & Light Co  
Deerpath Group  
DTE Energy  
Edison International  
Edmonton Power Company  
Elizabethtown Gas Co.  
Emera  
Energen  
Engraph Corporation  
Entergy Corp.  
Entergy Arkansas Inc.  
Entergy Gulf States, Inc.  
Entergy Louisiana, Inc.  
Entergy Mississippi Power  
Entergy New Orleans, Inc.  
First Energy  
Florida Water Association  
Fortis  
Garmaise-Thomson & Assoc., Investment Consultants

Gaz Metropolitan  
General Public Utilities  
Georgia Broadcasting Corp.  
Georgia Power Company  
GTE California - Verizon  
GTE Northwest Inc. - Verizon  
GTE Service Corp. - Verizon  
GTE Southwest Incorporated - Verizon  
Gulf Power Company  
Havasu Water Inc.  
Hawaiian Electric Company  
Hawaii Electric Light Company  
Heater Utilities – Aqua - America  
Hope Gas Inc.  
Hydro-Quebec  
ICG Utilities  
Illinois Commerce Commission  
Island Telephone  
Jersey Central Power & Light  
Kansas Power & Light  
KeySpan Energy  
Manitoba Hydro  
Maritime Telephone  
Maui Electric Company  
Metropolitan Edison Co.  
Minister of Natural Resources Province of Quebec  
Minnesota Power & Light  
Mississippi Power Company  
Missouri Gas Energy  
Mountain Bell

National Grid  
Nevada Power Company  
New Brunswick Power  
Newfoundland Power Inc. - Fortis Inc.  
New Market Hydro  
New Tel Enterprises Ltd.  
New York Telephone Co.  
Niagara Mohawk Power Corp  
Norfolk-Southern  
Northeast Utilities  
Northern Telephone Ltd.  
Northwestern Bell  
Northwestern Utilities Ltd.  
Nova Scotia Power  
Nova Scotia Utility and Review Board  
NUI Corp.  
NYNEX  
Oklahoma G & E  
Ontario Telephone Service Commission  
Orange & Rockland  
PNM Resources  
Pacific Northwest Bell  
People's Gas System Inc.  
People's Natural Gas  
Pennsylvania Electric Co.  
Pepco Holdings  
Potomac Electric Power Co.  
Price Waterhouse  
PSI Energy  
Public Service Electric & Gas

Public Service of New Hampshire  
Public Service of New Mexico  
Puget Sound Electric Co.  
Quebec Telephone  
Regie de l'Energie du Quebec  
Rochester Telephone  
San Diego Gas & Electric  
SaskPower  
Sierra Pacific Power Company  
Southern Bell  
Southern States Utilities  
Southern Union Gas  
South Central Bell  
Sun City Water Company  
TECO Energy  
The Southern Company  
Touche Ross and Company  
TransEnergie  
Trans-Quebec & Maritimes Pipeline  
TXU Corp  
US WEST Communications  
Union Heat Light & Power  
Utah Power & Light  
Vermont Gas Systems Inc.

**MANAGEMENT DEVELOPMENT AND PROFESSIONAL EXECUTIVE EDUCATION**

- Canadian Institute of Marketing, Corporate Finance, 1971-73
- Hydro-Quebec, "Capital Budgeting Under Uncertainty," 1974-75
- Institute of Certified Public Accountants, Mergers & Acquisitions, 1975-78

- Investment Dealers Association of Canada, 1977-78
  - Financial Research Foundation, bi-annual seminar, 1975-79
  - Advanced Management Research (AMR), faculty member, 1977-80
  - Financial Analysts Federation, Educational chapter: "Financial Futures Contracts" seminar
  - Exnet Inc. a.k.a. The Management Exchange Inc., faculty member 1981-2008.
- National Seminars:

*Risk and Return on Capital Projects*  
*Cost of Capital for Regulated Utilities*  
*Capital Allocation for Utilities*  
*Alternative Regulatory Frameworks*  
*Utility Directors' Workshop*  
*Shareholder Value Creation for Utilities*  
*Fundamentals of Utility Finance in a Restructured Environment*  
*Contemporary Issues in Utility Finance*

- Georgia State University College of Business, Management Development Program, faculty member, 1981-1994.

### **EXPERT TESTIMONY & UTILITY CONSULTING AREAS OF EXPERTISE**

Corporate Finance  
Rate of Return  
Capital Structure  
Generic Cost of Capital  
Costing Methodology  
Depreciation  
Flow-Through vs Normalization  
Revenue Requirements Methodology  
Utility Capital Expenditures Analysis  
Risk Analysis  
Capital Allocation  
Divisional Cost of Capital, Unbundling  
Incentive Regulation & Alternative Regulatory Plans  
Shareholder Value Creation  
Value-Based Management

**REGULATORY BODIES**

Alabama Public Service Commission  
Alaska Public Utility Commission  
Alberta Public Service Board  
Arizona Corporation Commission  
Arkansas Public Service Commission  
British Columbia Board of Public Utilities  
California Public Service Commission  
Canadian Radio-Television & Telecommunications Comm.  
Colorado Public Utilities Board  
Delaware Public Utility Commission  
District of Columbia Public Service Commission  
Federal Communications Commission  
Federal Energy Regulatory Commission  
Florida Public Service Commission  
Georgia Public Service Commission  
Georgia Senate Committee on Regulated Industries  
Hawaii Public Utilities Commission  
Illinois Commerce Commission  
Indiana Utility Regulatory Commission  
Iowa Board of Public Utilities  
Louisiana Public Service Commission  
Maine Public Service Commission  
Manitoba Board of Public Utilities  
Michigan Public Service Commission  
Minnesota Public Utilities Commission  
Mississippi Public Service Commission  
Missouri Public Service Commission  
Montana Public Service Commission  
National Energy Board of Canada

Nevada Public Service Commission  
New Brunswick Board of Public Commissioners  
New Hampshire Public Utility Commission  
New Jersey Board of Public Utilities  
New Mexico Public Regulatory Commission  
New York Public Service Commission  
Newfoundland Board of Commissioners of Public Utilities  
North Carolina Utilities Commission  
Ohio Public Utilities Commission  
Oklahoma State Board of Equalization  
Ontario Telephone Service Commission  
Ontario Energy Board  
Pennsylvania Public Service Commission  
Quebec Natural Gas Board  
Quebec Regie de l'Energie  
Quebec Telephone Service Commission  
South Carolina Public Service Commission  
Tennessee Regulatory Authority  
Texas Public Utility Commission  
Utah Public Service Commission  
Virginia Public Service Commission  
Washington Utilities & Transportation Commission  
West Virginia Public Service Commission

**SERVICE AS EXPERT WITNESS**

Southern Bell, So. Carolina PSC, Docket #81-201C  
Southern Bell, So. Carolina PSC, Docket #82-294C  
Southern Bell, North Carolina PSC, Docket #P-55-816  
Metropolitan Edison, Pennsylvania PUC, Docket #R-822249  
Pennsylvania Electric, Pennsylvania PUC, Docket #R-822250

Georgia Power, Georgia PSC, Docket # 3270-U, 1981  
Georgia Power, Georgia PSC, Docket # 3397-U, 1983  
Georgia Power, Georgia PSC, Docket # 3673-U, 1987  
Georgia Power, F.E.R.C., Docket # ER 80-326, 80-327  
Georgia Power, F.E.R.C., Docket # ER 81-730, 80-731  
Georgia Power, F.E.R.C., Docket # ER 85-730, 85-731  
Bell Canada, CRTC 1987  
Northern Telephone, Ontario PSC  
GTE-Quebec Telephone, Quebec PSC, Docket 84-052B  
Newtel., Nfld. Brd of Public Commission PU 11-87  
CN-CP Telecommunications, CRTC  
Quebec Northern Telephone, Quebec PSC  
Edmonton Power Company, Alberta Public Service Board  
Kansas Power & Light, F.E.R.C., Docket # ER 83-418  
NYNEX, FCC generic cost of capital Docket #84-800  
Bell South, FCC generic cost of capital Docket #84-800  
American Water Works - Tennessee, Docket #7226  
Burlington-Northern - Oklahoma State Board of Taxes  
Georgia Power, Georgia PSC, Docket # 3549-U  
GTE Service Corp., FCC Docket #84-200  
Mississippi Power Co., Miss. PSC, Docket U-4761  
Citizens Utilities, Ariz. Corp. Comm., D # U2334-86020  
Quebec Telephone, Quebec PSC, 1986, 1987, 1992  
Newfoundland L & P, Nfld. Brd. Publ Comm. 1987, 1991  
Northwestern Bell, Minnesota PSC, #P-421/CI-86-354  
GTE Service Corp., FCC Docket #87-463  
Anchorage Municipal Power & Light, Alaska PUC, 1988  
New Brunswick Telephone, N.B. PUC, 1988  
Trans-Quebec Maritime, Nat'l Energy Brd. of Cda, '88-92  
Gulf Power Co., Florida PSC, Docket #88-1167-EI



Mountain States Bell, Montana PSC, #88-1.2  
Mountain States Bell, Arizona CC, #E-1051-88-146  
Georgia Power, Georgia PSC, Docket # 3840-U, 1989  
Rochester Telephone, New York PSC, Docket # 89-C-022  
Noverco - Gaz Metro, Quebec Natural Gas PSC, #R-3164-89  
GTE Northwest, Washington UTC, #U-89-3031  
Orange & Rockland, New York PSC, Case 89-E-175  
Central Illinois Light Company, ICC, Case 90-0127  
Peoples Natural Gas, Pennsylvania PSC, Case  
Gulf Power, Florida PSC, Case # 891345-EI  
ICG Utilities, Manitoba BPU, Case 1989  
New Tel Enterprises, CRTC, Docket #90-15  
Peoples Gas Systems, Florida PSC  
Jersey Central Pwr & Light, N.J. PUB, Case ER 89110912J  
Alabama Gas Co., Alabama PSC, Case 890001  
Trans-Quebec Maritime Pipeline, Cdn. Nat'l Energy Board  
Mountain Bell, Utah PSC,  
Mountain Bell, Colorado PUB  
South Central Bell, Louisiana PS  
Hope Gas, West Virginia PSC  
Vermont Gas Systems, Vermont PSC  
Alberta Power Ltd., Alberta PUB  
Ohio Utilities Company, Ohio PSC  
Georgia Power Company, Georgia PSC  
Sun City Water Company  
Havasu Water Inc.  
Centra Gas (Manitoba) Co.  
Central Telephone Co. Nevada  
AGT Ltd., CRTC 1992  
BC GAS, BCPUB 1992

California Water Association, California PUC 1992  
Maritime Telephone 1993  
BCE Enterprises, Bell Canada, 1993  
Citizens Utilities Arizona gas division 1993  
PSI Resources 1993-5  
CILCORP gas division 1994  
GTE Northwest Oregon 1993  
Stentor Group 1994-5  
Bell Canada 1994-1995  
PSI Energy 1993, 1994, 1995, 1999  
Cincinnati Gas & Electric 1994, 1996, 1999, 2004  
Southern States Utilities, 1995  
CILCO 1995, 1999, 2001  
Commonwealth Telephone 1996  
Edison International 1996, 1998  
Citizens Utilities 1997  
Stentor Companies 1997  
Hydro-Quebec 1998  
Entergy Gulf States Louisiana 1998, 1999, 2001, 2002, 2003  
Detroit Edison, 1999, 2003  
Entergy Gulf States, Texas, 2000, 2004  
Hydro Quebec TransEnergie, 2001, 2004  
Sierra Pacific Company, 2000, 2001, 2002, 2007  
Nevada Power Company, 2001  
Mid American Energy, 2001, 2002  
Entergy Louisiana Inc. 2001, 2002, 2004  
Mississippi Power Company, 2001, 2002, 2007  
Oklahoma Gas & Electric Company, 2002 -2003  
Public Service Electric & Gas, 2001, 2002  
NUI Corp (Elizabethtown Gas Company), 2002

Jersey Central Power & Light, 2002  
San Diego Gas & Electric, 2002  
New Brunswick Power, 2002  
Entergy New Orleans, 2002  
Hydro-Quebec Distribution 2002  
PSI Energy 2003  
Fortis – Newfoundland Power & Light 2002  
Emera – Nova Scotia Power 2004  
Hydro-Quebec TransEnergie 2004  
Hawaiian Electric 2004  
Missouri Gas Energy 2004  
AGL Resources 2004  
Arkansas Western Gas 2004  
Public Service of New Hampshire 2005  
Hawaiian Electric Company 2005  
Delmarva Power & Light Company 2005  
Union Heat Power & Light 2005  
Puget Sound Electric Co 2006  
Cascade Natural Gas 2006  
Entergy Arkansas 2006-7  
Bangor Hydro 2006-7  
Delmarva 2006-7  
Potomac Electric Power Co. 2006, 2007  
Detroit Edison Co. 2007  
Nevada Power Co. 2007  
Hawaiian Electric Co. 2006-7  
Hawaii Electric Light Co. 2007  
Maui Electric Co. 2007  
Ameren Union Electric 2008  
Consolidated Edison of New York 2007-2008

Orange & Rockland 2007  
Niagara Mohawk Power Corp 2008  
Allele (Minnesota Power) 2007-2008  
Sierra Pacific Power 2007-2008

### **PROFESSIONAL AND LEARNED SOCIETIES**

- Engineering Institute of Canada, 1967-1972
- Canada Council Award, recipient 1971 and 1972
- Canadian Association Administrative Sciences, 1973-80
- American Association of Decision Sciences, 1974-1978
- American Finance Association, 1975-2002
- Financial Management Association, 1978-2002

### **ACTIVITIES IN PROFESSIONAL ASSOCIATIONS AND MEETINGS**

- Chairman of meeting on "New Developments in Utility Cost of Capital", Southern Finance Association, Atlanta, Nov. 1982
- Chairman of meeting on "Public Utility Rate of Return", Southeastern Public Utility Conference, Atlanta, Oct. 1982
- Chairman of meeting on "Current Issues in Regulatory Finance", Financial Management Association, Atlanta, Oct. 1983
- Chairman of meeting on "Utility Cost of Capital", Financial Management Association, Toronto, Canada, Oct. 1984.
- Committee on New Product Development, FMA, 1985
- Discussant, "Tobin's Q Ratio", paper presented at Financial Management Association, New York, N.Y., Oct. 1986
- Guest speaker, "Utility Capital Structure: New Developments", National Society of Rate of Return Analysts 18th Financial Forum, Wash., D.C. Oct. 1986
- Opening address, "Capital Expenditures Analysis: Methodology vs Mythology," Bellcore Economic Analysis Conference, Naples Fla., 1988.

- Guest speaker, "Mythodology in Regulatory Finance", Society of Utility Rate of Return Analysts (SURFA), Annual Conference, Wash., D.C. February 2007.

**PAPERS PRESENTED:**

"An Empirical Study of Multi-Period Asset Pricing," annual meeting of Financial Management Assoc., Las Vegas Nevada, 1987.

"Utility Capital Expenditures Analysis: Net Present Value vs Revenue Requirements", annual meeting of Financial Management Assoc., Denver, Colorado, October 1985.

"Intervention Analysis and the Dynamics of Market Efficiency", annual meeting of Financial Management Assoc., San Francisco, Oct. 1982

"Intertemporal Market-Line Theory: An Empirical Study," annual meeting of Eastern Finance Assoc., Newport, R.I. 1981

"Option Writing for Financial Institutions: A Cost-Benefit Analysis", 1979 annual meeting Financial Research Foundation

"Free-lunch on the Toronto Stock Exchange", annual meeting of Financial Research Foundation of Canada, 1978.

"Simulation System Computer Software SIMFIN", HP International Business Computer Users Group, London, 1975.

"Inflation Accounting: Implications for Financial Analysis." Institute of Certified Public Accountants Symposium, 1979.

**OFFICES IN PROFESSIONAL ASSOCIATIONS**

- President, International Hewlett-Packard Business Computers Users Group, 1977
- Chairman Program Committee, International HP Business Computers Users Group, London, England, 1975
- Program Coordinator, Canadian Assoc. of Administrative Sciences, 1976

- Member, New Product Development Committee, Financial Management Association, 1985-1986

- Reviewer: Journal of Financial Research

Financial Management

Financial Review

Journal of Finance

## **PUBLICATIONS**

"Risk Aversion Revisited", Journal of Finance, Sept. 1983

"Hedging Regulatory Lag with Financial Futures," Journal of Finance, May 1983. (with G. Gay, R. Kolb)

"The Effect of CWIP on Cost of Capital," Public Utilities Fortnightly, July 1986.

"The Effect of CWIP on Revenue Requirements" Public Utilities Fortnightly, August 1986.

"Intervention Analysis and the Dynamics of Market Efficiency," Time-Series Applications, New York: North Holland, 1983. (with K. El-Sheshai)

"Market-Line Theory and the Canadian Equity Market," Journal of Business Administration, Jan. 1982, M. Brennan, editor

"Efficiency of Canadian Equity Markets," International Management Review, Feb. 1978.

"Intertemporal Market-Line Theory: An Empirical Test," Financial Review, Proceedings of the Eastern Finance Association, 1981.

## **BOOKS**

Utilities' Cost of Capital, Public Utilities Reports Inc., Arlington, Va., 1984.

Regulatory Finance, Public Utilities Reports Inc., Arlington, Va., 2004

Driving Shareholder Value, McGraw-Hill, January 2001.

The New Regulatory Finance, Public Utilities Reports Inc., Arlington, Va., 2006.

## **MONOGRAPHS**

Determining Cost of Capital for Regulated Industries, Public Utilities Reports, Inc., and The Management Exchange Inc., 1982 - 1993. (with V.L. Andrews)

Alternative Regulatory Frameworks, Public Utilities Reports, Inc., and The Management Exchange Inc., 1993. (with V.L. Andrews)

Risk and Return in Capital Projects, The Management Exchange Inc., 1980. (with B. Deschamps)

Utility Capital Expenditure Analysis, The Management Exchange Inc., 1983.

Regulation of Cable Television: An Econometric Planning Model, Quebec Department of Communications, 1978.

"An Economic & Financial Profile of the Canadian Cablevision Industry," Canadian Radio-Television & Telecommunication Commission (CRTC), 1978.

Computer Users' Manual: Finance and Investment Programs, University of Montreal Press, 1974, revised 1978.

Fiber Optics Communications: Economic Characteristics, Quebec Department of Communications, 1978.

"Canadian Equity Market Inefficiencies", Capital Market Research Memorandum, Garmaise & Thomson Investment Consultants, 1979.

### **MISCELLANEOUS CONSULTING REPORTS**

"Operational Risk Analysis: California Water Utilities," Calif. Water Association, 1993.

"Cost of Capital Methodologies for Independent Telephone Systems", Ontario Telephone Service Commission, March 1989.

"The Effect of CWIP on Cost of Capital and Revenue Requirements", Georgia Power Company, 1985.

"Costing Methodology and the Effect of Alternate Depreciation and Costing Methods on Revenue Requirements and Utility Finances", Gaz Metropolitan Inc., 1985.



"Simulated Capital Structure of CN-CP Telecommunications: A Critique", CRTC, 1977.

"Telecommunications Cost Inquiry: Critique," CRTC, 1977.

"Social Rate of Discount in the Public Sector", CRTC Policy Statement, 1974.

"Technical Problems in Capital Projects Analysis", CRTC Policy Statement, 1974.

### **RESEARCH GRANTS**

"Econometric Planning Model of the Cablevision Industry", International Institute of Quantitative Economics, CRTC.

"Application of the Averch-Johnson Model to Telecommunications Utilities", Canadian Radio-Television Commission. (CRTC)

"Economics of the Fiber Optics Industry", Quebec Dept. of Communications.

"Intervention Analysis and the Dynamics of Market Efficiency", Georgia State Univ. College of Business, 1981.

"Firm Size and Beta Stability", Georgia State University College of Business, 1982.

"Risk Aversion and the Demand for Risky Assets", Georgia State University College of Business, 1981.

Chase Econometrics, Interactive Data Corp., Research Grant, \$50,000 per annum, 1986-1989.

**S&P ELECTRIC DISTRIBUTION UTILITIES  
BETA ESTIMATES**

Company Name	Beta
1 Amer. Elec. Power	0.85
2 Ameren Corp.	0.80
3 Consol. Edison	0.75
4 Energy East Corp.	0.75
5 Exelon Corp.	0.85
6 FirstEnergy Corp.	0.80
7 Northeast Utilities	0.75
8 NSTAR	0.80
9 Pepco Holdings	0.90
10 PPL Corp.	0.90
11 Public Serv. Enterprise	0.90
<b>AVERAGE</b>	<b>0.82</b>

Source: VLIA 06/2008

**MOODY'S ELECTRIC UTILITIES  
BETA ESTIMATES**

Company Name	Beta
1 Amer. Elec. Power	0.85
2 CH Energy Group	0.90
3 Consol. Edison	0.75
4 Constellation Energy	0.90
5 Dominion Resources	0.80
6 DPL Inc.	0.80
7 DTE Energy	0.80
8 Duke Energy	N/A
9 Energy East Corp.	0.75
10 Exelon Corp.	0.85
11 FirstEnergy Corp.	0.80
12 IDACORP Inc.	0.90
13 NiSource Inc.	0.90
14 OGE Energy	0.90
15 PPL Corp.	0.90
16 Progress Energy	0.80
17 Public Serv. Enterprise	0.90
18 Southern Co.	0.70
19 TECO Energy	0.95
20 Xcel Energy Inc.	0.80
<b>AVERAGE</b>	<b>0.84</b>

Source: VLIA 06/2008

**MOODY'S ELECTRIC UTILITIES  
BETA ESTIMATES**

Company Name	Beta
1 Amer. Elec. Power	0.85
2 Consol. Edison	0.75
3 DPL Inc.	0.80
4 DTE Energy	0.80
5 Duke Energy	N/A
6 Energy East Corp.	0.75
7 Exelon Corp.	0.85
8 FirstEnergy Corp.	0.80
9 IDACORP Inc.	0.90
10 PPL Corp.	0.90
11 Progress Energy	0.80
12 Public Serv. Enterprise	0.90
13 Southern Co.	0.70
14 TECO Energy	0.95
15 Xcel Energy Inc.	0.80
<b>AVERAGE</b>	<b>0.83</b>

Source: VLIA 06/2008

Electric Industry Historical Risk Premium

Line No.	Year	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
		Long-Term Government Bond Yield	20 year Maturity Bond Value	Gain/Loss	Interest	Bond Total Return	Moody's Electric Utility Stock Index	Dividend	Capital Gain/(Loss) % Growth	Yield	Stock Total Return	Equity Risk Premium Over Bond Returns	Equity Risk Premium Over Bond Yields
1	1931	4.07%	1,000.00				43.23						
2	1932	3.15%	1,135.75	135.75	40.70	17.64%	39.42	2.22	-8.81%	5.14%	-3.68%	-21.32%	-6.83%
3	1933	3.36%	969.60	-30.40	31.50	0.11%	28.73	1.75	-27.12%	4.44%	-22.68%	-22.79%	-26.04%
4	1934	2.93%	1,064.73	64.73	33.60	9.83%	21.06	1.42	-26.70%	4.94%	-21.75%	-31.59%	-24.68%
5	1935	2.76%	1,025.99	25.99	29.30	5.53%	36.06	1.33	71.23%	6.32%	77.54%	72.01%	74.78%
6	1936	2.55%	1,032.74	32.74	27.60	6.03%	41.60	1.78	15.36%	4.94%	20.30%	14.27%	17.75%
7	1937	2.73%	972.40	-27.60	25.50	-0.21%	24.24	1.68	-41.73%	4.04%	-37.69%	-37.48%	-40.42%
8	1938	2.52%	1,032.83	32.83	27.30	6.01%	27.55	1.45	13.66%	5.98%	19.64%	13.62%	17.12%
9	1939	2.26%	1,041.65	41.65	25.20	6.68%	28.85	1.51	4.72%	5.48%	10.20%	3.51%	7.94%
10	1940	1.94%	1,052.84	52.84	22.60	7.54%	22.22	1.57	-22.98%	5.44%	-17.54%	-25.08%	-19.48%
11	1941	2.04%	983.64	-16.36	19.40	0.30%	13.45	1.27	-39.47%	5.72%	-33.75%	-34.06%	-35.79%
12	1942	2.46%	933.97	-66.03	20.40	-4.56%	14.29	1.28	6.25%	9.52%	15.76%	20.33%	13.30%
13	1943	2.48%	996.86	-3.14	24.60	2.15%	21.01	1.46	47.03%	10.22%	57.24%	55.10%	54.76%
14	1944	2.46%	1,003.14	3.14	24.80	2.79%	21.09	1.35	0.38%	6.43%	6.81%	4.01%	4.35%
15	1945	1.99%	1,077.23	77.23	24.60	10.18%	31.14	1.37	47.65%	6.50%	54.15%	43.97%	52.16%
16	1946	2.12%	978.90	-21.10	19.90	-0.12%	32.71	1.48	5.04%	4.75%	9.79%	9.91%	7.67%
17	1947	2.43%	951.13	-48.87	21.20	-2.77%	25.60	1.58	-21.74%	4.83%	-16.91%	-14.14%	-19.34%
18	1948	2.37%	1,009.51	9.51	24.30	3.38%	26.20	1.63	2.34%	6.37%	8.71%	5.33%	6.34%
19	1949	2.09%	1,045.58	45.58	23.70	6.93%	30.57	1.68	16.68%	6.41%	23.09%	16.16%	21.00%
20	1950	2.24%	975.93	-24.07	20.90	-0.32%	30.81	1.85	0.79%	6.05%	6.84%	7.15%	4.60%
21	1951	2.69%	930.75	-69.25	22.40	-4.69%	33.85	1.90	9.87%	6.17%	16.03%	20.72%	13.34%
22	1952	2.79%	984.75	-15.25	26.90	1.17%	37.85	1.92	11.82%	5.67%	17.49%	16.32%	14.70%
23	1953	2.74%	1,007.66	7.66	27.90	3.56%	39.61	2.09	4.65%	5.52%	10.17%	6.62%	7.43%
24	1954	2.72%	1,003.07	3.07	27.40	3.05%	47.56	2.14	20.07%	5.40%	25.47%	22.43%	22.75%
25	1955	2.95%	965.44	-34.56	27.20	-0.74%	49.35	2.27	3.76%	4.77%	8.54%	9.27%	5.59%
26	1956	3.45%	928.19	-71.81	29.50	-4.23%	48.96	2.37	-0.79%	4.80%	4.01%	8.24%	0.56%
27	1957	3.23%	1,032.23	32.23	34.50	6.67%	50.30	2.46	2.74%	5.02%	7.76%	1.09%	4.53%
28	1958	3.82%	918.01	-81.99	32.30	-4.97%	66.37	2.57	31.95%	5.11%	37.06%	42.03%	33.24%
29	1959	4.47%	914.65	-85.35	38.20	-4.71%	65.77	2.64	-0.90%	3.98%	3.07%	7.79%	-1.40%
30	1960	3.80%	1,093.27	93.27	44.70	13.80%	76.82	2.74	16.80%	4.17%	20.97%	7.17%	17.17%
31	1961	4.15%	952.75	-47.25	38.00	-0.92%	99.32	2.86	29.29%	3.72%	33.01%	33.94%	28.86%
32	1962	3.95%	1,027.48	27.48	41.50	6.90%	96.49	3.07	-2.85%	3.09%	0.24%	-6.66%	-3.71%
33	1963	4.17%	970.35	-29.65	39.50	0.99%	102.31	3.33	6.03%	3.45%	9.48%	8.50%	5.31%
34	1964	4.23%	991.96	-8.04	41.70	3.37%	115.54	3.68	12.93%	3.60%	16.53%	13.16%	12.30%
35	1965	4.50%	964.64	-35.36	42.30	0.69%	114.86	4.02	-0.59%	3.48%	2.89%	2.20%	-1.61%
36	1966	4.55%	993.48	-6.52	45.00	3.85%	105.99	4.18	-7.72%	3.64%	-4.08%	-7.93%	-8.63%
37	1967	5.56%	879.01	-120.99	45.50	-7.55%	98.19	4.44	-7.36%	4.19%	-3.17%	4.38%	-8.73%
38	1968	5.98%	951.38	-48.62	55.60	0.70%	104.04	4.58	5.96%	4.66%	10.62%	9.92%	4.64%
39	1969	6.87%	904.00	-96.00	59.80	-3.62%	84.62	4.63	-18.67%	4.45%	-14.22%	-10.60%	-21.09%
40	1970	6.48%	1,043.38	43.38	68.70	11.21%	88.59	4.73	4.69%	5.59%	10.28%	-0.93%	3.80%
41	1971	5.97%	1,059.09	59.09	64.80	12.39%	85.56	4.81	-3.42%	5.43%	2.01%	-10.38%	-3.96%
42	1972	5.99%	997.69	-2.31	59.70	5.74%	83.61	4.92	-2.28%	5.75%	3.47%	-2.27%	-2.52%
43	1973	7.26%	867.09	-132.91	59.90	-7.30%	60.87	5.04	-27.20%	6.03%	-21.17%	-13.87%	-28.43%
44	1974	7.60%	965.33	-34.67	72.60	3.79%	41.17	4.83	-32.36%	7.93%	-24.43%	-28.22%	-32.03%
45	1975	8.05%	955.63	-44.37	76.00	3.16%	55.66	4.99	35.20%	12.12%	47.32%	44.15%	39.27%
46	1976	7.21%	1,088.25	88.25	80.50	16.87%	66.29	5.25	19.10%	9.43%	28.53%	11.66%	21.32%
47	1977	8.03%	919.03	-80.97	72.10	-0.89%	68.19	5.68	2.87%	8.57%	11.43%	12.32%	3.40%
48	1978	8.98%	912.47	-87.53	80.30	-0.72%	59.75	5.98	-12.38%	8.77%	-3.61%	-2.88%	-12.59%
49	1979	10.12%	902.99	-97.01	89.80	-0.72%	56.41	6.34	-5.59%	10.61%	5.02%	5.74%	-5.10%
50	1980	11.99%	859.23	-140.77	101.20	-3.96%	54.42	6.67	-3.53%	11.82%	8.30%	12.25%	-3.69%

**Electric Industry Historical Risk Premium**

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	
						Moody's							
	Long-Term	20 year				Bond	Electric				Equity	Equity	
	Government	Maturity				Total	Utility	Capital		Stock	Risk	Risk	
	Bond	Bond					Stock	Gain/(Loss)		Total	Premium	Premium	
Line No.	Year	Yield	Value	Gain/Loss	Interest	Return	Index	Dividend	% Growth	Yield	Return	Over Bond Returns	Over Bond Yields
51	1981	13.34%	906.45	-93.55	119.90	2.63%	57.20	7.16	5.11%	13.16%	18.27%	15.63%	4.93%
52	1982	10.95%	1,192.38	192.38	133.40	32.58%	70.26	7.64	22.83%	13.36%	36.19%	3.61%	25.24%
53	1983	11.97%	923.12	-76.88	109.50	3.26%	72.03	8.00	2.52%	11.39%	13.91%	10.64%	1.94%
54	1984	11.70%	1,020.70	20.70	119.70	14.04%	80.16	8.37	11.29%	11.62%	22.91%	8.87%	11.21%
55	1985	9.56%	1,189.27	189.27	117.00	30.63%	94.98	8.71	18.49%	10.87%	29.35%	-1.27%	19.79%
56	1986	7.89%	1,166.63	166.63	95.60	26.22%	113.66	8.97	19.67%	9.44%	29.11%	2.89%	21.22%
57	1987	9.20%	881.17	-118.83	78.90	-3.99%	94.24	9.12	-17.09%	8.02%	-9.06%	-5.07%	-18.26%
58	1988	9.18%	1,001.82	1.82	92.00	9.38%	100.94	8.71	7.11%	9.24%	16.35%	6.97%	7.17%
59	1989	8.16%	1,099.75	99.75	91.80	19.16%	122.52	8.85	21.38%	8.77%	30.15%	10.99%	21.99%
60	1990	8.44%	973.17	-26.83	81.60	5.48%	117.77	8.76	-3.88%	7.15%	3.27%	-2.20%	-5.17%
61	1991	7.30%	1,118.94	118.94	84.40	20.33%	144.02	9.02	22.29%	7.66%	29.95%	9.61%	22.65%
62	1992	7.26%	1,004.19	4.19	73.00	7.72%	141.06	8.82	-2.06%	6.12%	4.07%	-3.65%	-3.19%
63	1993	6.54%	1,079.70	79.70	72.60	15.23%	146.70	9.04	4.00%	6.41%	10.41%	-4.82%	3.87%
64	1994	7.99%	856.40	-143.60	65.40	-7.82%	115.50	9.01	-21.27%	6.14%	-15.13%	-7.31%	-23.12%
65	1995	6.03%	1,225.98	225.98	79.90	30.59%	142.90	9.06	23.72%	7.84%	31.57%	0.98%	25.54%
66	1996	6.73%	923.67	-76.33	60.30	-1.60%	136.00	9.06	-4.83%	6.34%	1.51%	3.11%	-5.22%
67	1997	6.02%	1,081.92	81.92	67.30	14.92%	155.73	9.06	14.51%	6.66%	21.17%	6.25%	15.15%
68	1998	5.42%	1,072.71	72.71	60.20	13.29%	181.84	8.01	16.77%	5.14%	21.91%	8.62%	16.49%
69	1999	6.82%	848.41	-151.59	54.20	-9.74%	137.30	8.06	-24.49%	4.43%	-20.06%	-10.32%	-26.88%
70	2000	5.58%	1,148.30	148.30	68.20	21.65%	227.09	8.71	65.40%	6.34%	71.74%	50.09%	66.16%
71	2001	5.75%	979.95	-20.05	55.80	3.57%	200.50	8.95	-11.71%	3.94%	-7.77%	-11.34%	-13.52%
72	2002	4.84%	1,115.77	115.77	57.50	17.33%	169.50	8.83	-15.46%	4.40%	-11.06%	-28.38%	-15.90%
73	2003	5.11%	966.42	-33.58	48.40	1.48%	201.21	8.52	18.71%	5.03%	23.73%	22.25%	18.62%
74	2004	4.84%	1,034.35	34.35	51.10	8.54%	249.70	9.98	24.10%	4.96%	29.06%	20.51%	24.22%
75	2005	4.61%	1,029.84	29.84	48.40	7.82%	285.86	10.72	14.48%	4.29%	18.77%	10.95%	14.16%
76	2006	4.91%	962.06	-37.94	46.10	0.82%	326.19	11.31	14.11%	3.96%	18.06%	17.25%	13.15%
78	<b>Mean</b>											<b>5.7%</b>	<b>5.8%</b>

Source: Mergent Public Utility Manual December stock prices and dividends

Dec. Bond yields from Morningstar (formerly Ibbotson Associates) 2008 Valuation Yearbook Table B-9 Long-Term Government Bonds Yields

<b>Distribution Utility Companies</b>	<b>Parent</b>
1 Atlanta Gas Light Co	AGL Resources Inc
2 Central Illinois Public Service Co.	Ameren
3 AEP Texas North Co	American Electric Power
4 AEP Texas Central Co.	American Electric Power
5 Ohio Power Co	American Electric Power
6 Columbus Southern Power Co.	American Electric Power
7 American States Water Co.	American States Water Company
8 Southern California Water Co.	American States Water Company
9 American Water Capital Corp	American Water Works Company Inc
10 Aqua Pennsylvania	Aqua America Inc
11 Aquarion Water Co. of Connecticut	Aquarion
12 California Water Service Co	California Water Service Group
13 Cascade Natural Gas Corp	Cascade Natural Gas Corp
14 CenterPoint Energy Houston Electric LLC	CenterPoint Energy
15 CenterPoint Energy Resources Corp.LLC	CenterPoint Energy
16 Central Hudson Gas & Electric Co.	CH Energy Group
17 Atlantic City Sewerage Co.	City of Atlantic City
18 Connecticut Water Co.	Connecticut Water Service Inc.
19 Connecticut Water Service Inc.	Connecticut Water Service Inc.
20 Consolidated Edison Inc.	Consolidated Edison
21 Orange and Rockland Utilities Inc.	Consolidated Edison
22 Consolidated Edison Co. of New York Inc.	Consolidated Edison
23 Baltimore Gas & Electric Co	Constellation Energy
24 Duquesne Light Holdings Inc.	Duquesne Light Holdings Inc.
25 Duquesne Light Co	Duquesne Light Holdings Inc.
26 Alabama Gas Corp.	Energen
27 Central Maine Power Co.	Energy East Corporation
28 Connecticut Natural Gas Corp.	Energy East Corporation
29 Southern Connecticut Gas Co.	Energy East Corporation
30 Commonwealth Edison Co.	Exelon
31 PECO Energy Co.	Exelon
32 Jersey Central Power & Light Co.	FirstEnergy
33 Metropolitan Edison Co.	FirstEnergy
34 Pennsylvania Electric Co.	FirstEnergy
35 Aquarion Co.	Kelda Group Plc
36 KeySpan Energy Delivery Long Island	KeySpan
37 KeySpan Energy Delivery New York	KeySpan
38 Boston Gas CO	KeySpan
39 Colonial Gas Co.	KeySpan
40 Laclede Group Inc.	Laclede
41 Laclede Gas Co.	Laclede
42 Middlesex Water Co	Middlesex Water Co
43 Niagara Mohawk Power Corp.	National Grid
44 Narragansett Electric Co.	National Grid
45 National Grid USA	National Grid USA

	<b>Distribution Utility Companies</b>	<b>Parent</b>
46	Massachusetts Electric Co.	New England Electric Systems
47	New Jersey Natural Gas Co	New Jersey Resources
48	Nicor Gas Co.	Nicor Inc
49	Nicor Inc	Nicor Inc
50	Bay State Gas Co.	NiSource
51	Yankee Gas Services Co.	Northeast Utilities
52	Western Massachusetts Electric Co	Northeast Utilities System
53	Connecticut Light & Power Co.	Northeast Utilities System
54	Northwest Natural Gas Co.	Northwest Natural Gas Co.
55	NSTAR	NSTAR
56	Boston Edison Co.	NSTAR
57	Commonwealth Electric Co	NSTAR
58	NSTAR Gas Co.	NSTAR
59	Cambridge Electric Light Co.	NSTAR
60	ONEOK Inc.	ONEOK Inc.
61	Rockland Electric Co	Orange and Rockland Utilities Inc.
62	Peoples Gas Light & Coke Co.	Peoples Energy
63	North Shore Gas Co.	Peoples Energy
64	Delmarva Power & Light Co	PEPCO Holdings
65	Atlantic City Electric Co.	PEPCO Holdings
66	Potomac Electric Power Co.	PEPCO Holdings
67	Piedmont Natural Gas Co. Inc.	Piedmont Natural Gas
68	PPL Electric Utilities Corp.	PPL Corp
69	Baton Rouge Water Works Co. (The)	Private
70	Public Service Electric & Gas Co	Public Service Enterprise Group
71	Questar Gas Co	Questar
72	Public Service Co. of North Carolina Inc.	SCANA Corp.
73	Southern California Gas Co	Sempra Energy
74	South Jersey Gas Co	South Jersey Industries
75	Southern Union Co	Southern Union
76	Southwest Gas Corp.	Southwest Gas
77	Elizabethtown Water Co	Thames Water Co
78	TXU Gas Co.	TXU
79	Oncor Electric Delivery Co.	TXU
80	UGI Utilities Inc	UGI
81	United Water New Jersey	United Water Resources
82	United Waterworks	United Water Resources
83	Indiana Gas Co. Inc.	Vectren
84	WGL Holdings Inc.	WGL Holdings
85	Washington Gas Light Co.	WGL Holdings
86	Wisconsin Gas Co.	Wisconsin Energy Corp
87	York Water Co. (The)	York Water Co. (The)

Source: Standard & Poor's "New Business Profile Scores Assigned for U.S. Utility and Power Companies; Financial Guidelines Revised," June 2004



	<b>Electricity Distribution Companies</b>	<b>Parent</b>
1	Central Illinois Public Service Co.	Ameren
2	AEP Texas North Co	American Electric Power
3	AEP Texas Central Co.	American Electric Power
4	Ohio Power Co	American Electric Power
5	Columbus Southem Power Co.	American Electric Power
6	CenterPoint Energy Houston Electric	CenterPoint Energy
7	CenterPoint Energy Resources Corp	CenterPoint Energy
8	Central Hudson Gas & Electric Co.	CH Energy Group
9	Consolidated Edison Inc.	Consolidated Edison
10	Orange and Rockland Utilities Inc.	Consolidated Edison
11	Consolidated Edison Co. of New York	Consolidated Edison
12	Baltimore Gas & Electric Co	Constellation Energy
13	Duquesne Light Holdings Inc.	Duquesne Light Holdings Inc.
14	Duquesne Light Co	Duquesne Light Holdings Inc.
15	Central Maine Power Co.	Energy East Corporation
16	Connecticut Natural Gas Corp.	Energy East Corporation
17	Southern Connecticut Gas Co.	Energy East Corporation
18	Commonwealth Edison Co.	Exelon
19	PECO Energy Co.	Exelon
20	Jersey Central Power & Light Co.	FirstEnergy
21	Metropolitan Edison Co	FirstEnergy
22	Pennsylvania Electric Co.	FirstEnergy
23	Western Massachusetts Electric Co	Northeast Utilities
24	Connecticut Light & Power Co.	Northeast Utilities
25	NSTAR	NSTAR
26	Boston Edison Co.	NSTAR
27	Commonwealth Electric Co	NSTAR
28	NSTAR Gas Co.	NSTAR
29	Cambridge Electric Light Co.	NSTAR
30	Delmarva Power & Light Co	PEPCO Holdings
31	Atlantic City Electric Co.	PEPCO Holdings
32	Potomac Electric Power Co.	PEPCO Holdings
33	PPL Electric Utilities Corp.	PPL Corp
34	Public Service Electric & Gas Co	Public Service Enterprise Group
35	Public Service Co. of North Carolina Inc.	SCANA Corp.
36	Oncor Electric Delivery Co.	TXU

Source: Standard & Poor's "New Business Profile Scores Assigned for U.S. Utility and Power Companies; Financial Guidelines Revised," June 2004

<b>Parent of Electricity Distribution Companies</b>	<b>% Elec Reg Rev</b>
1 Ameren	83
2 American Electric Power	89
3 CenterPoint Energy	17
4 CH Energy Group	48
5 Consolidated Edison	62
6 Constellation Energy	13
7 Duquesne Light Holdings Inc.	na
8 Energy East Corporation	56
9 Exelon	56
10 FirstEnergy	88
11 Northeast Utilities	84
12 NSTAR	78
13 PEPCO Holdings	56
14 PPL Corp	62
15 Public Service Enterprise Group	66
16 SCANA Corp.	42
17 TXU	na

Source: AUS Utility Reports June 2008

**Parent of Electricity Distribution Companies**

		% Elec Reg Rev
1	Ameren	83
2	American Electric Power	89
3	Consolidated Edison	62
4	Energy East Corporation	56
5	Exelon	56
6	FirstEnergy	88
7	Northeast Utilities	84
8	NSTAR	78
9	PEPCO Holdings	56
10	PPL Corp	62
11	Public Service Enterprise Group	66
	AVERAGE	71

Companies < 50% Regul Rev:

Centerpoint, CH Energy, Constellation, SCANA.

TXU, Duquesne n.a.

**S&P 's DISTRIBUTION ELECTRIC UTILITIES  
DCF ANALYSIS: VALUE LINE GROWTH PROJECTIONS**

Company	% Current Divid Yield (1)	Proj EPS Growth (2)	% Expected Divid Yield (3)	Cost of Equity (4)	ROE (5)
1 Amer. Elec. Power	3.9	6.0	4.2	10.2	10.4
2 Ameren Corp.	5.5	3.5	5.7	9.2	9.5
3 Consol. Edison	5.7	2.0	5.8	7.8	8.1
4 Energy East Corp.	5.0	-0.5	4.9	4.4	4.7
5 Exelon Corp.	2.3	9.0	2.5	11.5	11.6
6 FirstEnergy Corp.	2.9	11.0	3.2	14.2	14.4
7 Northeast Utilities	3.3	13.5	3.7	17.2	17.4
8 NSTAR	4.3	7.5	4.6	12.1	12.4
9 Pepco Holdings	4.0	13.0	4.5	17.5	17.7
10 PPL Corp.	2.8	14.0	3.2	17.2	17.3
11 Public Serv. Enterprise	3.0	10.0	3.3	13.3	13.5
<b>AVERAGE</b>	<b>3.9</b>	<b>8.1</b>	<b>4.1</b>	<b>12.2</b>	<b>12.5</b>
<b>MEDIAN</b>					<b>12.4</b>

## Notes:

Column 1, 2: Value Line Investment Analyzer, 06/2008

Column 3 = Column 1 times (1 + Column 2/100)

Column 4 = Column 3 + Column 2

Column 5 = (Column 3 /0.95) + Column 2

**S&P 's DISTRIBUTION ELECTRIC UTILITIES  
DCF ANALYSIS: VALUE LINE GROWTH PROJECTIONS**

Company	% Current Divid Yield (1)	Proj DPS Growth (2)	% Expected Divid Yield (3)	Cost of Equity (4)	ROE (5)
1 Amer. Elec. Power	3.9	7.5	4.2	11.7	12.0
2 Ameren Corp.	5.5	-	5.5	5.5	5.8
3 Consol. Edison	5.7	1.0	5.7	6.7	7.0
4 Energy East Corp.	5.0	2.0	5.0	7.0	7.3
5 Exelon Corp.	2.3	6.0	2.4	8.4	8.5
6 FirstEnergy Corp.	2.9	8.5	3.1	11.6	11.8
7 Northeast Utilities	3.3	6.0	3.4	9.4	9.6
8 NSTAR	4.3	7.0	4.6	11.6	11.9
9 Pepco Holdings	4.0	10.0	4.4	14.4	14.6
10 PPL Corp.	2.8	14.0	3.2	17.2	17.3
11 Public Serv. Enterprise	3.0	6.5	3.2	9.7	9.9
<b>AVERAGE</b>	<b>3.9</b>	<b>6.2</b>	<b>4.1</b>	<b>10.3</b>	<b>10.5</b>
<b>AVERAGE w/o Ameren</b>					<b>11.0</b>

## Notes:

Column 1, 2: Value Line Investment Analyzer, 06/2008

Column 3 = Column 1 times (1 + Column 2/100)

Column 4 = Column 3 + Column 2

Column 5 = (Column 3 /0.95) + Column 2

**DCF ANALYSIS**  
**ANALYSTS' GROWTH PROJECTIONS**

<b>Company</b>	<b>% Current Divid Yield (1)</b>	<b>Proj EPS Growth (2)</b>
1 Amer. Elec. Power	3.9	5.4
2 Ameren Corp.	5.5	5.0
3 Consol. Edison	5.7	3.2
4 Energy East Corp.	5.0	N/A
5 Exelon Corp.	2.3	11.5
6 FirstEnergy Corp.	2.9	6.5
7 Northeast Utilities	3.3	10.0
8 NSTAR	4.3	6.4
9 Pepco Holdings	4.0	9.6
10 PPL Corp.	2.8	16.3
11 Public Serv. Enterprise	3.0	14.3

Notes:

Column 1: Value Line Investment Analyzer, 06/2008

Column 2: Zacks 06/2008

No growth projection available for Energy East

**S&P'S DISTRIBUTION ELECTRIC UTILITIES  
DCF ANALYSIS: ANALYSTS' GROWTH FORECASTS**

Company	% Current Divid Yield (1)	Proj EPS Growth (2)	% Expected Divid Yield (3)	Cost of Equity (4)	ROE (5)
1 Amer. Elec. Power	3.9	5.4	4.2	9.6	9.8
2 Ameren Corp.	5.5	5.0	5.8	10.8	11.1
3 Consol. Edison	5.7	3.2	5.9	9.0	9.3
4 Exelon Corp.	2.3	11.5	2.5	14.0	14.2
5 FirstEnergy Corp.	2.9	6.5	3.1	9.6	9.7
6 Northeast Utilities	3.3	10.0	3.6	13.6	13.8
7 NSTAR	4.3	6.4	4.6	11.0	11.2
8 Pepco Holdings	4.0	9.6	4.4	14.0	14.2
9 PPL Corp.	2.8	16.3	3.2	19.5	19.6
10 Public Serv. Enterprise	3.0	14.3	3.4	17.8	17.9
<b>AVERAGE</b>	<b>3.8</b>	<b>8.8</b>	<b>4.1</b>	<b>12.9</b>	<b>13.1</b>
<b>MEDIAN w/o PPL</b>					<b>11.2</b>

## Notes:

Column 1: Value Line Investment Analyzer, 06/2008

Column 2: Zacks long-term earnings growth forecast, 06/2008

Column 3 = Column 1 times (1 + Column 2/100)

Column 4 = Column 3 + Column 2

Column 5 = (Column 3 /0.95) + Column 2

**MOODY'S ELECTRIC UTILITIES**  
**DCF ANALYSIS: VALUE LINE GROWTH PROJECTION**

Company	% Current Divid Yield (1)	Proj EPS Growth (2)
1 Amer. Elec. Power	3.9	6.0
2 CH Energy Group	5.7	2.0
3 Consol. Edison	5.7	2.0
4 Constellation Energy	2.3	13.0
5 Dominion Resources	3.7	12.0
6 DPL Inc.	3.9	11.0
7 DTE Energy	4.8	4.5
8 Duke Energy	5.0	N/A
9 Energy East Corp.	5.0	-0.5
10 Exelon Corp.	2.3	9.0
11 FirstEnergy Corp.	2.9	11.0
12 IDACORP Inc.	3.9	3.0
13 NiSource Inc.	5.1	5.0
14 OGE Energy	4.2	4.5
15 PPL Corp.	2.8	14.0
16 Progress Energy	5.8	5.0
17 Public Serv. Enterprise	3.0	10.0
18 Southern Co.	4.7	5.5
19 TECO Energy	3.9	4.5
20 Xcel Energy Inc.	4.5	7.5

## Notes:

Column 1, 2: Value Line Investment Analyzer, 6/2008

No growth forecast available for Duke Energy



**MOODY'S ELECTRIC UTILITIES**  
**DCF ANALYSIS: VALUE LINE GROWTH PROJECTIONS**

Company	% Current Divid Yield (1)	Proj EPS Growth (2)	% Expected Divid Yield (3)	Cost of Equity (4)	ROE (5)
1 Amer. Elec. Power	3.9	6.0	4.2	10.2	10.4
2 CH Energy Group	5.7	2.0	5.8	7.8	8.1
3 Consol. Edison	5.7	2.0	5.8	7.8	8.1
4 Constellation Energy	2.3	13.0	2.6	15.6	15.7
5 Dominion Resources	3.7	12.0	4.2	16.2	16.4
6 DPL Inc.	3.9	11.0	4.4	15.4	15.6
7 DTE Energy	4.8	4.5	5.0	9.5	9.7
8 Energy East Corp.	5.0	-0.5	4.9	4.4	4.7
9 Exelon Corp.	2.3	9.0	2.5	11.5	11.6
10 FirstEnergy Corp.	2.9	11.0	3.2	14.2	14.4
11 IDACORP Inc.	3.9	3.0	4.0	7.0	7.2
12 NiSource Inc.	5.1	5.0	5.3	10.3	10.6
13 OGE Energy	4.2	4.5	4.4	8.9	9.1
14 PPL Corp.	2.8	14.0	3.2	17.2	17.3
15 Progress Energy	5.8	5.0	6.1	11.1	11.4
16 Public Serv. Enterprise	3.0	10.0	3.3	13.3	13.5
17 Southern Co.	4.7	5.5	4.9	10.4	10.7
18 TECO Energy	3.9	4.5	4.1	8.6	8.8
19 Xcel Energy Inc.	4.5	7.5	4.8	12.3	12.6
<b>AVERAGE</b>	<b>4.1</b>	<b>6.8</b>	<b>4.4</b>	<b>11.1</b>	<b>11.4</b>

## Notes:

Column 1, 2: Value Line Investment Analyzer, 6/2008

Column 3 = Column 1 times (1 + Column 2/100)

Column 4 = Column 3 + Column 2

Column 5 = (Column 3 /0.95) + Column 2

**MOODY'S ELECTRIC UTILITIES**  
**DCF ANALYSIS: VALUE LINE GROWTH PROJECTIONS**

Company	% Current Divid Yield (1)	Proj EPS Growth (2)	% Expected Divid Yield (3)	Cost of Equity (4)	ROE (5)
1 Amer. Elec. Power	3.9	6.0	4.2	10.2	10.4
2 Consol. Edison	5.7	2.0	5.8	7.8	8.1
3 DPL Inc.	3.9	11.0	4.4	15.4	15.6
4 DTE Energy	4.8	4.5	5.0	9.5	9.7
5 Energy East Corp.	5.0	-0.5	4.9	4.4	4.7
6 Exelon Corp.	2.3	9.0	2.5	11.5	11.6
7 FirstEnergy Corp.	2.9	11.0	3.2	14.2	14.4
8 IDACORP Inc.	3.9	3.0	4.0	7.0	7.2
9 PPL Corp.	2.8	14.0	3.2	17.2	17.3
10 Progress Energy	5.8	5.0	6.1	11.1	11.4
11 Public Serv. Enterprise	3.0	10.0	3.3	13.3	13.5
12 Southern Co.	4.7	5.5	4.9	10.4	10.7
13 TECO Energy	3.9	4.5	4.1	8.6	8.8
14 Xcel Energy Inc.	4.5	7.5	4.8	12.3	12.6
<b>AVERAGE</b>	<b>4.1</b>	<b>6.6</b>	<b>4.3</b>	<b>10.9</b>	<b>11.1</b>

Notes:

Column 1, 2: Value Line Investment Analyzer, 6/2008

Column 3 = Column 1 times (1 + Column 2/100)

Column 4 = Column 3 + Column 2

Column 5 = (Column 3 /0.95) + Column 2

No earnings growth forecast for Duke Energy.

**MOODY'S ELECTRIC UTILITIES  
DCF ANALYSIS: VALUE LINE GROWTH PROJECTIONS**

Company	% Current Divid Yield (1)	Proj DPS Growth (2)	% Expected Divid Yield (3)	Cost of Equity (4)	ROE (5)
1 Amer. Elec. Power	3.9	7.5	4.2	11.7	12.0
2 Consol. Edison	5.7	1.0	5.7	6.7	7.0
3 DPL Inc.	3.9	5.0	4.1	9.1	9.3
4 DTE Energy	4.8	1.5	4.8	6.3	6.6
5 Energy East Corp.	5.0	2.0	5.0	7.0	7.3
6 Exelon Corp.	2.3	6.0	2.4	8.4	8.5
7 FirstEnergy Corp.	2.9	8.5	3.1	11.6	11.8
8 PPL Corp.	2.8	14.0	3.2	17.2	17.3
9 Progress Energy	5.8	1.0	5.9	6.9	7.2
10 Public Serv. Enterprise	3.0	6.5	3.2	9.7	9.9
11 Southern Co.	4.7	4.5	4.9	9.4	9.6
12 TECO Energy	3.9	2.5	4.0	6.5	6.7
13 Xcel Energy Inc.	4.5	4.5	4.7	9.2	9.5
<b>AVERAGE</b>	<b>4.1</b>	<b>5.0</b>	<b>4.3</b>	<b>9.2</b>	<b>9.4</b>

## Notes:

Column 1, 2: Value Line Investment Analyzer, 6/2008

Column 3 = Column 1 times (1 + Column 2/100)

Column 4 = Column 3 + Column 2

Column 5 = (Column 3 /0.95) + Column 2

No dividend growth forecast available for Duke Energy and IDACORP

**MOODY'S ELECTRIC UTILITIES**  
**DCF ANALYSIS: ANALYSTS' GROWTH FORECASTS**

Company	% Current Divid Yield (1)	Analysts' Growth Forecast (2)
1 Amer. Elec. Power	3.9	5.4
2 CH Energy Group	5.7	N/A
3 Consol. Edison	5.7	3.2
4 Constellation Energy	2.3	18.0
5 Dominion Resources	3.7	10.3
6 DPL Inc.	3.9	10.7
7 DTE Energy	4.8	6.3
8 Duke Energy	5.0	5.8
9 Energy East Corp.	5.0	N/A
10 Exelon Corp.	2.3	11.5
11 FirstEnergy Corp.	2.9	6.5
12 IDACORP Inc.	3.9	6.0
13 NiSource Inc.	5.1	3.0
14 OGE Energy	4.2	4.0
15 PPL Corp.	2.8	16.3
16 Progress Energy	5.8	4.7
17 Public Serv. Enterprise	3.0	14.3
18 Southern Co.	4.7	4.7
19 TECO Energy	3.9	8.8
20 Xcel Energy Inc.	4.5	5.4

## Notes:

Column 1: Value Line Investment Analyzer, 6/2008

Column 2: Zacks long-term earnings growth forecast, 06/2008

No growth forecast available for CH Energy Group, Energy East.

**MOODY'S ELECTRIC UTILITIES**  
**DCF ANALYSIS: ANALYSTS' GROWTH FORECASTS**

Company	% Current Divid Yield (1)	Analysts' Growth Forecast (2)	% Expected Divid Yield (3)	Cost of Equity (4)	ROE (5)
1 Amer. Elec. Power	3.9	5.4	4.2	9.6	9.8
2 Consol. Edison	5.7	3.2	5.9	9.0	9.3
3 Constellation Energy	2.3	18.0	2.7	20.7	20.9
4 Dominion Resources	3.7	10.3	4.1	14.5	14.7
5 DPL Inc.	3.9	10.7	4.3	15.0	15.2
6 DTE Energy	4.8	6.3	5.1	11.4	11.7
7 Duke Energy	5.0	5.8	5.3	11.1	11.4
8 Exelon Corp.	2.3	11.5	2.5	14.0	14.2
9 FirstEnergy Corp.	2.9	6.5	3.1	9.6	9.7
10 IDACORP Inc.	3.9	6.0	4.1	10.1	10.3
11 NiSource Inc.	5.1	3.0	5.2	8.2	8.5
12 OGE Energy	4.2	4.0	4.4	8.4	8.6
13 PPL Corp.	2.8	16.3	3.2	19.5	19.6
14 Progress Energy	5.8	4.7	6.1	10.8	11.1
15 Public Serv. Enterprise	3.0	14.3	3.4	17.8	17.9
16 Southern Co.	4.7	4.7	4.9	9.6	9.9
17 TECO Energy	3.9	8.8	4.3	13.0	13.2
18 Xcel Energy Inc.	4.5	5.4	4.8	10.2	10.4
<b>AVERAGE</b>	<b>4.0</b>	<b>8.0</b>	<b>4.3</b>	<b>12.4</b>	<b>12.6</b>

## Notes:

Column 1: Value Line Investment Analyzer, 6/2008

Column 2: Zacks long-term earnings growth forecast, 06/2008

Column 3 = Column 1 times (1 + Column 2/100)

Column 4 = Column 3 + Column 2

Column 5 = (Column 3 /0.95) + Column 2

**MOODY'S ELECTRIC UTILITIES**  
**DCF ANALYSIS: ANALYSTS' GROWTH FORECASTS**

Company	% Current Divid Yield (1)	Analysts' Growth Forecast (2)	% Expected Divid Yield (3)	Cost of Equity (4)	ROE (5)
1 Amer. Elec. Power	3.9	5.4	4.2	9.6	9.8
2 Consol. Edison	5.7	3.2	5.9	9.0	9.3
3 DPL Inc.	3.9	10.7	4.3	15.0	15.2
4 DTE Energy	4.8	6.3	5.1	11.4	11.7
5 Duke Energy	5.0	5.8	5.3	11.1	11.4
7 Exelon Corp.	2.3	11.5	2.5	14.0	14.2
8 FirstEnergy Corp.	2.9	6.5	3.1	9.6	9.7
9 IDACORP Inc.	3.9	6.0	4.1	10.1	10.3
10 PPL Corp.	2.8	16.3	3.2	19.5	19.6
11 Progress Energy	5.8	4.7	6.1	10.8	11.1
12 Public Serv. Enterprise	3.0	14.3	3.4	17.8	17.9
13 Southern Co.	4.7	4.7	4.9	9.6	9.9
14 TECO Energy	3.9	8.8	4.3	13.0	13.2
15 Xcel Energy Inc.	4.5	5.4	4.8	10.2	10.4
<b>AVERAGE</b>	<b>4.1</b>	<b>7.8</b>	<b>4.4</b>	<b>12.2</b>	<b>12.4</b>
<b>MEDIAN</b>					<b>11.3</b>

## Notes:

Column 1: Value Line Investment Analyzer, 6/2008

Column 2: Zacks long-term earnings growth forecast, 6/2008

Column 3 = Column 1 times (1 + Column 2/100)

Column 4 = Column 3 + Column 2

Column 5 = (Column 3 / 0.95) + Column 2

No growth forecast available for Energy East

## APPENDIX A

### CAPM, EMPIRICAL CAPM

The Capital Asset Pricing Model (CAPM) is a fundamental paradigm of finance. Simply put, the fundamental idea underlying the CAPM is that risk-averse investors demand higher returns for assuming additional risk, and higher-risk securities are priced to yield higher expected returns than lower-risk securities. The CAPM quantifies the additional return, or risk premium, required for bearing incremental risk. It provides a formal risk-return relationship anchored on the basic idea that only market risk matters, as measured by beta. According to the CAPM, securities are priced such that their:

$$\text{EXPECTED RETURN} = \text{RISK-FREE RATE} + \text{RISK PREMIUM}$$

Denoting the risk-free rate by  $R_F$  and the return on the market as a whole by  $R_M$ , the CAPM is:

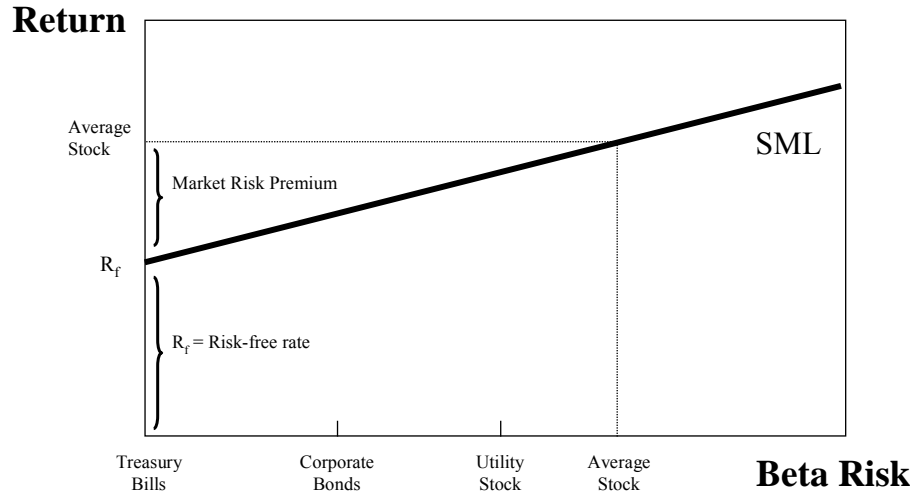
$$K = R_F + \beta(R_M - R_F) \quad (1)$$

Equation 1 is the CAPM expression which asserts that an investor expects to earn a return,  $K$ , that could be gained on a risk-free investment,  $R_F$ , plus a risk premium for assuming risk, proportional to the security's market risk, also known as beta,  $\beta$ , and the market risk premium,  $(R_M - R_F)$ , where  $R_M$  is the market return. The market risk premium  $(R_M - R_F)$  can be abbreviated MRP so that the CAPM becomes:

$$K = R_F + \beta \times \text{MRP} \quad (2)$$

The CAPM risk-return relationship is depicted in the figure below and is typically labeled as the Security Market Line (SML) by the investment community.

## CAPM and Risk - Return in Capital Markets

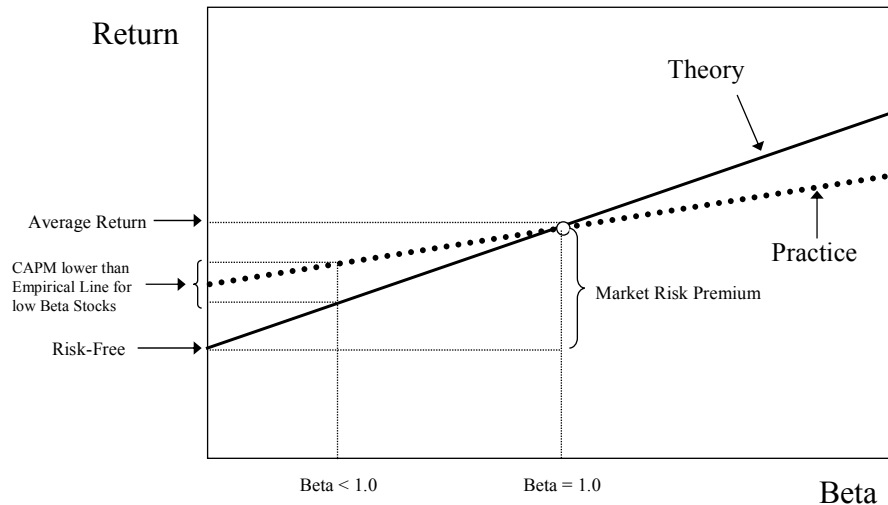


A myriad empirical tests of the CAPM have shown that the risk-return tradeoff is not as steeply sloped as that predicted by the CAPM, however. That is, low-beta securities earn returns somewhat higher than the CAPM would predict, and high-beta securities earn less than predicted. In other words, the CAPM tends to overstate the actual sensitivity of the cost of capital to beta: low-beta stocks tend to have higher returns and high-beta stocks tend to have lower risk returns than predicted by the CAPM. The difference between the CAPM and the type of relationship observed in the empirical studies is depicted in the figure below. This is one of the most widely known empirical findings of the finance literature. This extensive literature is summarized in Chapter 13 of Dr. Morin's book [Regulatory Finance, Public Utilities Report Inc., Arlington, VA, 1994].



# Risk vs Return

## Theory vs. Practice



A number of refinements and expanded versions of the original CAPM theory have been proposed to explain the empirical findings. These revised CAPMs typically produce a risk-return relationship that is flatter than the standard CAPM prediction. The following equation makes use of these empirical findings by flattening the slope of the risk-return relationship and increasing the intercept:

$$K = R_F + \alpha + \beta (MRP - \alpha) \quad (3)$$

where  $\alpha$  is the "alpha" of the risk-return line, a constant determined empirically, and the other symbols are defined as before. Alternatively, Equation 3 can be written as follows:

$$K = R_F + a MRP + (1-a) \beta MRP \quad (4)$$

where  $a$  is a fraction to be determined empirically. Comparing Equations 3 and 4, it is easy to see that alpha equals 'a' times MRP, that is,  $\alpha = a \times MRP$

## **Theoretical Underpinnings**

The obvious question becomes what would produce a risk return relationship which is flatter than the CAPM prediction, or in other words, how do you explain the presence of “alpha” in the above equation. The exclusion of variables aside from beta would produce this result. Three such variables are noteworthy: dividend yield, skewness, and hedging potential.

The dividend yield effects stem from the differential taxation on corporate dividends and capital gains. The standard CAPM does not consider the regularity of dividends received by investors. Utilities generally maintain high dividend payout ratios relative to the market, and by ignoring dividend yield, the CAPM provides biased cost of capital estimates. To the extent that dividend income is taxed at a higher rate than capital gains, investors will require higher pre-tax returns in order to equalize the after-tax returns provided by high-yielding stocks (e.g. utility stocks) with those of low-yielding stocks. In other words, high-yielding stocks must offer investors higher pre-tax returns. Even if dividends and capital gains are undifferentiated for tax purposes, there is still a tax bias in favor of earnings retention (lower dividend payout), as capital gains taxes are paid only when gains are realized.

Empirical studies by Litzenberger and Ramaswamy (1979) and Litzenberger et al. (1980) find that security returns are positively related to dividend yield as well as to beta. These results are consistent with after-tax extensions of the CAPM developed by Breenan (1973) and Litzenberger and Ramaswamy (1979) and suggest that the relationship between return, beta, and dividend yield should be estimated and employed to calculate the cost of equity capital.

As far as skewness is concerned, investors are more concerned with losing money than with total variability of return. If risk is defined as the probability of loss, it appears more logical to measure risk as the probability of achieving a return which is below the expected return. The traditional CAPM provides downward-biased estimates of cost of capital to the extent that these skewness effects are significant. As shown by Kraus and Litzenberger (1976), expected return depends on both on a stock's systematic risk (beta) and the systematic skewness. Empirical studies by Kraus and Litzenberger (1976), Friend, Westerfield, and Granito (1978), and Morin (1981) found that, in addition to beta, skewness of returns has a significant negative relationship with security returns. This

result is consistent with the skewness version of the CAPM developed by Rubinstein (1973) and Kraus and Litzenberger (1976).

This is particularly relevant for public utilities whose future profitability is constrained by the regulatory process on the upside and relatively unconstrained on the downside in the face of socio-political realities of public utility regulation. The process of regulation, by restricting the upward potential for returns and responding sluggishly on the downward side, may impart some asymmetry to the distribution of returns, and is more likely to result in utilities earning less, rather than more, than their cost of capital. The traditional CAPM provides downward-biased estimates of cost of capital to the extent that these skewness effects are significant.

As far as hedging potential is concerned, investors are exposed to another kind of risk, namely, the risk of unfavorable shifts in the investment opportunity set. Merton (1973) shows that investors will hold portfolios consisting of three funds: the risk-free asset, the market portfolio, and a portfolio whose returns are perfectly negatively correlated with the riskless asset so as to hedge against unforeseen changes in the future risk-free rate. The higher the degree of protection offered by an asset against unforeseen changes in interest rates, the lower the required return, and conversely. Merton argues that low beta assets, like utility stocks, offer little protection against changes in interest rates, and require higher returns than suggested by the standard CAPM.

Another explanation for the CAPM's inability to fully explain the process determining security returns involves the use of an inadequate or incomplete market index. Empirical studies to validate the CAPM invariably rely on some stock market index as a proxy for the true market portfolio. The exclusion of several asset categories from the definition of market index mis-specifies the CAPM and biases the results found using only stock market data. Kolbe and Read (1983) illustrate the biases in beta estimates which result from applying the CAPM to public utilities. Unfortunately, no comprehensive and easily accessible data exist for several classes of assets, such as mortgages and business investments, so that the exact relation between return and stock betas predicted by the CAPM does not exist. This suggests that the empirical relationship between returns and stock betas is best estimated empirically (ECAPM) rather than by relying on theoretical and elegant CAPM models expanded to include missing assets

effects. In any event, stock betas may be highly correlated with the true beta measured with the true market index.

Yet another explanation for the CAPM's inability to fully explain the observed risk-return tradeoff involves the possibility of constraints on investor borrowing that run counter to the assumptions of the CAPM. In response to this inadequacy, several versions of the CAPM have been developed by researchers. One of these versions is the so-called zero-beta, or two-factor, CAPM which provides for a risk-free return in a market where borrowing and lending rates are divergent. If borrowing rates and lending rates differ, or there is no risk-free borrowing or lending, or there is risk-free lending but no risk-free borrowing, then the CAPM has the following form:

$$K = R_Z + \beta(R_m - R_F)$$

The model, christened the zero-beta model, is analogous to the standard CAPM, but with the return on a minimum risk portfolio which is unrelated to market returns,  $R_Z$ , replacing the risk-free rate,  $R_F$ . The model has been empirically tested by Black, Jensen, and Scholes (1972), who found a flatter than predicted CAPM, consistent with the model and other researchers' findings.

The zero-beta CAPM cannot be literally employed in cost of capital projections, since the zero-beta portfolio is a statistical construct difficult to replicate.

### **Empirical Evidence**

A summary of the empirical evidence on the magnitude of alpha is provided in the table below.

<b>Empirical Evidence on the Alpha Factor</b>		
<b>Author</b>	<b>Range of alpha</b>	<b>Period relied</b>
Black (1993)	-3.6% to 3.6%	1931-1991
Black, Jensen and Scholes (1972)	-9.61% to 12.24%	1931-1965
Fama and McBeth (1972)	4.08% to 9.36%	1935-1968
Fama and French (1992)	10.08% to 13.56%	1941-1990
Litzenberger and Ramaswamy (1979)	5.32% to 8.17%	
Litzenberger, Ramaswamy and Sosin (1980)	1.63% to 5.04%	1926-1978
Pettengill, Sundaram and Mathur (1995)	4.6%	
Morin (1994)	2.0%	1926-1984
Harris, Marston, Mishra, and O'Brien (2003)	2.0%	1983-1998

Given the observed magnitude of alpha, the empirical evidence indicates that the risk-return relationship is flatter than that predicted by the CAPM. Typical of the empirical evidence is the findings cited in Morin (1989) over the period 1926-1984 indicating that the observed expected return on a security is related to its risk by the following equation:

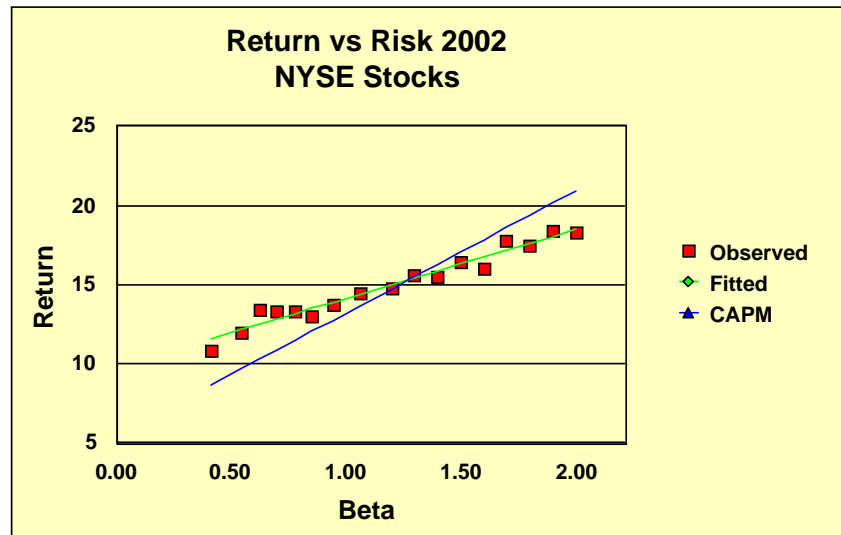
$$K = .0829 + .0520 \beta$$

Given that the risk-free rate over the estimation period was approximately 6 percent, this relationship implies that the intercept of the risk-return relationship is higher than the 6 percent risk-free rate, contrary to the CAPM's prediction. Given that the average return on an average risk stock exceeded the risk-free rate by about 8.0 percent in that period, that is, the market risk premium ( $R_M - R_F$ ) = 8 percent, the intercept of the observed relationship between return and beta exceeds the risk-free rate by about 2 percent, suggesting an alpha factor of 2 percent.

Most of the empirical studies cited in the above table utilize raw betas rather than Value Line adjusted betas because the latter were not available over most of the time periods covered in these studies. A study of the relationship between return and adjusted beta is reported on Table 6-7 in Ibbotson Associates Valuation Yearbook 2001. If we

exclude the portfolio of very small cap stocks from the relationship due to significant size effects, the relationship between the arithmetic mean return and beta for the remaining portfolios is flatter than predicted and the intercept slightly higher than predicted by the CAPM, as shown on the graph below. It is noteworthy that the Ibbotson study relies on adjusted betas as stated on page 95 of the aforementioned study.

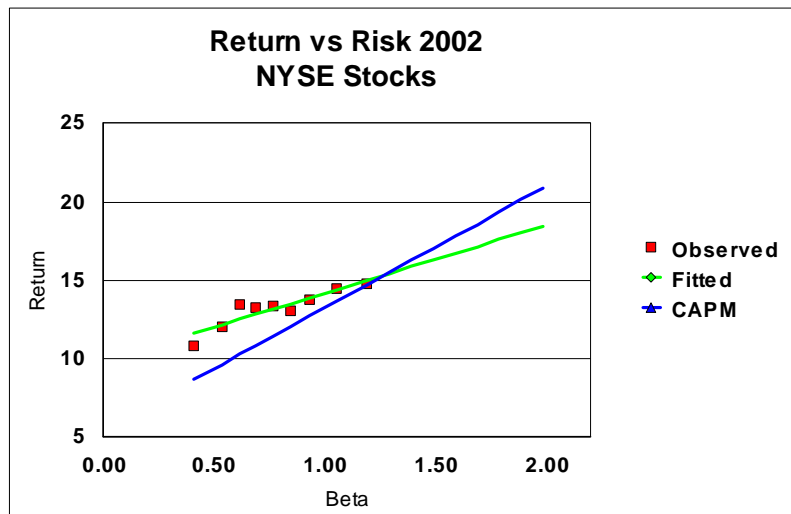
## CAPM vs ECAPM



Another study by Morin in May 2002 provides empirical support for the ECAPM. All the stocks covered in the Value Line Investment Survey for Windows for which betas and returns data were available were retained for analysis. There were nearly 2000 such stocks. The expected return was measured as the total shareholder return (“TSR”) reported by Value Line over the past ten years. The Value Line adjusted beta was also retrieved from the same data base. The nearly 2000 companies for which all data were available were ranked in ascending order of beta, from lowest to highest. In order to palliate measurement error, the nearly 2000 securities were grouped into ten portfolios of approximately 180 securities for each portfolio. The average returns and betas for each portfolio were as follows:

Portfolio #	Beta	Return
portfolio 1	0.41	10.87
portfolio 2	0.54	12.02
portfolio 3	0.62	13.50
portfolio 4	0.69	13.30
portfolio 5	0.77	13.39
portfolio 6	0.85	13.07
portfolio 7	0.94	13.75
portfolio 8	1.06	14.53
portfolio 9	1.19	14.78
portfolio 10	1.48	20.78

It is clear from the graph below that the observed relationship between DCF returns and Value Line adjusted betas is flatter than that predicted by the plain vanilla CAPM. The observed intercept is higher than the prevailing risk-free rate of 5.7 percent while the slope is less than equal to the market risk premium of 7.7 percent predicted by the plain vanilla CAPM for that period.



In an article published in Financial Management, Harris, Marston, Mishra, and O'Brien ("HMMO") estimate ex ante expected returns for S&P 500 companies over the period 1983-1998<sup>1</sup>. HMMO measure the expected rate of return (cost of equity) of each dividend-paying stock in the S&P 500 for each month from January 1983 to August 1998 by using the constant growth DCF model. They then investigate the relation between the

risk premium (expected return over the 20-year U.S. Treasury Bond yield) estimates for each month to equity betas as of that same month (5-year raw betas).

The table below, drawn from HMMO Table 4, displays the average estimate prospective risk premium (Column 2) by industry and the corresponding beta estimate for that industry, both in raw form (Column 3) and adjusted form (Column 4). The latter were calculated with the traditional Value Line – Merrill Lynch – Bloomberg adjustment methodology by giving 1/3 weight of to a beta estimate of 1.00 and 2/3 weight to the raw beta estimate.

**Table A-1 Risk Premium and Beta Estimates by Industry**

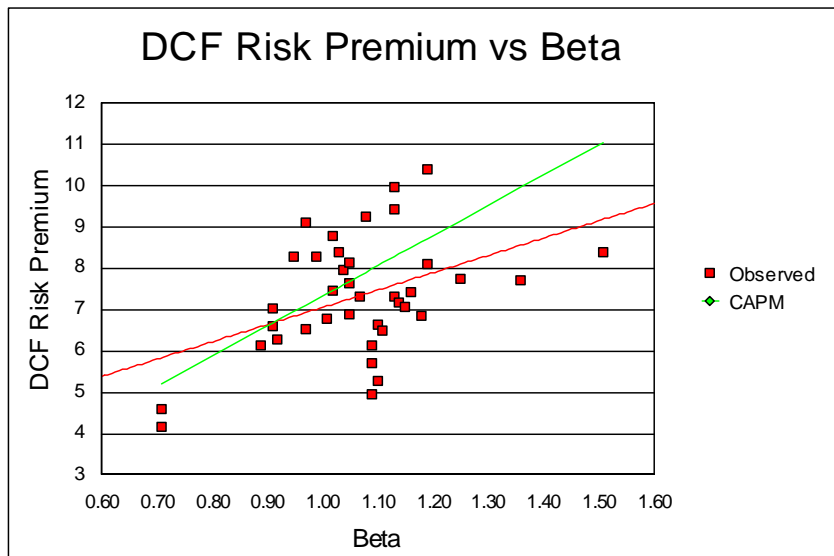
	Industry	DCF Risk Premium	Raw Industry Beta	Adjusted Industry Beta
	(1)	(2)	(3)	(4)
1	Aero	6.63	1.15	1.10
2	Autos	5.29	1.15	1.10
3	Banks	7.16	1.21	1.14
4	Beer	6.60	0.87	0.91
5	BldMat	6.84	1.27	1.18
6	Books	7.64	1.07	1.05
7	Boxes	8.39	1.04	1.03
8	BusSv	8.15	1.07	1.05
9	Chems	6.49	1.16	1.11
10	Chips	8.11	1.28	1.19
11	Clths	7.74	1.37	1.25
12	Cnstr	7.70	1.54	1.36
13	Comps	9.42	1.19	1.13
14	Drugs	8.29	0.99	0.99
15	ElcEq	6.89	1.08	1.05
16	Energy	6.29	0.88	0.92
17	Fin	8.38	1.76	1.51
18	Food	7.02	0.86	0.91
19	Fun	9.98	1.19	1.13
20	Gold	4.59	0.57	0.71
21	Hlth	10.40	1.29	1.19
22	Hsld	6.77	1.02	1.01
23	Insur	7.46	1.03	1.02
24	LabEq	7.31	1.10	1.07
25	Mach	7.32	1.20	1.13
26	Meals	7.98	1.06	1.04
27	MedEq	8.80	1.03	1.02
28	Pap	6.14	1.13	1.09
29	PerSv	9.12	0.95	0.97
30	Retail	9.27	1.12	1.08
31	Rubber	7.06	1.22	1.15

<sup>1</sup> Harris, R. S., Marston, F. C., Mishra, D. R., and O'Brien, T. J., "Ex Ante Cost of Equity Estimates of S&P 500 Firms: The Choice Between Global and Domestic CAPM," *Financial Management*, Autumn 2003, pp. 51-66.



32	Ships	1.95	0.95	0.97
33	Stee	4.96	1.13	1.09
34	Telc	6.12	0.83	0.89
35	Toys	7.42	1.24	1.16
36	Trans	5.70	1.14	1.09
37	Txtls	6.52	0.95	0.97
38	Util	4.15	0.57	0.71
39	Whlsl	8.29	0.92	0.95
	<b>MEAN</b>	<b>7.19</b>		

The observed statistical relationship between expected return and **adjusted beta** is shown in the graph below along with the CAPM prediction:



If the plain vanilla version of the CAPM is correct, then the intercept of the graph should be zero, recalling that the vertical axis represents returns in excess of the risk-free rate. Instead, the observed intercept is approximately 2 percent, that is approximately equal to 25 percent of the expected market risk premium of 7.2 percent shown at the bottom of Column 2 over the 1983-1998 period, as predicted by the ECAPM. The same is true for the slope of the graph. If the plain vanilla version of the CAPM is correct, then the slope of the relationship should equal the market risk premium of 7.2 percent. Instead, the observed slope of close to 5 percent is approximately equal to 75 percent of the expected market risk premium of 7.2 percent, as predicted by the ECAPM.

In short, the HMMO empirical findings are quite consistent with the predictions of the ECAPM.

### **Practical Implementation of the ECAPM**

The empirical evidence reviewed above suggests that the expected return on a security is related to its risk by the following relationship:

$$K = R_F + \alpha + \beta (MRP - \alpha) \quad (5)$$

or, alternatively by the following equivalent relationship:

$$K = R_F + a MRP + (1-a) \beta MRP \quad (6)$$

The empirical findings support values of  $\alpha$  from approximately 2 percent to 7 percent. If one is using the short-term U.S. Treasury Bills yield as a proxy for the risk-free rate, and given that utility stocks have lower than average betas, an alpha in the lower range of the empirical findings, 2 percent - 3 percent is reasonable, albeit conservative.

Using the long-term U.S. Treasury yield as a proxy for the risk-free rate, a lower alpha adjustment is indicated. This is because the use of the long-term U.S. Treasury yield as a proxy for the risk-free rate partially incorporates the desired effect of using the ECAPM<sup>2</sup>. An alpha in the range of 1 percent - 2 percent is therefore reasonable.

To illustrate, consider a utility with a beta of 0.80. The risk-free rate is 5 percent, the MRP is 7 percent, and the alpha factor is 2 percent. The cost of capital is determined as follows:

$$\begin{aligned} K &= R_F + \alpha + \beta (MRP - \alpha) \\ K &= 5\% + 2\% + 0.80(7\% - 2\%) \\ &= 11\% \end{aligned}$$

---

<sup>2</sup> The Security Market Line (SML) using the long-term risk-free rate has a higher intercept and a flatter slope than the SML using the short-term risk-free rate

A practical alternative is to rely on the second variation of the ECAPM:

$$K = R_F + a \text{ MRP} + (1-a) \beta \text{ MRP}$$

With an alpha of 2 percent, a MRP in the 6 percent - 8 percent range, the 'a' coefficient is 0.25, and the ECAPM becomes<sup>3</sup>:

$$K = R_F + 0.25 \text{ MRP} + 0.75 \beta \text{ MRP}$$

Returning to the numerical example, the utility's cost of capital is:

$$\begin{aligned} K &= 5\% + 0.25 \times 7\% + 0.75 \times 0.80 \times 7\% \\ &= 11\% \end{aligned}$$

For reasonable values of beta and the MRP, both renditions of the ECAPM produce results that are virtually identical<sup>4</sup>.

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<sup>3</sup> Recall that alpha equals 'a' times MRP, that is,  $\alpha = a \text{ MRP}$ , and therefore  $a = \alpha/\text{MRP}$ . If alpha is 2 percent, then  $a = 0.25$

<sup>4</sup> In the Morin (1994) study, the value of "a" was actually derived by systematically varying the constant "a" in equation 6 from 0 to 1 in steps of 0.05 and choosing that value of 'a' that minimized the mean square error between the observed relationship between return and beta:

$$K = 0.0829 + .0520 \beta$$

The value of a that best explained the observed relationship was 0.25.

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## **APPENDIX B**

### **FLOTATION COST ALLOWANCE**

To obtain the final cost of equity financing from the investors' expected rate of return, it is necessary to make allowance for underpricing, which is the sum of market pressure, costs of flotation, and underwriting fees associated with new issues. Allowance for market pressure should be made because large blocks of new stock may cause significant pressure on market prices even in stable markets. Allowance must also be made for company costs of flotation (including such items as printing, legal and accounting expenses) and for underwriting fees.

#### **1. MAGNITUDE OF FLOTATION COSTS**

According to empirical studies, underwriting costs and expenses average at least 4% of gross proceeds for utility stock offerings in the U.S. (See Logue & Jarrow: "Negotiations vs. Competitive Bidding in the Sale of Securities by Public Utilities", Financial Management, Fall 1978.) A study of 641 common stock issues by 95 electric utilities identified a flotation cost allowance of 5.0%. (See Borum & Malley: "Total Flotation Cost for Electric Company Equity Issues", Public Utilities Fortnightly, Feb. 20, 1986.)

Empirical studies suggest an allowance of 1% for market pressure in U.S. studies. Logue and Jarrow found that the absolute magnitude of the relative price decline due to market pressure was less than 1.5%. Bowyer and Yawitz examined 278 public utility stock issues and found an average market pressure of 0.72%. (See Bowyer & Yawitz, "The Effect of New Equity Issues on Utility Stock Prices", Public Utilities Fortnightly, May 22, 1980.)

Eckbo & Masulis ("Rights vs. Underwritten Stock Offerings: An Empirical Analysis", University of British Columbia, Working Paper No. 1208, Sept., 1987) found an average flotation cost of 4.175% for utility common stock offerings. Moreover, flotation costs increased progressively for smaller size issues. They also found that the relative price decline due to market pressure in the days

surrounding the announcement amounted to slightly more than 1.5%. In a classic and monumental study published in the prestigious Journal of Financial Economics by a prominent scholar, a market pressure effect of 3.14% for industrial stock issues and 0.75% for utility common stock issues was found (see Smith, C.W., "Investment Banking and the Capital Acquisition Process," Journal of Financial Economics 15, 1986). Other studies of market pressure are reported in Logue ("On the Pricing of Unseasoned Equity Offerings, Journal of Financial and Quantitative Analysis, Jan. 1973), Pettway ("The Effects of New Equity Sales Upon Utility Share Prices," Public Utilities Fortnightly, May 10 1984), and Reilly and Hatfield ("Investor Experience with New Stock Issues," Financial Analysts' Journal, Sept.- Oct. 1969). In the Pettway study, the market pressure effect for a sample of 368 public utility equity sales was in the range of 2% to 3%. Adding the direct and indirect effects of utility common stock issues, the indicated total flotation cost allowance is above 5.0%, corroborating the results of earlier studies.

As shown in the table below, a comprehensive empirical study by Lee, Lochhead, Ritter, and Zhao, "The Costs of Raising Capital," Journal of Financial Research, Vol. XIX, NO. 1, Spring 1996, shows average direct flotation costs for equity offerings of 3.5% - 5% for stock issues between \$60 and \$500 million. Allowing for market pressure costs raises the flotation cost allowance to well above 5%.

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**FLOTATION COSTS: RAISING EXTERNAL CAPITAL**

(Percent of Total Capital Raised)

<u>Amount Raised in \$ Millions</u>	<u>Average Flotation Cost: Common Stock</u>	<u>Average Flotation Cost: New Debt</u>
\$ 2 - 9.99	13.28%	4.39%
10 - 19.99	8.72	2.76
20 - 39.99	6.93	2.42
40 - 59.99	5.87	1.32
60 - 79.99	5.18	2.34
80 - 99.99	4.73	2.16
100 - 199.99	4.22	2.31
200 - 499.99	3.47	2.19
500 and Up	3.15	1.64

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Note: Flotation costs for IPOs are about 17 percent of the value of common stock issued if the amount raised is less than \$10 million and about 6 percent if more than \$500 million is raised. Flotation costs are somewhat lower for utilities than others.

Source: Lee, Inmoo, Scott Lochhead, Jay Ritter, and Quanshui Zhao, "The Costs of Raising Capital," *The Journal of Financial Research*, Spring 1996.

Therefore, based on empirical studies, total flotation costs including market pressure amount to approximately 5% of gross proceeds. I have therefore assumed a 5% gross total flotation cost allowance in my cost of capital analyses.

**2. APPLICATION OF THE FLOTATION COST ADJUSTMENT**

The section below shows: 1) why it is necessary to apply an allowance of 5% to the dividend yield component of equity cost by dividing that yield by 0.95 (100% - 5%) to obtain the fair return on equity capital, and 2) why the flotation adjustment is permanently required to avoid confiscation even if



no further stock issues are contemplated. Flotation costs are only recovered if the rate of return is applied to total equity, including retained earnings, in all future years.

Flotation costs are just as real as costs incurred to build utility plant. Fair regulatory treatment absolutely must permit the recovery of these costs. An analogy with bond issues is useful to understand the treatment of flotation costs in the case of common stocks.

In the case of a bond issue, flotation costs are not expensed but are rather amortized over the life of the bond, and the annual amortization charge is embedded in the cost of service. This is analogous to the process of depreciation, which allows the recovery of funds invested in utility plant. The recovery of bond flotation expense continues year after year, irrespective of whether the company issues new debt capital in the future, until recovery is complete. In the case of common stock that has no finite life, flotation costs are not amortized. Therefore, the recovery of flotation cost requires an upward adjustment to the allowed return on equity. Roger A. Morin, Regulatory Finance, Public Utilities Reports Inc., Arlington, Va., 1994, provides numerical illustrations that show that even if a utility does not contemplate any additional common stock issues, a flotation cost adjustment is still permanently required. Examples there also demonstrate that the allowance applies to retained earnings as well as to the original capital.

From the standard DCF model, the investor's required return on equity capital is expressed as:

$$K = D_1/P_o + g$$

If  $P_o$  is regarded as the proceeds per share actually received by the company from which dividends and earnings will be generated, that is,  $P_o$  equals  $B_o$ , the book value per share, then the company's required return is:

$$r = D_1/B_o + g$$

Denoting the percentage flotation costs 'f', proceeds per share  $B_o$  are related to market price  $P_o$  as follows:

$$P - fP = B_o$$

$$P(1 - f) = B_o$$

Substituting the latter equation into the above expression for return on equity, we obtain:

$$r = D_1/P(1-f) + g$$

that is, the utility's required return adjusted for underpricing. For flotation costs of 5%, dividing the expected dividend yield by 0.95 will produce the adjusted cost of equity capital. For a dividend yield of 6% for example, the magnitude of the adjustment is 32 basis points:  $.06/.95 = .0632$ .

In deriving DCF estimates of fair return on equity, it is therefore necessary to apply a conservative after-tax allowance of 5% to the dividend yield component of equity cost.

Even if no further stock issues are contemplated, the flotation adjustment is still permanently required to keep shareholders whole. Flotation costs are only recovered if the rate of return is applied to total equity, including retained earnings, in all future years, even if no future financing is contemplated. This is demonstrated by the numerical example contained in pages 7-9 of this Appendix. Moreover, even if the stock price, hence the DCF estimate of equity return, fully reflected the lack of permanent allowance, the company always nets less than the market price. Only the net proceeds from an equity issue are used to add to the rate base on which the investor earns. A permanent allowance for flotation costs must be authorized in order to insure that in each year the investor earns the required return on the total amount of capital actually supplied.

The example shown on pages 7-9 shows the flotation cost adjustment process using illustrative, yet realistic, market data. The assumptions used in the computation are shown on page 7. The stock is selling in the market for \$25, investors expect the firm to pay a dividend of \$2.25 that will grow at a rate of 5% thereafter. The traditional DCF cost of equity is thus  $k = D/P + g = 2.25/25 + .05 = 14\%$ . The firm sells one share stock, incurring a flotation cost of 5%. The traditional DCF cost of equity adjusted for flotation cost is thus  $ROE = D/P(1-f) + g = .09/.95 + .05 = 14.47\%$ .

The initial book value (rate base) is the net proceeds from the stock issue, which are \$23.75, that is, the market price less the 5% flotation costs. The example demonstrates that only if the company is allowed to earn 14.47% on rate base will investors earn their cost of equity of 14%. On page 8, Column

1 shows the initial common stock account, Column 2 the cumulative retained earnings balance, starting at zero, and steadily increasing from the retention of earnings. Total equity in Column 3 is the sum of common stock capital and retained earnings. The stock price in Column 4 is obtained from the seminal DCF formula:  $D_1/(k - g)$ . Earnings per share in Column 6 are simply the allowed return of 14.47% times the total common equity base. Dividends start at \$2.25 and grow at 5% thereafter, which they must do if investors are to earn a 14% return. The dividend payout ratio remains constant, as per the assumption of the DCF model. All quantities, stock price, book value, earnings, and dividends grow at a 5% rate, as shown at the bottom of the relevant columns. Only if the company is allowed to earn 14.47% on equity do investors earn 14%. For example, if the company is allowed only 14%, the stock price drops from \$26.25 to \$26.13 in the second year, inflicting a loss on shareholders. This is shown on page 9. The growth rate drops from 5% to 4.53%. Thus, investors only earn  $9\% + 4.53\% = 13.53\%$  on their investment. It is noteworthy that the adjustment is always required each and every year, whether or not new stock issues are sold in the future, and that the allowed return on equity must be earned on total equity, including retained earnings, for investors to earn the cost of equity.

### ASSUMPTIONS:

ISSUE PRICE = \$25.00  
FLOTATION COST = 5.00%  
DIVIDEND YIELD = 9.00%  
GROWTH = 5.00%

EQUITY RETURN = **14.00%**  
(D/P + g)  
ALLOWED RETURN ON EQUITY = **14.47%**  
(D/P(1-f) + g)

Yr	COMMON	RETAINED	TOTAL	STOCK	MARKET/ BOOK	EPS	DPS	PAYOUT
	STOCK (1)	EARNINGS (2)	EQUITY (3)	PRICE (4)	RATIO (5)	(6)	(7)	(8)
1	\$23.75	\$0.000	\$23.750	\$25.000	1.0526	\$3.438	\$2.250	65.45%
2	\$23.75	\$1.188	\$24.938	\$26.250	1.0526	\$3.609	\$2.363	65.45%
3	\$23.75	\$2.434	\$26.184	\$27.563	1.0526	\$3.790	\$2.481	65.45%
4	\$23.75	\$3.744	\$27.494	\$28.941	1.0526	\$3.979	\$2.605	65.45%
5	\$23.75	\$5.118	\$28.868	\$30.388	1.0526	\$4.178	\$2.735	65.45%
6	\$23.75	\$6.562	\$30.312	\$31.907	1.0526	\$4.387	\$2.872	65.45%
7	\$23.75	\$8.077	\$31.827	\$33.502	1.0526	\$4.607	\$3.015	65.45%
8	\$23.75	\$9.669	\$33.419	\$35.178	1.0526	\$4.837	\$3.166	65.45%
9	\$23.75	\$11.340	\$35.090	\$36.936	1.0526	\$5.079	\$3.324	65.45%
10	\$23.75	\$13.094	\$36.844	\$38.783	1.0526	\$5.333	\$3.490	65.45%

	<b>5.00%</b>	<b>5.00%</b>
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<b>5.00%</b>	<b>5.00%</b>
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Yr	COMMON	RETAINED	TOTAL	STOCK	MARKET/ BOOK	EPS	DPS	PAYOUT
	STOCK (1)	EARNINGS (2)	EQUITY (3)	PRICE (4)	RATIO (5)	(6)	(7)	(8)
1	\$23.75	\$0.000	\$23.750	\$25.000	1.0526	\$3.325	\$2.250	67.67%
2	\$23.75	\$1.075	\$24.825	\$26.132	1.0526	\$3.476	\$2.352	67.67%
3	\$23.75	\$2.199	\$25.949	\$27.314	1.0526	\$3.633	\$2.458	67.67%
4	\$23.75	\$3.373	\$27.123	\$28.551	1.0526	\$3.797	\$2.570	67.67%
5	\$23.75	\$4.601	\$28.351	\$29.843	1.0526	\$3.969	\$2.686	67.67%
6	\$23.75	\$5.884	\$29.634	\$31.194	1.0526	\$4.149	\$2.807	67.67%
7	\$23.75	\$7.225	\$30.975	\$32.606	1.0526	\$4.337	\$2.935	67.67%
8	\$23.75	\$8.627	\$32.377	\$34.082	1.0526	\$4.533	\$3.067	67.67%
9	\$23.75	\$10.093	\$33.843	\$35.624	1.0526	\$4.738	\$3.206	67.67%
10	\$23.75	\$11.625	\$35.375	\$37.237	1.0526	\$4.952	\$3.351	67.67%

4.53%	4.53%
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4.53%	4.53%
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Pike County Light & Power Co.  
Exhibit E-10 Depreciation

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<u>Schedule</u>	<u>Description</u>	<u>Pages</u>
1	Proposed Depreciation Rate Changes	2
2	Summary of Average Service Lives	34

**PIKE COUNTY LIGHT AND POWER COMPANY**

**PROPOSED DEPRECIATION RATE CHANGES  
FOR ELECTRIC PLANT  
AT DECEMBER 31, 2007**

**JULY 2008**



**PIKE COUNTY LIGHT AND POWER COMPANY**  
**PROPOSED DEPRECIATION RATE CHANGES FOR ELECTRIC PLANT**  
**AT DECEMBER 31, 2007**

BOOK BASIS

PROPOSED BASIS

ACCOUNT (1)	ACCOUNT TITLE (2)	BOOK BASIS				PROPOSED BASIS				RESERVE VARIATION (14)			
		BOOK COST (3)	ACCUM. PROVISION FOR DEPREC. TABLE (4)	AVG. SERVICE LIFE (5)	ANNUAL DEPREC. EXPENSE (6)	COMPUTED RESERVE FOR DEPREC. (7)	AVG. SERVICE LIFE (8)	ANNUAL DEPREC. EXPENSE (9)	COMPUTED RESERVE FOR DEPREC. (10)		RESERVE VARIATION (11)		
301000	<b>ELECTRIC PLANT</b>	2,675											
	INTANGIBLE PLANT ORGANIZATION												
	<b>DISTRIBUTION PLANT</b>												
360000	LAND AND LAND RIGHTS - EASEMENTS	22,561	19,713	h 3.0	50	451	16,082	3,631	h 3.0	50	451	16,082	3,631
360100	LAND AND LAND RIGHTS - FEE STRUCTURES AND IMPROVEMENTS	23,530	8,612	h 3.0	60	2,520	8,405	208	h 3.0	50	3,018	10,080	(1,467)
362000	STATION EQUIPMENT	1,517,825	115,911	h 1.5	45	33,696	85,939	29,972	h 1.5	40	37,946	96,365	19,546
364000	POLES, TOWERS AND FIXTURES	2,816,162	939,804	h 1.0	40	70,404	584,209	355,594	h 1.5	40	70,404	708,251	231,552
365000	OH CONDUCTOR AND DEVICES	2,999,410	503,100	h 1.5	45	66,587	640,563	(137,464)	h 1.5	45	66,587	640,563	(137,464)
365100	OH CONDUCTOR AND DEVICES - CAPACITORS	39,665	(6,811)	h 1.5	30	1,321	8,863	(15,674)	h 1.5	30	1,321	8,863	(15,674)
366000	UNDERGROUND CONDUIT	345,427	54,179	h 2.5	60	5,769	56,202	(2,023)	h 2.5	60	5,769	56,202	(2,023)
367000	UG CONDUCTOR AND DEVICES	871,733	138,928	h 2.0	40	21,793	137,062	1,866	h 2.0	40	21,793	137,062	1,866
368100	LINE TRANSFORMERS - OVERHEAD	993,948	435,918	h 1.5	30	33,098	389,882	46,036	h 1.0	35	28,427	291,395	144,523
368200	LINE TRANSFORMERS - O/H INSTALLS	493,123	160,435	h 1.5	30	16,421	135,852	24,583	h 1.0	35	14,103	99,954	60,480
368300	LINE TRANSFORMERS - UNDERGROUND	440,728	125,455	h 1.5	30	14,676	111,203	14,252	h 1.0	35	12,605	81,819	43,635
368400	LINE TRANSFORMERS - U/G INSTALLS	89,640	11,166	h 1.5	30	2,985	13,799	(2,633)	h 1.0	35	2,564	9,967	1,199
369100	SERVICES - OVERHEAD	592,665	259,085	h 2.0	40	14,817	224,148	34,937	h 2.0	50	11,853	188,847	70,237
369200	SERVICES - UNDERGROUND	342,295	59,648	h 1.5	40	8,557	44,330	15,318	h 2.0	45	7,599	46,364	13,284
370100	METERS	303,630	56,287	h 1.5	30	10,111	61,586	(3,299)	h 1.5	20	15,182	82,362	(24,074)
370200	METER INSTALLATIONS	157,018	(185)	h 1.5	30	5,229	21,604	(21,789)	h 1.5	20	7,851	29,970	(30,155)
370300	DEMAND RECORDERS AND METERS	56,170	18,687	h 1.5	30	1,870	14,078	4,608	h 1.5	20	2,809	19,514	(628)
373100	STREETLIGHTS-OVERHEAD	132,152	78,521	h 0.5	20	6,608	43,280	35,241	h 1.0	30	4,401	40,472	39,049
	TOTAL DISTRIBUTION PLANT	12,388,599	2,980,451			316,913	2,597,087	383,364			314,683	2,564,133	416,318
	TOTAL ELECTRIC	12,391,274	2,980,451			316,913	2,597,087	383,364			314,683	2,564,133	416,318

RESERVE VARIATION PERCENTAGE 14.76%

**PIKE COUNTY LIGHT AND POWER COMPANY**

**ELECTRIC UTILITY PLANT**

**SUMMARY OF AVERAGE SERVICE LIVES, EQUIVALENT "h" CURVES AND OTHER  
STATISTICAL DATA INDICATED BY PLANT MORTALITY STUDIES BASED ON  
EXPERIENCE THROUGH DECEMBER 31, 2006**

**JULY 2008**

ORANGE AND ROCKLAND UTILITIES INC. MORTALITY STUDY BY LEAST SQUARE FITTING OF WEIGHTED RETIREMENT RATIOS  
 ACCOUNT 1361000 STRUCTURES AND IMPROVEMENTS PSC CASE 1 ORANGE AND ROCKLAND UTILITIES INC STUDY NO. 2006  
 SUMMARY OF ROLLING BANDS

YEAR	YEAR	FIRST DEGREE			SECOND DEGREE			THIRD DEGREE				
		AVERAGE SERVICE LIFE (YEARS)	FIT INDEX	TERMINAL A/L RATIO (PERCENT)	EQUIV. H CURVE	AVERAGE SERVICE LIFE (YEARS)	FIT INDEX	TERMINAL A/L RATIO (PERCENT)	EQUIV. H CURVE	AVERAGE SERVICE LIFE (YEARS)	FIT INDEX	TERMINAL A/L RATIO (PERCENT)
1952 TO 1961		58.50	0.004307	363.27	1.47	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.00
1953 TO 1962		58.68	0.003052	360.42	1.50	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.00
1954 TO 1963		60.26	0.002860	359.27	1.51	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.00
1955 TO 1964		62.61	0.002439	358.58	1.52	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.00
1956 TO 1965		59.03	0.002316	354.91	1.57	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.00
1957 TO 1966		61.20	0.002147	353.76	1.58	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.00
1958 TO 1967		72.05	0.001697	342.12	1.74	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.00
1959 TO 1968		108.46	0.000927	348.98	1.65	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.00
1960 TO 1969		115.28	0.001060	345.69	1.65	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.00
1961 TO 1970		138.67	0.000839	287.37	1.66	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.00
1962 TO 1971		143.06	0.000964	278.56	1.62	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.00
1963 TO 1972		85.35	0.001697	348.57	1.66	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.00
1964 TO 1973		87.99	0.001865	348.35	1.67	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.00
1965 TO 1974		60.76	0.004336	325.05	1.96	0.004324	207.99	0.003815	60.41	0.004287	163.05	3.66
1966 TO 1975		63.59	0.003843	337.33	1.79	0.003815	205.21	0.003586	61.46	0.003756	158.64	3.73
1967 TO 1976		65.02	0.003668	337.57	1.79	0.003644	206.34	0.003513	62.05	0.003586	158.74	2.88
1968 TO 1977		57.14	0.003559	340.40	1.76	0.003555	232.17	0.003435	56.85	0.003513	175.01	2.99
1969 TO 1978		58.58	0.003472	338.86	1.77	0.003469	231.88	0.002759	57.87	0.003435	171.94	3.08
1970 TO 1979		60.03	0.002814	339.02	1.78	0.002803	229.99	0.002696	58.82	0.002759	170.85	3.17
1971 TO 1980		61.59	0.002743	320.96	2.01	0.003651	229.71	0.002696	59.78	0.002696	169.79	3.08
1972 TO 1981		50.63	0.003688	320.96	2.01	0.003069	211.28	0.003664	52.90	0.003664	191.86	3.54
1973 TO 1982		55.49	0.003123	321.70	2.00	0.002754	211.02	0.002751	57.09	0.003064	176.02	3.55
1974 TO 1983		56.66	0.002814	322.08	2.01	0.002754	211.02	0.002751	57.45	0.002751	176.68	0.00
1975 TO 1984		69.00	0.002026	331.15	1.87	0.001984	236.23	0.000000	0.00	0.000000	0.00	0.00
1976 TO 1985		71.01	0.001979	324.60	1.97	0.001894	246.52	0.000000	0.00	0.000000	0.00	0.00
1977 TO 1986		83.22	0.001727	322.65	2.00	0.001732	229.44	0.000000	0.00	0.000000	0.00	0.00
1978 TO 1987		75.54	0.001849	322.36	2.00	0.001852	231.79	0.000000	0.00	0.000000	0.00	0.00
1979 TO 1988		68.35	0.001857	319.66	2.04	0.001857	235.88	0.000000	0.00	0.000000	0.00	0.00
1980 TO 1989		52.84	0.003051	315.10	2.09	0.002828	208.09	0.002834	52.44	0.002834	191.64	2.78
1981 TO 1990		61.26	0.002576	330.55	1.90	0.002280	209.03	0.002326	56.45	0.002326	172.00	3.09
1982 TO 1991		59.56	0.002476	328.24	1.91	0.002370	205.35	0.002061	55.75	0.002061	177.58	3.03
1983 TO 1992		59.91	0.002304	329.65	1.91	0.002104	206.86	0.001844	55.03	0.001844	176.69	3.09
1984 TO 1993		60.21	0.002122	328.00	1.91	0.001899	204.95	0.001786	55.70	0.001786	183.32	3.08
1985 TO 1994		60.98	0.001959	328.80	1.91	0.001815	202.07	0.001786	53.19	0.001786	183.06	3.15
1986 TO 1995		58.14	0.002271	329.37	1.91	0.001712	204.25	0.001656	54.42	0.001656	177.33	3.35
1987 TO 1996		57.86	0.002075	327.51	1.92	0.001697	200.17	0.001784	55.53	0.001784	175.58	3.48
1988 TO 1997		61.73	0.001940	329.66	1.91	0.001820	199.67	0.000000	0.00	0.000000	0.00	0.00
1989 TO 1998		65.32	0.002021	331.46	1.88	0.001838	236.14	0.000000	0.00	0.000000	0.00	0.00
1990 TO 1999		89.23	0.000844	335.66	1.83	0.000843	225.41	0.000000	0.00	0.000000	0.00	0.00
1991 TO 2000		86.03	0.000863	333.01	1.87	0.000975	216.27	0.000000	0.00	0.000000	0.00	0.00
1992 TO 2001		85.44	0.001006	329.47	1.90	0.001065	216.00	0.000000	0.00	0.000000	0.00	0.00
1993 TO 2002		80.58	0.001101	328.26	1.92	0.001260	232.38	0.000000	0.00	0.000000	0.00	0.00
1994 TO 2003		68.18	0.001275	326.33	1.95	0.002321	233.92	0.000000	0.00	0.000000	0.00	0.00
1995 TO 2004		50.51	0.002347	317.75	2.07	0.002646	229.29	0.000000	0.00	0.000000	0.00	0.00
1996 TO 2005		46.56	0.002697	314.65	2.09							

ORANGE AND ROCKLAND UTILITIES INC. MORTALITY STUDY BY LEAST SQUARE FITTING OF WEIGHTED RETIREMENT RATIOS  
 ACCOUNT 1361000 STRUCTURES AND IMPROVEMENTS PSC CASE 1 ORANGE AND ROCKLAND UTILITIES INC STUDY NO. 2006  
 SUMMARY OF SHRINKING BANDS

YEAR	YEAR	FIRST DEGREE				SECOND DEGREE				THIRD DEGREE			
		AVERAGE SERVICE LIFE (YEARS)	FIT INDEX	TERMINAL A/L RATIO (PERCENT)	EQUIV. H CURVE	AVERAGE SERVICE LIFE (YEARS)	FIT INDEX	TERMINAL A/L RATIO (PERCENT)	EQUIV. H CURVE	AVERAGE SERVICE LIFE (YEARS)	FIT INDEX	TERMINAL A/L RATIO (PERCENT)	EQUIV. H CURVE
2006 TO 2006	2006 TO 2006	32.18	0.007038	315.46	2.08	36.12	0.006884	220.08	2.89	36.00	0.006926	218.04	2.84
2005 TO 2006	2005 TO 2006	29.34	0.006799	308.41	2.18	33.09	0.006647	228.14	2.81	0.00	0.000000	0.00	0.00
2004 TO 2006	2004 TO 2006	32.08	0.004861	310.16	2.15	37.34	0.004771	237.52	2.70	0.00	0.000000	0.00	0.00
2003 TO 2006	2003 TO 2006	35.15	0.004142	311.53	2.13	39.59	0.004065	236.98	2.76	0.00	0.000000	0.00	0.00
2002 TO 2006	2002 TO 2006	37.73	0.003699	311.41	2.13	41.50	0.003619	233.62	2.82	0.00	0.000000	0.00	0.00
2001 TO 2006	2001 TO 2006	39.99	0.003395	311.34	2.13	43.22	0.003314	230.12	2.83	0.00	0.000000	0.00	0.00
2000 TO 2006	2000 TO 2006	42.23	0.003131	313.77	2.11	44.41	0.003062	230.21	2.83	0.00	0.000000	0.00	0.00
1999 TO 2006	1999 TO 2006	43.83	0.002964	313.77	2.10	44.41	0.002903	230.82	2.83	0.00	0.000000	0.00	0.00
1998 TO 2006	1998 TO 2006	45.51	0.002810	315.32	2.09	45.66	0.002756	228.86	2.86	0.00	0.000000	0.00	0.00
1997 TO 2006	1997 TO 2006	46.56	0.002697	314.65	2.09	46.45	0.002646	229.29	2.86	0.00	0.000000	0.00	0.00
1996 TO 2006	1996 TO 2006	46.77	0.002645	317.53	2.07	46.49	0.002592	229.08	2.83	0.00	0.000000	0.00	0.00
1995 TO 2006	1995 TO 2006	47.78	0.002567	317.07	2.06	47.22	0.002516	229.76	2.88	0.00	0.000000	0.00	0.00
1994 TO 2006	1994 TO 2006	48.60	0.002499	317.89	2.06	47.80	0.002448	226.98	2.88	0.00	0.000000	0.00	0.00
1993 TO 2006	1993 TO 2006	49.33	0.002433	319.27	2.05	48.30	0.002383	226.69	2.89	0.00	0.000000	0.00	0.00
1992 TO 2006	1992 TO 2006	49.66	0.002367	319.18	2.04	48.51	0.002319	227.78	2.89	0.00	0.000000	0.00	0.00
1991 TO 2006	1991 TO 2006	50.38	0.002322	318.56	2.04	48.99	0.002274	227.61	2.90	0.00	0.000000	0.00	0.00
1990 TO 2006	1990 TO 2006	48.68	0.002388	319.46	2.04	47.59	0.002249	215.38	3.04	0.00	0.000000	0.00	0.00
1989 TO 2006	1989 TO 2006	48.79	0.002351	318.70	2.04	47.69	0.002219	217.04	3.01	0.00	0.000000	0.00	0.00
1988 TO 2006	1988 TO 2006	48.98	0.002327	319.50	2.04	47.81	0.002200	218.59	2.97	0.00	0.000000	0.00	0.00
1987 TO 2006	1987 TO 2006	49.57	0.002296	319.76	2.04	48.23	0.002180	218.76	2.95	0.00	0.000000	0.00	0.00
1986 TO 2006	1986 TO 2006	49.99	0.002262	319.09	2.03	48.52	0.002157	221.57	2.92	0.00	0.000000	0.00	0.00
1985 TO 2006	1985 TO 2006	50.46	0.002236	320.06	2.03	48.86	0.002138	222.06	2.90	0.00	0.000000	0.00	0.00
1984 TO 2006	1984 TO 2006	50.89	0.002213	319.29	2.03	49.19	0.002122	222.62	2.88	0.00	0.000000	0.00	0.00
1983 TO 2006	1983 TO 2006	51.29	0.002185	320.72	2.03	49.49	0.002099	223.29	2.88	0.00	0.000000	0.00	0.00
1982 TO 2006	1982 TO 2006	51.64	0.002117	320.46	2.02	49.76	0.002034	224.08	2.88	0.00	0.000000	0.00	0.00
1981 TO 2006	1981 TO 2006	50.90	0.002162	319.23	2.05	49.36	0.002069	221.83	2.93	0.00	0.000000	0.00	0.00
1980 TO 2006	1980 TO 2006	51.23	0.002096	319.15	2.05	49.62	0.002005	222.71	2.92	0.00	0.000000	0.00	0.00
1979 TO 2006	1979 TO 2006	51.53	0.002034	319.24	2.04	49.85	0.001944	221.66	2.91	0.00	0.000000	0.00	0.00
1978 TO 2006	1978 TO 2006	51.59	0.001997	319.48	2.04	50.07	0.001909	222.70	2.91	0.00	0.000000	0.00	0.00
1977 TO 2006	1977 TO 2006	51.83	0.001862	318.86	2.03	49.92	0.001802	223.35	2.88	0.00	0.000000	0.00	0.00
1976 TO 2006	1976 TO 2006	51.83	0.001840	320.24	2.03	50.10	0.001774	224.54	2.87	0.00	0.000000	0.00	0.00
1975 TO 2006	1975 TO 2006	51.51	0.001851	319.36	2.03	49.89	0.001752	224.25	2.84	0.00	0.000000	0.00	0.00
1974 TO 2006	1974 TO 2006	51.73	0.001833	319.94	2.02	50.07	0.001743	221.47	2.90	0.00	0.000000	0.00	0.00
1973 TO 2006	1973 TO 2006	51.73	0.001833	321.16	2.02	49.96	0.001734	223.16	2.87	0.00	0.000000	0.00	0.00
1972 TO 2006	1972 TO 2006	51.72	0.001824	320.01	2.02	50.11	0.001726	224.50	2.87	0.00	0.000000	0.00	0.00
1971 TO 2006	1971 TO 2006	51.90	0.001812	320.82	2.02	50.26	0.001716	223.85	2.86	0.00	0.000000	0.00	0.00
1970 TO 2006	1970 TO 2006	52.07	0.001804	321.70	2.01	50.39	0.001703	224.69	2.85	0.00	0.000000	0.00	0.00
1969 TO 2006	1969 TO 2006	52.22	0.001794	320.75	2.01	50.51	0.001697	224.18	2.85	0.00	0.000000	0.00	0.00
1968 TO 2006	1968 TO 2006	52.37	0.001787	321.77	2.01	50.63	0.001691	225.69	2.85	0.00	0.000000	0.00	0.00
1967 TO 2006	1967 TO 2006	52.50	0.001780	320.96	2.01	50.73	0.001684	225.60	2.84	0.00	0.000000	0.00	0.00
1966 TO 2006	1966 TO 2006	52.51	0.001774	320.90	2.00	50.84	0.001684	225.21	2.84	0.00	0.000000	0.00	0.00
1965 TO 2006	1965 TO 2006	52.63	0.001770	322.08	2.00	50.92	0.001680	224.84	2.84	0.00	0.000000	0.00	0.00
1964 TO 2006	1964 TO 2006	52.74	0.001765	321.40	2.00	50.97	0.001670	224.63	2.84	0.00	0.000000	0.00	0.00
1963 TO 2006	1963 TO 2006	52.80	0.001754	321.02	2.00	51.04	0.001666	226.28	2.84	0.00	0.000000	0.00	0.00
1962 TO 2006	1962 TO 2006	52.80	0.001749	322.33	2.00	51.06	0.001651	226.19	2.84	0.00	0.000000	0.00	0.00
1961 TO 2006	1961 TO 2006	52.92	0.001744	322.18	2.00	51.11	0.001656	225.97	2.84	0.00	0.000000	0.00	0.00
1960 TO 2006	1960 TO 2006	52.99	0.001738	321.74	2.00	50.98	0.001649	226.56	2.83	0.00	0.000000	0.00	0.00
1959 TO 2006	1959 TO 2006	52.78	0.001730	321.17	2.00	50.89	0.001637	226.94	2.81	0.00	0.000000	0.00	0.00
1958 TO 2006	1958 TO 2006	52.69	0.001717	321.72	1.99	50.93	0.001634	226.76	2.81	0.00	0.000000	0.00	0.00
1957 TO 2006	1957 TO 2006	52.75	0.001714	323.23	1.99	50.98	0.001633	226.56	2.81	0.00	0.000000	0.00	0.00
1956 TO 2006	1956 TO 2006	52.82	0.001713	322.79	1.99	51.01	0.001632	226.43	2.81	0.00	0.000000	0.00	0.00
1955 TO 2006	1955 TO 2006	52.87	0.001712	322.47	1.99								

ORANGE AND ROCKLAND UTILITIES INC. MORTALITY STUDY BY LEAST SQUARE FITTING OF WEIGHTED RETIREMENT RATIOS  
 ACCOUNT 1361000 STRUCTURES AND IMPROVEMENTS PSC CASE 1 ORANGE AND ROCKLAND UTILITIES INC STUDY NO. 2006

SUMMARY OF SHRINKING BANDS

YEAR	YEAR	FIRST DEGREE			SECOND DEGREE			THIRD DEGREE				
		AVERAGE SERVICE LIFE (YEARS)	FIT INDEX	TERMINAL A/L RATIO (PERCENT)	EQUIV. H CURVE	AVERAGE SERVICE LIFE (YEARS)	FIT INDEX	TERMINAL A/L RATIO (PERCENT)	EQUIV. H CURVE	AVERAGE SERVICE LIFE (YEARS)	FIT INDEX	TERMINAL A/L RATIO (PERCENT)
1953 TO 2006	52.94	0.001691	322.09	1.99	51.05	0.001609	226.26	2.81	0.00	0.000000	0.00	0.00
1952 TO 2006	52.98	0.001690	321.80	1.99	51.07	0.001609	226.15	2.81	0.00	0.000000	0.00	0.00

ORANGE AND ROCKLAND UTILITIES INC. MORTALITY STUDY BY LEAST SQUARE FITTING OF WEIGHTED RETIREMENT RATIOS  
 ACCOUNT 1362000 STATION EQUIPMENT PSC CASE 1 ORANGE AND ROCKLAND UTILITIES INC STUDY NO. 2006

SUMMARY OF ROLLING BANDS

YEAR	YEAR	FIRST DEGREE				SECOND DEGREE				THIRD DEGREE			
		AVERAGE SERVICE LIFE (YEARS)	FIT INDEX	TERMINAL A/L RATIO (PERCENT)	EQUIV. H CURVE	AVERAGE SERVICE LIFE (YEARS)	FIT INDEX	TERMINAL A/L RATIO (PERCENT)	EQUIV. H CURVE	AVERAGE SERVICE LIFE (YEARS)	FIT INDEX	TERMINAL A/L RATIO (PERCENT)	EQUIV. H CURVE
1952 TO 1961	32.52	0.001905	367.49	1.40	31.90	0.001853	261.78	1.95	31.35	0.001865	231.24	2.06	
1953 TO 1962	33.21	0.001540	362.84	1.46	32.57	0.001490	268.68	1.94	0.00	0.000000	0.00	0.00	
1954 TO 1963	34.53	0.001380	360.60	1.49	33.67	0.001315	262.81	2.00	0.00	0.000000	0.00	0.00	
1955 TO 1964	35.80	0.001215	356.16	1.54	34.81	0.001169	268.56	1.99	0.00	0.000000	0.00	0.00	
1956 TO 1965	39.77	0.001076	358.28	1.52	37.96	0.001042	267.38	2.01	0.00	0.000000	0.00	0.00	
1957 TO 1966	43.75	0.000994	355.39	1.55	41.29	0.000978	270.07	2.02	0.00	0.000000	0.00	0.00	
1958 TO 1967	46.55	0.001104	372.73	1.36	43.33	0.001099	278.12	1.84	0.00	0.000000	0.00	0.00	
1959 TO 1968	50.97	0.001025	373.75	1.34	45.33	0.000999	257.01	2.02	0.00	0.000000	0.00	0.00	
1960 TO 1969	57.68	0.001001	389.19	1.18	52.86	0.001007	299.86	1.63	0.00	0.000000	0.00	0.00	
1961 TO 1970	62.73	0.000928	386.60	1.21	56.53	0.000933	292.75	1.70	0.00	0.000000	0.00	0.00	
1962 TO 1971	60.72	0.001269	381.26	1.26	53.81	0.001275	277.84	1.83	0.00	0.000000	0.00	0.00	
1963 TO 1972	60.98	0.001198	386.17	1.21	52.69	0.001197	270.48	1.88	0.00	0.000000	0.00	0.00	
1964 TO 1973	56.93	0.001327	387.32	1.20	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00	
1965 TO 1974	46.51	0.001619	398.87	1.08	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00	
1966 TO 1975	45.25	0.001641	409.93	0.97	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00	
1967 TO 1976	47.42	0.001414	412.29	0.95	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00	
1968 TO 1977	49.54	0.001527	430.97	0.77	0.00	0.000000	0.00	0.00	46.36	0.001508	225.41	1.44	
1969 TO 1978	50.20	0.001413	425.33	0.82	0.00	0.000000	0.00	0.00	47.97	0.001368	222.00	1.43	
1970 TO 1979	55.23	0.001350	433.65	0.74	0.00	0.000000	0.00	0.00	50.10	0.001312	208.58	1.62	
1971 TO 1980	56.14	0.001243	426.58	0.81	0.00	0.000000	0.00	0.00	53.07	0.001216	217.64	1.52	
1972 TO 1981	59.13	0.001198	433.82	0.81	0.00	0.000000	0.00	0.00	53.30	0.001152	203.58	1.70	
1973 TO 1982	53.50	0.001517	414.00	0.92	0.00	0.000000	0.00	0.00	48.86	0.001480	201.61	1.78	
1974 TO 1983	55.21	0.001468	404.83	1.01	0.00	0.000000	0.00	0.00	49.61	0.001447	200.56	1.85	
1975 TO 1984	54.39	0.001248	388.84	1.18	0.00	0.000000	0.00	0.00	50.05	0.001256	222.77	1.85	
1976 TO 1985	51.20	0.001365	368.15	1.41	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00	
1977 TO 1986	48.66	0.001668	356.53	1.54	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00	
1978 TO 1987	50.97	0.001464	342.37	1.72	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00	
1979 TO 1988	43.11	0.001494	339.85	1.76	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00	
1980 TO 1989	42.13	0.001425	343.01	1.71	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00	
1981 TO 1990	41.64	0.001490	344.58	1.69	41.49	0.001500	333.85	1.73	0.00	0.000000	0.00	0.00	
1982 TO 1991	41.83	0.001555	340.58	1.75	41.62	0.001566	325.56	1.80	0.00	0.000000	0.00	0.00	
1983 TO 1992	38.96	0.001693	327.24	1.90	38.80	0.001705	308.02	1.98	0.00	0.000000	0.00	0.00	
1984 TO 1993	39.20	0.001730	327.85	1.93	38.83	0.001734	284.54	2.11	0.00	0.000000	0.00	0.00	
1985 TO 1994	40.23	0.001501	326.84	1.91	39.79	0.001503	287.74	2.11	0.00	0.000000	0.00	0.00	
1986 TO 1995	42.53	0.001355	332.74	1.86	41.72	0.001351	284.05	2.09	0.00	0.000000	0.00	0.00	
1987 TO 1996	41.16	0.001753	346.20	1.66	39.86	0.001734	279.74	1.94	0.00	0.000000	0.00	0.00	
1988 TO 1997	41.84	0.001653	345.33	1.67	40.44	0.001632	278.18	1.97	0.00	0.000000	0.00	0.00	
1989 TO 1998	46.17	0.001553	345.44	1.69	44.01	0.001537	271.52	2.07	0.00	0.000000	0.00	0.00	
1990 TO 1999	47.11	0.001426	340.67	1.76	44.87	0.001408	266.32	2.16	0.00	0.000000	0.00	0.00	
1991 TO 2000	50.02	0.001408	340.89	1.74	47.47	0.001402	270.70	2.13	0.00	0.000000	0.00	0.00	
1992 TO 2001	50.96	0.001534	352.21	1.61	49.17	0.001540	299.99	1.85	0.00	0.000000	0.00	0.00	
1993 TO 2002	49.74	0.001662	346.80	1.68	46.33	0.001638	257.91	2.16	0.00	0.000000	0.00	0.00	
1994 TO 2003	48.44	0.001556	362.29	1.48	45.63	0.001547	279.43	1.87	0.00	0.000000	0.00	0.00	
1995 TO 2004	44.55	0.001473	360.25	1.49	42.98	0.001469	296.63	1.74	43.01	0.001477	275.52	1.77	
1996 TO 2005	41.27	0.001662	364.66	1.44	40.12	0.001659	302.83	1.66	40.17	0.001666	280.04	1.68	
1997 TO 2006	40.53	0.001557	361.42	1.47	39.76	0.001558	313.16	1.64	39.85	0.001553	267.26	1.68	

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SUMMARY OF SHRINKING BANDS

YEAR	YEAR	FIRST DEGREE			SECOND DEGREE			THIRD DEGREE					
		AVERAGE SERVICE LIFE (YEARS)	FIT INDEX	TERMINAL A/L RATIO (PERCENT)	EQUIV. H CURVE	AVERAGE SERVICE LIFE (YEARS)	FIT INDEX	TERMINAL A/L RATIO (PERCENT)	EQUIV. H CURVE	AVERAGE SERVICE LIFE (YEARS)	FIT INDEX	TERMINAL A/L RATIO (PERCENT)	EQUIV. H CURVE
2006 TO 2006	2006	32.46	0.003810	380.50	1.25	32.36	0.003830	350.73	1.33	32.13	0.003823	294.12	1.26
2005 TO 2006	2006	32.36	0.003447	381.62	1.23	32.23	0.003463	342.89	1.34	32.04	0.003459	294.94	1.29
2004 TO 2006	2006	31.94	0.003017	374.15	1.22	0.00	0.000000	0.00	0.00	31.77	0.003019	303.73	1.27
2003 TO 2006	2006	33.11	0.002463	385.07	1.21	0.00	0.000000	0.00	0.00	33.01	0.002458	301.42	1.20
2002 TO 2006	2006	33.21	0.002545	365.87	1.42	32.89	0.002533	305.56	1.58	32.94	0.002522	280.85	1.53
2001 TO 2006	2006	34.85	0.002114	371.59	1.35	34.45	0.002115	323.63	1.48	34.58	0.002090	276.18	1.46
2000 TO 2006	2006	37.08	0.001827	370.81	1.37	36.53	0.001828	321.66	1.51	36.67	0.001809	271.34	1.52
1999 TO 2006	2006	38.20	0.001719	367.83	1.41	37.56	0.001720	318.12	1.56	37.73	0.001702	266.39	1.58
1998 TO 2006	2006	39.29	0.001635	365.20	1.44	38.65	0.001638	316.94	1.59	38.77	0.001627	266.95	1.63
1997 TO 2006	2006	40.53	0.001557	361.42	1.47	39.76	0.001558	313.16	1.64	39.85	0.001553	267.26	1.68
1996 TO 2006	2006	39.93	0.001549	366.91	1.40	38.99	0.001545	306.51	1.61	39.05	0.001549	277.88	1.63
1995 TO 2006	2006	41.01	0.001457	367.02	1.41	39.93	0.001453	306.78	1.63	39.98	0.001456	276.41	1.66
1994 TO 2006	2006	41.32	0.001382	366.65	1.43	40.29	0.001378	308.98	1.64	40.32	0.001383	279.02	1.67
1993 TO 2006	2006	41.64	0.001377	361.47	1.47	40.45	0.001368	297.87	1.72	40.49	0.001373	275.39	1.74
1992 TO 2006	2006	40.60	0.001374	355.87	1.54	39.62	0.001363	296.60	1.76	39.62	0.001371	296.60	1.76
1991 TO 2006	2006	40.95	0.001318	355.34	1.55	39.94	0.001308	296.71	1.78	0.00	0.000000	0.00	0.00
1990 TO 2006	2006	41.10	0.001284	353.98	1.56	40.03	0.001270	293.56	1.79	0.00	0.000000	0.00	0.00
1989 TO 2006	2006	41.14	0.001250	356.11	1.54	40.06	0.001238	293.79	1.77	0.00	0.000000	0.00	0.00
1988 TO 2006	2006	40.26	0.001223	356.39	1.54	39.34	0.001212	298.65	1.75	0.00	0.000000	0.00	0.00
1987 TO 2006	2006	40.78	0.001197	356.79	1.54	39.80	0.001185	297.76	1.76	0.00	0.000000	0.00	0.00
1986 TO 2006	2006	40.85	0.001156	353.69	1.56	39.90	0.001146	299.51	1.77	0.00	0.000000	0.00	0.00
1985 TO 2006	2006	40.87	0.001132	353.54	1.58	39.95	0.001122	299.12	1.78	0.00	0.000000	0.00	0.00
1984 TO 2006	2006	40.77	0.001122	354.41	1.58	39.89	0.001113	302.09	1.77	0.00	0.000000	0.00	0.00
1983 TO 2006	2006	40.96	0.001106	352.78	1.59	40.06	0.001097	300.77	1.78	0.00	0.000000	0.00	0.00
1982 TO 2006	2006	40.92	0.001092	353.12	1.59	40.02	0.001083	301.09	1.78	0.00	0.000000	0.00	0.00
1981 TO 2006	2006	41.12	0.001071	353.88	1.58	40.20	0.001062	299.73	1.78	0.00	0.000000	0.00	0.00
1980 TO 2006	2006	41.33	0.001048	352.07	1.59	40.40	0.001040	300.71	1.78	0.00	0.000000	0.00	0.00
1979 TO 2006	2006	41.53	0.001020	352.77	1.58	40.58	0.001011	299.44	1.78	0.00	0.000000	0.00	0.00
1978 TO 2006	2006	41.63	0.000994	351.93	1.59	40.69	0.000986	301.06	1.78	0.00	0.000000	0.00	0.00
1977 TO 2006	2006	41.70	0.000978	356.15	1.56	40.71	0.000969	300.88	1.76	0.00	0.000000	0.00	0.00
1976 TO 2006	2006	41.81	0.000970	355.14	1.56	40.83	0.000961	302.48	1.76	0.00	0.000000	0.00	0.00
1975 TO 2006	2006	41.81	0.000960	357.53	1.54	40.82	0.000952	302.53	1.75	0.00	0.000000	0.00	0.00
1974 TO 2006	2006	41.59	0.000952	357.04	1.53	40.67	0.000945	306.10	1.72	0.00	0.000000	0.00	0.00
1973 TO 2006	2006	41.58	0.000943	357.13	1.52	40.69	0.000937	308.45	1.71	0.00	0.000000	0.00	0.00
1972 TO 2006	2006	41.62	0.000937	356.84	1.52	40.75	0.000926	305.85	1.71	0.00	0.000000	0.00	0.00
1971 TO 2006	2006	41.67	0.000932	358.75	1.52	40.72	0.000919	307.30	1.72	0.00	0.000000	0.00	0.00
1970 TO 2006	2006	41.77	0.000926	357.87	1.53	40.84	0.000915	307.15	1.71	0.00	0.000000	0.00	0.00
1969 TO 2006	2006	41.79	0.000921	357.72	1.52	40.86	0.000916	306.95	1.72	0.00	0.000000	0.00	0.00
1968 TO 2006	2006	41.83	0.000923	357.39	1.53	40.89	0.000911	306.93	1.71	0.00	0.000000	0.00	0.00
1967 TO 2006	2006	41.86	0.000918	359.57	1.52	40.91	0.000906	306.73	1.71	0.00	0.000000	0.00	0.00
1966 TO 2006	2006	41.88	0.000913	359.33	1.52	40.96	0.000901	306.39	1.72	0.00	0.000000	0.00	0.00
1965 TO 2006	2006	41.94	0.000909	358.87	1.52	40.99	0.000897	306.20	1.72	0.00	0.000000	0.00	0.00
1964 TO 2006	2006	41.96	0.000904	358.65	1.52	41.00	0.000895	306.12	1.72	0.00	0.000000	0.00	0.00
1963 TO 2006	2006	41.98	0.000898	358.54	1.52	41.00	0.000890	306.11	1.72	0.00	0.000000	0.00	0.00
1962 TO 2006	2006	41.98	0.000896	358.53	1.52	41.03	0.000889	305.89	1.72	0.00	0.000000	0.00	0.00
1961 TO 2006	2006	42.01	0.000896	358.24	1.52	41.04	0.000887	305.80	1.72	0.00	0.000000	0.00	0.00
1960 TO 2006	2006	42.03	0.000894	358.12	1.52	40.98	0.000886	306.28	1.72	0.00	0.000000	0.00	0.00
1959 TO 2006	2006	41.96	0.000893	358.70	1.52	40.94	0.000886	306.54	1.72	0.00	0.000000	0.00	0.00
1958 TO 2006	2006	41.91	0.000894	359.07	1.52	40.92	0.000885	306.70	1.72	0.00	0.000000	0.00	0.00
1957 TO 2006	2006	41.90	0.000893	359.21	1.52	40.87	0.000883	304.66	1.72	0.00	0.000000	0.00	0.00
1956 TO 2006	2006	41.84	0.000891	357.34	1.52	40.83	0.000882	304.95	1.71	0.00	0.000000	0.00	0.00
1955 TO 2006	2006	41.79	0.000889	357.72	1.52	40.83	0.000880	304.97	1.71	0.00	0.000000	0.00	0.00
1954 TO 2006	2006	41.79	0.000888	357.73	1.51	40.82	0.000880	304.97	1.71	0.00	0.000000	0.00	0.00

ORANGE AND ROCKLAND UTILITIES INC. MORTALITY STUDY BY LEAST SQUARE FITTING OF WEIGHTED RETIREMENT RATIOS  
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SUMMARY OF SHRINKING BANDS

YEAR	YEAR	FIRST DEGREE			SECOND DEGREE			THIRD DEGREE				
		AVERAGE SERVICE LIFE (YEARS)	FIT INDEX	TERMINAL A/L RATIO (PERCENT)	EQUIV. H CURVE	AVERAGE SERVICE LIFE (YEARS)	FIT INDEX	TERMINAL A/L RATIO (PERCENT)	EQUIV. H CURVE	AVERAGE SERVICE LIFE (YEARS)	FIT INDEX	TERMINAL A/L RATIO (PERCENT)
1953 TO 2006	41.78	0.000887	357.85	1.52	40.81	0.000879	305.04	1.71	0.00	0.000000	0.00	0.00
1952 TO 2006	41.77	0.000886	357.88	1.51	40.81	0.000878	305.09	1.71	0.00	0.000000	0.00	0.00



ORANGE AND ROCKLAND UTILITIES INC. MORTALITY STUDY BY LEAST SQUARE FITTING OF WEIGHTED RETIREMENT RATIOS  
 ACCOUNT 1364000 POLES, TOWERS AND FIXTURES PSC CASE 1 ORANGE AND ROCKLAND UTILITIES INC STUDY NO. 2006

SUMMARY OF ROLLING BANDS

YEAR	YEAR	FIRST DEGREE				SECOND DEGREE				THIRD DEGREE			
		AVERAGE SERVICE LIFE (YEARS)	FIT INDEX	TERMINAL A/L RATIO (PERCENT)	EQUIV. H CURVE	AVERAGE SERVICE LIFE (YEARS)	FIT INDEX	TERMINAL A/L RATIO (PERCENT)	EQUIV. H CURVE	AVERAGE SERVICE LIFE (YEARS)	FIT INDEX	TERMINAL A/L RATIO (PERCENT)	EQUIV. H CURVE
1952 TO 1961	33.77	0.000585	413.14	0.94	32.38	0.000566	328.89	1.26	0.000000	0.000000	0.00	0.00	
1953 TO 1962	34.66	0.000514	411.14	0.94	33.52	0.000506	344.58	1.20	0.000000	0.000000	0.00	0.00	
1954 TO 1963	35.80	0.000495	412.01	0.95	34.42	0.000500	335.51	1.25	0.000000	0.000000	0.00	0.00	
1955 TO 1964	35.87	0.000495	408.47	0.98	34.65	0.000487	339.08	1.24	0.000000	0.000000	0.00	0.00	
1956 TO 1965	35.68	0.000508	402.17	1.04	34.57	0.000499	336.99	1.28	0.000000	0.000000	0.00	0.00	
1957 TO 1966	35.41	0.000627	393.92	1.13	33.87	0.000590	305.61	1.49	0.000000	0.000000	0.00	0.00	
1958 TO 1967	35.37	0.000581	391.55	1.15	33.84	0.000581	302.92	1.52	0.000000	0.000000	0.00	0.00	
1959 TO 1968	35.62	0.000594	388.81	1.16	34.14	0.000552	303.20	1.51	0.000000	0.000000	0.00	0.00	
1960 TO 1969	36.50	0.000581	387.64	1.19	34.90	0.000539	302.25	1.55	0.000000	0.000000	0.00	0.00	
1961 TO 1970	37.06	0.000557	389.94	1.16	35.43	0.000521	306.28	1.51	0.000000	0.000000	0.00	0.00	
1962 TO 1971	35.47	0.000511	396.08	1.10	34.50	0.000497	331.93	1.34	0.000000	0.000000	0.00	0.00	
1963 TO 1972	33.29	0.000458	406.98	0.99	0.00	0.000000	0.00	0.00	0.000000	0.000000	0.00	0.00	
1964 TO 1973	30.01	0.000478	404.83	0.99	0.00	0.000000	0.00	0.00	0.000000	0.000000	0.00	0.00	
1965 TO 1974	27.39	0.000532	432.71	0.74	0.00	0.000000	0.00	0.00	0.000000	0.000000	0.00	0.00	
1966 TO 1975	27.92	0.000510	428.06	0.78	0.00	0.000000	0.00	0.00	0.000000	0.000000	0.00	0.00	
1967 TO 1976	29.11	0.000468	424.26	0.81	0.00	0.000000	0.00	0.00	0.000000	0.000000	0.00	0.00	
1968 TO 1977	27.96	0.000547	405.97	1.00	0.00	0.000000	0.00	0.00	0.000000	0.000000	0.00	0.00	
1969 TO 1978	28.94	0.000528	405.99	1.01	0.00	0.000000	0.00	0.00	0.000000	0.000000	0.00	0.00	
1970 TO 1979	29.92	0.000511	402.80	1.03	0.00	0.000000	0.00	0.00	0.000000	0.000000	0.00	0.00	
1971 TO 1980	31.44	0.000492	402.31	1.05	0.00	0.000000	0.00	0.00	0.000000	0.000000	0.00	0.00	
1972 TO 1981	33.48	0.000470	398.75	1.06	0.00	0.000000	0.00	0.00	0.000000	0.000000	0.00	0.00	
1973 TO 1982	36.01	0.000460	404.11	1.01	35.61	0.000461	374.91	1.11	0.000000	0.000000	0.00	0.00	
1974 TO 1983	40.82	0.000427	407.92	0.98	39.04	0.000414	329.18	1.29	0.000000	0.000000	0.00	0.00	
1975 TO 1984	47.20	0.000380	388.79	1.17	43.96	0.000360	301.40	1.58	0.000000	0.000000	0.00	0.00	
1976 TO 1985	50.96	0.000359	391.52	1.15	46.29	0.000333	290.54	1.65	0.000000	0.000000	0.00	0.00	
1977 TO 1986	55.51	0.000339	397.25	1.10	49.07	0.000312	284.30	1.68	0.000000	0.000000	0.00	0.00	
1978 TO 1987	70.56	0.000253	424.45	0.84	56.59	0.000226	276.57	1.70	0.000000	0.000000	0.00	0.00	
1979 TO 1988	0.00	0.000000	0.00	0.00	49.33	0.000478	244.29	1.57	0.000000	0.000000	0.00	0.00	
1980 TO 1989	0.00	0.000000	0.00	0.00	49.15	0.000484	245.15	1.55	0.000000	0.000000	0.00	0.00	
1981 TO 1990	0.00	0.000000	0.00	0.00	47.02	0.000512	252.01	1.50	0.000000	0.000000	0.00	0.00	
1982 TO 1991	0.00	0.000000	0.00	0.00	47.95	0.000474	253.37	1.52	0.000000	0.000000	0.00	0.00	
1983 TO 1992	0.00	0.000000	0.00	0.00	48.72	0.000438	253.52	1.57	0.000000	0.000000	0.00	0.00	
1984 TO 1993	0.00	0.000000	0.00	0.00	49.19	0.000408	253.13	1.60	0.000000	0.000000	0.00	0.00	
1985 TO 1994	0.00	0.000000	0.00	0.00	49.39	0.000370	254.11	1.61	0.000000	0.000000	0.00	0.00	
1986 TO 1995	0.00	0.000000	0.00	0.00	50.09	0.000331	254.55	1.60	0.000000	0.000000	0.00	0.00	
1987 TO 1996	90.85	0.000452	438.65	-1.81	50.06	0.000311	258.70	1.57	0.000000	0.000000	0.00	0.00	
1988 TO 1997	96.65	0.000424	412.31	-2.30	51.21	0.000291	258.72	1.56	0.000000	0.000000	0.00	0.00	
1989 TO 1998	67.69	0.000256	409.96	0.97	56.45	0.000218	275.45	1.72	0.000000	0.000000	0.00	0.00	
1990 TO 1999	68.20	0.000244	409.80	0.98	56.92	0.000205	274.94	1.73	0.000000	0.000000	0.00	0.00	
1991 TO 2000	71.71	0.000232	413.46	0.94	58.82	0.000194	274.57	1.74	0.000000	0.000000	0.00	0.00	
1992 TO 2001	71.08	0.000263	410.13	0.97	58.90	0.000232	274.17	1.75	0.000000	0.000000	0.00	0.00	
1993 TO 2002	70.79	0.000266	404.70	1.03	59.84	0.000243	278.25	1.73	0.000000	0.000000	0.00	0.00	
1994 TO 2003	72.13	0.000255	405.54	1.01	61.18	0.000235	280.33	1.70	0.000000	0.000000	0.00	0.00	
1995 TO 2004	71.11	0.000249	405.70	1.02	61.34	0.000233	286.13	1.66	0.000000	0.000000	0.00	0.00	
1996 TO 2005	70.63	0.000268	404.23	1.03	60.24	0.000245	278.07	1.72	0.000000	0.000000	0.00	0.00	
1997 TO 2006	68.55	0.000623	512.78	0.07	50.94	0.000552	267.96	1.47	0.000000	0.000000	0.00	0.00	

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SUMMARY OF SHRINKING BANDS

YEAR	YEAR	FIRST DEGREE				SECOND DEGREE				THIRD DEGREE			
		AVERAGE SERVICE LIFE (YEARS)	FIT INDEX	TERMINAL A/L RATIO (PERCENT)	EQUIV. H CURVE	AVERAGE SERVICE LIFE (YEARS)	FIT INDEX	TERMINAL A/L RATIO (PERCENT)	EQUIV. H CURVE	AVERAGE SERVICE LIFE (YEARS)	FIT INDEX	TERMINAL A/L RATIO (PERCENT)	EQUIV. H CURVE
2006 TO 2006	2006	0.00	0.000000	0.00	0.00	24.57	0.003198	392.81	-2.60	24.56	0.003167	362.96	-2.60
2005 TO 2006	2006	0.00	0.000000	0.00	0.00	35.32	0.001801	304.38	0.20	35.29	0.001793	281.93	0.25
2004 TO 2006	2006	0.00	0.000000	0.00	0.00	40.29	0.001269	286.69	0.73	40.18	0.001269	270.06	0.77
2003 TO 2006	2006	0.00	0.000000	0.00	0.00	44.04	0.000983	275.91	1.03	43.89	0.000986	263.14	1.06
2002 TO 2006	2006	69.00	0.000940	577.50	-1.83	46.31	0.000837	273.16	1.19	46.18	0.000840	263.12	1.22
2001 TO 2006	2006	66.93	0.000841	592.43	-0.60	47.79	0.000750	271.00	1.30	47.73	0.000753	267.11	1.31
2000 TO 2006	2006	66.96	0.000768	554.80	-0.27	48.83	0.000684	269.28	1.37	0.00	0.000000	0.00	0.00
1999 TO 2006	2006	66.82	0.000708	529.05	-0.06	49.48	0.000627	267.80	1.42	0.00	0.000000	0.00	0.00
1998 TO 2006	2006	67.43	0.000665	527.18	-0.04	49.94	0.000587	269.34	1.43	0.00	0.000000	0.00	0.00
1997 TO 2006	2006	68.55	0.000623	512.78	0.07	50.94	0.000552	267.96	1.47	0.00	0.000000	0.00	0.00
1996 TO 2006	2006	68.56	0.000592	503.91	0.14	51.34	0.000524	269.76	1.49	0.00	0.000000	0.00	0.00
1995 TO 2006	2006	68.73	0.000567	492.54	0.24	51.87	0.000502	268.97	1.52	0.00	0.000000	0.00	0.00
1994 TO 2006	2006	68.68	0.000547	482.71	0.33	52.19	0.000483	267.27	1.55	0.00	0.000000	0.00	0.00
1993 TO 2006	2006	68.31	0.000532	472.14	0.41	52.42	0.000469	266.14	1.58	0.00	0.000000	0.00	0.00
1992 TO 2006	2006	68.34	0.000516	468.96	0.43	52.55	0.000453	267.39	1.59	0.00	0.000000	0.00	0.00
1991 TO 2006	2006	68.19	0.000503	464.13	0.48	52.76	0.000442	266.30	1.61	0.00	0.000000	0.00	0.00
1990 TO 2006	2006	66.65	0.000492	458.39	0.54	52.41	0.000433	268.09	1.60	0.00	0.000000	0.00	0.00
1989 TO 2006	2006	66.45	0.000482	456.70	0.55	52.36	0.000422	268.33	1.60	0.00	0.000000	0.00	0.00
1988 TO 2006	2006	73.01	0.000523	545.79	-0.29	50.42	0.000422	264.77	1.49	0.00	0.000000	0.00	0.00
1987 TO 2006	2006	72.73	0.000513	545.17	-0.19	50.68	0.000414	265.41	1.50	0.00	0.000000	0.00	0.00
1986 TO 2006	2006	73.09	0.000503	538.39	-0.14	50.95	0.000405	263.98	1.53	0.00	0.000000	0.00	0.00
1985 TO 2006	2006	72.89	0.000496	530.22	-0.07	51.11	0.000399	263.15	1.54	0.00	0.000000	0.00	0.00
1984 TO 2006	2006	72.93	0.000489	523.08	-0.01	51.30	0.000393	262.16	1.56	0.00	0.000000	0.00	0.00
1983 TO 2006	2006	72.54	0.000481	517.61	0.03	51.36	0.000386	261.88	1.57	0.00	0.000000	0.00	0.00
1982 TO 2006	2006	72.91	0.000476	523.23	-0.02	51.30	0.000380	262.21	1.56	0.00	0.000000	0.00	0.00
1981 TO 2006	2006	72.49	0.000469	519.41	0.02	51.32	0.000374	264.05	1.56	0.00	0.000000	0.00	0.00
1980 TO 2006	2006	72.15	0.000460	513.53	0.07	51.43	0.000368	263.46	1.57	0.00	0.000000	0.00	0.00
1979 TO 2006	2006	71.56	0.000454	507.93	0.11	51.45	0.000364	263.37	1.57	0.00	0.000000	0.00	0.00
1978 TO 2006	2006	71.14	0.000448	505.33	0.13	51.45	0.000359	263.34	1.57	0.00	0.000000	0.00	0.00
1977 TO 2006	2006	68.47	0.000441	494.39	0.23	51.04	0.000357	267.46	1.55	0.00	0.000000	0.00	0.00
1976 TO 2006	2006	67.99	0.000436	490.51	0.25	51.02	0.000354	267.53	1.55	0.00	0.000000	0.00	0.00
1975 TO 2006	2006	67.40	0.000432	488.86	0.27	50.94	0.000352	267.94	1.55	0.00	0.000000	0.00	0.00
1974 TO 2006	2006	67.21	0.000433	506.63	0.12	50.35	0.000352	271.10	1.49	0.00	0.000000	0.00	0.00
1973 TO 2006	2006	65.90	0.000426	509.11	0.11	50.00	0.000350	274.97	1.44	0.00	0.000000	0.00	0.00
1972 TO 2006	2006	65.43	0.000421	512.80	0.07	49.83	0.000347	277.95	1.41	0.00	0.000000	0.00	0.00
1971 TO 2006	2006	64.97	0.000418	513.28	0.06	49.69	0.000346	278.74	1.40	0.00	0.000000	0.00	0.00
1970 TO 2006	2006	64.74	0.000415	513.59	0.07	49.63	0.000344	279.04	1.39	0.00	0.000000	0.00	0.00
1969 TO 2006	2006	64.54	0.000413	512.11	0.08	49.61	0.000343	279.19	1.39	0.00	0.000000	0.00	0.00
1968 TO 2006	2006	64.30	0.000412	510.87	0.09	49.57	0.000342	279.39	1.39	0.00	0.000000	0.00	0.00
1967 TO 2006	2006	64.00	0.000410	508.56	0.10	49.50	0.000341	279.79	1.39	0.00	0.000000	0.00	0.00
1966 TO 2006	2006	63.58	0.000410	507.23	0.12	49.40	0.000341	280.37	1.39	0.00	0.000000	0.00	0.00
1965 TO 2006	2006	63.31	0.000408	506.23	0.13	49.35	0.000340	280.63	1.38	0.00	0.000000	0.00	0.00
1964 TO 2006	2006	63.15	0.000407	504.32	0.14	49.33	0.000340	280.98	1.38	0.00	0.000000	0.00	0.00
1963 TO 2006	2006	63.03	0.000406	503.76	0.14	49.30	0.000339	280.95	1.38	0.00	0.000000	0.00	0.00
1962 TO 2006	2006	62.94	0.000404	504.44	0.15	49.28	0.000338	280.95	1.38	0.00	0.000000	0.00	0.00
1961 TO 2006	2006	62.84	0.000403	503.63	0.15	49.24	0.000337	283.10	1.38	0.00	0.000000	0.00	0.00
1960 TO 2006	2006	62.68	0.000402	503.33	0.15	49.21	0.000336	283.30	1.37	0.00	0.000000	0.00	0.00
1959 TO 2006	2006	62.61	0.000401	503.95	0.15	49.21	0.000335	283.46	1.37	0.00	0.000000	0.00	0.00
1958 TO 2006	2006	62.52	0.000400	503.00	0.15	49.20	0.000334	283.56	1.37	0.00	0.000000	0.00	0.00
1957 TO 2006	2006	62.43	0.000399	503.74	0.15	49.17	0.000334	283.72	1.37	0.00	0.000000	0.00	0.00
1956 TO 2006	2006	62.29	0.000398	503.26	0.15	49.13	0.000333	283.95	1.36	0.00	0.000000	0.00	0.00
1955 TO 2006	2006	62.22	0.000397	502.26	0.15	49.11	0.000333	284.08	1.36	0.00	0.000000	0.00	0.00
1954 TO 2006	2006	62.18	0.000396	502.61	0.16	49.10	0.000332	284.10	1.36	0.00	0.000000	0.00	0.00

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SUMMARY OF SHRINKING BANDS

YEAR	YEAR	FIRST DEGREE				SECOND DEGREE				THIRD DEGREE			
		AVERAGE SERVICE LIFE (YEARS)	FIT INDEX	TERMINAL A/L RATIO (PERCENT)	EQUIV. H CURVE	AVERAGE SERVICE LIFE (YEARS)	FIT INDEX	TERMINAL A/L RATIO (PERCENT)	EQUIV. H CURVE	AVERAGE SERVICE LIFE (YEARS)	FIT INDEX	TERMINAL A/L RATIO (PERCENT)	EQUIV. H CURVE
1953 TO 2006	2006	62.07	0.000395	503.45	0.16	49.08	0.000332	284.25	1.36	0.00	0.000000	0.00	0.00
1952 TO 2006	2006	62.02	0.000394	502.30	0.16	49.07	0.000331	284.31	1.36	0.00	0.000000	0.00	0.00

ORANGE AND ROCKLAND UTILITIES INC. MORTALITY STUDY BY LEAST SQUARE FITTING OF WEIGHTED RETIREMENT RATIOS  
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SUMMARY OF ROLLING BANDS

YEAR	YEAR	FIRST DEGREE				SECOND DEGREE				THIRD DEGREE			
		AVERAGE SERVICE LIFE (YEARS)	FIT INDEX	TERMINAL A/L RATIO (PERCENT)	EQUIV. H CURVE	AVERAGE SERVICE LIFE (YEARS)	FIT INDEX	TERMINAL A/L RATIO (PERCENT)	EQUIV. H CURVE	AVERAGE SERVICE LIFE (YEARS)	FIT INDEX	TERMINAL A/L RATIO (PERCENT)	EQUIV. H CURVE
1952 TO 1961	36.45	0.000608	407.35	0.98	34.61	0.000478	290.34	1.53	34.33	0.000476	269.41	1.57	
1953 TO 1962	37.65	0.000546	407.71	0.98	35.69	0.000448	292.80	1.51	35.50	0.000451	280.26	1.54	
1954 TO 1963	41.37	0.000435	414.55	0.91	38.57	0.000366	296.90	1.48	38.18	0.000366	273.67	1.54	
1955 TO 1964	43.09	0.000442	421.22	0.86	39.92	0.000393	299.32	1.43	39.74	0.000397	288.14	1.46	
1956 TO 1965	43.00	0.000501	422.10	0.85	40.29	0.000478	311.51	1.34	39.60	0.000479	276.53	1.46	
1957 TO 1966	43.54	0.000498	419.18	0.87	40.81	0.000476	312.42	1.35	39.85	0.000473	264.72	1.52	
1958 TO 1967	44.20	0.000497	421.94	0.86	42.17	0.000492	335.52	1.20	40.71	0.000489	266.50	1.45	
1959 TO 1968	45.73	0.000499	434.09	0.75	43.80	0.000499	352.77	1.06	41.72	0.000495	264.84	1.40	
1960 TO 1969	47.06	0.000532	432.42	0.76	45.09	0.000533	355.96	1.06	42.02	0.000515	243.93	1.54	
1961 TO 1970	45.70	0.000653	434.35	0.73	0.00	0.000000	0.00	0.00	41.28	0.000625	241.02	1.49	
1962 TO 1971	43.17	0.000610	427.37	0.81	0.00	0.000000	0.00	0.00	40.31	0.000567	246.84	1.40	
1963 TO 1972	40.29	0.000626	423.16	0.85	0.00	0.000000	0.00	0.00	38.75	0.000547	254.21	1.28	
1964 TO 1973	34.82	0.000903	406.40	1.01	0.00	0.000000	0.00	0.00	35.15	0.000806	294.45	1.02	
1965 TO 1974	32.94	0.000906	396.13	1.11	0.00	0.000000	0.00	0.00	33.62	0.000768	316.79	0.95	
1966 TO 1975	32.94	0.000837	387.08	1.20	0.00	0.000000	0.00	0.00	33.86	0.000695	332.26	0.93	
1967 TO 1976	34.22	0.000751	381.30	1.26	0.00	0.000000	0.00	0.00	35.75	0.000606	348.21	0.85	
1968 TO 1977	35.10	0.000670	374.61	1.37	0.00	0.000000	0.00	0.00	44.81	0.000512	483.18	-1.76	
1969 TO 1978	36.67	0.000629	369.48	1.41	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00	
1970 TO 1979	38.16	0.000588	363.06	1.46	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00	
1971 TO 1980	40.63	0.000520	360.96	1.48	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00	
1972 TO 1981	42.80	0.000483	360.96	1.52	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00	
1973 TO 1982	46.12	0.000414	358.88	1.54	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00	
1974 TO 1983	52.99	0.000277	357.58	1.54	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00	
1975 TO 1984	61.95	0.000232	357.53	1.53	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00	
1976 TO 1985	69.70	0.000182	357.99	1.47	76.03	0.000168	339.99	1.57	0.00	0.000000	0.00	0.00	
1977 TO 1986	77.67	0.000167	362.45	1.46	80.84	0.000157	316.06	1.70	0.00	0.000000	0.00	0.00	
1978 TO 1987	85.47	0.000157	364.44	1.46	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00	
1979 TO 1988	85.45	0.000198	364.54	1.46	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00	
1980 TO 1989	85.03	0.000204	366.34	1.44	77.62	0.000203	298.25	1.80	0.00	0.000000	0.00	0.00	
1981 TO 1990	81.66	0.000199	363.10	1.47	71.15	0.000192	274.77	2.01	0.00	0.000000	0.00	0.00	
1982 TO 1991	85.51	0.000186	364.29	1.45	73.00	0.000177	270.56	2.05	0.00	0.000000	0.00	0.00	
1983 TO 1992	85.85	0.000184	364.01	1.46	71.14	0.000165	260.77	2.16	0.00	0.000000	0.00	0.00	
1984 TO 1993	90.06	0.000182	369.19	1.41	71.49	0.000154	253.88	2.21	0.00	0.000000	0.00	0.00	
1985 TO 1994	91.85	0.000210	380.52	1.28	69.93	0.000174	249.55	2.20	0.00	0.000000	0.00	0.00	
1986 TO 1995	88.60	0.000240	385.43	1.22	66.96	0.000191	248.65	2.19	0.00	0.000000	0.00	0.00	
1987 TO 1996	86.66	0.000253	394.06	1.14	65.33	0.000198	250.26	2.13	0.00	0.000000	0.00	0.00	
1988 TO 1997	89.96	0.000258	401.82	1.06	66.05	0.000204	249.04	2.13	0.00	0.000000	0.00	0.00	
1989 TO 1998	96.76	0.000275	411.84	0.87	65.78	0.000204	243.98	2.15	0.00	0.000000	0.00	0.00	
1990 TO 1999	99.71	0.000282	399.68	0.72	65.47	0.000206	243.63	2.11	0.00	0.000000	0.00	0.00	
1991 TO 2000	108.63	0.000265	366.84	0.54	67.52	0.000197	243.64	2.08	0.00	0.000000	0.00	0.00	
1992 TO 2001	99.36	0.000320	401.07	0.67	67.11	0.000276	249.59	2.01	0.00	0.000000	0.00	0.00	
1993 TO 2002	101.74	0.000311	391.68	0.56	68.27	0.000275	252.66	1.93	0.00	0.000000	0.00	0.00	
1994 TO 2003	104.89	0.000290	379.93	0.48	69.84	0.000258	255.59	1.88	0.00	0.000000	0.00	0.00	
1995 TO 2004	104.08	0.000277	382.86	0.40	71.29	0.000255	264.43	1.76	0.00	0.000000	0.00	0.00	
1996 TO 2005	118.32	0.000240	336.81	0.06	74.42	0.000219	265.38	1.71	0.00	0.000000	0.00	0.00	
1997 TO 2006	80.51	0.000469	477.59	0.37	0.00	0.000000	0.00	64.64	0.000456	220.46	1.64		

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SUMMARY OF SHRINKING BANDS

YEAR	YEAR	FIRST DEGREE			SECOND DEGREE			THIRD DEGREE				
		AVERAGE SERVICE LIFE (YEARS)	FIT INDEX	TERMINAL A/L RATIO (PERCENT)	EQUIV. H CURVE	AVERAGE SERVICE LIFE (YEARS)	FIT INDEX	TERMINAL A/L RATIO (PERCENT)	EQUIV. H CURVE	AVERAGE SERVICE LIFE (YEARS)	FIT INDEX	TERMINAL A/L RATIO (PERCENT)
2006 TO 2006	2006	34.41	0.003166	510.01	0.09	0.00	0.000000	0.00	36.94	0.002823	291.04	-0.17
2005 TO 2006	2006	50.20	0.001672	522.89	-0.01	0.00	0.000000	0.00	49.86	0.001523	235.64	0.75
2004 TO 2006	2006	58.69	0.001187	525.64	-0.04	0.00	0.000000	0.00	54.75	0.001085	225.59	1.05
2003 TO 2006	2006	66.02	0.000912	508.14	0.11	0.00	0.000000	0.00	58.80	0.000834	216.83	1.30
2002 TO 2006	2006	70.04	0.000748	499.01	0.19	0.00	0.000000	0.00	60.88	0.000688	214.36	1.41
2001 TO 2006	2006	69.90	0.000660	471.40	0.42	0.00	0.000000	0.00	62.06	0.000511	216.72	1.46
2000 TO 2006	2006	72.98	0.000598	466.57	0.46	0.00	0.000000	0.00	63.29	0.000559	215.69	1.55
1999 TO 2006	2006	74.72	0.000539	471.79	0.42	0.00	0.000000	0.00	63.07	0.000514	219.59	1.58
1998 TO 2006	2006	78.07	0.000505	482.25	0.33	0.00	0.000000	0.00	63.71	0.000489	220.52	1.58
1997 TO 2006	2006	80.51	0.000469	477.59	0.37	0.00	0.000000	0.00	64.64	0.000456	220.46	1.64
1996 TO 2006	2006	81.30	0.000449	476.61	0.37	0.00	0.000000	0.00	64.81	0.000440	222.95	1.64
1995 TO 2006	2006	80.62	0.000425	470.75	0.43	0.000427	0.000427	0.00	64.62	0.000419	226.72	1.63
1994 TO 2006	2006	81.75	0.000405	469.11	0.44	0.000407	0.000407	0.00	64.95	0.000401	228.64	1.65
1993 TO 2006	2006	82.32	0.000383	463.44	0.49	0.000385	0.000385	0.00	65.48	0.000380	229.84	1.67
1992 TO 2006	2006	82.17	0.000368	456.95	0.55	0.000369	0.000369	0.00	65.55	0.000364	231.12	1.69
1991 TO 2006	2006	82.43	0.000347	451.90	0.59	0.000348	0.000348	0.00	65.95	0.000344	231.24	1.71
1990 TO 2006	2006	81.53	0.000328	444.60	0.65	0.000328	0.000328	0.00	66.03	0.000325	235.67	1.70
1989 TO 2006	2006	81.28	0.000309	442.29	0.68	0.000309	0.000309	0.00	66.25	0.000293	237.72	1.70
1988 TO 2006	2006	81.35	0.000296	440.67	0.69	0.000296	0.000296	0.00	66.82	0.000279	240.19	1.71
1987 TO 2006	2006	81.89	0.000282	437.81	0.72	0.000281	0.000281	0.00	67.43	0.000267	241.01	1.71
1986 TO 2006	2006	82.85	0.000269	436.35	0.72	0.000268	0.000268	0.00	67.82	0.000260	244.02	1.71
1985 TO 2006	2006	82.96	0.000262	434.55	0.75	0.000262	0.000262	0.00	68.30	0.000252	245.24	1.71
1984 TO 2006	2006	83.25	0.000254	431.85	0.77	0.000254	0.000254	0.00	68.58	0.000247	248.62	1.70
1983 TO 2006	2006	82.69	0.000249	427.49	0.80	0.000247	0.000247	0.00	68.65	0.000239	248.37	1.70
1982 TO 2006	2006	82.47	0.000241	426.21	0.82	0.000241	0.000241	0.00	68.74	0.000234	250.93	1.68
1981 TO 2006	2006	81.93	0.000236	424.15	0.84	0.000236	0.000236	0.00	68.90	0.000230	251.81	1.69
1980 TO 2006	2006	81.70	0.000232	421.64	0.86	0.000232	0.000232	0.00	68.92	0.000228	253.21	1.69
1979 TO 2006	2006	81.32	0.000229	419.97	0.87	0.000229	0.000229	0.00	68.96	0.000224	252.03	1.69
1978 TO 2006	2006	81.14	0.000225	418.40	0.89	0.000225	0.000225	0.00	68.81	0.000221	253.13	1.69
1977 TO 2006	2006	80.56	0.000222	417.72	0.90	0.000222	0.000222	0.00	68.71	0.000217	251.06	1.69
1976 TO 2006	2006	80.13	0.000218	416.21	0.92	0.000218	0.000218	0.00	68.28	0.000217	249.69	1.68
1975 TO 2006	2006	79.06	0.000218	415.49	0.92	0.000218	0.000218	0.00	67.51	0.000218	248.11	1.68
1974 TO 2006	2006	77.69	0.000218	415.12	0.92	0.000219	0.000219	0.00	66.57	0.000227	245.62	1.67
1973 TO 2006	2006	75.93	0.000228	415.53	0.91	0.000229	0.000229	0.00	66.07	0.000228	242.91	1.66
1972 TO 2006	2006	75.35	0.000230	417.37	0.90	0.000231	0.000231	0.00	65.74	0.000230	242.61	1.66
1971 TO 2006	2006	74.86	0.000232	417.44	0.89	0.000233	0.000233	0.00	65.42	0.000235	242.27	1.66
1970 TO 2006	2006	74.58	0.000237	418.99	0.88	0.000237	0.000237	0.00	65.25	0.000234	241.38	1.66
1969 TO 2006	2006	74.46	0.000236	419.71	0.88	0.000236	0.000236	0.00	65.15	0.000234	241.77	1.65
1968 TO 2006	2006	74.44	0.000236	421.12	0.87	0.000238	0.000238	0.00	65.04	0.000234	242.15	1.65
1967 TO 2006	2006	74.36	0.000237	421.61	0.86	0.000237	0.000237	0.00	64.91	0.000233	242.64	1.64
1966 TO 2006	2006	74.19	0.000236	422.58	0.86	0.000236	0.000236	0.00	64.80	0.000233	243.07	1.63
1965 TO 2006	2006	74.03	0.000235	423.50	0.85	0.000235	0.000235	0.00	64.77	0.000231	243.18	1.63
1964 TO 2006	2006	73.99	0.000234	423.70	0.84	0.000235	0.000235	0.00	64.73	0.000231	243.33	1.63
1963 TO 2006	2006	73.94	0.000233	423.98	0.84	0.000234	0.000234	0.00	64.72	0.000230	243.37	1.62
1962 TO 2006	2006	73.93	0.000232	424.07	0.84	0.000233	0.000233	0.00	64.68	0.000229	245.04	1.62
1961 TO 2006	2006	73.86	0.000231	424.44	0.84	0.000232	0.000232	0.00	64.65	0.000228	245.15	1.61
1960 TO 2006	2006	73.75	0.000231	424.72	0.84	0.000232	0.000232	0.00	64.61	0.000228	246.86	1.61
1959 TO 2006	2006	73.75	0.000230	424.37	0.83	0.000230	0.000230	0.00	64.58	0.000228	246.97	1.60
1958 TO 2006	2006	73.64	0.000230	425.10	0.83	0.000230	0.000230	0.00	64.56	0.000227	247.04	1.59
1957 TO 2006	2006	73.45	0.000229	425.47	0.83	0.000229	0.000229	0.00	64.52	0.000226	248.78	1.58
1956 TO 2006	2006	73.34	0.000228	426.07	0.82	0.000228	0.000228	0.00	64.51	0.000225	248.81	1.57
1955 TO 2006	2006	73.24	0.000227	425.32	0.82	0.000227	0.000227	0.00	64.48	0.000225	250.45	1.57
1954 TO 2006	2006	73.12	0.000226	426.02	0.82	0.000227	0.000227	0.00				

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SUMMARY OF SHRINKING BANDS

YEAR	FIRST DEGREE				SECOND DEGREE				THIRD DEGREE			
	AVERAGE SERVICE LIFE (YEARS)	FIT INDEX	TERMINAL A/L RATIO (PERCENT)	EQUIV. H CURVE	AVERAGE SERVICE LIFE (YEARS)	FIT INDEX	TERMINAL A/L RATIO (PERCENT)	EQUIV. H CURVE	AVERAGE SERVICE LIFE (YEARS)	FIT INDEX	TERMINAL A/L RATIO (PERCENT)	EQUIV. H CURVE
1953 TO 2006	72.81	0.000225	425.07	0.83	71.75	0.000226	400.72	0.91	64.43	0.000224	250.66	1.56
1952 TO 2006	72.76	0.000225	425.38	0.83	71.68	0.000226	399.72	0.91	64.42	0.000223	252.25	1.55

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SUMMARY OF ROLLING BANDS

YEAR	YEAR	FIRST DEGREE				SECOND DEGREE				THIRD DEGREE			
		AVERAGE SERVICE LIFE (YEARS)	FIT INDEX	TERMINAL A/L RATIO (PERCENT)	EQUIV. H CURVE	AVERAGE SERVICE LIFE (YEARS)	FIT INDEX	TERMINAL A/L RATIO (PERCENT)	EQUIV. H CURVE	AVERAGE SERVICE LIFE (YEARS)	FIT INDEX	TERMINAL A/L RATIO (PERCENT)	EQUIV. H CURVE
1988 TO 1997	1988 TO 1997	22.58	0.005489	405.21	1.01	0.00	0.000000	0.00	0.00	22.56	0.006214	259.32	1.39
1989 TO 1998	1989 TO 1998	24.24	0.004360	426.97	0.81	21.51	0.004593	323.07	1.31	15.74	0.004804	187.48	2.44
1990 TO 1999	1990 TO 1999	27.24	0.004109	464.32	0.47	0.00	0.000000	0.00	0.00	16.74	0.004472	188.12	2.32
1991 TO 2000	1991 TO 2000	34.66	0.003795	538.13	-0.14	0.00	0.000000	0.00	0.00	19.25	0.004038	184.42	2.29
1992 TO 2001	1992 TO 2001	42.27	0.003095	576.00	-0.44	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1993 TO 2002	1993 TO 2002	36.14	0.002677	449.67	0.60	0.00	0.000000	0.00	0.00	24.61	0.002855	197.10	2.25
1994 TO 2003	1994 TO 2003	38.09	0.002534	473.94	0.40	0.00	0.000000	0.00	0.00	22.35	0.002665	185.70	2.46
1995 TO 2004	1995 TO 2004	53.54	0.002541	706.95	-1.67	0.00	0.000000	0.00	0.00	24.03	0.002597	181.03	2.45
1996 TO 2005	1996 TO 2005	36.92	0.003571	496.99	0.19	28.17	0.003671	296.42	1.29	21.42	0.003663	184.43	2.34
1997 TO 2006	1997 TO 2006	28.37	0.004034	329.62	1.86	24.36	0.004069	240.12	2.30	0.00	0.000000	0.00	0.00

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SUMMARY OF SHRINKING BANDS

YEAR	YEAR	FIRST DEGREE			SECOND DEGREE			THIRD DEGREE					
		AVERAGE SERVICE LIFE (YEARS)	FIT INDEX	TERMINAL A/L RATIO (PERCENT)	EQUIV. H CURVE	AVERAGE SERVICE LIFE (YEARS)	FIT INDEX	TERMINAL A/L RATIO (PERCENT)	EQUIV. H CURVE	AVERAGE SERVICE LIFE (YEARS)	FIT INDEX	TERMINAL A/L RATIO (PERCENT)	EQUIV. H CURVE
2006 TO 2006	2006	16.45	0.024279	410.21	0.93	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
2005 TO 2006	2006	20.15	0.012236	369.76	1.37	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
2004 TO 2006	2006	24.36	0.008172	342.79	1.69	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
2003 TO 2006	2006	25.74	0.006508	339.90	1.74	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
2002 TO 2006	2006	26.57	0.005419	333.05	1.81	26.29	0.005577	317.64	1.87	0.00	0.000000	0.00	0.00
2001 TO 2006	2006	27.49	0.005094	340.07	1.74	24.63	0.005205	257.85	2.12	0.00	0.000000	0.00	0.00
2000 TO 2006	2006	28.32	0.004774	326.57	1.93	24.57	0.004834	238.14	2.42	0.00	0.000000	0.00	0.00
1999 TO 2006	2006	28.36	0.004476	329.75	1.88	24.51	0.004528	238.64	2.35	0.00	0.000000	0.00	0.00
1998 TO 2006	2006	28.15	0.004304	335.70	1.79	24.30	0.004358	244.81	2.21	0.00	0.000000	0.00	0.00
1997 TO 2006	2006	28.37	0.004034	329.62	1.86	24.36	0.004069	240.12	2.30	0.00	0.000000	0.00	0.00
1996 TO 2006	2006	27.39	0.004166	385.24	1.22	24.17	0.004263	283.38	1.65	0.00	0.000000	0.00	0.00
1995 TO 2006	2006	27.52	0.003966	365.17	1.41	24.58	0.004059	278.72	1.80	0.00	0.000000	0.00	0.00
1994 TO 2006	2006	27.62	0.003810	367.50	1.40	24.31	0.003887	269.47	1.84	0.00	0.000000	0.00	0.00
1993 TO 2006	2006	27.57	0.003660	368.22	1.39	24.63	0.003741	278.12	1.81	0.00	0.000000	0.00	0.00
1992 TO 2006	2006	27.71	0.003647	391.51	1.13	23.92	0.003712	273.84	1.70	0.00	0.000000	0.00	0.00
1991 TO 2006	2006	27.85	0.003737	421.96	0.84	23.82	0.003813	287.60	1.49	22.67	0.003928	240.41	1.73
1990 TO 2006	2006	28.09	0.003637	436.14	0.73	23.42	0.003695	283.97	1.49	22.93	0.003809	259.45	1.59
1989 TO 2006	2006	27.98	0.003577	427.16	0.78	23.69	0.003642	284.96	1.50	23.02	0.003754	254.10	1.64
1988 TO 2006	2006	27.83	0.003547	422.17	0.85	24.07	0.003622	288.77	1.49	22.90	0.003732	242.35	1.73



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YEAR		SUMMARY OF ROLLING BANDS															
		FIRST DEGREE					SECOND DEGREE					THIRD DEGREE					
YEAR	YEAR	AVERAGE SERVICE LIFE (YEARS)	FIT INDEX	TERMINAL A/L RATIO (PERCENT)	EQUIV. H CURVE	AVERAGE SERVICE LIFE (YEARS)	FIT INDEX	TERMINAL A/L RATIO (PERCENT)	EQUIV. H CURVE	AVERAGE SERVICE LIFE (YEARS)	FIT INDEX	TERMINAL A/L RATIO (PERCENT)	EQUIV. H CURVE	AVERAGE SERVICE LIFE (YEARS)	FIT INDEX	TERMINAL A/L RATIO (PERCENT)	EQUIV. H CURVE
1975 TO 1984		126.58	0.000229	314.82	1.64	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1976 TO 1985		148.73	0.000183	267.93	1.63	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1977 TO 1986		91.16	0.000408	341.72	1.75	65.59	0.000409	244.71	2.60	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1978 TO 1987		101.82	0.000376	343.25	1.73	68.86	0.000376	241.80	2.66	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1979 TO 1988		114.07	0.000306	344.08	1.72	72.52	0.000306	237.87	2.71	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1980 TO 1989		127.77	0.000282	311.89	1.70	76.32	0.000281	236.51	2.75	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1981 TO 1990		145.20	0.000255	274.46	1.67	80.97	0.000254	235.27	2.76	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1982 TO 1991		196.85	0.000232	202.44	1.74	81.16	0.000229	227.32	2.95	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1983 TO 1992		113.54	0.000339	344.80	1.71	73.03	0.000339	238.95	2.69	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1984 TO 1993		44.13	0.003181	318.41	2.05	38.29	0.003197	238.97	2.76	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1985 TO 1994		47.61	0.002364	322.43	2.00	40.98	0.002375	242.83	2.70	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1986 TO 1995		51.15	0.002049	325.50	1.95	44.10	0.002060	248.31	2.60	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1987 TO 1996		55.11	0.001944	331.17	1.88	49.13	0.001956	265.59	2.36	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1988 TO 1997		59.01	0.001403	333.00	1.84	55.10	0.001412	287.67	2.13	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1989 TO 1998		62.90	0.001317	336.27	1.81	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1990 TO 1999		62.54	0.001255	339.76	1.76	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1991 TO 2000		66.86	0.001178	343.26	1.73	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1992 TO 2001		69.41	0.001110	343.63	1.72	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1993 TO 2002		76.43	0.001042	346.07	1.68	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1994 TO 2003		209.15	0.000184	190.54	1.56	132.01	0.000185	257.17	2.25	101.09	0.000186	195.38	3.09	104.05	0.000167	185.96	3.30
1995 TO 2004		233.47	0.000166	170.68	1.69	217.15	0.000167	183.51	1.71	104.05	0.000167	185.96	3.30	114.42	0.000715	161.24	3.51
1996 TO 2005		122.39	0.000710	325.61	1.42	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1997 TO 2006		62.43	0.001663	346.80	1.68	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00	161.77	0.001669	162.27	1.46

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ACCOUNT 1366000 UNDERGROUND CONDUIT

SUMMARY OF SHRINKING BANDS

YEAR	YEAR	FIRST DEGREE				SECOND DEGREE				THIRD DEGREE			
		AVERAGE SERVICE LIFE (YEARS)	FIT INDEX	TERMINAL A/L RATIO (PERCENT)	EQUIV. H CURVE	AVERAGE SERVICE LIFE (YEARS)	FIT INDEX	TERMINAL A/L RATIO (PERCENT)	EQUIV. H CURVE	AVERAGE SERVICE LIFE (YEARS)	FIT INDEX	TERMINAL A/L RATIO (PERCENT)	EQUIV. H CURVE
2006 TO 2006	2006	27.88	0.011496	367.60	1.42	0.00	0.000000	0.00	0.00	58.66	0.011494	353.75	-2.60
2005 TO 2006	2006	35.28	0.006462	364.22	1.45	0.00	0.000000	0.00	0.00	86.71	0.006429	239.31	-2.60
2004 TO 2006	2006	42.60	0.004528	357.98	1.51	0.00	0.000000	0.00	0.00	121.73	0.004515	194.29	-0.23
2003 TO 2006	2006	48.22	0.003581	355.66	1.56	0.00	0.000000	0.00	0.00	133.39	0.003574	175.80	0.62
2002 TO 2006	2006	52.62	0.003010	352.53	1.60	0.00	0.000000	0.00	0.00	141.73	0.003009	166.16	1.05
2001 TO 2006	2006	55.55	0.002576	348.33	1.64	0.00	0.000000	0.00	0.00	159.97	0.002576	160.35	1.21
2000 TO 2006	2006	58.36	0.002185	346.97	1.67	0.00	0.000000	0.00	0.00	174.01	0.002185	156.60	1.36
1999 TO 2006	2006	59.07	0.001976	349.61	1.64	0.00	0.000000	0.00	0.00	148.46	0.001980	164.69	1.37
1998 TO 2006	2006	60.88	0.001811	347.42	1.66	0.00	0.000000	0.00	0.00	150.52	0.001815	163.77	1.45
1997 TO 2006	2006	62.43	0.001663	346.80	1.68	0.00	0.000000	0.00	0.00	161.77	0.001669	162.27	1.46
1996 TO 2006	2006	63.58	0.001585	348.40	1.66	0.00	0.000000	0.00	0.00	168.39	0.001592	162.42	1.44
1995 TO 2006	2006	64.67	0.001309	347.15	1.67	0.00	0.000000	0.00	0.00	206.38	0.001314	158.69	1.32
1994 TO 2006	2006	65.58	0.001257	345.38	1.68	0.00	0.000000	0.00	0.00	285.42	0.001263	139.62	1.13
1993 TO 2006	2006	58.38	0.001332	341.72	1.73	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1992 TO 2006	2006	58.49	0.001302	342.81	1.73	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1991 TO 2006	2006	59.11	0.001221	342.61	1.73	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1990 TO 2006	2006	59.54	0.001190	341.78	1.74	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1989 TO 2006	2006	59.88	0.001167	341.50	1.75	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1988 TO 2006	2006	60.15	0.001148	340.00	1.76	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1987 TO 2006	2006	60.36	0.001134	340.45	1.76	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1986 TO 2006	2006	60.21	0.001125	339.63	1.77	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1985 TO 2006	2006	60.33	0.001113	338.99	1.78	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1984 TO 2006	2006	60.41	0.001102	338.55	1.78	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1983 TO 2006	2006	60.46	0.001092	338.23	1.79	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1982 TO 2006	2006	60.51	0.001083	337.98	1.79	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1981 TO 2006	2006	60.54	0.001074	337.82	1.78	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1980 TO 2006	2006	60.56	0.001067	337.70	1.79	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1979 TO 2006	2006	60.58	0.001060	337.55	1.79	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1978 TO 2006	2006	60.61	0.001053	337.41	1.79	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1977 TO 2006	2006	60.65	0.001047	338.85	1.79	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1976 TO 2006	2006	60.63	0.001042	338.97	1.79	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1975 TO 2006	2006	60.65	0.001038	338.83	1.79	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00

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 SUMMARY OF ROLLING BANDS

YEAR	YEAR	FIRST DEGREE				SECOND DEGREE				THIRD DEGREE			
		AVERAGE SERVICE LIFE (YEARS)	FIT INDEX	TERMINAL A/L RATIO (PERCENT)	EQUIV. H CURVE	AVERAGE SERVICE LIFE (YEARS)	FIT INDEX	TERMINAL A/L RATIO (PERCENT)	EQUIV. H CURVE	AVERAGE SERVICE LIFE (YEARS)	FIT INDEX	TERMINAL A/L RATIO (PERCENT)	EQUIV. H CURVE
1956 TO 1965	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00	47.49	0.000875	156.87	3.21	
1957 TO 1966	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00	49.19	0.000785	155.52	3.48	
1958 TO 1967	35.51	0.002814	409.69	0.96	0.00	0.000000	0.00	0.00	38.70	0.002467	179.61	1.71	
1959 TO 1968	27.89	0.003168	381.80	1.24	0.00	0.000000	0.00	0.00	34.54	0.002588	201.19	1.11	
1960 TO 1969	27.69	0.003060	359.34	1.48	0.00	0.000000	0.00	0.00	34.81	0.002726	216.88	0.96	
1961 TO 1970	28.21	0.002839	352.72	1.58	0.00	0.000000	0.00	0.00	38.49	0.002626	237.71	0.56	
1962 TO 1971	29.57	0.002424	353.43	1.58	0.00	0.000000	0.00	0.00	40.94	0.002268	223.51	0.87	
1963 TO 1972	31.16	0.001957	351.40	1.60	0.00	0.000000	0.00	0.00	53.26	0.001856	222.49	0.40	
1964 TO 1973	34.84	0.001571	348.72	1.63	0.00	0.000000	0.00	0.00	98.52	0.001522	199.45	-0.08	
1965 TO 1974	29.18	0.001633	341.04	1.74	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00	
1966 TO 1975	29.13	0.001349	338.19	1.75	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00	
1967 TO 1976	31.48	0.001104	338.27	1.77	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00	
1968 TO 1977	38.06	0.000915	340.22	1.75	37.60	0.000924	328.45	1.81	0.00	0.000000	0.00	0.00	
1969 TO 1978	43.19	0.000899	339.22	1.76	36.92	0.000902	261.37	2.35	0.00	0.000000	0.00	0.00	
1970 TO 1979	42.32	0.000911	339.08	1.77	37.80	0.000919	273.80	2.20	0.00	0.000000	0.00	0.00	
1971 TO 1980	45.87	0.000736	339.01	1.77	39.69	0.000742	268.35	2.27	0.00	0.000000	0.00	0.00	
1972 TO 1981	45.97	0.000808	336.12	1.80	37.21	0.000809	251.30	2.51	0.00	0.000000	0.00	0.00	
1973 TO 1982	48.30	0.000701	338.53	1.79	39.06	0.000702	252.20	2.47	0.00	0.000000	0.00	0.00	
1974 TO 1983	54.59	0.000811	343.48	1.71	37.40	0.000796	233.94	2.75	0.00	0.000000	0.00	0.00	
1975 TO 1984	63.54	0.000660	347.01	1.67	42.96	0.000656	238.58	2.66	0.00	0.000000	0.00	0.00	
1976 TO 1985	67.75	0.000522	346.12	1.69	44.15	0.000515	234.43	2.75	0.00	0.000000	0.00	0.00	
1977 TO 1986	60.92	0.000573	345.53	1.69	45.14	0.000573	247.00	2.51	0.00	0.000000	0.00	0.00	
1978 TO 1987	70.27	0.000506	352.21	1.61	50.01	0.000506	246.96	2.48	0.00	0.000000	0.00	0.00	
1979 TO 1988	55.05	0.000813	342.44	1.73	47.27	0.000820	269.73	2.23	0.00	0.000000	0.00	0.00	
1980 TO 1989	44.00	0.001014	330.69	1.88	37.20	0.001022	248.63	2.54	0.00	0.000000	0.00	0.00	
1981 TO 1990	48.40	0.000873	335.75	1.81	41.55	0.000881	258.73	2.38	0.00	0.000000	0.00	0.00	
1982 TO 1991	53.96	0.000777	341.90	1.74	49.68	0.000784	290.88	2.05	0.00	0.000000	0.00	0.00	
1983 TO 1992	59.15	0.000672	345.74	1.70	0.00	0.000600	0.00	0.00	0.00	0.000000	0.00	0.00	
1984 TO 1993	55.32	0.000636	340.74	1.75	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00	
1985 TO 1994	61.30	0.000560	346.64	1.68	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00	
1986 TO 1995	66.83	0.000502	352.41	1.61	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00	
1987 TO 1996	75.98	0.000476	361.28	1.49	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00	
1988 TO 1997	81.70	0.000438	365.37	1.45	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00	
1989 TO 1998	99.13	0.000380	376.76	1.31	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00	
1990 TO 1999	146.64	0.000314	271.75	1.11	0.00	0.000000	0.00	0.00	207.53	0.000310	131.79	3.93	
1991 TO 2000	175.99	0.000282	226.43	1.13	0.00	0.000000	0.00	0.00	373.60	0.000278	106.66	4.14	
1992 TO 2001	196.16	0.000262	203.15	1.17	0.00	0.000000	0.00	0.00	376.00	0.000259	105.99	4.13	
1993 TO 2002	166.97	0.000248	238.66	1.14	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00	
1994 TO 2003	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00	143.14	0.000176	169.41	3.50	
1995 TO 2004	284.99	0.000165	139.83	1.85	0.00	0.000000	0.00	0.00	105.06	0.000164	169.91	3.58	
1996 TO 2005	90.91	0.000480	361.33	1.50	63.64	0.000476	239.61	2.52	58.37	0.000479	203.01	2.92	
1997 TO 2006	50.03	0.001297	346.81	1.68	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00	

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SUMMARY OF SHRINKING BANDS

YEAR	YEAR	AVERAGE SERVICE LIFE (YEARS)	FIRST DEGREE			SECOND DEGREE			THIRD DEGREE				
			FIT INDEX	TERMINAL A/L RATIO (PERCENT)	EQUIV. H CURVE	AVERAGE SERVICE LIFE (YEARS)	FIT INDEX	TERMINAL A/L RATIO (PERCENT)	EQUIV. H CURVE	AVERAGE SERVICE LIFE (YEARS)	FIT INDEX	TERMINAL A/L RATIO (PERCENT)	EQUIV. H CURVE
2006 TO 2006	2006 TO 2006	22.25	0.011523	370.84	1.33	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00
2005 TO 2006	2005 TO 2006	28.68	0.005058	350.38	1.59	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00
2004 TO 2006	2004 TO 2006	34.10	0.003521	350.48	1.60	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00
2003 TO 2006	2003 TO 2006	38.29	0.002750	351.27	1.62	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00
2002 TO 2006	2002 TO 2006	41.29	0.002332	347.50	1.67	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00
2001 TO 2006	2001 TO 2006	43.85	0.001974	345.52	1.68	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00
2000 TO 2006	2000 TO 2006	46.07	0.001705	344.03	1.70	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00
1999 TO 2006	1999 TO 2006	47.49	0.001538	344.27	1.69	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00
1998 TO 2006	1998 TO 2006	48.82	0.001392	347.16	1.67	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00
1997 TO 2006	1997 TO 2006	50.03	0.001297	346.81	1.68	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00
1996 TO 2006	1996 TO 2006	51.13	0.001209	349.11	1.64	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00
1995 TO 2006	1995 TO 2006	52.84	0.001068	349.10	1.64	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00
1994 TO 2006	1994 TO 2006	52.84	0.001068	349.17	1.64	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00
1993 TO 2006	1993 TO 2006	52.65	0.001007	348.53	1.65	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00
1992 TO 2006	1992 TO 2006	53.13	0.000953	347.27	1.66	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00
1991 TO 2006	1991 TO 2006	53.55	0.000911	348.28	1.66	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00
1990 TO 2006	1990 TO 2006	53.86	0.000876	346.28	1.67	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00
1989 TO 2006	1989 TO 2006	53.06	0.000856	347.75	1.67	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00
1988 TO 2006	1988 TO 2006	52.76	0.000842	345.90	1.67	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00
1987 TO 2006	1987 TO 2006	52.95	0.000822	346.56	1.67	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00
1986 TO 2006	1986 TO 2006	53.01	0.000813	346.16	1.68	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00
1985 TO 2006	1985 TO 2006	53.07	0.000804	345.78	1.68	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00
1984 TO 2006	1984 TO 2006	53.17	0.000796	347.03	1.68	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00
1983 TO 2006	1983 TO 2006	53.14	0.000790	346.96	1.68	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00
1982 TO 2006	1982 TO 2006	53.14	0.000784	345.30	1.68	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00
1981 TO 2006	1981 TO 2006	53.14	0.000781	345.34	1.69	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00
1979 TO 2006	1979 TO 2006	53.11	0.000776	345.48	1.68	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00
1978 TO 2006	1978 TO 2006	53.10	0.000773	345.59	1.69	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00
1977 TO 2006	1977 TO 2006	53.10	0.000770	345.58	1.69	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00
1976 TO 2006	1976 TO 2006	53.09	0.000768	345.64	1.69	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00
1975 TO 2006	1975 TO 2006	53.09	0.000766	345.63	1.69	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00
1974 TO 2006	1974 TO 2006	53.06	0.000766	345.82	1.69	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00
1973 TO 2006	1973 TO 2006	53.06	0.000765	345.82	1.69	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00
1972 TO 2006	1972 TO 2006	53.07	0.000764	345.78	1.69	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00
1971 TO 2006	1971 TO 2006	53.08	0.000763	345.73	1.68	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00
1970 TO 2006	1970 TO 2006	53.07	0.000763	345.75	1.68	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00
1969 TO 2006	1969 TO 2006	53.07	0.000762	345.78	1.68	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00
1968 TO 2006	1968 TO 2006	53.06	0.000762	345.82	1.68	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00
1967 TO 2006	1967 TO 2006	53.06	0.000762	345.85	1.68	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00
1966 TO 2006	1966 TO 2006	53.06	0.000762	345.85	1.68	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00
1965 TO 2006	1965 TO 2006	53.06	0.000762	345.84	1.68	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00
1964 TO 2006	1964 TO 2006	53.06	0.000761	345.83	1.68	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00
1963 TO 2006	1963 TO 2006	53.06	0.000761	345.83	1.68	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00
1962 TO 2006	1962 TO 2006	53.06	0.000761	345.82	1.68	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00
1961 TO 2006	1961 TO 2006	53.06	0.000761	345.81	1.68	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00
1960 TO 2006	1960 TO 2006	53.07	0.000761	345.80	1.68	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00
1959 TO 2006	1959 TO 2006	53.07	0.000761	345.78	1.68	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00
1958 TO 2006	1958 TO 2006	53.07	0.000761	345.78	1.68	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00
1957 TO 2006	1957 TO 2006	53.07	0.000761	345.77	1.68	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00
1956 TO 2006	1956 TO 2006	53.07	0.000761	345.77	1.68	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00



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SUMMARY OF SHRINKING BANDS

YEAR	YEAR	FIRST DEGREE				SECOND DEGREE				THIRD DEGREE			
		AVERAGE SERVICE LIFE (YEARS)	FIT INDEX	TERMINAL A/L RATIO (PERCENT)	EQUIV. H CURVE	AVERAGE SERVICE LIFE (YEARS)	FIT INDEX	TERMINAL A/L RATIO (PERCENT)	EQUIV. H CURVE	AVERAGE SERVICE LIFE (YEARS)	FIT INDEX	TERMINAL A/L RATIO (PERCENT)	EQUIV. H CURVE
2006 TO 2006	2006	43.45	0.000825	385.47	1.22	42.94	0.000828	357.44	1.30	41.09	0.000732	242.18	1.65
2005 TO 2006	2006	44.60	0.000497	413.72	0.94	0.00	0.000000	0.00	0.00	43.10	0.000453	268.00	1.30
2004 TO 2006	2006	35.20	0.002622	455.93	0.55	0.00	0.000000	0.00	0.00	36.35	0.002605	314.97	0.62
2003 TO 2006	2006	37.56	0.001606	443.26	0.65	0.00	0.000000	0.00	0.00	38.76	0.001577	308.28	0.72
2002 TO 2006	2006	38.48	0.001201	443.11	0.66	0.00	0.000000	0.00	0.00	39.83	0.001167	310.07	0.71
2001 TO 2006	2006	39.50	0.001002	436.66	0.71	0.00	0.000000	0.00	0.00	41.15	0.000967	312.27	0.72
2000 TO 2006	2006	38.78	0.000871	437.09	0.71	0.00	0.000000	0.00	0.00	40.44	0.000837	322.68	0.68
1999 TO 2006	2006	41.32	0.000757	427.11	0.81	0.00	0.000000	0.00	0.00	42.89	0.000733	315.89	0.82
1998 TO 2006	2006	42.92	0.000702	415.91	0.90	0.00	0.000000	0.00	0.00	44.43	0.000687	316.25	0.90
1997 TO 2006	2006	44.90	0.000659	408.70	0.97	0.00	0.000000	0.00	0.00	46.28	0.000652	316.54	0.98
1996 TO 2006	2006	46.43	0.000598	403.85	1.04	0.00	0.000000	0.00	0.00	47.77	0.000595	319.26	1.03
1995 TO 2006	2006	46.73	0.000556	401.20	1.06	0.00	0.000000	0.00	0.00	48.34	0.000554	332.01	1.00
1994 TO 2006	2006	46.48	0.000531	401.25	1.05	0.00	0.000000	0.00	0.00	48.43	0.000530	364.41	0.88
1993 TO 2006	2006	46.42	0.000510	401.74	1.05	0.00	0.000000	0.00	0.00	49.85	0.000511	610.78	0.43
1992 TO 2006	2006	46.32	0.000500	404.81	1.01	0.00	0.000000	0.00	0.00	51.66	0.000502	771.35	-1.61
1991 TO 2006	2006	46.02	0.000487	409.61	0.97	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1990 TO 2006	2006	44.94	0.000482	412.74	0.94	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1989 TO 2006	2006	44.50	0.000465	410.98	0.97	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1988 TO 2006	2006	44.54	0.000459	411.95	0.95	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1987 TO 2006	2006	44.71	0.000452	412.65	0.93	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1986 TO 2006	2006	44.16	0.000473	417.77	0.89	44.16	0.000475	417.82	0.89	0.00	0.000000	0.00	0.00
1985 TO 2006	2006	44.40	0.000466	415.58	0.90	44.18	0.000468	404.04	0.94	0.00	0.000000	0.00	0.00
1984 TO 2006	2006	44.70	0.000465	415.01	0.92	44.16	0.000467	388.37	1.00	0.00	0.000000	0.00	0.00
1983 TO 2006	2006	44.90	0.000457	413.15	0.94	44.25	0.000459	383.08	1.06	0.00	0.000000	0.00	0.00
1982 TO 2006	2006	45.05	0.000451	411.79	0.94	44.26	0.000453	376.22	1.06	0.00	0.000000	0.00	0.00
1981 TO 2006	2006	44.92	0.000529	435.22	0.74	43.52	0.000530	375.67	0.94	0.00	0.000000	0.00	0.00
1980 TO 2006	2006	44.37	0.000503	433.89	0.74	43.68	0.000506	399.47	0.85	0.00	0.000000	0.00	0.00
1979 TO 2006	2006	43.66	0.000494	429.50	0.78	43.46	0.000496	419.93	0.81	0.00	0.000000	0.00	0.00
1978 TO 2006	2006	43.70	0.000488	426.76	0.80	43.67	0.000490	424.82	0.81	0.00	0.000000	0.00	0.00
1977 TO 2006	2006	43.68	0.000483	424.64	0.82	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1976 TO 2006	2006	43.75	0.000477	421.72	0.86	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1975 TO 2006	2006	43.43	0.000468	420.24	0.87	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1974 TO 2006	2006	43.40	0.000460	418.25	0.89	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1973 TO 2006	2006	43.37	0.000454	416.16	0.90	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1972 TO 2006	2006	43.28	0.000448	417.05	0.89	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1971 TO 2006	2006	43.34	0.000446	416.45	0.90	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1970 TO 2006	2006	43.39	0.000443	415.98	0.92	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1969 TO 2006	2006	43.27	0.000442	414.87	0.92	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1968 TO 2006	2006	43.17	0.000441	413.47	0.93	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1967 TO 2006	2006	43.14	0.000440	413.79	0.93	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1966 TO 2006	2006	43.10	0.000440	414.17	0.93	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1965 TO 2006	2006	43.02	0.000439	412.63	0.94	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1964 TO 2006	2006	43.00	0.000437	412.77	0.94	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1963 TO 2006	2006	43.00	0.000437	410.51	0.95	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1962 TO 2006	2006	42.97	0.000436	410.78	0.95	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1961 TO 2006	2006	42.93	0.000435	411.16	0.96	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1960 TO 2006	2006	42.91	0.000435	411.36	0.96	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1959 TO 2006	2006	42.87	0.000435	409.42	0.96	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1958 TO 2006	2006	42.86	0.000434	409.45	0.97	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1957 TO 2006	2006	42.85	0.000434	409.62	0.97	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1956 TO 2006	2006	42.84	0.000433	409.69	0.97	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1955 TO 2006	2006	42.79	0.000433	410.10	0.97	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1954 TO 2006	2006	42.80	0.000432	410.07	0.97	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00

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SUMMARY OF SHRINKING BANDS

YEAR	YEAR	FIRST DEGREE			SECOND DEGREE			THIRD DEGREE					
		AVERAGE SERVICE LIFE (YEARS)	FIT INDEX	TERMINAL A/L RATIO (PERCENT)	EQUIV. H CURVE	AVERAGE SERVICE LIFE (YEARS)	FIT INDEX	TERMINAL A/L RATIO (PERCENT)	EQUIV. H CURVE	AVERAGE SERVICE LIFE (YEARS)	FIT INDEX	TERMINAL A/L RATIO (PERCENT)	EQUIV. H CURVE
1953 TO 2006		42.79	0.000432	410.11	0.97	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1952 TO 2006		42.80	0.000432	410.03	0.98	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00

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 ACCOUNT 1369100 SERVICES OVERHEAD PSC CASE 1 ORANGE AND ROCKLAND UTILITIES INC STUDY NO. 2006

SUMMARY OF ROLLING BANDS

YEAR	YEAR	FIRST DEGREE				SECOND DEGREE				THIRD DEGREE			
		AVERAGE SERVICE LIFE (YEARS)	FIT INDEX	TERMINAL A/L RATIO (PERCENT)	EQUIV. H CURVE	AVERAGE SERVICE LIFE (YEARS)	FIT INDEX	TERMINAL A/L RATIO (PERCENT)	EQUIV. H CURVE	AVERAGE SERVICE LIFE (YEARS)	FIT INDEX	TERMINAL A/L RATIO (PERCENT)	EQUIV. H CURVE
1952 TO 1961		29.00	0.000944	384.47	1.22	28.69	0.000549	266.62	1.73	0.00	0.000000	0.00	0.00
1953 TO 1962		28.66	0.000916	382.02	1.24	28.43	0.000547	272.60	1.71	0.00	0.000000	0.00	0.00
1954 TO 1963		28.91	0.000873	382.17	1.25	28.60	0.000539	274.52	1.69	0.00	0.000000	0.00	0.00
1955 TO 1964		29.80	0.000769	384.24	1.23	29.24	0.000501	278.76	1.65	29.22	0.000504	272.08	1.67
1956 TO 1965		29.83	0.000723	380.44	1.24	29.23	0.000490	285.65	1.62	29.22	0.000492	275.53	1.64
1957 TO 1966		27.45	0.001263	362.54	1.46	27.31	0.001130	287.43	1.72	0.00	0.000000	0.00	0.00
1958 TO 1967		27.73	0.001206	358.88	1.50	27.51	0.001108	292.64	1.71	0.00	0.000000	0.00	0.00
1959 TO 1968		28.11	0.001149	357.52	1.52	27.82	0.001083	296.51	1.71	0.00	0.000000	0.00	0.00
1960 TO 1969		28.96	0.001084	353.95	1.57	28.58	0.001031	295.68	1.75	0.00	0.000000	0.00	0.00
1961 TO 1970		29.47	0.001030	351.15	1.60	29.07	0.000995	301.05	1.76	0.00	0.000000	0.00	0.00
1962 TO 1971		30.14	0.000989	350.08	1.62	29.68	0.000962	301.59	1.78	0.00	0.000000	0.00	0.00
1963 TO 1972		29.61	0.000988	346.22	1.66	29.30	0.000979	312.31	1.76	0.00	0.000000	0.00	0.00
1964 TO 1973		28.42	0.001126	339.60	1.74	28.27	0.001128	316.64	1.81	0.00	0.000000	0.00	0.00
1965 TO 1974		28.58	0.001152	337.68	1.77	28.42	0.001158	311.41	1.85	0.00	0.000000	0.00	0.00
1966 TO 1975		29.03	0.001232	335.86	1.78	28.80	0.001234	307.25	1.87	0.00	0.000000	0.00	0.00
1967 TO 1976		30.97	0.000952	343.93	1.70	30.63	0.000951	315.04	1.79	0.00	0.000000	0.00	0.00
1968 TO 1977		32.08	0.000912	341.30	1.71	31.55	0.000903	305.89	1.84	0.00	0.000000	0.00	0.00
1969 TO 1978		33.52	0.000837	344.62	1.70	32.72	0.000820	298.00	1.88	0.00	0.000000	0.00	0.00
1970 TO 1979		34.92	0.000769	345.11	1.69	33.82	0.000743	291.28	1.90	0.00	0.000000	0.00	0.00
1971 TO 1980		36.63	0.000709	345.38	1.68	35.07	0.000669	283.69	1.95	0.00	0.000000	0.00	0.00
1972 TO 1981		38.39	0.000639	347.75	1.66	36.37	0.000589	279.10	1.97	0.00	0.000000	0.00	0.00
1973 TO 1982		41.65	0.000591	349.37	1.64	38.49	0.000518	268.92	2.06	0.00	0.000000	0.00	0.00
1974 TO 1983		47.24	0.000534	354.54	1.58	41.73	0.000437	255.21	2.16	0.00	0.000000	0.00	0.00
1975 TO 1984		52.92	0.000465	359.96	1.52	44.86	0.000365	250.75	2.21	0.00	0.000000	0.00	0.00
1976 TO 1985		57.64	0.000415	359.96	1.51	47.42	0.000313	245.70	2.29	0.00	0.000000	0.00	0.00
1977 TO 1986		65.62	0.000343	361.93	1.48	51.51	0.000251	241.69	2.36	0.00	0.000000	0.00	0.00
1978 TO 1987		70.51	0.000327	363.79	1.47	53.68	0.000238	237.52	2.42	0.00	0.000000	0.00	0.00
1979 TO 1988		75.72	0.000343	371.76	1.37	54.41	0.000237	234.33	2.45	0.00	0.000000	0.00	0.00
1980 TO 1989		80.02	0.000340	375.54	1.33	55.85	0.000239	231.88	2.48	0.00	0.000000	0.00	0.00
1981 TO 1990		84.58	0.000345	378.92	1.30	57.04	0.000245	228.81	2.52	0.00	0.000000	0.00	0.00
1982 TO 1991		92.02	0.000316	381.98	1.27	59.52	0.000222	227.66	2.57	0.00	0.000000	0.00	0.00
1983 TO 1992		97.84	0.000305	388.90	1.18	60.71	0.000212	226.49	2.57	0.00	0.000000	0.00	0.00
1984 TO 1993		104.08	0.000285	382.87	1.12	62.58	0.000200	226.00	2.56	0.00	0.000000	0.00	0.00
1985 TO 1994		105.96	0.000277	376.10	1.14	63.50	0.000191	226.00	2.59	0.00	0.000000	0.00	0.00
1986 TO 1995		113.40	0.000252	351.40	1.12	65.65	0.000168	224.67	2.62	0.00	0.000000	0.00	0.00
1987 TO 1996		114.19	0.000240	348.97	1.08	66.30	0.000157	225.50	2.57	0.00	0.000000	0.00	0.00
1988 TO 1997		126.79	0.000211	314.31	0.99	69.28	0.000135	225.88	2.56	0.00	0.000000	0.00	0.00
1989 TO 1998		134.86	0.000174	295.50	1.02	73.84	0.000118	228.21	2.53	0.00	0.000000	0.00	0.00
1990 TO 1999		147.91	0.000153	269.41	0.97	77.37	0.000105	229.41	2.51	0.00	0.000000	0.00	0.00
1991 TO 2000		157.67	0.000133	252.74	0.95	81.08	0.000093	231.26	2.46	0.00	0.000000	0.00	0.00
1992 TO 2001		173.70	0.000120	229.42	0.86	84.33	0.000087	234.20	2.36	0.00	0.000000	0.00	0.00
1993 TO 2002		176.12	0.000106	226.27	0.90	89.98	0.000085	239.49	2.29	86.26	0.000085	218.52	2.46
1994 TO 2003		182.90	0.000091	217.88	0.95	95.21	0.000076	242.00	2.25	90.12	0.000076	216.94	2.46
1995 TO 2004		178.89	0.000113	222.76	0.94	89.04	0.000085	234.15	2.36	80.68	0.000079	196.45	2.76
1996 TO 2005		163.29	0.000538	244.05	0.54	88.37	0.000537	249.53	2.00	73.27	0.000531	186.30	2.70
1997 TO 2006		135.92	0.000540	293.20	0.67	81.54	0.000535	245.88	2.05	70.46	0.000525	186.64	2.70



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YEAR	YEAR	FIRST DEGREE				SECOND DEGREE				THIRD DEGREE			
		AVERAGE SERVICE LIFE (YEARS)	FIT INDEX	TERMINAL A/L RATIO (PERCENT)	EQUIV. H CURVE	AVERAGE SERVICE LIFE (YEARS)	FIT INDEX	TERMINAL A/L RATIO (PERCENT)	EQUIV. H CURVE	AVERAGE SERVICE LIFE (YEARS)	FIT INDEX	TERMINAL A/L RATIO (PERCENT)	EQUIV. H CURVE
2006 TO 2006	2006	83.82	0.001395	357.33	1.54	65.79	0.001386	236.16	2.27	62.46	0.001378	189.71	2.77
2005 TO 2006	2006	90.90	0.001965	438.41	-0.31	65.03	0.001972	289.86	1.23	56.76	0.001945	194.66	2.04
2004 TO 2006	2006	96.70	0.001357	412.11	0.47	66.71	0.001356	258.60	1.69	60.21	0.001326	188.49	2.37
2003 TO 2006	2006	107.03	0.001058	372.32	0.57	71.74	0.001056	254.39	1.82	63.60	0.001033	186.33	2.51
2002 TO 2006	2006	113.59	0.000886	350.82	0.60	74.67	0.000884	252.45	1.87	65.50	0.000865	187.02	2.57
2001 TO 2006	2006	125.23	0.000774	318.21	0.43	76.33	0.000770	250.90	1.88	66.60	0.000754	186.95	2.55
2000 TO 2006	2006	127.04	0.000659	313.69	0.52	77.70	0.000691	249.03	1.93	67.71	0.000676	186.82	2.59
1999 TO 2006	2006	130.59	0.000632	305.14	0.57	79.14	0.000628	248.29	1.97	68.72	0.000615	186.99	2.63
1998 TO 2006	2006	134.45	0.000583	296.39	0.61	80.40	0.000579	246.88	2.01	69.68	0.000568	187.28	2.66
1997 TO 2006	2006	135.92	0.000540	293.20	0.67	81.54	0.000535	245.88	2.05	70.46	0.000525	186.64	2.70
1996 TO 2006	2006	134.98	0.000504	295.22	0.72	81.56	0.000471	245.82	2.08	70.71	0.000490	187.39	2.71
1995 TO 2006	2006	131.60	0.000476	302.81	0.83	82.26	0.000445	245.57	2.11	71.14	0.000461	187.67	2.76
1994 TO 2006	2006	128.61	0.000450	309.84	0.91	82.05	0.000401	244.83	2.16	71.32	0.000436	187.18	2.78
1993 TO 2006	2006	129.00	0.000428	308.91	0.89	81.49	0.000401	243.67	2.17	71.20	0.000376	191.71	2.72
1992 TO 2006	2006	129.48	0.000409	307.76	0.86	80.23	0.000383	243.36	2.19	71.20	0.000376	191.71	2.72
1991 TO 2006	2006	128.73	0.000392	309.57	0.89	80.33	0.000365	242.17	2.20	71.07	0.000359	193.48	2.69
1990 TO 2006	2006	126.81	0.000375	314.24	0.91	79.49	0.000349	242.33	2.20	71.03	0.000344	194.90	2.67
1989 TO 2006	2006	125.31	0.000360	318.01	0.92	79.03	0.000337	241.36	2.22	70.85	0.000333	198.30	2.62
1988 TO 2006	2006	126.57	0.000351	314.84	0.87	77.42	0.000326	240.88	2.22	70.82	0.000322	198.38	2.61
1987 TO 2006	2006	124.41	0.000332	320.63	0.93	77.68	0.000317	241.36	2.23	71.04	0.000314	197.78	2.64
1986 TO 2006	2006	124.29	0.000324	325.81	0.96	77.47	0.000309	242.02	2.23	70.95	0.000306	199.43	2.63
1985 TO 2006	2006	122.31	0.000317	327.22	0.96	77.39	0.000302	242.29	2.23	71.05	0.000299	199.15	2.62
1984 TO 2006	2006	121.78	0.000310	330.90	0.96	76.60	0.000287	242.18	2.22	70.98	0.000285	203.58	2.57
1983 TO 2006	2006	120.43	0.000303	335.54	0.97	76.35	0.000281	242.97	2.20	70.92	0.000279	205.15	2.54
1982 TO 2006	2006	118.76	0.000297	339.69	0.97	76.08	0.000275	245.13	2.19	70.82	0.000273	205.44	2.51
1981 TO 2006	2006	117.31	0.000291	344.83	0.97	75.91	0.000269	245.69	2.17	70.76	0.000268	207.03	2.49
1980 TO 2006	2006	115.56	0.000285	349.24	0.97	75.77	0.000265	247.47	2.15	70.68	0.000263	208.69	2.47
1979 TO 2006	2006	114.11	0.000280	352.89	0.96	75.54	0.000260	248.20	2.12	70.51	0.000259	209.20	2.44
1978 TO 2006	2006	112.92	0.000275	358.36	0.96	75.39	0.000257	251.36	2.08	70.31	0.000256	211.20	2.40
1977 TO 2006	2006	111.20	0.000271	364.77	0.95	75.17	0.000254	253.43	2.04	70.03	0.000253	212.04	2.36
1976 TO 2006	2006	109.25	0.000267	370.66	0.93	75.23	0.000253	258.54	1.98	69.59	0.000251	213.38	2.33
1975 TO 2006	2006	107.51	0.000264	379.36	0.92	75.59	0.000257	266.57	1.88	68.82	0.000254	212.86	2.28
1974 TO 2006	2006	105.04	0.000265	392.39	0.90	75.96	0.000266	271.85	1.80	68.23	0.000263	211.78	2.25
1973 TO 2006	2006	101.56	0.000271	399.67	0.87	75.96	0.000266	274.33	1.77	67.95	0.000266	211.20	2.24
1972 TO 2006	2006	99.71	0.000274	402.78	0.86	76.00	0.000270	277.75	1.73	67.63	0.000268	210.70	2.23
1971 TO 2006	2006	98.94	0.000276	406.23	0.84	76.15	0.000271	280.13	1.71	67.42	0.000266	211.35	2.22
1970 TO 2006	2006	98.10	0.000274	409.00	0.84	76.21	0.000270	281.28	1.68	67.15	0.000265	210.72	2.21
1969 TO 2006	2006	97.43	0.000273	411.00	0.82	76.26	0.000269	284.27	1.65	66.89	0.000264	211.55	2.19
1968 TO 2006	2006	96.96	0.000272	413.00	0.80	76.16	0.000263	289.76	1.60	66.81	0.000259	214.80	2.13
1967 TO 2006	2006	96.49	0.000272	426.32	0.81	75.75	0.000263	289.76	1.59	66.56	0.000257	215.58	2.11
1966 TO 2006	2006	93.47	0.000265	428.38	0.80	75.43	0.000262	289.66	1.58	66.38	0.000256	216.17	2.10
1965 TO 2006	2006	93.02	0.000264	430.23	0.79	75.14	0.000260	290.78	1.58	66.23	0.000255	218.19	2.08
1964 TO 2006	2006	92.63	0.000262	431.53	0.77	74.75	0.000259	290.99	1.57	66.12	0.000253	218.56	2.07
1963 TO 2006	2006	92.34	0.000261	432.83	0.76	74.34	0.000257	289.87	1.57	66.03	0.000252	220.37	2.05
1962 TO 2006	2006	92.07	0.000260	433.62	0.74	73.94	0.000256	289.12	1.57	65.92	0.000251	220.72	2.03
1961 TO 2006	2006	91.90	0.000258	434.74	0.73	73.52	0.000254	289.05	1.57	65.84	0.000250	222.46	2.01
1960 TO 2006	2006	91.66	0.000257	435.22	0.71	73.10	0.000253	289.33	1.57	65.86	0.000249	224.04	2.00
1959 TO 2006	2006	91.56	0.000257	436.01	0.70	72.75	0.000252	287.99	1.57	65.84	0.000249	225.57	1.98
1958 TO 2006	2006	91.40	0.000256	436.60	0.69	72.38	0.000251	288.07	1.57	65.83	0.000248	227.06	1.96
1957 TO 2006	2006	91.27	0.000255	436.60	0.68	72.06	0.000250	287.94	1.57	65.84	0.000247	228.51	1.95
1956 TO 2006	2006	90.98	0.000255	438.00	0.68	71.91	0.000249	288.54	1.57	65.86	0.000247	229.84	1.93
1955 TO 2006	2006	90.61	0.000254	439.79	0.68	71.91	0.000249	288.54	1.56	65.92	0.000247	229.84	1.93
1954 TO 2006	2006	89.93	0.000252	440.91	0.69	71.68	0.000248	288.09	1.56	65.92	0.000247	229.84	1.93

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SUMMARY OF SHRINKING BANDS

YEAR	YEAR	FIRST DEGREE				SECOND DEGREE				THIRD DEGREE			
		AVERAGE SERVICE LIFE (YEARS)	FIT INDEX	TERMINAL A/L RATIO (PERCENT)	EQUIV. H CURVE	AVERAGE SERVICE LIFE (YEARS)	FIT INDEX	TERMINAL A/L RATIO (PERCENT)	EQUIV. H CURVE	AVERAGE SERVICE LIFE (YEARS)	FIT INDEX	TERMINAL A/L RATIO (PERCENT)	EQUIV. H CURVE
1953 TO 2006		89.56	0.000251	440.46	0.69	71.61	0.000247	289.75	1.56	65.94	0.000246	231.27	1.92
1952 TO 2006		89.45	0.000251	439.92	0.69	71.60	0.000246	289.80	1.55	65.95	0.000245	231.22	1.91

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ACCOUNT 1369200 SERVICES UNDERGROUND

SUMMARY OF ROLLING BANDS

YEAR	FIRST DEGREE				SECOND DEGREE				THIRD DEGREE			
	AVERAGE SERVICE LIFE (YEARS)	FIT INDEX	TERMINAL A/L RATIO (PERCENT)	EQUIV. H CURVE	AVERAGE SERVICE LIFE (YEARS)	FIT INDEX	TERMINAL A/L RATIO (PERCENT)	EQUIV. H CURVE	AVERAGE SERVICE LIFE (YEARS)	FIT INDEX	TERMINAL A/L RATIO (PERCENT)	EQUIV. H CURVE
1952 TO 1961	37.13	0.001294	370.30	1.39	36.25	0.001304	318.61	1.60	0.00	0.000000	0.00	0.00
1953 TO 1962	36.38	0.001320	369.74	1.39	35.79	0.001332	331.06	1.55	0.00	0.000000	0.00	0.00
1954 TO 1963	37.01	0.000998	365.08	1.42	35.70	0.000988	289.95	1.80	0.00	0.000000	0.00	0.00
1955 TO 1964	36.21	0.000859	363.18	1.47	35.16	0.000846	291.53	1.81	0.00	0.000000	0.00	0.00
1956 TO 1965	35.41	0.000696	360.09	1.50	34.53	0.000675	293.95	1.82	0.00	0.000000	0.00	0.00
1957 TO 1966	36.31	0.000716	359.41	1.50	35.25	0.000694	287.96	1.86	0.00	0.000000	0.00	0.00
1958 TO 1967	37.87	0.000592	357.77	1.51	36.85	0.000584	299.86	1.79	0.00	0.000000	0.00	0.00
1959 TO 1968	40.52	0.000527	356.65	1.55	39.01	0.000517	293.51	1.87	0.00	0.000000	0.00	0.00
1960 TO 1969	43.98	0.000444	353.60	1.57	42.16	0.000440	297.71	1.87	0.00	0.000000	0.00	0.00
1961 TO 1970	46.67	0.000428	354.60	1.58	44.04	0.000422	287.22	1.95	0.00	0.000000	0.00	0.00
1962 TO 1971	50.60	0.000375	350.82	1.61	47.50	0.000373	289.48	1.97	0.00	0.000000	0.00	0.00
1963 TO 1972	55.75	0.000326	348.87	1.64	50.70	0.000322	277.11	2.11	0.00	0.000000	0.00	0.00
1964 TO 1973	64.54	0.000213	349.39	1.65	56.81	0.000209	271.97	2.18	0.00	0.000000	0.00	0.00
1965 TO 1974	78.72	0.000171	353.78	1.59	63.65	0.000165	260.01	2.30	0.00	0.000000	0.00	0.00
1966 TO 1975	92.99	0.000098	354.20	1.59	71.18	0.000123	256.39	2.36	0.00	0.000000	0.00	0.00
1967 TO 1976	111.38	0.000027	288.11	1.58	87.09	0.000076	244.01	2.46	0.00	0.000000	0.00	0.00
1968 TO 1977	138.32	0.000079	299.28	1.60	83.77	0.000074	242.93	2.60	0.00	0.000000	0.00	0.00
1969 TO 1978	133.15	0.000078	273.34	1.61	84.09	0.000064	238.42	2.69	0.00	0.000000	0.00	0.00
1970 TO 1979	145.79	0.000069	279.36	1.62	88.31	0.000065	244.03	2.59	0.00	0.000000	0.00	0.00
1971 TO 1980	142.65	0.000068	308.29	1.60	84.91	0.000074	247.90	2.51	0.00	0.000000	0.00	0.00
1972 TO 1981	129.26	0.000076	329.36	1.57	92.04	0.000072	266.73	2.22	0.00	0.000000	0.00	0.00
1973 TO 1982	120.99	0.000073	315.24	1.56	90.62	0.000067	259.87	2.31	0.00	0.000000	0.00	0.00
1974 TO 1983	126.41	0.000068	282.83	1.57	97.26	0.000054	257.56	2.35	0.00	0.000000	0.00	0.00
1975 TO 1984	140.94	0.000069	282.75	1.58	99.45	0.000068	258.92	2.33	0.00	0.000000	0.00	0.00
1976 TO 1985	145.95	0.000070	273.03	1.59	100.34	0.000070	256.63	2.37	0.00	0.000000	0.00	0.00
1977 TO 1986	163.71	0.000059	243.42	1.60	108.54	0.000059	254.75	2.39	0.00	0.000000	0.00	0.00
1978 TO 1987	217.31	0.000062	183.38	1.69	135.85	0.000062	258.01	2.28	135.64	0.000063	256.93	2.29
1979 TO 1988	259.45	0.000055	153.59	2.01	154.07	0.000055	254.75	2.32	120.56	0.000055	202.80	3.02
1980 TO 1989	315.24	0.000044	126.41	2.72	163.34	0.000044	243.98	2.47	128.53	0.000045	200.34	3.12
1981 TO 1990	347.75	0.000036	114.59	3.45	189.36	0.000037	210.44	2.50	117.09	0.000037	186.61	3.60
1982 TO 1991	364.26	0.000036	109.40	4.20	149.51	0.000036	234.43	2.74	111.67	0.000036	189.40	3.61
1983 TO 1992	0.00	0.000000	0.00	0.00	149.10	0.000030	229.04	2.85	112.56	0.000030	187.91	3.67
1984 TO 1993	0.00	0.000000	0.00	0.00	147.38	0.000028	231.03	2.81	103.48	0.000028	183.12	3.84
1985 TO 1994	0.00	0.000000	0.00	0.00	152.20	0.000027	227.66	2.89	102.13	0.000026	180.66	4.00
1986 TO 1995	0.00	0.000000	0.00	0.00	134.97	0.000025	223.38	2.98	104.86	0.000024	186.45	3.78
1987 TO 1996	0.00	0.000000	0.00	0.00	138.98	0.000022	222.69	3.00	107.92	0.000022	186.71	3.78
1988 TO 1997	0.00	0.000000	0.00	0.00	142.70	0.000023	224.52	2.96	121.06	0.000022	194.70	3.48
1989 TO 1998	0.00	0.000000	0.00	0.00	140.07	0.000022	226.47	2.93	118.39	0.000022	196.19	3.48
1990 TO 1999	0.00	0.000000	0.00	0.00	132.69	0.000029	226.47	2.93	107.10	0.000028	194.01	3.63
1991 TO 2000	340.78	0.000046	116.94	3.36	116.44	0.000043	226.29	2.94	106.37	0.000043	202.59	3.29
1992 TO 2001	267.34	0.000097	149.06	2.19	99.11	0.000093	224.50	2.99	0.00	0.000000	0.00	0.00
1993 TO 2002	202.79	0.000135	196.51	1.76	88.96	0.000129	223.14	3.03	0.00	0.000000	0.00	0.00
1994 TO 2003	155.48	0.000237	256.31	1.69	75.77	0.000225	218.41	3.17	0.00	0.000000	0.00	0.00
1995 TO 2004	115.33	0.000263	342.05	1.74	68.27	0.000244	218.99	3.13	0.00	0.000000	0.00	0.00
1996 TO 2005	94.38	0.000347	336.40	1.81	62.90	0.000324	220.19	3.13	0.00	0.000000	0.00	0.00

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SUMMARY OF SHRINKING BANDS

YEAR	YEAR	FIRST DEGREE				SECOND DEGREE				THIRD DEGREE			
		AVERAGE SERVICE LIFE (YEARS)	FIT INDEX	TERMINAL A/L RATIO (PERCENT)	EQUIV. H CURVE	AVERAGE SERVICE LIFE (YEARS)	FIT INDEX	TERMINAL A/L RATIO (PERCENT)	EQUIV. H CURVE	AVERAGE SERVICE LIFE (YEARS)	FIT INDEX	TERMINAL A/L RATIO (PERCENT)	EQUIV. H CURVE
2006 TO 2006	2006	61.19	0.001359	324.41	1.97	52.00	0.001353	227.87	2.93	0.000000	0.00	0.00	
2005 TO 2006	2006	63.71	0.001148	327.26	1.93	53.29	0.001143	229.86	2.89	0.000000	0.00	0.00	
2004 TO 2006	2006	69.07	0.000798	327.94	1.92	54.62	0.000780	222.46	3.05	0.000000	0.00	0.00	
2003 TO 2006	2006	74.19	0.000583	329.54	1.90	56.59	0.000560	221.76	3.09	0.000000	0.00	0.00	
2002 TO 2006	2006	78.51	0.000495	331.80	1.88	58.02	0.000470	219.75	3.10	0.000000	0.00	0.00	
2001 TO 2006	2006	82.45	0.000441	332.93	1.86	59.39	0.000416	219.75	3.11	0.000000	0.00	0.00	
2000 TO 2006	2006	85.91	0.000407	334.64	1.85	60.56	0.000383	220.43	3.11	0.000000	0.00	0.00	
1999 TO 2006	2006	89.14	0.000380	334.85	1.83	61.52	0.000356	220.26	3.12	0.000000	0.00	0.00	
1998 TO 2006	2006	92.10	0.000362	336.06	1.82	62.24	0.000339	219.31	3.12	0.000000	0.00	0.00	
1997 TO 2006	2006	94.38	0.000347	336.40	1.81	62.90	0.000324	220.19	3.13	0.000000	0.00	0.00	
1996 TO 2006	2006	96.57	0.000335	337.06	1.80	63.27	0.000313	218.90	3.13	0.000000	0.00	0.00	
1995 TO 2006	2006	98.22	0.000324	338.24	1.80	63.69	0.000301	219.04	3.13	0.000000	0.00	0.00	
1994 TO 2006	2006	99.48	0.000314	339.07	1.79	64.01	0.000285	218.85	3.13	0.000000	0.00	0.00	
1993 TO 2006	2006	101.01	0.000307	339.70	1.78	64.20	0.000278	219.75	3.13	0.000000	0.00	0.00	
1992 TO 2006	2006	101.92	0.000300	339.18	1.78	64.39	0.000272	219.11	3.13	0.000000	0.00	0.00	
1991 TO 2006	2006	102.75	0.000294	339.48	1.78	64.58	0.000267	220.14	3.13	0.000000	0.00	0.00	
1990 TO 2006	2006	103.47	0.000289	339.70	1.78	64.73	0.000263	219.67	3.13	0.000000	0.00	0.00	
1989 TO 2006	2006	104.15	0.000284	339.43	1.78	64.87	0.000263	219.54	3.13	0.000000	0.00	0.00	
1988 TO 2006	2006	105.50	0.000281	340.77	1.76	64.91	0.000258	219.54	3.13	0.000000	0.00	0.00	
1987 TO 2006	2006	105.93	0.000277	341.28	1.76	65.04	0.000255	219.09	3.12	0.000000	0.00	0.00	
1986 TO 2006	2006	106.17	0.000273	341.42	1.76	65.16	0.000251	220.22	3.12	0.000000	0.00	0.00	
1985 TO 2006	2006	106.28	0.000270	341.07	1.76	65.27	0.000249	219.84	3.12	0.000000	0.00	0.00	
1984 TO 2006	2006	106.52	0.000268	341.26	1.76	65.35	0.000246	219.59	3.12	0.000000	0.00	0.00	
1983 TO 2006	2006	106.70	0.000266	341.62	1.75	65.41	0.000245	219.40	3.11	0.000000	0.00	0.00	
1982 TO 2006	2006	107.02	0.000264	341.54	1.75	65.46	0.000243	220.75	3.10	0.000000	0.00	0.00	
1981 TO 2006	2006	107.19	0.000263	341.93	1.74	65.49	0.000242	220.64	3.10	0.000000	0.00	0.00	
1980 TO 2006	2006	107.29	0.000261	342.54	1.74	65.54	0.000241	220.48	3.09	0.000000	0.00	0.00	
1979 TO 2006	2006	107.35	0.000260	342.33	1.74	65.58	0.000239	220.34	3.09	0.000000	0.00	0.00	
1978 TO 2006	2006	107.40	0.000259	342.17	1.74	65.61	0.000238	220.25	3.09	0.000000	0.00	0.00	
1977 TO 2006	2006	107.47	0.000258	341.97	1.74	65.64	0.000238	220.12	3.09	0.000000	0.00	0.00	
1976 TO 2006	2006	107.53	0.000257	342.71	1.74	65.67	0.000237	220.03	3.09	0.000000	0.00	0.00	
1975 TO 2006	2006	107.58	0.000257	342.54	1.74	65.69	0.000236	221.49	3.09	0.000000	0.00	0.00	
1974 TO 2006	2006	107.76	0.000256	342.77	1.74	65.71	0.000236	221.50	3.09	0.000000	0.00	0.00	
1973 TO 2006	2006	107.80	0.000256	342.89	1.74	65.72	0.000235	221.39	3.09	0.000000	0.00	0.00	
1972 TO 2006	2006	107.81	0.000256	342.73	1.74	65.74	0.000235	221.33	3.09	0.000000	0.00	0.00	
1971 TO 2006	2006	107.84	0.000255	342.63	1.74	65.73	0.000235	221.35	3.09	0.000000	0.00	0.00	
1970 TO 2006	2006	107.88	0.000255	342.51	1.74	65.75	0.000235	221.31	3.09	0.000000	0.00	0.00	
1969 TO 2006	2006	107.89	0.000255	342.49	1.74	65.75	0.000235	221.31	3.09	0.000000	0.00	0.00	
1968 TO 2006	2006	107.92	0.000255	342.48	1.73	65.74	0.000235	221.31	3.09	0.000000	0.00	0.00	
1967 TO 2006	2006	107.89	0.000255	342.48	1.73	65.73	0.000235	221.37	3.09	0.000000	0.00	0.00	
1966 TO 2006	2006	107.88	0.000255	342.51	1.73	65.73	0.000235	221.47	3.09	0.000000	0.00	0.00	
1965 TO 2006	2006	107.83	0.000255	342.66	1.73	65.70	0.000235	221.54	3.09	0.000000	0.00	0.00	
1964 TO 2006	2006	107.79	0.000255	342.80	1.73	65.68	0.000235	221.62	3.09	0.000000	0.00	0.00	
1963 TO 2006	2006	107.74	0.000255	342.95	1.73	65.65	0.000235	221.62	3.09	0.000000	0.00	0.00	
1962 TO 2006	2006	107.72	0.000256	343.01	1.73	65.64	0.000235	220.16	3.09	0.000000	0.00	0.00	
1961 TO 2006	2006	107.71	0.000256	343.04	1.73	65.62	0.000235	220.19	3.09	0.000000	0.00	0.00	
1960 TO 2006	2006	107.72	0.000256	343.03	1.73	65.61	0.000235	220.23	3.08	0.000000	0.00	0.00	
1959 TO 2006	2006	107.72	0.000256	343.15	1.73	65.60	0.000235	220.26	3.08	0.000000	0.00	0.00	
1958 TO 2006	2006	107.68	0.000256	343.14	1.73	65.60	0.000235	220.28	3.08	0.000000	0.00	0.00	
1957 TO 2006	2006	107.63	0.000256	343.31	1.73	65.58	0.000235	220.34	3.08	0.000000	0.00	0.00	
1956 TO 2006	2006	107.63	0.000256	343.40	1.73	65.57	0.000235	220.36	3.08	0.000000	0.00	0.00	
1955 TO 2006	2006	107.58	0.000256	343.47	1.73	65.57	0.000235	220.38	3.08	0.000000	0.00	0.00	
1954 TO 2006	2006	107.57	0.000255	343.51	1.73	65.57	0.000234	220.38	3.08	0.000000	0.00	0.00	

ORANGE AND ROCKLAND UTILITIES INC. MORTALITY STUDY BY LEAST SQUARE FITTING OF WEIGHTED RETIREMENT RATIOS  
 ACCOUNT 1369200 SERVICES UNDERGROUND PSC CASE 1 ORANGE AND ROCKLAND UTILITIES INC STUDY NO. 2006

SUMMARY OF SHRINKING BANDS

YEAR	YEAR	FIRST DEGREE			SECOND DEGREE			THIRD DEGREE				
		AVERAGE SERVICE LIFE (YEARS)	FIT INDEX	TERMINAL A/L RATIO (PERCENT)	EQUIV. H CURVE	AVERAGE SERVICE LIFE (YEARS)	FIT INDEX	TERMINAL A/L RATIO (PERCENT)	EQUIV. H CURVE	AVERAGE SERVICE LIFE (YEARS)	FIT INDEX	TERMINAL A/L RATIO (PERCENT)
1953 TO 2006	107.52	0.000255	342.73	1.73	65.56	0.000234	220.40	3.08	0.00	0.000000	0.00	0.00
1952 TO 2006	107.52	0.000255	342.74	1.73	65.56	0.000234	220.41	3.08	0.00	0.000000	0.00	0.00

ORANGE AND ROCKLAND UTILITIES INC. MORTALITY STUDY BY LEAST SQUARE FITTING OF WEIGHTED RETIREMENT RATIOS  
 PSC CASE 1 ORANGE AND ROCKLAND UTILITIES INC STUDY NO. 2006  
 ACCOUNT 1370100 METERS

YEAR	YEAR	FIRST DEGREE				SECOND DEGREE				THIRD DEGREE			
		AVERAGE SERVICE LIFE (YEARS)	FIT INDEX	TERMINAL A/L RATIO (PERCENT)	EQUIV. H CURVE	AVERAGE SERVICE LIFE (YEARS)	FIT INDEX	TERMINAL A/L RATIO (PERCENT)	EQUIV. H CURVE	AVERAGE SERVICE LIFE (YEARS)	FIT INDEX	TERMINAL A/L RATIO (PERCENT)	EQUIV. H CURVE
1952 TO 1961	26.74	0.002458	312.29	2.13	28.35	0.002102	234.53	2.60	0.000000	0.000000	0.00	0.00	
1952 TO 1962	26.64	0.002459	305.95	2.17	28.50	0.002124	229.81	2.70	0.000000	0.000000	0.00	0.00	
1954 TO 1963	26.17	0.002457	307.57	2.20	28.06	0.002120	233.46	2.72	0.000000	0.000000	0.00	0.00	
1955 TO 1964	26.24	0.002487	302.96	2.24	28.27	0.002154	228.16	2.82	0.000000	0.000000	0.00	0.00	
1956 TO 1965	26.57	0.002355	302.93	2.24	28.34	0.002114	234.62	2.78	0.000000	0.000000	0.00	0.00	
1957 TO 1966	26.48	0.002308	300.27	2.25	27.98	0.002144	237.71	2.72	0.000000	0.000000	0.00	0.00	
1958 TO 1967	26.97	0.002280	302.23	2.26	28.18	0.002186	243.12	2.67	0.000000	0.000000	0.00	0.00	
1959 TO 1968	27.54	0.002232	303.24	2.24	28.36	0.002205	252.10	2.57	0.000000	0.000000	0.00	0.00	
1960 TO 1969	28.62	0.002103	305.78	2.19	29.02	0.002119	267.06	2.42	0.000000	0.000000	0.00	0.00	
1961 TO 1970	30.36	0.002038	311.23	2.14	30.50	0.002062	277.03	2.32	0.000000	0.000000	0.00	0.00	
1962 TO 1971	32.58	0.001849	314.64	2.10	32.54	0.001870	290.44	2.21	0.000000	0.000000	0.00	0.00	
1963 TO 1972	34.44	0.001719	320.82	2.02	0.00	0.000000	0.00	0.00	0.000000	0.000000	0.00	0.00	
1964 TO 1973	36.18	0.001498	327.56	1.92	0.00	0.000000	0.00	0.00	0.000000	0.000000	0.00	0.00	
1965 TO 1974	38.24	0.001273	330.84	1.87	0.00	0.000000	0.00	0.00	0.000000	0.000000	0.00	0.00	
1966 TO 1975	40.59	0.001052	336.32	1.81	0.00	0.000000	0.00	0.00	0.000000	0.000000	0.00	0.00	
1967 TO 1976	43.92	0.000813	344.91	1.70	0.00	0.000000	0.00	0.00	0.000000	0.000000	0.00	0.00	
1968 TO 1977	47.68	0.000650	351.30	1.61	0.00	0.000000	0.00	0.00	0.000000	0.000000	0.00	0.00	
1969 TO 1978	52.01	0.000512	358.61	1.52	0.00	0.000000	0.00	0.00	0.000000	0.000000	0.00	0.00	
1970 TO 1979	56.91	0.000428	362.85	1.47	0.00	0.000000	0.00	0.00	0.000000	0.000000	0.00	0.00	
1971 TO 1980	59.38	0.000375	359.53	1.51	0.00	0.000000	0.00	0.00	0.000000	0.000000	0.00	0.00	
1972 TO 1981	64.48	0.000323	363.66	1.47	0.00	0.000000	0.00	0.00	0.000000	0.000000	0.00	0.00	
1973 TO 1982	72.64	0.000254	364.12	1.46	0.00	0.000000	0.00	0.00	0.000000	0.000000	0.00	0.00	
1974 TO 1983	86.88	0.000192	366.61	1.43	0.00	0.000000	0.00	0.00	0.000000	0.000000	0.00	0.00	
1975 TO 1984	100.36	0.000147	372.14	1.37	0.00	0.000000	0.00	0.00	0.000000	0.000000	0.00	0.00	
1976 TO 1985	88.00	0.000210	368.73	1.40	0.00	0.000000	0.00	0.00	0.000000	0.000000	0.00	0.00	
1977 TO 1986	85.75	0.000270	363.25	1.48	78.23	0.000271	297.19	1.84	0.000000	0.000000	0.00	0.00	
1978 TO 1987	86.03	0.000270	367.90	1.42	76.81	0.000270	290.98	1.86	0.000000	0.000000	0.00	0.00	
1979 TO 1988	88.29	0.000248	369.80	1.40	77.46	0.000247	285.96	1.89	0.000000	0.000000	0.00	0.00	
1980 TO 1989	42.92	0.002566	422.88	0.84	39.37	0.002556	290.84	1.43	0.000000	0.000000	0.00	0.00	
1981 TO 1990	43.71	0.002374	422.14	0.85	40.07	0.002365	290.72	1.45	0.000000	0.000000	0.00	0.00	
1982 TO 1991	43.55	0.002082	425.94	0.81	39.99	0.002069	293.81	1.40	0.000000	0.000000	0.00	0.00	
1983 TO 1992	38.03	0.002458	429.89	0.77	0.00	0.000000	0.00	0.00	37.98	0.002485	396.27	0.80	
1984 TO 1993	38.42	0.002358	430.78	0.76	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00	
1985 TO 1994	38.92	0.002200	435.50	0.74	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00	
1986 TO 1995	39.86	0.002001	455.32	0.56	39.36	0.002011	415.41	0.68	0.00	0.000000	0.00	0.00	
1987 TO 1996	40.44	0.001904	466.16	0.45	39.69	0.001914	411.94	0.63	0.00	0.000000	0.00	0.00	
1988 TO 1997	40.70	0.001748	470.46	0.43	40.04	0.001757	418.35	0.58	0.00	0.000000	0.00	0.00	
1989 TO 1998	41.01	0.001689	474.23	0.39	40.12	0.001697	410.05	0.59	0.00	0.000000	0.00	0.00	
1990 TO 1999	54.18	0.001125	473.43	0.40	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00	
1991 TO 2000	55.42	0.000999	484.47	0.31	0.00	0.000000	0.00	0.00	117.56	0.001004	315.16	-2.60	
1992 TO 2001	57.01	0.000986	502.57	0.15	0.00	0.000000	0.00	0.00	62.40	0.000987	300.46	0.24	
1993 TO 2002	51.54	0.000539	497.68	0.20	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00	
1994 TO 2003	48.92	0.000512	505.93	0.12	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00	
1995 TO 2004	24.47	0.002292	361.67	1.47	24.45	0.002303	353.76	1.45	0.00	0.000000	0.00	0.00	
1996 TO 2005	23.44	0.002268	369.05	1.38	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00	
1997 TO 2006	21.53	0.002303	392.49	1.11	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00	

ORANGE AND ROCKLAND UTILITIES INC. MORTALITY STUDY BY LEAST SQUARE FITTING OF WEIGHTED RETIREMENT RATIOS  
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ACCOUNT 1370100 METERS

YEAR	YEAR	AVERAGE SERVICE LIFE (YEARS)	FIRST DEGREE			SECOND DEGREE			THIRD DEGREE			
			FIT INDEX	TERMINAL A/L RATIO (PERCENT)	EQUIV. H CURVE	AVERAGE SERVICE LIFE (YEARS)	FIT INDEX	TERMINAL A/L RATIO (PERCENT)	EQUIV. H CURVE	AVERAGE SERVICE LIFE (YEARS)	FIT INDEX	TERMINAL A/L RATIO (PERCENT)
2006	TO 2006	15.27	0.004853	684.51	-1.40	0.00	0.000000	0.00	16.11	0.004224	561.78	-2.60
2005	TO 2006	17.49	0.003384	597.51	-0.65	0.00	0.000000	0.00	18.25	0.002941	512.31	-2.00
2004	TO 2006	13.83	0.006453	343.36	1.67	13.62	0.006412	348.85	0.00	0.000000	0.00	0.00
2003	TO 2006	15.33	0.004941	361.97	1.39	15.29	0.004962	363.00	0.00	0.000000	0.00	0.00
2002	TO 2006	16.06	0.004048	382.94	1.19	0.00	0.000000	0.00	0.00	0.000000	0.00	0.00
2001	TO 2006	17.42	0.003537	393.21	1.13	0.00	0.000000	0.00	0.00	0.000000	0.00	0.00
2000	TO 2006	18.75	0.003099	391.97	1.13	0.00	0.000000	0.00	0.00	0.000000	0.00	0.00
1999	TO 2006	19.63	0.002845	394.86	1.08	0.00	0.000000	0.00	0.00	0.000000	0.00	0.00
1998	TO 2006	20.65	0.002537	394.59	1.10	0.00	0.000000	0.00	0.00	0.000000	0.00	0.00
1997	TO 2006	21.53	0.002303	392.49	1.11	0.00	0.000000	0.00	0.00	0.000000	0.00	0.00
1996	TO 2006	22.25	0.002098	393.24	1.11	0.00	0.000000	0.00	0.00	0.000000	0.00	0.00
1995	TO 2006	22.81	0.001937	396.76	1.08	0.00	0.000000	0.00	0.00	0.000000	0.00	0.00
1994	TO 2006	23.47	0.001822	394.09	1.10	0.00	0.000000	0.00	0.00	0.000000	0.00	0.00
1993	TO 2006	24.07	0.001738	392.64	1.12	24.07	0.001746	392.66	0.00	0.000000	0.00	0.00
1992	TO 2006	24.08	0.001705	396.56	1.09	0.00	0.000000	0.00	0.00	0.000000	0.00	0.00
1991	TO 2006	24.53	0.001638	393.37	1.10	0.00	0.000000	0.00	0.00	0.000000	0.00	0.00
1990	TO 2006	25.01	0.001573	393.86	1.12	0.00	0.000000	0.00	0.00	0.000000	0.00	0.00
1989	TO 2006	24.15	0.001586	403.66	1.03	24.15	0.001594	399.57	0.00	0.000000	0.00	0.00
1988	TO 2006	24.61	0.001536	400.29	1.04	24.60	0.001544	396.30	0.00	0.000000	0.00	0.00
1987	TO 2006	24.99	0.001494	398.13	1.06	24.99	0.001501	394.23	0.00	0.000000	0.00	0.00
1986	TO 2006	25.34	0.001459	396.67	1.07	25.33	0.001466	392.84	0.00	0.000000	0.00	0.00
1985	TO 2006	25.61	0.001433	396.31	1.08	25.60	0.001439	388.65	0.00	0.000000	0.00	0.00
1984	TO 2006	25.92	0.001408	395.46	1.10	25.91	0.001414	387.92	0.00	0.000000	0.00	0.00
1983	TO 2006	26.21	0.001384	394.83	1.11	26.20	0.001390	383.61	0.00	0.000000	0.00	0.00
1982	TO 2006	26.48	0.001355	394.62	1.12	26.46	0.001360	379.80	0.00	0.000000	0.00	0.00
1981	TO 2006	26.73	0.001334	390.96	1.12	26.70	0.001338	380.09	0.00	0.000000	0.00	0.00
1980	TO 2006	26.94	0.001318	391.67	1.13	26.91	0.001322	377.23	0.00	0.000000	0.00	0.00
1979	TO 2006	27.13	0.001295	392.57	1.14	27.10	0.001298	374.60	0.00	0.000000	0.00	0.00
1978	TO 2006	27.30	0.001280	390.15	1.15	27.26	0.001283	372.34	0.00	0.000000	0.00	0.00
1977	TO 2006	27.46	0.001267	387.90	1.16	27.42	0.001270	370.23	0.00	0.000000	0.00	0.00
1976	TO 2006	27.56	0.001255	390.03	1.17	27.52	0.001257	368.82	0.00	0.000000	0.00	0.00
1975	TO 2006	27.67	0.001242	388.48	1.17	27.63	0.001245	367.37	0.00	0.000000	0.00	0.00
1974	TO 2006	27.76	0.001229	387.27	1.18	27.71	0.001232	369.84	0.00	0.000000	0.00	0.00
1973	TO 2006	27.82	0.001221	386.45	1.19	27.77	0.001224	369.05	0.00	0.000000	0.00	0.00
1972	TO 2006	27.88	0.001211	385.53	1.19	27.84	0.001214	368.18	0.00	0.000000	0.00	0.00
1971	TO 2006	27.97	0.001202	384.32	1.20	27.93	0.001204	367.03	0.00	0.000000	0.00	0.00
1970	TO 2006	28.04	0.001194	383.45	1.21	28.04	0.001196	366.21	0.00	0.000000	0.00	0.00
1969	TO 2006	28.09	0.001187	382.75	1.21	28.09	0.001189	365.54	0.00	0.000000	0.00	0.00
1968	TO 2006	28.13	0.001180	382.18	1.22	28.08	0.001182	364.98	0.00	0.000000	0.00	0.00
1967	TO 2006	28.17	0.001174	381.60	1.23	28.13	0.001177	364.42	0.00	0.000000	0.00	0.00
1966	TO 2006	28.18	0.001167	381.50	1.23	28.14	0.001170	364.30	0.00	0.000000	0.00	0.00
1965	TO 2006	28.20	0.001162	381.20	1.24	28.16	0.001165	364.00	0.00	0.000000	0.00	0.00
1964	TO 2006	28.21	0.001156	381.13	1.25	28.17	0.001159	363.91	0.00	0.000000	0.00	0.00
1963	TO 2006	28.21	0.001151	381.06	1.26	28.17	0.001154	363.84	0.00	0.000000	0.00	0.00
1962	TO 2006	28.22	0.001146	380.99	1.26	28.18	0.001149	363.76	0.00	0.000000	0.00	0.00
1961	TO 2006	28.22	0.001144	377.45	1.27	28.18	0.001147	363.76	0.00	0.000000	0.00	0.00
1960	TO 2006	28.20	0.001143	377.62	1.27	28.17	0.001146	363.92	0.00	0.000000	0.00	0.00
1959	TO 2006	28.20	0.001142	377.66	1.28	28.16	0.001145	363.95	0.00	0.000000	0.00	0.00
1958	TO 2006	28.20	0.001140	377.61	1.28	28.17	0.001140	360.29	0.00	0.000000	0.00	0.00
1957	TO 2006	28.21	0.001137	377.54	1.29	28.17	0.001136	360.33	0.00	0.000000	0.00	0.00
1956	TO 2006	28.21	0.001134	377.59	1.29	28.17	0.001135	360.39	0.00	0.000000	0.00	0.00
1955	TO 2006	28.20	0.001133	377.66	1.29	28.16	0.001133	360.39	0.00	0.000000	0.00	0.00
1954	TO 2006	28.19	0.001130	377.84	1.29	28.15	0.001133	360.56	0.00	0.000000	0.00	0.00

ORANGE AND ROCKLAND UTILITIES INC. MORTALITY STUDY BY LEAST SQUARE FITTING OF WEIGHTED RETIREMENT RATIOS  
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SUMMARY OF SHRINKING BANDS

YEAR	YEAR	FIRST DEGREE				SECOND DEGREE				THIRD DEGREE			
		AVERAGE SERVICE LIFE (YEARS)	FIT INDEX	TERMINAL A/L RATIO (PERCENT)	EQUIV. H CURVE	AVERAGE SERVICE LIFE (YEARS)	FIT INDEX	TERMINAL A/L RATIO (PERCENT)	EQUIV. H CURVE	AVERAGE SERVICE LIFE (YEARS)	FIT INDEX	TERMINAL A/L RATIO (PERCENT)	EQUIV. H CURVE
1953 TO 2006	28.20	0.001128	377.70	1.29	28.16	0.001131	360.42	1.31	0.00	0.000000	0.00	0.00	
1952 TO 2006	28.19	0.001126	377.74	1.29	28.16	0.001129	360.46	1.31	0.00	0.000000	0.00	0.00	



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ACCOUNT 1373000 STREET LIGHTING

SUMMARY OF ROLLING BANDS

YEAR	FIRST DEGREE				SECOND DEGREE				THIRD DEGREE			
	AVERAGE SERVICE LIFE (YEARS)	FIT INDEX	TERMINAL A/L RATIO (PERCENT)	EQUIV. H CURVE	AVERAGE SERVICE LIFE (YEARS)	FIT INDEX	TERMINAL A/L RATIO (PERCENT)	EQUIV. H CURVE	AVERAGE SERVICE LIFE (YEARS)	FIT INDEX	TERMINAL A/L RATIO (PERCENT)	EQUIV. H CURVE
1952 TO 1961	18.64	0.003380	474.71	0.38	0.00	0.000000	0.00	0.00	16.71	0.002806	457.91	0.26
1953 TO 1962	17.36	0.003663	452.21	0.55	0.00	0.000000	0.00	0.00	15.54	0.003050	472.94	0.59
1954 TO 1963	16.68	0.003855	440.75	0.68	0.00	0.000000	0.00	0.00	15.12	0.003375	479.64	0.80
1955 TO 1964	16.02	0.003680	421.46	0.81	0.00	0.000000	0.00	0.00	14.81	0.003284	516.63	1.00
1956 TO 1965	12.73	0.004289	498.76	0.14	0.00	0.000000	0.00	0.00	11.84	0.003604	586.95	0.64
1957 TO 1966	11.44	0.003477	572.48	-0.40	0.00	0.000000	0.00	0.00	10.83	0.002779	632.24	0.15
1958 TO 1967	10.87	0.003856	547.21	-0.26	0.00	0.000000	0.00	0.00	10.34	0.002976	633.31	0.37
1959 TO 1968	11.26	0.003720	528.23	-0.04	0.00	0.000000	0.00	0.00	10.75	0.003055	618.57	0.46
1960 TO 1969	11.78	0.003446	504.90	0.15	0.00	0.000000	0.00	0.00	11.33	0.003033	604.60	0.51
1961 TO 1970	11.97	0.003447	480.25	0.31	0.00	0.000000	0.00	0.00	11.62	0.003187	555.29	0.59
1962 TO 1971	12.62	0.003086	463.49	0.43	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1963 TO 1972	12.59	0.004534	448.69	0.60	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1964 TO 1973	13.36	0.004161	445.49	0.62	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1965 TO 1974	13.69	0.003241	449.34	0.58	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1966 TO 1975	15.76	0.002583	428.20	0.80	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1967 TO 1976	17.68	0.002360	398.80	1.03	17.69	0.002375	387.20	1.04	0.00	0.000000	0.00	0.00
1968 TO 1977	19.80	0.002330	411.58	0.93	19.71	0.002328	372.83	1.00	0.00	0.000000	0.00	0.00
1969 TO 1978	20.76	0.002191	421.39	0.84	20.38	0.002130	345.94	1.01	0.00	0.000000	0.00	0.00
1970 TO 1979	21.50	0.002173	434.79	0.73	20.71	0.002072	335.59	1.00	0.00	0.000000	0.00	0.00
1971 TO 1980	23.88	0.001978	475.22	0.37	22.14	0.001887	324.69	0.88	0.00	0.000000	0.00	0.00
1972 TO 1981	25.36	0.001765	506.62	-2.60	22.64	0.001890	322.137	0.65	0.00	0.000000	0.00	0.00
1973 TO 1982	31.89	0.001107	782.37	-2.60	24.04	0.000816	333.18	0.48	0.00	0.000000	0.00	0.00
1974 TO 1983	0.00	0.000000	0.00	0.00	24.16	0.000816	365.41	0.09	0.00	0.000000	0.00	0.00
1975 TO 1984	0.00	0.000000	0.00	0.00	27.50	0.000690	369.68	-0.01	0.00	0.000000	0.00	0.00
1976 TO 1985	0.00	0.000000	0.00	0.00	28.54	0.000644	399.25	-0.51	33.50	0.000623	347.79	-0.16
1977 TO 1986	0.00	0.000000	0.00	0.00	34.69	0.000619	409.64	-0.81	33.42	0.000640	339.60	-0.26
1978 TO 1987	0.00	0.000000	0.00	0.00	35.28	0.000636	456.87	-2.60	35.79	0.000617	325.54	-0.56
1979 TO 1988	0.00	0.000000	0.00	0.00	45.42	0.000614	0.00	0.00	38.43	0.000547	282.31	-0.41
1980 TO 1989	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00	38.00	0.000499	296.09	-0.62
1981 TO 1990	0.00	0.000000	0.00	0.00	171.88	0.000505	231.85	-2.60	38.06	0.000492	285.10	-0.43
1982 TO 1991	0.00	0.000000	0.00	0.00	178.57	0.000504	223.16	-2.60	39.96	0.000497	281.52	-0.24
1983 TO 1992	0.00	0.000000	0.00	0.00	185.72	0.000506	214.58	-2.60	39.88	0.000489	277.08	-0.10
1984 TO 1993	0.00	0.000000	0.00	0.00	186.49	0.000500	213.69	-2.60	40.10	0.000447	285.56	-0.14
1985 TO 1994	0.00	0.000000	0.00	0.00	115.20	0.000456	309.47	-2.60	42.84	0.000391	269.59	0.05
1986 TO 1995	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00	42.84	0.000352	262.62	0.08
1987 TO 1996	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00	43.98	0.000352	245.70	0.45
1988 TO 1997	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00	49.04	0.000273	232.11	0.69
1989 TO 1998	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00	55.36	0.000220	225.59	0.84
1990 TO 1999	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00	66.71	0.000167	209.94	1.22
1991 TO 2000	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00	72.64	0.000145	204.30	1.41
1992 TO 2001	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00	81.01	0.000155	198.43	1.42
1993 TO 2002	0.00	0.000000	0.00	0.00	294.20	0.000000	135.45	1.36	146.90	0.000000	0.00	0.00
1994 TO 2003	0.00	0.000000	0.00	0.00	163.99	0.000116	218.01	1.61	0.00	0.000000	0.00	0.00
1995 TO 2004	0.00	0.000000	0.00	0.00	113.28	0.000087	233.49	1.83	0.00	0.000000	0.00	0.00
1996 TO 2005	0.00	0.000000	0.00	0.00	101.40	0.000104	233.23	1.98	0.00	0.000000	0.00	0.00
1997 TO 2006	0.00	0.000000	0.00	0.00	79.65	0.000648	256.76	1.83	63.17	0.000642	190.76	2.52

ORANGE AND ROCKLAND UTILITIES INC. MORTALITY STUDY BY LEAST SQUARE FITTING OF WEIGHTED RETIREMENT RATIOS  
 PSC CASE 1 ORANGE AND ROCKLAND UTILITIES INC STUDY NO 2006

ACCOUNT 1373000 STREET LIGHTING

SUMMARY OF SHRINKING BANDS

YEAR	YEAR	FIRST DEGREE				SECOND DEGREE				THIRD DEGREE			
		AVERAGE SERVICE LIFE (YEARS)	FIT INDEX	TERMINAL A/L RATIO (PERCENT)	EQUIV. H CURVE	AVERAGE SERVICE LIFE (YEARS)	FIT INDEX	TERMINAL A/L RATIO (PERCENT)	EQUIV. H CURVE	AVERAGE SERVICE LIFE (YEARS)	FIT INDEX	TERMINAL A/L RATIO (PERCENT)	EQUIV. H CURVE
2006 TO 2006		47.28	0.005851	392.35	1.14	0.00	0.000000	0.00	0.00	41.30	0.005797	202.20	1.96
2005 TO 2006		63.83	0.002962	406.56	1.00	0.00	0.000000	0.00	0.00	49.58	0.002945	190.59	2.30
2004 TO 2006		79.31	0.002029	444.45	0.65	68.58	0.002041	315.68	1.29	53.41	0.002025	190.55	2.36
2003 TO 2006		90.57	0.001539	439.99	0.60	77.00	0.001549	317.52	1.29	56.35	0.001534	187.23	2.46
2002 TO 2006		98.67	0.001249	403.87	0.49	79.18	0.001256	304.98	1.36	58.08	0.001245	190.27	2.44
2001 TO 2006		114.87	0.001062	346.91	0.17	79.72	0.001068	286.62	1.49	59.34	0.001058	189.59	2.44
2000 TO 2006		124.90	0.000896	319.05	0.16	81.37	0.000900	278.36	1.59	60.72	0.000890	188.56	2.50
1999 TO 2006		142.83	0.000792	279.00	0.00	79.55	0.000794	265.87	1.72	61.78	0.000787	190.19	2.50
1998 TO 2006		169.73	0.000714	234.78	-0.12	78.86	0.000715	259.33	1.78	62.42	0.000709	191.45	2.48
1997 TO 2006		0.00	0.000000	0.00	0.00	79.65	0.000648	256.76	1.83	63.17	0.000642	190.76	2.52
1996 TO 2006		0.00	0.000000	0.00	0.00	77.98	0.000600	255.84	1.78	62.87	0.000595	193.27	2.39
1995 TO 2006		0.00	0.000000	0.00	0.00	78.78	0.000557	259.58	1.68	62.54	0.000551	195.87	2.29
1994 TO 2006		0.00	0.000000	0.00	0.00	77.51	0.000528	267.70	1.44	61.00	0.000523	202.47	2.04
1993 TO 2006		0.00	0.000000	0.00	0.00	77.88	0.000513	275.43	1.24	59.65	0.000507	207.04	1.87
1992 TO 2006		0.00	0.000000	0.00	0.00	77.76	0.000497	278.43	1.10	57.72	0.000472	212.24	1.65
1991 TO 2006		0.00	0.000000	0.00	0.00	77.92	0.000480	281.69	0.99	55.77	0.000456	218.97	1.49
1990 TO 2006		0.00	0.000000	0.00	0.00	72.70	0.000461	279.96	0.93	55.77	0.000446	221.46	1.40
1989 TO 2006		0.00	0.000000	0.00	0.00	70.19	0.000452	280.16	0.82	54.93	0.000441	226.67	1.29
1988 TO 2006		0.00	0.000000	0.00	0.00	67.64	0.000445	280.16	0.72	54.22	0.000434	231.45	1.16
1987 TO 2006		0.00	0.000000	0.00	0.00	66.08	0.000438	283.74	0.70	54.67	0.000425	231.40	1.17
1986 TO 2006		0.00	0.000000	0.00	0.00	65.28	0.000428	284.16	0.67	54.28	0.000417	234.90	1.11
1985 TO 2006		0.00	0.000000	0.00	0.00	65.58	0.000420	284.16	0.67	54.28	0.000417	234.90	1.11
1984 TO 2006		0.00	0.000000	0.00	0.00	66.49	0.000419	286.51	0.58	53.44	0.000415	234.82	1.08
1983 TO 2006		0.00	0.000000	0.00	0.00	66.83	0.000421	289.53	0.48	52.25	0.000415	234.43	1.04
1982 TO 2006		0.00	0.000000	0.00	0.00	69.48	0.000413	292.88	0.30	50.99	0.000403	234.38	0.97
1981 TO 2006		0.00	0.000000	0.00	0.00	70.66	0.000408	293.67	0.23	50.74	0.000396	233.56	0.95
1980 TO 2006		0.00	0.000000	0.00	0.00	71.20	0.000408	292.85	0.19	50.33	0.000395	233.47	0.93
1979 TO 2006		0.00	0.000000	0.00	0.00	70.45	0.000405	295.94	0.16	49.99	0.000392	235.06	0.91
1978 TO 2006		0.00	0.000000	0.00	0.00	67.95	0.000405	296.52	0.18	49.69	0.000392	236.45	0.89
1977 TO 2006		0.00	0.000000	0.00	0.00	67.40	0.000404	297.46	0.15	49.56	0.000392	237.06	0.86
1976 TO 2006		0.00	0.000000	0.00	0.00	63.97	0.000400	297.78	0.18	49.21	0.000390	240.80	0.82
1975 TO 2006		0.00	0.000000	0.00	0.00	62.95	0.000395	297.84	0.18	49.04	0.000386	241.62	0.80
1974 TO 2006		0.00	0.000000	0.00	0.00	57.05	0.000414	298.84	0.26	46.60	0.000398	241.39	0.82
1973 TO 2006		0.00	0.000000	0.00	0.00	62.53	0.000411	300.18	0.23	46.51	0.000393	239.72	0.83
1972 TO 2006		0.00	0.000000	0.00	0.00	63.50	0.000456	311.05	-0.05	45.76	0.000431	239.28	0.80
1971 TO 2006		0.00	0.000000	0.00	0.00	62.35	0.000453	312.60	-0.11	45.49	0.000424	238.50	0.81
1970 TO 2006		0.00	0.000000	0.00	0.00	62.14	0.000460	316.74	-0.15	44.61	0.000427	236.47	0.81
1969 TO 2006		0.00	0.000000	0.00	0.00	63.60	0.000461	317.82	-0.17	44.44	0.000422	237.37	0.81
1968 TO 2006		0.00	0.000000	0.00	0.00	61.53	0.000473	319.96	-0.23	44.39	0.000420	237.68	0.81
1967 TO 2006		0.00	0.000000	0.00	0.00	54.99	0.000483	324.26	-0.33	43.15	0.000421	237.52	0.78
1966 TO 2006		0.00	0.000000	0.00	0.00	51.52	0.000499	322.78	-0.23	42.13	0.000436	243.28	0.66
1965 TO 2006		0.00	0.000000	0.00	0.00	49.83	0.000496	323.16	-0.28	40.98	0.000453	247.67	0.54
1964 TO 2006		0.00	0.000000	0.00	0.00	48.25	0.000504	324.09	-0.24	40.51	0.000449	248.12	0.53
1963 TO 2006		0.00	0.000000	0.00	0.00	46.60	0.000519	326.44	-0.21	39.96	0.000453	249.02	0.54
1962 TO 2006		0.00	0.000000	0.00	0.00	45.24	0.000530	327.26	-0.16	39.34	0.000466	250.36	0.54
1961 TO 2006		0.00	0.000000	0.00	0.00	44.76	0.000527	328.87	-0.16	38.90	0.000472	250.66	0.54
1959 TO 2006		0.00	0.000000	0.00	0.00	44.55	0.000531	330.44	-0.15	38.69	0.000469	251.39	0.54
1958 TO 2006		0.00	0.000000	0.00	0.00	44.31	0.000530	331.77	-0.15	38.49	0.000472	253.95	0.53
1957 TO 2006		0.00	0.000000	0.00	0.00	43.61	0.000531	333.34	-0.14	38.39	0.000470	254.96	0.53
1956 TO 2006		0.00	0.000000	0.00	0.00	43.42	0.000530	335.13	-0.15	38.24	0.000473	257.26	0.51
1955 TO 2006		0.00	0.000000	0.00	0.00	43.49	0.000530	339.73	-0.17	37.80	0.000473	257.96	0.50
1954 TO 2006		0.00	0.000000	0.00	0.00	43.49	0.000530	339.13	-0.18	37.81	0.000473	257.86	0.50

ORANGE AND ROCKLAND UTILITIES INC. MORTALITY STUDY BY LEAST SQUARE FITTING OF WEIGHTED RETIREMENT RATIOS  
 ACCOUNT 1373000 STREET LIGHTING PSC CASE 1 ORANGE AND ROCKLAND UTILITIES INC STUDY NO 2006

SUMMARY OF SHRINKING BANDS

YEAR	YEAR	FIRST DEGREE			SECOND DEGREE			THIRD DEGREE					
		AVERAGE SERVICE LIFE (YEARS)	FIT INDEX	TERMINAL A/L RATIO (PERCENT)	EQUIV. H CURVE	AVERAGE SERVICE LIFE (YEARS)	FIT INDEX	TERMINAL A/L RATIO (PERCENT)	EQUIV. H CURVE	AVERAGE SERVICE LIFE (YEARS)	FIT INDEX	TERMINAL A/L RATIO (PERCENT)	EQUIV. H CURVE
1953 TO 2006	1953 TO 2006	0.00	0.000000	0.00	0.00	43.53	0.000530	341.15	-0.19	37.80	0.000473	257.91	0.50
1952 TO 2006	1952 TO 2006	0.00	0.000000	0.00	0.00	43.52	0.000530	341.22	-0.18	37.81	0.000473	257.87	0.50

**PCL&P DIRECT INSTALL WEATHERIZATION PROGRAM****PROGRAM TYPE: ENERGY AUDIT/DIRECT INSTALL****ELIGIBLE CUSTOMERS: LIHEAP CUSTOMERS****ELIGIBLE MEASURES: CFLS, WEATHERIZATION MEASURES, APPLIANCES****PROGRAM DESCRIPTION**

The PCL&P Direct Install Weatherization Program ("Program") is designed to provide customers eligible for the Low-Income Home Energy Assistance Program ("LIHEAP") with energy efficiency measures at no cost to such customers. Participants will be provided with an energy assessment of their home and direct installation of cost effective energy savings measures. Over a three-year period, PCL&P will provide approximately \$1,000 per household to install the recommended measures that may include: CFLs, weather stripping, caulking, low flow water control devices, insulated wrapping for water pipes, water heaters and furnaces, window and door replacement, appliance replacement including refrigerators and air conditioning units, and other reasonable and industry standard measures needed to practice energy efficiency in the home. Eligible homes will be evaluated on an individual basis to determine which measures are most suitable for their needs. In addition, PCL&P will provide energy education information to help participants manage their home energy use more effectively.

**PROGRAM OBJECTIVE**

The Program will assist low-income customers to manage their energy needs by installing recommended cost effective energy efficiency measures and educating them about energy efficient behaviors they can adopt. By installing these measures free of charge, PCL&P will remove an apparent market barrier for low-income customers and enable them to participate in energy savings' actions.

**IMPLEMENTATION PLAN**

Upon approval by the Pennsylvania Public Utility Commission, PCL&P will initiate an aggressive marketing program to the targeted low-income customers. Letters describing the benefits of participating in the Program will be sent to all LIHEAP eligible customers. In addition, PCL&P's new customer publication, @Your Service, will feature articles about the Program. The Program will be funded at \$105,000 and operate for three years on a first-come, first-served basis. PCL&P will hire a contractor to perform home evaluations and provide the direct install measures.

<b>EVALUATION PLAN</b>
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Customer satisfaction will be measured by means of a customer survey form that will be circulated after completion of direct install measures at each home. Results may be used to modify and improve the Program. A minimum of 10% of randomly selected participants will be subject to verification and inspection by PCL&P.

<b>PARTICIPATION AND BUDGET</b>
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PARTICIPANT GOAL	90
BUDGET:	
ADMINISTRATION	9,000
MARKETING	5,000
IMPLEMENTATION	90,000
EVALUATION	1,000
<i>TOTAL BUDGET:</i>	<b>\$105,000</b>