

STATE OF NEW YORK DEPARTMENT OF PUBLIC SERVICE

THREE EMPIRE STATE PLAZA, ALBANY, NY 12223-1350

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March 15, 2004

ORIGINAL FILES
C 03-G-1671 FINAL
COPY TO:
ALJ BOUTELLER

VIA HAND DELIVERY

Hon. Jaclyn A. Brillling
Secretary
New York State Public Service Commission
Three Empire State Plaza
Albany, NY 12223-1350

Re: Case 03-G-1671 – Consolidated Edison Company of New York, Inc. – Gas Rates.
Case 03-S-1672 – Consolidated Edison Company of New York, Inc. – Steam Rates.

Dear Secretary Brillling:

Enclosed please find an original and five copies of the Department of Public Service Staff's pre-filed direct testimony in the above-entitled proceedings. Department Staff is filing the following testimony:

<u>Witness</u>	<u>Case(s)</u>	<u>Topic(s)</u>
Accounting & Finance Panel	Gas/Steam	accounting, O&M, and rate issues
Allen	Steam	sales forecast
Daniel	Gas	revenue requirement
Depreciation Panel	Gas	depreciation
Downs/Scott	Gas	capital and O&M adjustments
Hogan	Gas/Steam	capital structure, cost of capital
Insogna	Gas	customer service performance mechanism, outreach and education, service fees, low-income program
Kotula/Padula	Steam	capital and O&M adjustments
Munnely/Evensen/Desai/Raichel	Gas	gas safety, capital and O&M adjustments, WTC amortization
Reliability Panel	Gas	balancing, cash-out and reliability
Retail Access Panel	Gas	retail access, outreach and education, migration and market

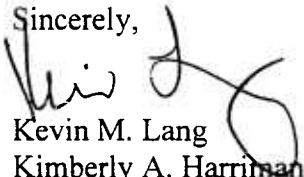
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Hon. Jaclyn A. Brillling
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Rieder	Steam	depreciation
Romaine	Steam	revenue requirement
Van Cook	Steam	revenues, rate design, ERRP costs and rate treatment, other steam issues
Wade/Salony	Gas	sales forecast, revenues, rate design, LAUF, other gas issues

Copies of this testimony are being delivered to Administrative Law Judge Bouteiller and sent via overnight courier to all of the active parties to both cases, today.

Sincerely,



Kevin M. Lang
Kimberly A. Harriman
Assistant Counsels

Enclosures

cc: Administrative Law Judge William Bouteiller (w/ enc.)
Parties to Case 03-G-1671 (w/ enc.)
Parties to Case 03-S-1672 (w/ enc.)

BEFORE THE
STATE OF NEW YORK
PUBLIC SERVICE COMMISSION

In the Matter of
CONSOLIDATED EDISON COMPANY OF NEW YORK, INC.

Case 03-S-1672

MARCH 2004

Prepared Testimony of:

Steven Van Cook
Utility Engineer 3
Office of Electricity and
Environment
State of New York
Department of Public Service
One Penn Plaza
New York City, New York 10119

BEFORE THE
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Steven Van Cook
Utility Engineer 3
Office of Electricity and
Environment
State of New York
Department of Public Service
One Penn Plaza
New York City, New York 10119

1 Q. Please state your name and business address.

2 A. My name is Steven Van Cook and my business address is One
3 Penn Plaza, New York, New York.

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

5 A. I am employed by the New York State Department of Public
6 Service as a Utility Engineer 3.

7 Q. Briefly state your educational background and professional
8 experience.

9 A. I received a Bachelor of Engineering Degree in Electrical
10 and Electronic Engineering from the State University of New
11 York at Stony Brook in June 1977. I joined the Department
12 in March 1978 and am currently assigned to the Office of
13 Electricity and Environment.

14 While with the Department, I have prepared, analyzed,
15 and reviewed reports and studies involving the original
16 cost of utility property, operating revenues, sales
17 forecasts, operation and maintenance expenses, marginal and
18 embedded cost studies, rate designs as well as additions
19 and retirements to utility plant. I have also prepared
20 studies in connection with depreciation of water utility
21 property. Finally, I have investigated complaints and
22 responded to inquiries from customers, elected officials,
23 and the general public.

24 Q. Have you testified previously before the Public Service
25 Commission?

26 A. Yes, on numerous occasions. I have proffered testimony in
27 water, gas, electric, and steam proceedings on topics

1 ranging from rate design, cost allocation, utility
2 operating revenue, operating and construction budgets, and
3 adequacy of service. Most recently I proffered testimony
4 in the electric proceeding that supported the equalization
5 of electric delivery rates in New York City and Westchester
6 County.

7 Q. Have you also proffered testimony before the New York State
8 Board on Electric Generation Siting and the Environment?

9 A. Yes, I have proffered testimony in Case 99-F-1314, which
10 was Consolidated Edison Company of New York, Inc.'s
11 (hereinafter referred to as Con Edison or the Company)
12 application for a Certificate of Environmental
13 Compatibility to Repower The East River Generating
14 Facility. My testimony in that proceeding addressed the
15 viability of alternative proposals to the East River
16 Repowering Project (ERRP).

17 Q. What is the scope of your testimony in this proceeding?

18 A. My testimony will address staff's position regarding the
19 steam rate design proposed by the Company, Staff's proposal
20 to modify the existing steam variance incentive mechanism,
21 Staff's recommended ratemaking treatment for costs and
22 related credits associated with the ERRP, and the
23 allocation of ERRP costs between the steam and electric
24 departments. Additionally, I will comment on the Company's
25 steam resource plan and have also computed the priceout of
26 Staff Witness Edith Allen's normalized sales forecast.

STEAM RATE DESIGN1
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Q. Please describe the rationale used by the Company to justify the proposed steam rate design.

A. Company Witness Andrew L. Jacob attempts to link the existing rate structure to Con Edison's inability to achieve steam earnings of the magnitude approved in the Company's most recently concluded steam rate case. To resolve this alleged deficiency in the ratemaking process, Witness Jacob concludes that the existing steam rate structure needs to be redesigned, as described by the Company's Steam Rate Panel or, in the alternative, that a real-time Weather Normalization Clause (WNC), as described by Company Witness Frank C. Yaegel, should be implemented.

Q. Does Staff agree with Witness Jacob's conclusion?

A. Staff does not acknowledge that there is any link between rate design and earnings. Con Edison's steam rates, as well as all other utility rates in New York, have been designed to provide the Company with an opportunity to recover costs and earn a fair return on equity. There are no guarantees in utility ratemaking with regard to earnings. Staff contends that the Company's inability to achieve its desired earnings is due to factors other than rate design, such as loss of business and the economy. Therefore, Staff is not supporting the Company's proposal to redesign the existing rate structure for the reasons stated by Witness Jacob.

Q. Does Staff support the Company's alternative to implement a

1 WNC?

2 A. In theory, Staff believes implementation of a WNC will
3 reduce the volatility in weather-related revenues from year
4 to year. However, the Company has failed to provide an
5 adequate description of how the WNC will function. Witness
6 Yaegel provides a general outline of the proposed WNC but
7 does not adequately explain the mechanics involved. For
8 example, the description of how the unit credit/charge
9 would be computed is inadequate. Additionally, there is no
10 analysis of how variations in weather and the economy would
11 impact on revenues.

12 Q. What is Staff's position regarding the Company's proposed
13 steam rate design?

14 A. Staff is opposed to the Company's proposals to implement an
15 Access Charge and drastically reduce the Usage Rate
16 applicable to SC 2 (Annual Power Service) and SC 3
17 (Apartment House Service) customers. Staff is also opposed
18 to the Company's proposals to (1) eliminate language in the
19 tariff regarding the "Annual Credit Adjustment" dealing
20 with the incentive mechanism that caps fuel costs
21 associated with losses, and (2) add language to the tariff
22 that would credit customers for each month that ERRP is not
23 in commercial operation. I will explain why Staff opposes
24 each of these matters later in my testimony.

25 With the exception of the above, Staff believes that
26 most of the other aspects of the Company's steam rate
27 design proposal are reasonable.

1 Q. What aspects of the Company's rate design proposal are
2 reasonable?

3 A. Staff believes the following aspects of the Company's
4 overall rate design proposal to be reasonable:

5 (1) The revenue allocation methodology to distribute
6 the rate increase among the various service
7 classifications, including the roll-in to base rates of
8 State Income Taxes;

9 (2) The increase to the monthly customer charge for SC
10 1, 2, 3, and 4 by the overall percent increase in pure base
11 revenues;

12 (3) The methodology used for the general design of the
13 rates in SC 1 (General Service) and SC 4 (Backup Service);

14 (4) The proposal to implement a steam demand charge
15 for SC 2 and 3, subject to modifications described below;
16 and,

17 (5) The following other tariff changes as described by
18 the Steam Rate Panel: the elimination of SC 6 -
19 Transportation Service, the proposed changes to provisions
20 of Steam Repair Service, the proposed change to the method
21 for "Prepayment for Extension or Reinforcement of Mains",
22 and the implementation of Rider E - Negotiated Steam Fuel
23 Cost.

24 Q. What is Staff's concern regarding the Company's rate design
25 proposal for SC 2 and 3?

26 A. As previously mentioned, Staff is opposed to the proposals
27 to drastically reduce the volumetric usage rate and

1 implement an access charge.

2 Q. What is Staff's concern regarding the reduction in the
3 Usage Rate for SC 2 and 3?

4 A. The existing usage rate for both SC 2 and 3 is comprised of
5 a multi-block rate format whereby the volumetric rate
6 varies as monthly usage increases. For comparison
7 purposes, the average usage rate during the winter season
8 in the test period amounted to \$13.61 per 1,000 pounds
9 (Mlbs) for SC 2 and \$11.87/Mlbs for SC 3. Under the
10 Company's proposal, the usage rate for all steam usage in
11 both service classifications would be set at \$6.708/Mlbs of
12 steam. Staff believes this to be too drastic a reduction
13 in the usage rate.

14 Q. What are Staff's concerns regarding the proposed access
15 charge?

16 A. Staff has several concerns. First, the proposed access
17 charge was developed as an alternative to recovering costs
18 through the usage charge. Simply put, the access charge
19 assigns a revenue value to each customer based on
20 normalized test period usage. Second, there is no
21 provision for the assigned revenue value to be updated from
22 time to time. Therefore, customers would be required to
23 pay a set amount each year based on past usage regardless
24 of their actual usage. Third, Staff does not believe this
25 to be a reasonable form of billing. Fourth, the method
26 used to compute the Access Charge does not properly align
27 cost causation with recovery. Con Edison's steam system

1 experiences peaks during weekday mornings in the winter
2 heating season. The system has been designed and is
3 maintained in order to meet the peaks. However, these
4 peaks do not occur very often. Therefore, for the greater
5 part of the year a large portion of the steam system is
6 unused. The costs associated with this unused plant should
7 be recovered from the customers that contribute to the
8 peak. The Access Charge, as proposed, does not accomplish
9 this. Rather, at best, the Access Charge would recover
10 these costs from customers who contributed revenues during
11 the test period, regardless of the customers' contribution
12 to the peak.

13 Q. Please continue.

14 A. Without the Access Charge, the Company's proposal to lower
15 the Usage Rate cannot be implemented. Therefore, Staff
16 recommends that the existing multiple rate block structure
17 remain in effect and winter rates be raised on a percent
18 across-the-board basis to produce any revenue deficiency
19 that remains for SC 2 and 3 after the customer charge is
20 increased. SC 2 and 3 summer rates would remain unchanged
21 since peaks occur during the winter.

22 Q. Previously, you mentioned that Staff believes that the
23 implementation of the proposed demand charge is reasonable
24 subject to modifications. Why is implementation of the
25 demand charge reasonable?

26 A. The demand charge would properly recover costs from
27 customers that contribute to peaks.

1 Q. When should the demand charge be implemented?

2 A. In order to implement the demand charge, the Company is in
3 the process of installing remote meter capability to the
4 185 largest SC 2 and 3 customers. Installation is
5 anticipated to be completed by October 2004. Staff
6 recommends that during the winter period of 2004/5, the
7 Company monitor the demand of the 185 largest customers.
8 Staff further recommends that the Company be directed to
9 file, in the spring of 2005, a demand charge proposal to
10 become effective in October 2005, subject to Commission
11 approval. The demand charge proposal should be revenue-
12 neutral based on load data obtained during the winter
13 period of 2004/5. A collaborative process involving
14 interested parties would then be established to review the
15 appropriateness of the demand charge proposal.

16 As a result, consideration of the specific demand
17 charge proposal would occur beyond the scope of Staff's
18 one-year rate plan and no action on the demand charge needs
19 to be taken at this time other than require the Company to
20 submit a filing. Additionally, Staff recommends that Con
21 Edison also be directed to address in the demand charge
22 filing the proposed modifications described below.

23 Q. Please describe Staff's proposed modifications to the
24 demand charge.

25 A. Without an Access Fee, implementation of a revenue-neutral
26 demand charge would require a reduction in the usage rate.
27 However, Staff believes the proposal to reduce the usage

1 rate to Company's proposed \$6.708/Mlb for all steam usage
2 would be too drastic a reduction. Staff prefers a three-
3 year phase-in to gradually reduce the usage rate and
4 recommends the Company be required to address a phase-in at
5 the time the demand charge is filed. The reduction in the
6 usage rate would only be applicable to those customers
7 being billed a demand charge.

8 Additionally, Staff recommends that, as part of the
9 demand charge filing, the Company also be required to
10 address a 24-month ratchet mechanism for determining a
11 customer's contract demand. Staff believes this is
12 necessary so that the customer's bill would increase or
13 decrease to reflect a corresponding change to the
14 customer's contribution to seasonal peaks.

15 Staff also recommends that the Company review the
16 actual costs of remote metering to determine if it would be
17 practical to expand the remote metering program to allow
18 for more SC 2 and 3 customers to be billed under the demand
19 charge. To this end, Staff recommends the Company submit a
20 report at the time the proposed demand charge is filed in
21 the spring of 2005 as to the feasibility of expanding the
22 demand billing program.

23 STEAM VARIANCE INCENTIVE MECHANISM

- 24 Q. Please describe the existing steam variance incentive
25 mechanism.
- 26 A. If the steam variance (i.e., the difference between company
27 sendout, including purchases, and customer usage) for the

1 twelve month period ending September 30 for each year
2 exceeds 13.5% of sendout, Con Edison must refund over the
3 next twelve months through the steam Fuel Adjustment Charge
4 (FAC) the fuel costs associated with the variance in excess
5 of 13.5%.

6 Q. What is the purpose of the mechanism?

7 A. To provide an economic incentive to Con Edison to keep
8 losses to a minimum.

9 Q. Does Staff recommend retaining the mechanism?

10 A. Yes. However, the mechanism should be modified so that the
11 annual adjustment credit associated with excessive variance
12 is not based on a percentage of sendout. At the end of
13 each twelve month period ending September 30, actual
14 volumetric losses should be compared to a set volumetric
15 target.

16 Q. What amount of losses should be set as the target?

17 A. Company Witness Dr. Bahman Litkouhi developed a
18 mathematical model to determine that absolute steam system
19 line losses for the rate year will amount to 4,430,000
20 Mlbs. Staff accepts this amount as a reasonable estimate
21 of steam variance for the rate year and recommends that it
22 be used as the volumetric target.

23 Q. How will the variations between actual annual losses and
24 the set annual target be addressed?

25 A. At the conclusion of the twelve month period ending
26 September 30, if actual annual losses exceed the annual
27 target value of 4,430,000 Mlbs, Con Edison will be required

1 to refund to customers over the following twelve months,
2 through the FAC, an amount equal to the losses in excess of
3 the target multiplied by the average cost of fuel for the
4 most recent twelve month period ending September 30.

5 Q. What should be the term of Staff's modified steam variance
6 incentive mechanism?

7 A. The mechanism should begin in October 2004 and remain in
8 effect until otherwise ordered by the Commission.

9 Q. Should Con Edison be directed to update its steam tariff
10 schedule to reflect Staff's proposed modification to the
11 steam variance incentive mechanism?

12 A. Yes. If the Commission adopts Staff's proposed
13 modification, Con Edison should be directed to update
14 Section VII, Provision E, of its steam tariff schedule to
15 reflect Staff's modification to the steam variance
16 incentive mechanism.

17 EAST RIVER REPOWERING PROJECT

18 Q. Please describe the ERRP.

19 A. Con Edison is installing a state-of-the-art steam and
20 electric facility in the unused section of the existing
21 East River generating facility. When completed, the steam
22 output of ERRP will displace the steam output of Con
23 Edison's Waterside generating facility, which is located
24 about a mile from the East River plant, allowing for the
25 retirement and sale of Waterside. Additionally, the
26 electric capacity from ERRP will be available to meet loads
27 in the Company's East River load pocket.

1 Q. What are the projected capital costs for ERRP and when is
2 ERRP expected to be in commercial operation?

3 A. Company Witness Victor Gonnella testifies that the capital
4 costs to construct ERRP are currently expected to amount to
5 approximately \$670 million. While Witness Gonnella
6 testifies that ERRP will be in commercial operation in the
7 last quarter of 2004, the Company has subsequently stated
8 that there is some uncertainty as to exactly when ERRP will
9 go into commercial operation.

10 Q. How much did the Company originally estimate ERRP would
11 cost and when was it expected to be in commercial
12 operation?

13 A. In 1999, Con Edison originally estimated that ERRP would
14 cost \$360 million (including \$60 million for
15 interconnections) and be in commercial operation by April
16 2002.

17 Q. Has Con Edison included ERRP costs and related credits in
18 base steam rates for the rate year in this proceeding?

19 A. Yes. Although the Company admits that ERRP will not be in
20 commercial operation prior to the rate year, Con Edison
21 proposes to include the capital costs in steam base rates
22 as if ERRP was in commercial operation prior to the rate
23 year. To correct for this mismatch, Con Edison proposes to
24 refund, through the monthly steam FAC, the equivalent
25 monthly revenue requirement associated with including the
26 costs of ERRP and related credits in base rates until such
27 time as ERRP goes into commercial operation.

1 Q. Does Staff agree with the ratemaking approach regarding
2 ERRP proposed by the Company?

3 A. No. Staff believes that no costs associated with ERRP be
4 included in steam revenue requirement for the rate year in
5 this proceeding. Rather, Staff recommends that ERRP costs
6 and related credits be recovered through the FAC beginning
7 in the first month after ERRP goes into commercial
8 operation.

9 Q. Would Con Edison be required to update its tariff to
10 effectuate Staff's recommended ratemaking treatment for
11 ERRP?

12 A. No. The existing language set forth in Section VII,
13 Provision D, of Con Edison steam tariff schedule is
14 sufficient to effectuate Staff's recommended ratemaking
15 treatment for ERRP. In Case 99-S-1621, the Commission
16 authorized Con Edison to implement this provision of the
17 steam tariff based on the anticipation that ERRP would be
18 in commercial operation prior to the expiration of the
19 current four-year steam rate plan. If ERRP had gone into
20 commercial operation when anticipated, Con Edison would
21 have been reflecting ERRP costs and related credits in the
22 monthly FAC statements since May 2002.

23 Q. What is the impact on base rates of ERRP not being in
24 commercial operation prior to the end of the rate year?

25 A. According to Company Witness Edward J. Rasmussen's Exhibit
26 ___ (EJR-1), the revenue requirement relating to the fixed
27 costs of ERRP amount to \$114 million in the rate year.

1 Offsetting this amount would be \$76 million in
2 interdepartmental rents charged to the electric department.
3 Variable O&M would increase by \$3 million. Therefore, the
4 net impact would be a \$35 million decrease in base revenue
5 requirement.

6 ALLOCATION OF ERRP COSTS

7 Q. Does the Company propose to implement an interdepartmental
8 rent designed to recover some costs of ERRP from electric
9 ratepayers?

10 A. Yes.

11 Q. How was the interdepartmental rent to be charged to the
12 electric department computed?

13 A. The Company is proposing that all of the components of ERRP
14 that are used to generate electricity be allocated to
15 electric, which amounts to about 67% of the projected
16 costs.

17 Q. How is Con Edison proposing to recover the
18 interdepartmental rent?

19 A. Con Edison is proposing to pass-through the
20 interdepartmental rate to electric ratepayers through the
21 electric Monthly Adjustment Charge (MAC).

22 Q. How is Con Edison proposing to treat sales of electricity
23 from ERRP?

24 A. Con Edison proposes to apply 100% of the benefits
25 associated with sales of electricity to electric
26 ratepayers. As with the interdepartmental rent, the
27 Company is proposing to flow-through the benefit from the

1 sale of the electric output from ERRP through the MAC.

2 Q. Does Staff agree with the proposed methodology used by the
3 Company to allocate ERRP costs between steam and electric?

4 A. Yes. The proposed allocation methodology is consistent
5 with previous rulings made the Commission regarding the
6 allocation of costs at steam-electric generating
7 facilities.

8 Q. Does Staff agree with the Company's proposal to flow-
9 through interdepartmental rent and benefits from the sale
10 of the electric output of ERRP through the MAC?

11 A. Yes, but only as a temporary placeholder from the time ERRP
12 goes into commercial operation until such time as the
13 Commission subsequently adjusts electric rates. The MAC is
14 designed for the Company to recover stranded electric
15 generation costs. Staff does not categorize ERRP as a
16 stranded cost and thus, recovery of the interdepartmental
17 rent and distribution of benefits may be more appropriately
18 recovered through some other mechanism than the MAC. This
19 issue is more suitable to be addressed in an electric
20 proceeding and, accordingly, Staff believes any further
21 discussion of the issue be tabled until Con Edison files
22 its next major electric case which is expected in the
23 spring of 2004.

24 STEAM RESOURCE PLAN

25 Q. What is the general purpose of the Steam Resource Plan?

26 A. Generally, the Steam Resource Plan ensures that Con Edison
27 will have adequate steam capacity and efficiently operating

1 plants.

2 Q. In Case 99-S-1621, did the Commission direct Con Edison to
3 study any specific items as part of the Steam Resource
4 Plan?

5 Q. Specifically, the Commission directed Con Edison to study
6 whether installing new steam or steam-electric generation
7 at the East 74th Street, West 59th Street, and Hudson Avenue
8 plants will result in operating efficiencies. A
9 collaborative Study Group of interested parties was
10 assembled to provide input and monitor the study. Company
11 Witness Rick Shansky describes in his testimony the results
12 of the study to date.

13 Q. Should Con Edison continue to seek ways to improve the
14 operating efficiencies of its steam plants?

15 A. Yes. However, due to the statutory time restraints
16 associated with a rate proceeding, it would not be
17 appropriate to consider steam resource planning within the
18 scope of this rate proceeding. Con Edison should continue
19 to work with the Study Group to investigate and develop
20 methods of achieving operational efficiencies.

21 PRICEOUT OF NORMALIZED SALES

22 Q. Did Staff Witness Edith Allen provide you with a normalized
23 steam sales forecast for the rate year?

24 A. Yes. Witness Allen provided me with a normalized rate year
25 steam sales forecast of 25,560,000 Mlbs, or an adjustment
26 of 395,000 Mlbs greater than the normalized sales forecast
27 supported by Company Witness Yaegel.

1 Q. Sales to which service classifications are affected by
2 Staff's sales adjustment?

3 A. As shown on Exhibit ____ (SVC-1), sales to SC 1, 2, and 3
4 have been adjusted upward by 23,000, 361,000, and 11,000
5 Mlbs, respectively.

6 Q. What is the impact of Staff's normalization adjustment on
7 rate year revenues?

8 A. Base revenues will increase by approximately \$6.9 million,
9 but will be offset by increased fuel, O&M, tax expenses of
10 approximately \$2.5 million for a net adjustment of
11 approximately \$4.4 million.

12 Q. Does this conclude your testimony?

13 A. Yes.

BEFORE THE
STATE OF NEW YORK
PUBLIC SERVICE COMMISSION

In the Matter of
CONSOLIDATED EDISON COMPANY OF NEW YORK, INC.

Case 03-G-1671

MARCH 2004

Prepared Testimony of:

Claude P. Daniel
Public Utilities Auditor II
Office of Accounting and Finance
State of New York
Department of Public Service
One Penn Plaza
New York, New York 10119

1 Q. Please state your name and business address.

2 A. My name is Claude Daniel, and my business
3 address is One Penn Plaza, New York, New York
4 10119.

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

6 A. I am employed by the New York State Department
7 of Public Service as a Public Utilities Auditor
8 II.

9 Q. Please describe your academic and professional
10 background.

11 A. I graduated from Hunter College of the City
12 University of New York with a Bachelor degree in
13 Accounting in 1986. I joined the Department of
14 Public Service in 1986 and was assigned to the
15 Audit Section of the Office of Accounting and
16 Finance. As a Public Utilities Auditor II, I
17 routinely examine accounts, records,
18 documentation, policies, and procedures of
19 regulated utilities.

20 Q. Have you previously testified before the New
21 York State Public Service Commission?

22 A. Yes, I have prepared cost of service exhibits
23 and sponsored various operation and maintenance
24 expense adjustments in previous Con Edison

1 electric and steam rate cases. I have also
2 testified in a New York Telephone Company rate
3 case on earning base capitalization.

4 Q. What is your responsibility in this case?

5 A. In addition to reviewing certain areas of the
6 Consolidated Edison Company of New York, Inc.'s
7 gas rate filing for accuracy and reasonableness,
8 I have prepared Staff's recommended revenue
9 requirement and income statement for
10 Consolidated Edison Company of New York, Inc.'s
11 gas business for the rate year October 1, 2004
12 through September 30, 2005. This information is
13 set forth in Exhibit __ (CD-1).

14 Q. What is Staff's recommendation?

15 A. Staff recommends no base rate increase for the
16 rate year. In computing Staff's revenue
17 requirement, I have employed the cost of capital
18 developed by Staff witness Hogan and compiled
19 the recommendations of other Staff witnesses,
20 summarizing their total effect.

21 Q. Please describe your exhibit.

22 A. Exhibit __ (CD-1) consists of eight schedules
23 showing Staff's proposed revenue requirement.
24 Schedule 1 is a projection by Staff of gas

1 operating income, rate base and rate of return
2 for the twelve months ending September 30, 2005.
3 This schedule is supported by Schedules 2
4 through 8.

5 Q. Please describe the format of Schedule 1.

6 A. Column 1 of Schedule 1 contains income
7 statement, rate base and rate of return figures
8 as filed by the company for the rate year,
9 twelve months ending September 30, 2005, without
10 a revenue increase. Column 2 contains
11 references to the supporting schedules which
12 present the Staff adjustments set forth in
13 column 3. Column 4 presents Staff's projected
14 rate year figures unadjusted for a revenue
15 increase or decrease. Column 5 contains Staff's
16 potential change in revenues, and Column 6 is
17 the final income, rate base and rate of return
18 as projected for the rate year.

19 Q. Please continue describing your exhibit.

20 A. Schedule 2 projects operation and maintenance
21 expense cost elements for the rate year, other
22 than fuel and depreciation expense, which appear
23 on Schedule 1. Schedule 3 projects taxes other
24 than income taxes.

1 Q. Please continue.

2 A. Schedules 4 and 5 project New York State income
3 tax and Federal income tax expense,
4 respectively. The adjustments in these
5 schedules correspond primarily to adjustments
6 set forth in the other schedules. Additionally,
7 they reflect the interest deduction adjustment
8 that is proposed by the Accounting and Finance
9 Panel. Schedule 6 projects rate base for the
10 rate year ending September 30, 2005. Schedule 7
11 projects an allowance for cash working capital,
12 which is a component of rate base. Schedule 8
13 lists Staff's adjustments with their supporting
14 witnesses.

15 Q. Does this conclude your testimony at this time?

16 A. Yes, it does.

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In the Matter of
CONSOLIDATED EDISON COMPANY OF NEW YORK, INC.

Case 03-G-1671

MARCH 2004

Prepared Exhibit of:

Claude P. Daniel
Public Utilities Auditor II
Office of Accounting & Finance
State of New York
Department of Public Service
One Penn Plaza
New York, New York 10119

Consolidated Edison of New York, Inc
Gas Department
Staff Revenue Requirement
Operating Income, Rate Base & Rate of Return
For the Twelve Months Ending September 30, 2005
(\$000's)

	Rate Year			As Submitted by Staff	Revenue Increase/ (Decrease)	Rate Year Per Staff
	As Submitted by Company	Adj. No.	Staff Adjustments			
Sales Revenues	\$522,195	[1a]	\$18,496	\$540,691	(\$6)	\$540,685
Less Fuel	(1,781)			(1,781)		(1,781)
Less Other Fuel Charges				0		0
Less Gross Receipts Tax (GRT)	(19,850)	Sch 3	(703)	(20,553)	0	(20,553)
Other Revenues	56,405	[1b]	6,000	62,405		62,405
Net Revenues	<u>556,969</u>		<u>23,793</u>	<u>580,762</u>	<u>(6)</u>	<u>580,756</u>
Operations & Maintenance Expenses	225,450	Sch 2	(21,099)	204,351	0	204,351
Depreciation	72,833			72,833		72,833
Taxes Other Than Income Taxes & GRT	107,989	Sch 3	0	107,989	0	107,989
Total Deductions	<u>406,272</u>		<u>(21,099)</u>	<u>385,173</u>	<u>0</u>	<u>385,173</u>
Operating Income Before Income Taxes	<u>150,697</u>		<u>44,892</u>	<u>195,589</u>	<u>(6)</u>	<u>195,583</u>
Federal Income Tax	29,483	Sch 5	13,213	42,695	(2)	42,694
New York State Income Taxes	<u>6,881</u>	Sch 4	<u>3,145</u>	<u>10,026</u>	<u>(0)</u>	<u>10,025</u>
Utility Operating Income	<u>\$114,333</u>		<u>\$28,534</u>	<u>\$142,867</u>	<u>(\$3)</u>	<u>\$142,864</u>
Rate Base	<u>\$1,953,756</u>	Sch 6	<u>(\$56,498)</u>	<u>\$1,897,258</u>		<u>\$1,897,258</u>
Overall Rate of Return	<u>5.85%</u>			<u>7.53%</u>		<u>7.53%</u>

Consolidated Edison of New York, Inc
Gas Department
Staff Revenue Requirement
Operations & Maintenance Expenses
For the Twelve Months Ending September 30, 2005
(\$000's)

Exhibit_(CD-1)
Schedule 2

	As Submitted by <u>Company</u>	Adj. <u>No.</u>	Staff <u>Adjustments</u>	As Submitted by <u>Staff</u>	Revenue Increase/ <u>(Decrease)</u>	Rate Year <u>Per Staff</u>
A&G Expenses Capitalized	(\$1,894)			(\$1,894)		(\$1,894)
Bank Collection Fees	17			17		17
Central Engineering	0			0		0
Collection Agency Fees	426			426		426
Communications - Tel.	1,427			1,427		1,427
Company Labor	95,068	[2]	2,737	97,805		97,805
Uncollectibles	5,207	[1c]	87	5,294	0	5,294
Consultants	845			845		845
Contract Labor	5,356	[3]	(1,513)	3,843		3,843
Disposal of Obsolete M&S	7			7		7
Duplicate Misc. Charges	(726)			(726)		(726)
EDP Equipment Rentals & Maintenance	574			574		574
Electric and Gas Use	468			468		468
Employee Pension/OPEBs-Net	(148)	[4]	(8,352)	(8,500)		(8,500)
Employee Welfare Expense-Net	18,018	[5]	(3,193)	14,825		14,825
Environmental Affairs-Central Services	779			779		779
Executive Incentives Plan						
Financial Services	594			594		594
Gas Leaks	9,730			9,730		9,730
Gas Incentives	1,470			1,470		1,470
Security	2,887			2,887		2,887
Informational Advertising	1,121			1,121		1,121
Information Resources	1,553			1,553		1,553
Injuries and Damages	9,457			9,457		9,457
Institutional Dues & Subscriptions	739			739		739
Insurance Premiums	7,610	[6]	(981)	6,629		6,629
Interference	14,013	[7]	(2,985)	11,028		11,028
Low Income Program	0	[8]	500	500		500
Manhour Labor	7,553			7,553		7,553
Marshall's Fees	225			225		225
Material and Supplies	838			838		838
MGP/Superfund	5,166	[9]	(4,356)	810		810
New York Facilities	7,706			7,706		7,706
Outside Legal Services	93			93		93
Paving	786			786		786
Postage	2,591			2,591		2,591
Promotional Advertising	(24)			(24)		(24)
RC Actg: Cust Outr, Ret Choice, Virtual Storage	1,600	[10]	660	2,260		2,260
RC Actg: Interference	0			0		0
RC Actg: Union Contract Agreement	0			0		0
Real Estate Expenses	418			418		418
Regulatory Commission Expenses	4,720			4,720		4,720
Rents	600			600		600
Rents - Interdepartmental	4			4		4
Research and Development	3,776			3,776		3,776
RC Actg: Amort Costs of Merger	0			0		0
Shared Services	(826)	[11]	99	(727)		(727)
Trenching	1,159			1,159		1,159
Other	10,665			10,665		10,665
RC adj: Recovery def.WTC costs	3,802	[12]	(3,802)	0		0
Total O & M Expenses	<u>\$225,450</u>		<u>(\$21,099)</u>	<u>\$204,351</u>	<u>\$0</u>	<u>\$204,351</u>

Consolidated Edison of New York, Inc
 Gas Department
 Staff Revenue Requirement
 Taxes Other than Income Taxes
 For the Twelve Months Ending September 30, 2005
 (\$000's)

	As Submitted b Company	Adj. No.	Staff Adjustments	As Submitted by Staff	Revenue Increase/ (Decrease)	Rate Year Per Staff
Revenue Taxes	\$19,850	[13]	\$703	\$20,553	\$0	\$20,553
Subsidiary Capital Taxes	431			\$431		431
Sales & Use Taxes - NYS	3,177			3,177		3,177
Property Taxes	95,609			95,609		95,609
Payroll Taxes	7,757			7,757		7,757
All Other	<u>1,015</u>			<u>1,015</u>		<u>1,015</u>
Taxes Other Than Income Taxes	<u>\$127,839</u>		<u>\$703</u>	<u>\$128,542</u>	<u>\$0</u>	<u>\$128,542</u>
Less: Gross Receipts Taxes	<u>(19,850)</u>		<u>(703)</u>	<u>(20,553)</u>	<u>0</u>	<u>(20,553)</u>
Total Excluding GRT	<u>\$107,989</u>		<u>\$0</u>	<u>\$107,989</u>	<u>\$0</u>	<u>\$107,989</u>

Consolidated Edison of New York, Inc
Gas Department
Staff Revenue Requirement
New York State Income Taxes
For the Twelve Months Ending September 30, 2005
(\$000's)

Exhibit_(CD-1)
Schedule 4

	As Submitted by Company	Adj. No.	Staff Adjustments	As Submitted by Staff	Revenue Increase (Decrease)	Rate Year Per Staff
Operating Income Before Income Taxes	<u>\$150,697</u>		<u>\$44,892</u>	<u>\$195,589</u>	<u>(\$6)</u>	<u>\$195,583</u>
Deduct: Non Taxable Inc. & Add'l Deductions						
Interest Expense	(58,565)	[14]	(2,960)	(61,525)		(61,525)
Dividends Paid on Cumulative Stock	<u>(388)</u>			<u>(388)</u>		<u>(388)</u>
Total Deductions	<u>(58,953)</u>		<u>(2,960)</u>	<u>(61,913)</u>	<u>0</u>	<u>(61,913)</u>
Normalized Items:						
Add: Add'l Income & Unallowable Deducts Normal						0
Book Depreciation	72,833			72,833		72,833
Capitalized Interest	599			599		599
Contributions in Aid of Construction	(42)			(42)		(42)
MTA Surcharge-Book Basis	6,300			6,300		6,300
Unbilled Revenues	283			283		283
Previously Def WTC Expenses	3,802	[15]	(3,802)	0		0
Previously Def Property Taxes	<u>4,852</u>			<u>4,852</u>		<u>4,852</u>
Total Additions	<u>88,627</u>		<u>(3,802)</u>	<u>84,825</u>	<u>0</u>	<u>84,825</u>
Deduct: Non Taxable Inc. & Add'l Deductions						
NYS Depreciation	92,295			92,295		92,295
Removal Costs	4,592			4,592		4,592
Amortization of Capitalized interest	186			186		186
Fuel Cost Def From Current Period				0		0
Unbilled Revenues				0		0
Loss on MACRS Retirements	3,489			3,489		3,489
MTA Surcharge-Tax Basis	1,284			1,284		1,284
Westchester Prop. Tax Adjustment	271			271		271
Capitalized Overheads	28,655			28,655		28,655
Overcollection of Interference Expenses	7,296			7,296		7,296
Previously Deferred Late Payment Charges	1,575			1,575		1,575
Interest on Rate Case Deferrals	(81)			(81)		(81)
WTC Revenues	12,821			12,821		12,821
Excess WTC Revenues	<u>795</u>			<u>795</u>		<u>795</u>
Total Deductions	<u>153,178</u>		<u>0</u>	<u>153,178</u>	<u>0</u>	<u>153,178</u>
Taxable Income-New York State	<u>27,193</u>		<u>38,130</u>	<u>65,323</u>	<u>(6)</u>	<u>65,317</u>
Current New York State Income Tax @ 7.5%	\$2,039		\$2,860	\$4,899	(\$0)	\$4,899
Deferred New York State Income Tax	<u>4,841</u>		<u>285</u>	<u>5,126</u>	<u>0</u>	<u>5,126</u>
Total NY State Income Tax Expense	<u>\$6,881</u>		<u>\$3,145</u>	<u>\$10,026</u>	<u>(\$0)</u>	<u>\$10,025</u>

Consolidated Edison of New York, Inc
Gas Department
Staff Revenue Requirement
Federal Income Tax
For the Twelve Months Ending September 30, 2005
(\$000's)

Exhibit (CD-1)
Schedule 5

	As Submitted by <u>Company</u>	Adj. <u>No.</u>	Staff <u>Adjustments</u>	As Submitted by <u>Staff</u>	Revenue Increase <u>(Decrease)</u>	Rate Year <u>Per Staff</u>
Operating Income Before Income Taxes	\$150,697		\$44,892	195,589	(\$6)	\$195,583
New York State Income Taxes	6,881		3,145	10,026	0	10,025
Book Operating Income before FIT	<u>143,816</u>		<u>41,747</u>	<u>185,563</u>	<u>(6)</u>	<u>185,557</u>
Adjustments that Increase(Decrease)						
<u>Taxable Income</u>						
Book Depreciation	72,833			72,833	0	72,833
Capitalized Interest	190			190		190
Interest on Debt	(56,613)	[16]	(4,912)	(61,525)		(61,525)
Amort. Of Debt Discount & Exp.-Tax Basis	(883)	[17]	883	0		0
Statutory Depreciation	(45,357)			(45,357)		(45,357)
Removal Cost	(4,592)			(4,592)		(4,592)
Amort. Of Capitalized Interest	(53)			(53)		(53)
Westchester Property Tax Adjustment	(271)			(271)		(271)
Dividend Paid on \$5 Cumulative Preferred	(388)			(388)		(388)
Total Adjustments	<u>(35,134)</u>		<u>(4,029)</u>	<u>(39,163)</u>		<u>(39,163)</u>
<u>Normalized Items:</u>						
Add: Additional Income & Unallowable Deductions:						
Contribution in Aid of Construction	(42)			(42)		(42)
MTA Surcharge - Book Basis	6,300			6,300		6,300
Advance Refunding LT Debt - net	1,140	[18]	(1,140)	0		0
Capitalized Interest	409			409		409
Unbilled Revenues	283			283		283
Previously Deferred WTC Expenses	3,802	[19]	(3,802)	0		0
Previously Deferred Property Taxes	4,852			4,852		4,852
Deferred State Income Tax	4,842			4,842		4,842
Total Additions	<u>21,586</u>		<u>(4,942)</u>	<u>16,644</u>		<u>16,644</u>
Deduct: Non-Taxable Income & Other Deductions:						
Depreciation - ADR ACRS MACRS	52,965			52,965		52,965
Loss on ACRS/Macrs Retirements	3,488			3,488		3,488
MTA Surcharge - Tax Basis	1,284			1,284		1,284
Amortization of Capitalized Interest	133			133		133
Capitalized Overheads	28,655			28,655		28,655
Overcollection of Interference Expenses	7,296			7,296		7,296
Previously Deferred Late Payment Charges	1,575			1,575		1,575
Interest on Rate Case Deferrals	(81)			(81)		(81)
WTC Revenues	12,821			12,821		12,821
Excess WTC Revenues	795			795		795
Total Deductions	<u>108,931</u>		<u>0</u>	<u>108,931</u>		<u>108,931</u>
Total Adjustments to Book Income	<u>(122,479)</u>		<u>(8,971)</u>	<u>(131,450)</u>	<u>0</u>	<u>(131,450)</u>
Taxable Income	<u>21,337</u>		<u>32,776</u>	<u>54,113</u>	<u>(6)</u>	<u>54,107</u>
Federal Income Tax Expense						
Composite Rate per Company						
FIT Payable at 35%	<u>7,468</u>		<u>11,471</u>	<u>18,939</u>	<u>(2)</u>	<u>18,938</u>
<u>Deferred Income Tax :</u>						
Deferred FIT @ 35%	30,571		1,730	32,300	0	32,300
Depreciation-ADR/ACRS/MACRS	(5,364)			(5,364)		(5,364)
Advance Refunding LT Debt	(12)	[18]	12	0		0
Capitalized Overheads	(2,415)			(2,415)		(2,415)
Investment Tax Credit	(765)			(765)		(765)
Other	0		0	0		0
Total F.I.T. Expense Deferred :	<u>22,015</u>		<u>1,742</u>	<u>23,756</u>	<u>0</u>	<u>23,756</u>
Total F.I.T. Expense	<u>\$29,483</u>		<u>\$13,213</u>	<u>\$42,695</u>	<u>(\$2)</u>	<u>\$42,694</u>

Consolidated Edison of New York, Inc
Gas Department
Staff Revenue Requirement
Rate Base
For the Twelve Months Ending September 30, 2005
(\$000's)

Exhibit_(CD-1)
Schedule 6

	<u>As Submitted by Company</u>	<u>Adj. No.</u>	<u>Staff Adjustments</u>	<u>As Submitted by Staff</u>
Utility Plant:				
Book Cost of Plant	\$2,768,710	[19]	(\$331)	\$2,768,379
Accumulated Reserve for Depreciation	<u>(732,842)</u>			<u>(732,842)</u>
Net Plant	2,035,868		(331)	2,035,537
Non-Interest Bearing CWIP	82,686			82,686
Gas Stored Underground - Non-Current	1,239			1,239
Preferred Stock Expense	545			545
Unamortized Debt Discount/Premium/Expense	26,105			26,105
Customer Advances for Construction	(1,627)			(1,627)
MTA Surtax Net of FIT	2,344			2,344
Working Capital	127,505	Sch 7	(1,702)	125,803
Excess Rate Base Over Capitalization	11,871	[20]	(48,750)	(36,879)
Accrual for Unbilled Revenues	43,594			43,594
Honeoye Storage Corp.	838			838
Gas Interference Cost Sharing - Net of FIT	(7,594)			(7,594)
Prov For Refund-Net-Post Merger-Ben Net of FIT	(20)			(20)
Gas Divest Plants-Demand Charge incr. -Net of FIT	(17)			(17)
Amortization of O&R Merger Costs	0			0
Divestiture Misc - Net of FIT	(631)			(631)
Sale, Appropriation of Property	0			0
First Ave Sale-Land Structure Improv. - Net of FIT	4,584			4,584
First Ave. Sale-Asset Separation-Net of FIT	258			258
First Ave. Sale-Incremental Environ Exp-Net of FIT	155			155
<u>Rate Case Reconciliations - Net of FIT</u>				
Amortization of Overcoll of Interference Exp - Net	(10,967)			(10,967)
Amortization of Previously deferred LPS's - Net	(2,368)			(2,368)
Amortization of Interest on Rate Deferrals	124			124
Amortization of Excess WTC Revenues - Net	(1,194)			(1,194)
Recovery of WTC Expenses - Net	5,715	[21]	(5,715)	0
Refund of 2002 Gas Rate Plan Def, WTC Funding	(19,271)			(19,271)
Property Taxes Previously Deferred	7,294			7,294
<u>Accumulated Deferred FIT</u>				
ADR/ACRS/MACRS Deductions	(282,915)			(282,915)
Vested Vacation	2,537			2,537
Unbilled Revenues	11,539			11,539
Contributions in Aid of Construction	2,479			2,479
Capitalized Interest	102			102
Advanced Refunding of Mortgage Bonds	(88)			(88)
Change of Accounting Section 263 A	(78,853)			(78,853)
Call Premium	<u>(2,200)</u>			<u>(2,200)</u>
Rate Base - Subtotal	\$1,959,637		(\$56,498)	\$1,903,139
Deferred SIT	(9,052)			(9,052)
Deferred FIT on Deferred SIT	3,171			3,171
Rate Base - Total	<u>\$1,953,756</u>		<u>(\$56,498)</u>	<u>\$1,897,258</u>

Consolidated Edison of New York, Inc
 Gas Department
 Staff Revenue Requirement
 Working Capital Allowance
 For the Twelve Months Ending September 30, 2005
 (\$000's)

Exhibit_(CD-1)
 Schedule 7

	As Submitted by <u>Company</u>	Adj. <u>No.</u>	Staff <u>Adjustments</u>	As Submitted by <u>Staff</u>
<u>M & S</u>				
Average Balance of Gas Stored Underground	\$69,944			\$69,944
Average Ball of M&S excl. Gas in Storage	7,778			7,778
Total Inventories	<u>77,722</u>		<u>0</u>	<u>77,722</u>
<u>Prepayments</u>				
Insurance	3,767		(491)	3,277
Property Taxes	18,167			18,167
PSC Assessment	645			645
Other	331			331
Total Prepayments	<u>22,910</u>		<u>(491)</u>	<u>22,420</u>
<u>Cash Working Capital</u>				
Total Operation & Maintenance Expenses	\$797,402		(\$17,296)	780,106
Less: Purchased Gas	(575,755)			(575,755)
Recoverable Fuel Costs				
Interdepartmental Rents	(4)			(4)
Uncollectibles	(5,207)		(87)	(5,294)
Rate Case Reg Accounting	(1,600)		(660)	(2,260)
Pensions	148		8,352	8,500
Net	<u>214,984</u>		<u>(9,691)</u>	<u>205,293</u>
Cash Working Capital @ 1/8th	26,873		(1,211)	25,662
Cash Working Capital @ 1/12th on Recoverable Fuel	<u>0</u>		<u>0</u>	<u>0</u>
Total Cash Working Capital	<u>26,873</u>		<u>(1,211)</u>	<u>25,662</u>
Total Working Capital	<u>127,505</u>		<u>(1,702)</u>	<u>125,803</u>

Consolidated Edison of New York, Inc
 Gas Department
 Staff Revenue Requirement
 Explanation of Adjustments.
 For the Twelve Months Ending September 30, 2005
 (\$000's)

Adj. No.	<u>Explanation</u>	<u>Amount</u>
Revenues		
1a	To reflect staff sales forecasts. (Wade/Salony)	\$18,496
1b	To reflect imputation of Non-Firm Revenues. (Wade/Salony)	6,000
Operation & Maintenance Expenses		
1c	To reflect Uncollectibles related to the change in sales.	87
2	To eliminate new hires associated with Sarbannes-Oxley Act. (A&F Panel)	(136)
	To transfer Interference labor costs to Company Labor. (A&F Panel)	<u>2,873</u>
	Total Labor Adjustment	2,737
3	To reflect effects on Contract Labor of adjustments to proposed projects. (Gas Panel)	(1,513)
4	To reflect updated Pensions/OPEBs cost estimates. (A&F Panel)	(5,252)
	To reflect estimated OPEBs savings from the Medical Prescription Drug Improvement & Modernization Act of 2003. (A&F Panel)	<u>(3,100)</u>
	Total Employee Pensions/OPEBs.	(8,352)
5	To correct capitalization of Employee Welfare Expenses. (A&F Panel)	(1,989)
	To reflect use of general escalation rate vs. health care factor for medical costs. (A&F Panel)	(1,189)
	To reflect pension and employee welfare cost reductions. (A&F Panel)	<u>(15)</u>
	Total Employee Welfare Expenses	(3,193)
6	To reflect updated Insurance premiums. (A&F Panel)	(981)
7	To remove labor from Interference Costs. (A&F Panel)	(2,985)
8	To reflect Staff's level of Low income Program. (Insogna)	500
9	To reflect staff's estimated MGP/Superfund cost level. (A&F Panel)	(4,356)
10	To reflect Staff's Customer Outreach Program. (Retail Access Panel)	(340)
	To reflect the Retail Access Promotional Funding recommended. (Retail Access Panel)	<u>1,000</u>
		660
11	To reflect change in Shared Services related to updates in Insurance premium. (A&F Panel)	99
12	To reverse Company amortization of deferred WTC expenses. (Munnely, Evensen, et al.)	(3,802)

Other Taxes

13 To reflect Revenues Taxes on Staff Sales forecast. (Tracking Adjustment) \$703

State Income Tax

14 To adjust Interest expense for changes in cost of debt and rate base: (A&F Panel) (2,960)

15 To reflect effects of the WTC amortization reversal. (Munnely, Evensen, et al.) (3,802)

Federal Income Tax

16 To adjust Interest expense for cost of debt and exclusion of Dividend declared: (A&F Panel) (4,912)

17 To remove amortization of Debt Discount and Expense from computation. (A&F Panel) (883)

18 To remove Advance Refunding LT Debt from computation. (A&F Panel) (1,140)
To remove Deferred Advance Refunding LT. (Tracking Adjustment) (12)

19 To reflect effects of the WTC amortization reversal. (Tracking Adjustment) (3,802)

Rate Base

20 To reflect Staff's view on Capital Project # 5. (Munnely, Evensen, et al.) (331)

21 To reflect Staff's revision of prepaid pensions as a non-regulated asset. (A&F Panel) (48,750)

22 To reflect Staff's reversal of recovery of WTC expenses. (Munnely, Evensen, et al.) (5,715)

23 To reflect effect on Working Capital of change in Insurance Premiums. (A&F Panel) (491)

BEFORE THE
STATE OF NEW YORK
PUBLIC SERVICE COMMISSION

In the Matter of
CONSOLIDATED EDISON COMPANY of NEW YORK, INC.

Case 03-S-1672

MARCH 2004

Prepared Testimony of:

Mitchell Kotula
Utility Engineer 2
Office of Electricity and
Environment
State of New York
Department of Public Service
One Penn Plaza
New York City, New York 10119

Marco L. Padula
Utility Engineer 3
Office of Electricity and
Environment
State of New York
Department of Public Service
Three Empire State Plaza
Albany, New York 12223-1350

BEFORE THE
STATE OF NEW YORK
PUBLIC SERVICE COMMISSION

In the Matter of
CONSOLIDATED EDISON COMPANY of NEW YORK, INC.

Case 03-S-1672

MARCH 2004

Prepared Testimony of:

Mitchell Kotula
Utility Engineer 2
Office of Electricity and
Environment
State of New York
Department of Public Service
One Penn Plaza
New York City, New York 10119

Marco L. Padula
Utility Engineer 3
Office of Electricity and
Environment
State of New York
Department of Public Service
Three Empire State Plaza
Albany, New York 12223-1350

- 1 Q. Mr. Kotula, please state your full name and
2 business address.
- 3 A. Mitchell Kotula, New York State Department of
4 Public Service, Office of Electricity and
5 Environment, One Penn Plaza, New York City, New
6 York 10119.
- 7 Q. Mr. Kotula, by whom are you employed and in what
8 capacity?
- 9 A. By the Department of Public Service of the State
10 of New York. I am a Utility Engineer 2 in the
11 Office of Electricity and Environment.
- 12 Q. Please state your educational background and
13 professional experience.
- 14 A. I graduated from the City College of New York
15 with a Bachelor of Engineering degree in
16 Electrical Engineering in 1975. I also earned a
17 Masters in Business Administration from Baruch
18 College in 1981. I joined the Department in
19 1976.
- 20 Q. Briefly describe the responsibilities of your
21 current and past positions.
- 22 A. I am a member of the Rates and Retail Choice
23 Section of the Department's Office of
24 Electricity and Environment. My current

1 responsibilities include electric utility rate
2 design and analyzing Economic Development
3 Programs. In past positions I have examined
4 capital programs for water companies.

5 Q. Have you previously testified as an expert
6 witness?

7 A. Yes. I have presented expert testimony on rate
8 design in the Unbundling Proceeding, Case 00-M-
9 0504 and on construction budgets and O&M
10 expenses in various water company proceedings
11 before the New York State Public Service
12 Commission.

13 Q. Mr. Padula, please state your full name and
14 business address.

15 A. Marco L. Padula, New York State Department of
16 Public Service, Office of Electricity and
17 Environment, Three Empire State Plaza, Albany,
18 New York 12223-1350.

19 Q. Mr. Padula, by whom are you employed and in what
20 capacity?

21 A. By the Department of Public Service of the State
22 of New York. I am a Utility Engineer 3 in the
23 Office of Electricity and Environment.

24 Q. Please state your educational background and

1 professional experience.

2 A. I received a Bachelor of Science Degree in
3 Electrical Engineering from Northeastern
4 University in 1990 and Master of Business
5 Administration from Rensselaer Polytechnic
6 Institute in 1998. From 1990 to 1994 I was
7 employed by IBM as an Electrical Engineer
8 responsible for the design and development of
9 high performance power/thermal control systems
10 for mainframe computers. In 1994 I joined the
11 New York State Department of Public Service.

12 Q. Briefly describe the responsibilities of your
13 current position.

14 A. I am a member of the Rates and Retail Choice
15 Section of the Department's Office of
16 Electricity and Environment. My current
17 responsibilities include electric utility rate
18 design, computer simulation of electricity
19 production, transmission and pricing, and NYISO
20 electric market issues. I also review
21 construction budgets submitted with utility
22 financing petitions.

23 Q. Have you previously testified as an expert
24 witness?

- 1 A. Yes. I have presented expert testimony on
2 operating and maintenance expenses in Case 94-G-
3 0885 and on rate design issues in the Standby
4 Service proceedings.
- 5 Q. Briefly describe the scope of your testimony.
- 6 A. Our testimony will address the Steam Plant
7 Construction Program capital expenditures
8 proposed by company witness Ronald Bozgo. We
9 will also address operations and maintenance
10 (O&M) expenses presented by company witness
11 Anthony Adinolfi.
- 12 Q. Do you have any observations about the company's
13 expected capital expenditures beyond the rate
14 year?
- 15 A. No, we are testifying on a one year rate case,
16 and it is not appropriate to address expenses
17 beyond the rate year in the context of a one-
18 year rate case.
- 19 Q. Do you have any adjustments to the proposed
20 capital expenditures for the rate year?
- 21 A. Yes. Under the category of Regulatory, Mr.
22 Bozgo budgeted \$11.9 million for 2005. He
23 states on Page 3, Line 6 of his testimony that
24 these funds are needed to address plant

1 conditions that "may affect the Company's
2 ability to comply with regulatory requirements."
3 We interpret this statement as meaning that
4 completion of these projects is not necessary to
5 comply with regulatory requirements. Therefore,
6 this capital budget request should be rejected.

7 Q. Do you have any adjustments to the proposed O&M
8 expenses?

9 A. Yes. Mr. Adinolfi proposes an increase to the
10 Plant Inspection and Repair program of \$1.4
11 million, on top of the historic test year level
12 of \$0.3 million. As described by Mr. Adinolfi
13 in his testimony, the company's inspection and
14 repair program consists of "routine inspections"
15 conducted to identify equipment that must be
16 repaired due to normal wear and tear. There is
17 no justification presented as to why these
18 routine inspections would cost more than four
19 times as much to complete in the rate year than
20 they have in the past. Therefore, the \$1.4
21 million increase should be rejected.

22 Q. Does that conclude your testimony at this time?

23 A. Yes it does.

BEFORE THE
STATE OF NEW YORK
PUBLIC SERVICE COMMISSION

In the Matter of
CONSOLIDATED EDISON COMPANY OF NEW YORK, INC.

Cases 03-G-1671 & 03-S-1672

MARCH 2004

Prepared Testimony of:

ACCOUNTING & FINANCE PANEL
Robert Burke
Public Utilities Auditor III
State of New York
Department of Public Service
Three Empire State Plaza
Albany, New York 12223-1350

John Scherer
Public Utilities Auditor III
State of New York
Department of Public Service
Three Empire State Plaza
Albany, New York 12223-1350

- 1 Q. Please state your name and business address.
- 2 A. Robert Burke, Three Empire State Plaza, Albany,
3 New York 12223.
- 4 Q. By whom and in what capacity are you employed?
- 5 A. I am employed by the New York State Department
6 of Public Service as a Public Utilities Auditor
7 III in the Office of Accounting and Finance.
- 8 Q. Please state your educational background and
9 professional experience.
- 10 A. I graduated from Siena College, Loudonville, New
11 York in 1972 and have a B.B.A. degree with an
12 Accounting major. I have been employed by the
13 Department of Public Service since 1974. I have
14 worked on various rate proceedings, financings,
15 and general accounting examinations.
- 16 Q. Mr. Burke, have you previously testified in any
17 Commission proceedings?
- 18 A. Yes, I have testified in numerous proceedings
19 before the New York State Public Service
20 Commission (Commission) on a variety of
21 regulatory issues ensuring that the filings were
22 adhering to Commission Policy Statements, e.g.
23 on pension and other post-employment benefits
24 (OPEBs) and/or practices, productivity and

1 medical benefits expense forecasts. I have also
2 testified to Income Taxes and the Earnings
3 Base/Capitalization (EBCAP) Adjustment.
4 Furthermore, I have participated in the review
5 of petitions for deferral accounting, financing
6 petitions and the sale of electric generating
7 plants. And with specific reference to
8 Consolidated Edison of New York, Inc.
9 (Consolidated Edison), I submitted testimony in
10 the company's last steam rate case.

11 Q. Please state your name and business address.

12 A. John Scherer, Three Empire State Plaza, Albany,
13 New York 12223.

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

15 A. I am employed by the New York State Department
16 of Public Service as a Public Utilities Auditor
17 III in the Office of Accounting and Finance.

18 Q. Please state your educational background and
19 professional experience.

20 A. I graduated from Siena College, Loudonville, New
21 York in 1988 and have a B.B.A. degree with an
22 Accounting major. I have been employed by the
23 Department of Public Service since 1988. I have
24 worked on various rate proceedings, financings,

- 1 and general accounting examinations.
- 2 Q. Mr. Scherer, have you previously testified in
3 any Commission proceedings?
- 4 A. Yes, I have testified in numerous Commission
5 proceedings on a variety of accounting and
6 regulatory issues including property taxes,
7 pensions and OPEBs, EBCAP, operations and
8 maintenance (O&M) expense forecasts, Federal
9 income taxes and various rate base components.
10 My responsibilities as a Public Utilities
11 Auditor include examination of accounts,
12 records, documentation, policies and procedures
13 of regulated utilities. I have been involved in
14 numerous rate and accounting examinations
15 including Consolidated Edison's last two
16 electric rate proceedings and the company's
17 electric and gas rate unbundling proceeding. I
18 have general responsibility for accounting and
19 ratemaking matters related to Consolidated
20 Edison.
- 21 Q. What is the purpose of your testimony?
- 22 A. Our testimony addresses Consolidated Edison's
23 gas and steam rate filings. We present our
24 position and recommended adjustments in the

1 following areas:

- 2 - Pension and OPEB expenses
- 3 - Pension/OPEB deferred accounting requests
- 4 - Prepaid Pension Expense - EBCAP
- 5 - Labor Program change
- 6 - Interest Deduction
- 7 - Deferred accounting requests
- 8 - Employees Welfare expense
- 9 - Insurance premiums
- 10 - Manufactured gas Plant (MGP)/Superfund
- 11 expense
- 12 - Interference expense
- 13 - Other Operating Revenues
- 14 - Property Taxes
- 15 - East River Repowering Project (ERRP)
- 16 - 74th & 59th Street Station costs
- 17 - Depreciation Reserve Deficiency
- 18 - Revised Capital expenditures
- 19 - World Trade Center (WTC) amortizations

20 We will first address issues common to both gas
21 and steam. Then we will address matters
22 specific to gas and steam, respectively.

23 Q. Are you sponsoring any exhibits?

24 A. Yes. We are sponsoring Exhibit__ (A&F Panel-1)

1 which is comprised of company responses to
2 Staff's information requests upon which we rely
3 and make reference to throughout our testimony.

4

5 **Three Year - Rate Plan**

6 Q. Consolidated Edison sponsored a three-year rate
7 proposal in both the gas and steam filings.

8 Will Staff address these proposals?

9 A. No. Staff's testimony in both the gas and steam
10 rate cases will address the rate year ending
11 September 20, 2005. We view the company's
12 multiyear plans as simply a series of staged
13 increases, deferral mechanisms and true-ups that
14 insulate shareholders from many uncertainties
15 while providing customers little more than the
16 assurance of increasing rates.

17 Q. Does this mean that Staff does not support the
18 concept of a multi-year rate plan for
19 Consolidated Edison's gas and steam operations?

20 A. No. We support a multi-year rate setting
21 approach. However, significant modifications to
22 the company's proposals are necessary before we
23 could support such proposals in these
24 proceedings. Given the statutory rate case

1 schedule and the need to have a solid set of
2 numbers for the rate year, our testimony
3 addresses a traditional one-year case.

4

5 **Pension and Other Post-Retirement Benefits Expense**

6 Q. Are you proposing to adjust Consolidated
7 Edison's rate year forecast of net pension and
8 OPEBs?

9 A. Yes. We propose two adjustments to the
10 company's gas and steam net pension/OPEB rate
11 year expense forecasts. The first adjustment
12 reflects an updated forecast based on latest
13 known actuarial information. Based on this
14 information, we forecast rate year net
15 pension/OPEB expenses of (\$5,400,600) for gas
16 and (\$2,198,400) for steam. Therefore, we would
17 adjust the company's gas and steam rate year
18 estimates by (\$5,252,300) and (\$2,138,100),
19 respectively. We expect Consolidated Edison to
20 provide us the updated actuarial information as
21 soon as it becomes available to the company. We
22 will recommend a further update if necessary.
23 Staff's second adjustment reflects expected
24 savings from the Medical Prescription Drug,

1 Improvement and Modernization Act of 2003 (the
2 Act). Enacted on December 8, 2003, the Act
3 introduced a prescription drug benefit under
4 Medicare and a subsidy to plan sponsors.
5 Consolidated Edison is eligible to receive the
6 subsidy because it is a qualifying plan sponsor.
7 According to Consolidated Edison, the subsidy is
8 based on 28% of annual prescription drug costs
9 between \$250 and \$5,000 per individual. While
10 the cash subsidy is not expected to commence
11 until 2006, accounting guidance allows companies
12 to immediately reflect the impact of the Act in
13 their financial statements and disclosures as
14 long as management believes that the effects can
15 be reasonable estimated.

16 Q. Has Consolidated Edison indicated how it will
17 account for the effects of the Act?

18 A. Yes. In response to Staff Information Request
19 277, Consolidated Edison indicated that it has
20 elected to recognize the effects of the Act in
21 its 2003 OPEB obligations. These effects are in
22 the form of an actuarial gain resulting from
23 expected lower future prescription drug costs.
24 The company indicated that it intends to

1 amortize the gain over 10 years commencing in
2 2004. The amortization will reduce the
3 company's periodic OPEB accrual.

4 Q. Do you have an estimate of the annual savings
5 resulting from the Act?

6 A. Yes. In response to Staff Information Request
7 278, Consolidated Edison stated that it expects
8 the Act to reduce the 2004 periodic OPEB cost by
9 \$18.5 million. Of this amount, \$3.1 million and
10 \$0.5 million, respectively, are allocable to gas
11 and steam operations and maintenance expense.
12 We recommend that gas and steam OPEB expenses
13 reflect these savings.

14 Q. Do you know how Consolidated Edison will account
15 for the cash subsidy?

16 A. No, while we know that Consolidated Edison will
17 receive the cash subsidy (Staff Information
18 Request 279), the company's accounting is
19 unclear. Consolidated Edison indicates that it
20 is awaiting accounting guidance from FASB and
21 reimbursement regulations from the appropriate
22 federal administrative agency to make its final
23 determination on the appropriate accounting.

24 Q. Is the accounting for the cash subsidy at issue

1 in this proceeding?

2 A. No. This is not an issue since no cash receipts
3 are expected before the end of the rate year.

4

5 **Pension/OPEB Deferred Accounting**

6 Q. Mr. Rasmussen, at page 16 of his gas testimony
7 and page 20 of his steam testimony, presents a
8 hypothetical scenario in which a significant
9 decline in the market value of pension plan
10 assets could force Consolidated Edison to record
11 an additional minimum liability (AML) pursuant
12 to the accounting requirements of SFAS No. 87,
13 Accounting for Pensions. What specific
14 circumstances would force Consolidated Edison to
15 record an AML?

16 A. The recording of an AML would be triggered if at
17 year end, the fair market value of pension plan
18 assets was less than the Accumulated Benefit
19 Obligation (ABO), or the current amount
20 necessary to discharge pension obligations.

21 Q. Is such a scenario likely?

22 A. Consolidated Edison has not had to record an AML
23 to date since it has had sufficient pension
24 assets. While we cannot predict future activity

- 1 in the financial markets, we can provide the
2 relative values of Consolidated Edison's ABO and
3 pension plan assets. As of December 31, 2003
4 Consolidated Edison's ABO and market value of
5 pension plan assets were estimated to be \$5.6
6 billion and \$6.5 billion, respectively (Staff
7 Information Request 94).
- 8 Q. Mr. Rasmussen testifies that the recognition of
9 an AML would require a corresponding charge to
10 Other Comprehensive Income (OCI). Please
11 explain the effects of such a charge.
- 12 A. The recognition of an AML would result in a non-
13 cash charge to OCI. Such a charge would be
14 recorded net of tax and would not affect the
15 company's net income for common stock. Although
16 the charge would reduce the level of
17 shareholder's equity, Staff would not reflect
18 the reduction for ratemaking purposes.
- 19 Q. Why not?
- 20 A. We view such a charge as an advanced form of
21 disclosure. Neither the pension plan assets nor
22 the ABO are on Consolidated Edison's balance
23 sheet. The values of these off balance sheet
24 assets and liabilities are routinely disclosed

1 for financial accounting purposes. FAS 87
2 requires the recognition of the AML in the event
3 the ABO exceeds the value plan assets. The
4 charge to OCI is the result of the recognition
5 of the AML. As we will discuss later in this
6 testimony, the impact of a loss in the market
7 value of pension plan assets is recognized in
8 pension and OPEB expenses for accounting
9 purposes over an extended future period even if
10 the AML is triggered.

11 Q. Is such a charge permanent once it is recorded?

12 A. No, the charge would be reversed if the value of
13 pension plan assets subsequently meets or
14 exceeds the ABO.

15 Q. In order to avoid a charge to OCI, Consolidated
16 Edison seeks Commission authority to capitalize
17 the impact by creating a regulatory asset. Do
18 you support the company's proposal to create a
19 regulatory asset in lieu of a charge to OCI in
20 the event that the accounting rules require
21 recognition of an AML?

22 A. No. The creation of a regulatory asset is not
23 an appropriate remedy in this situation. The
24 capitalization of a utility's actual costs as a

1 regulatory asset is an accounting convention
2 that is unique to regulated entities. SFAS 71
3 allows regulated entities to recognize, through
4 deferral accounting, certain costs as assets
5 because the regulatory body promises to allow
6 recovery of such costs in future utility rates.
7 Consolidated Edison's proposal does not,
8 however, fit these circumstances.

9 Q. Please explain why the company's proposal is not
10 appropriate.

11 A. Consolidated Edison is seeking deferral
12 accounting treatment for a potential accounting
13 event that has no ratemaking or cash
14 consequence. There is no cash flow associated
15 with the recognition of the AML and there is no
16 underlying cost to recover. Because of this,
17 there is no basis for recognition of a
18 regulatory asset. Thus, the remedy sought by
19 the company is inappropriate.

20 Q. Does the company share any of Staff's beliefs on
21 this matter?

22 A. Yes, in response to Staff Information Request
23 98, Consolidated Edison acknowledges that a
24 "charge to OCI is a determination for accounting

1 purposes only. As such, it does not trigger any
2 cash payments." Additionally, the company
3 acknowledges that a charge to OCI would be
4 reversed if the market value of its pension plan
5 assets increases to a level above the ABO.

6 The company also acknowledges, in Staff
7 Information Request 99, that "the creation of
8 the regulatory asset does not in and of itself
9 have any impact on the amount customers will pay
10 in the future." Since this accounting entry to
11 recognize a minimum pension liability will have
12 no direct impact on what customers will pay in
13 the future, it cannot be considered a proper
14 regulatory asset.

15 Q. Are there other reasons why the Commission
16 should not permit Consolidated Edison to
17 capitalize the effects of a potential
18 recognition of an AML for pensions?

19 A. Yes. The accounting that the company uses to
20 reflect gains and losses on its pension plan
21 assets captures the effects of changes in the
22 market value of plan assets over time. The
23 recognition of a regulatory asset resulting from
24 a decline in the market value of pension plan

1 assets is, therefore, unnecessary.

2 Q. How does Consolidated Edison account for and
3 recover gains and losses that it realizes on
4 pension plan assets?

5 A. Consolidated Edison's pension costs are
6 determined annually based on a number of
7 actuarial assumptions. One such assumption is
8 the expected return on the plan's assets. In
9 each year the expected return on plan assets is
10 reflected in the pension expense. The
11 difference between the actual and expected
12 return on the plan assets is referred to as an
13 actuarial gain or loss. Actuarial gains and
14 losses are not recognized immediately because
15 accounting rules contained in the Commission's
16 Policy Statement on Pensions and OPEBs, issued
17 September 7, 1993, (Policy Statement) allow the
18 company to amortize actuarial gains and losses
19 to its pension expense over fifteen years. This
20 long-term amortization is a smoothing technique
21 that minimizes the immediate impact of gains and
22 losses on the annual pension expense levels.
23 The amortization of past gains and losses is a
24 component of the annual pension cost

1 determination.

2 Q. Why is this important?

3 A. Consolidated Edison seeks authorization for the
4 creation of a regulatory asset if losses on its
5 pension assets exceed a certain threshold.

6 However, the accounting that the company
7 currently utilizes provides full recognition of
8 such losses (and potentially offsetting gains)
9 over an extended period of time. Because of
10 this, should Consolidated Edison experience a
11 significant loss on its pension plan assets, it
12 would not have a significant impact on its
13 current year pension expense, but it will have
14 an effect for an extended period of time. Thus,
15 there is no need to create any regulatory asset
16 to reflect changes in the market value of the
17 pension plan assets.

18 Q. Would Staff adjust Consolidated Edison's common
19 equity balance for ratemaking purposes in the
20 event the company is forced to recognize an AML?

21 A. No. We have discussed this issue with Staff
22 Witness Hogan, who sees no reason why a non-cash
23 charge for a potential temporary item would have
24 any effect on the common equity balance that is

1 used to set the company's rates.

2

3 **Pension/OPEB reconciliation**

4 Q. Mr. Rasmussen requests that the Commission allow
5 the company to go back on the Policy Statement.
6 More specifically, Consolidated Edison seeks to
7 restore the full reconciliation provision of the
8 Policy Statement for its gas and steam
9 operations. Do you support the company's
10 request?

11 A. No, we do not. The company's request would
12 reallocate forecasting risk from shareholders to
13 customers. The company has not explained or
14 justified why the Commission should insulate
15 shareholders from, and expose customers to, the
16 cost forecasting risk associated with the
17 company's pension and OPEB assets. Moreover, we
18 are particularly concerned about the dichotomy
19 between the actual performance of pension and
20 OPEB plan assets and the earnings effects of
21 Consolidated Edison's actual pension/OPEB
22 expenses since 2000.

23 Q. What does the reconciliation of pension and OPEB
24 expenses entail?

1 A. In the rate setting process, a forecast of rate
2 year pension and OPEB expenses is made based
3 upon available actuarial information and
4 assumptions. Differences between the forecasted
5 expenses and actual expenses are deferred on the
6 company's books. Disposition of the deferred
7 balances are usually addressed in the company's
8 next rate proceeding.

9 Q. What were the circumstances for Consolidated
10 Edison going off the Policy Statement?

11 A. In Case 96-E-0897, Consolidated Edison sought to
12 terminate reconciliation of pension/OPEB costs.
13 The Commission's approval of the rate plan that
14 emanated from the parties negotiation in that
15 proceeding terminated the application of the
16 Policy Statement to Consolidated Edison's
17 electric, gas and steam businesses effective
18 April 1, 1997.

19 Q. Does the Policy Statement provide guidance on
20 the company's request to return to the Policy
21 Statement?

22 A. No. While the Policy Statement offers much
23 guidance on how to account for pension and OPEB
24 costs, it does not envision that companies would

1 go off the policy, and it, therefore, does not
2 provide guidance on how a company might return
3 to its provisions.

4 It is important to note, however, that the
5 reconciliation provisions of the Policy
6 Statement provide equal protection to the
7 company and its customers. Because continuity
8 in its application is essential to ensure that
9 those protections continue, the provisions of
10 the Policy Statement cannot be viewed as a pick
11 and choose menu of options.

12 Q. Does Consolidated Edison's request to return to
13 the reconciliation provisions maintain a proper
14 balance between customer and shareholder
15 interest?

16 A. No, accounting for pensions and OPEBs is a very
17 complicated matter. Our recommendation opposing
18 Consolidated Edison's request is based on our
19 careful consideration of the consequences of
20 allowing Consolidated Edison to return to the
21 reconciliation protection of the Policy
22 Statement. At this point, we think that
23 company's request has not properly balanced
24 customer and shareholder interests.

1 Q. What is the basis for your conclusion?

2 A. The company's filing indicates that it is
3 forecasting significant increases in pension and
4 OPEB costs. The company's request to fully
5 reconcile amounts provided in rates to actual
6 costs would fully insulate shareholders from the
7 impact of unforeseen changes in net income. By
8 contrast, shareholders have been the direct
9 beneficiaries of substantial decreases in
10 pension and OPEB costs since the company went
11 off the Policy Statement. This is borne out by
12 Mr. Rasmussen's testimony that over the past few
13 years the performance of the financial markets
14 has had a great impact on the contributions of
15 pension and OPEBs to Consolidated Edison's net
16 income (page 16 gas and page 19 steam).

17 Q. Can you provide any quantification of the impact
18 the performance of the financial markets has had
19 on Consolidated Edison's pension and OPEB costs?

20 A. As previously noted, differences between
21 expected and actual market returns on plan
22 assets are amortized to expense over fifteen
23 years. Therefore, it is not possible to
24 calculate the full effect of market performance

1 on pension/OPEB costs since changes in the
2 market are not fully recognized for accounting
3 purposes for fifteen years.

4 Q. What information can you provide in this area?

5 A. The level of pension and OPEB expense recorded
6 on Consolidated Edison's books, since it went off
7 the Policy Statement, can be compared to amounts
8 provided in rates. Such a comparison
9 illustrates the short run financial effect of
10 being off the Policy Statement. Moreover, we
11 can provide some information regarding
12 unrecognized gains and losses in the pension and
13 OPEB plans which have not yet been reflected on
14 Consolidated Edison's books as pension/OPEB
15 expenses. These gains and losses are
16 unrecognized because they represent the portion
17 of historical gains and losses in the plans
18 which have not yet been reflected in the expense
19 due to the fifteen year amortization.

20 Q. What level of pension and OPEB expense did
21 Consolidated Edison record on its books since it
22 went off the Policy Statement?

23 A. Based on information provided by the company
24 (Staff Information Request 87), we calculated

1 that for the period April 1997 through December
2 2003, Consolidated Edison recorded a total
3 negative pension expense of \$776 million, \$138
4 million and \$54 million for electric, gas and
5 steam, respectively. (A negative pension
6 expense is a credit, which increases earnings.)
7 OPEB expense for the same period was \$267
8 million, \$52 million, and \$17 million for
9 electric, gas, and steam, respectively. Thus,
10 the net effects of these two items were
11 increases to electric, gas, and steam earnings
12 of \$509 million, \$86 million, and \$37 million
13 respectively.

14 Q. Do these earnings increases mean that
15 Consolidated Edison actually reported increases
16 in income reflecting these amounts?

17 A. Yes, in part. Consolidated Edison's earnings
18 during this period reflected a portion of the
19 pension credits. The earnings effects of the
20 remainder of the pension credits were reflected
21 in Consolidated Edison's rates.

22 Q. Can you provide details of the respective
23 amounts reflected in earnings and in rates?

24 A. Consolidated Edison's rates for this period were

1 based on negotiations among the parties, so it
2 is not possible to precisely answer this
3 question. However, Consolidated Edison provided
4 us the levels of expense it believes were
5 reflected in its rates. Based on this
6 information, we calculated that negative pension
7 expenses of \$451 million, \$69 million, and \$19
8 million for electric, gas, and steam,
9 respectively, were reflected in rates for this
10 time period. OPEB rate allowances for this
11 period totaled \$354 million, \$64 million and \$17
12 million for electric, gas, and steam,
13 respectively. Thus, Consolidated Edison's own
14 information indicates that the net amounts
15 reflected in electric, gas, and steam rates for
16 pensions and OPEBs since going off the Policy
17 Statement were credits to expense of \$97
18 million, \$5 million, and \$2 million,
19 respectively.

20 Q. Please summarize the financial effect of the
21 difference between actual pension and OPEB
22 expense and the levels provided for in rates.

23 A. If actual pension expense is less (or
24 alternatively if the credit is larger) than the

1 amount included in rates, income increases.
2 Since Consolidated Edison went off the Policy
3 Statement, the company has realized enhanced
4 earnings as a result of over-recovered pension
5 and OPEB expenses. We calculate that
6 Consolidated Edison has over-recovered its
7 actual pension and OPEB expense by \$412 million
8 for electric, \$81 million for gas, and \$35
9 million for steam, or \$528 million on a total
10 company basis. Thus the company realized a
11 benefit of about a half billion dollars as a
12 result of going off the Policy Statement in
13 1997. Of this total, roughly \$392 million has
14 been realized since 2000.

15 Q. What effect did these results have on
16 Consolidated Edison?

17 A. Consolidated Edison reported earned returns on
18 equity of 12.92%, 14.32%, 12.77% and 11.41% for
19 the 12 months ended December 31, 2000, 2001,
20 2002, and 2003, respectively. Such returns on
21 equity are in excess of what Staff forecast for
22 these periods.

23 Q. Consolidated Edison has explained that the
24 income effect of pension credits helped it,

- 1 Staff, and other parties to reduce electric
2 rates by \$170 million in 2000. (Staff
3 Information Request 324) Is this an accurate
4 statement?
- 5 A. No. The underlying financial forecast provided
6 by the company in support of the decrease did
7 not reflect pension credits of the magnitude
8 recorded by Consolidated Edison. Thus, to the
9 extent that Consolidated Edison relied upon
10 significant increases in pension credits as a
11 source of funding for the 2000 rate decrease, it
12 did so without sharing such information with
13 Staff. While we have no way of knowing if the
14 company possessed updated actuarial forecast at
15 the time of the 2000 rate decrease, the company
16 had been requested, at that time, to share its
17 latest information with Staff. The company did
18 provide Staff an updated actuarial forecast
19 shortly after the Commission had approved the
20 terms of the rate plan.
- 21 Q. Is it Staff's position that the company withheld
22 information?
- 23 A. We have no way of knowing if the company
24 withheld relevant information. However, the

1 company's response to the information request
2 has magnified concerns that have always existed
3 regarding the timing of the 2000 actuarial
4 information.

5 Q. What would have been the effects if Consolidated
6 Edison had remained on the Policy Statement?

7 A. Consolidated Edison's earnings would have been
8 lower and the company would have deferred the
9 difference between the actual lower expenses and
10 the rate allowances as a customer credit which
11 would have been available to offset the
12 company's future revenue needs.

13 Q. What is the level of unrecognized gain or loss
14 related to Consolidated Edison's pension and
15 OPEB plan assets?

16 A. Based on information provided by the company in
17 response to Staff Information Request 100, the
18 unrecognized loss related to the company's
19 pension and OPEB plan assets is \$1.6 billion.
20 These losses will be recognized as a component
21 of the company's periodic pension and OPEB costs
22 over the next 15 years. The effect of this
23 recognition will increase the company's annual
24 pension expenses.

1 If the company remains off the Policy
2 Statement it is at risk for the recovery of this
3 amount between rate filings. In other words, if
4 the initial rate allowance is not sufficient to
5 cover the actual future expense levels required
6 to extinguish the unrecognized loss, the
7 company's earnings will suffer. If Consolidated
8 Edison is allowed to return to the Policy
9 Statement, it would completely transfer from
10 shareholders to customers the risk of associated
11 with these unrecognized losses that were
12 realized while the company was off the Policy
13 Statement.

14 Q. Do you know the level of unrecognized gains and
15 losses on pension and OPEB assets Consolidated
16 Edison had when it went off the Policy
17 Statement?

18 A. The information that Consolidated Edison
19 reported to the Commission in its 1996 Annual
20 Report indicates that it had unrecognized
21 pension gains of \$708 million and unrecognized
22 OPEB losses of \$140 million. The net of the two
23 indicates that the company had approximately
24 \$568 million in unrecognized gains when it went

1 off the Policy Statement.

2 Q. What is the significance of the levels of gains
3 and losses when Consolidated Edison went off the
4 Policy Statement and now when it seeks to
5 return?

6 A. The company went off the Policy Statement when
7 it had unrecognized gains of \$568 million.
8 Since then, Consolidated Edison realized
9 additional income of \$528 million due to its
10 recording of net pension and OPEB credits.
11 Despite this significant positive effect on
12 short run earnings, the \$568 million
13 unrecognized gain when the company left the
14 Policy Statement is now an unrecognized loss of
15 \$1.6 billion. If the company were allowed to
16 return to the Policy Statement, the Commission
17 would effectively guarantee the recovery of the
18 losses that build up at the very time the
19 company was reporting substantially enhanced
20 earnings.

21 Q. Mr. Rasmussen suggests that Consolidated
22 Edison's pension and OPEB costs have been
23 volatile due to major swings in the financial
24 markets. Do you agree with his conclusions?

- 1 A. We agree that volatility in pension/OPEB costs
2 can result from financial market activity.
3 However, as we noted above, deltas between
4 expected and actual market returns are deferred
5 and amortized over 15 years. The long-term
6 recognition of these gains and losses minimizes
7 their impact on current costs.
- 8 Q. Are there other factors that can create
9 volatility in periodic pension and OPEB costs?
- 10 A. Yes there are. Changes in actuarial assumptions
11 can have dramatic effects on period pension/OPEB
12 costs.
- 13 Q. Please provide an example.
- 14 A. From 1996 through 2000, Consolidated Edison used
15 an 8.5% assumption for its expected return on
16 plan assets. In 2001, the company raised its
17 return assumption to 9.20%. The effect of such
18 a change in assumption significantly reduced the
19 company's annual expense.
- 20 Q. Can you provide an estimate of the reduction in
21 costs that resulted from such a change in
22 assumption?
- 23 A. We can provide a ballpark estimate of the
24 effects. Assuming a pension asset base of \$6

1 billion, a 70 basis point increase in the
2 expected return assumption would reduce the
3 periodic pension expense by \$42 million. For
4 OPEBs, due to a much smaller asset base, we
5 estimate the effect to be a \$5-6 million
6 reduction in periodic cost.

7 Q. Please summarize your recommendation.

8 A. In light of the substantial windfalls
9 Consolidated Edison realized while off the
10 Policy Statement, and, more importantly, the
11 substantial swing from an unrecognized gain on
12 plan assets of \$568 million gain to an
13 unrecognized \$1.6 billion loss, Consolidated
14 Edison should not be allowed to return to the
15 Policy Statement. We believe that a reasonable
16 forecast of pension and OPEB expense can be made
17 for the rate year in this proceeding and that
18 reconciliation is not appropriate. We do not
19 believe that it is appropriate for customers to
20 assume all of the risk for future increases in
21 pension/OPEB costs that are the result of large
22 losses that were realized while Consolidated
23 Edison was off the Policy Statement.

24

1 **Prepaid Pension Expense - EBCAP**

2 Q. Do you have any other concerns or adjustments
3 related to pension costs?

4 A. Yes we do. Consolidated Edison has accumulated
5 a significant prepaid pension expense balance.
6 The balance as of December 2003 is \$1.2 billion
7 (Staff Information Request 287). The entire
8 balance was accumulated while the company was
9 off the Policy Statement.

10 Q. What does this balance represent and why is it
11 an issue in this rate case.

12 A. The label of prepaid pension expense is somewhat
13 misleading. It not a cash prepaid expense but
14 rather the balance sheet effect that results
15 from the accrual of negative pension expense.
16 As discussed before, the company has had
17 substantial negative pension expenses since it
18 went off the Policy Statement. The balance is
19 an issue in this case because Consolidated
20 Edison is effectively seeking to include the
21 balance in its rate base. While not reflected
22 as a line item in the company's rate base, the
23 balance is effectively captured in its EBCAP
24 adjustment to rate base.

1 Q. Why is the effective inclusion of the prepaid
2 pension expense balance in rate base
3 problematic?

4 A. The inclusion of the prepaid pension expense
5 will provide the company a cash return on the
6 prepaid pension expense balance. The return on
7 the prepaid pension asset is problematic
8 because, as demonstrated before, customers did
9 not receive the full benefit of the negative
10 pension expense. Customers received a benefit
11 to the extent that pensions credits were
12 reflected in the rates they paid. Consolidated
13 Edison retained pension credits in excess of
14 those reflected in rates since it was not on the
15 Policy Statement. To require customers to pay
16 carrying costs on the portion of a benefit they
17 never received is inequitable and inappropriate.

18 Q. How do you propose to remedy this situation?

19 A. We propose to declare the portion of the prepaid
20 pension balance that is equivalent to the
21 pension credits that were not reflected in rates
22 a non-regulated asset. For ratemaking purposes,
23 we propose to adjust the company's
24 capitalization to eliminate the capital

1 supporting this non-regulated asset. We
2 reflected our adjustment in the EBCAP adjustment
3 to the company's rate bases.

4 Q. What is the value of the non-regulated assets?

5 A. Based on information provided by the company, we
6 calculate that for the period April 1997 through
7 June 2003, Consolidated Edison had actual gas
8 pension expense credits of \$125 million. For
9 the same period we calculate that credits
10 totaling \$50 million were reflected in rates.
11 We recommend that the difference of \$75 million
12 (\$48.8 million net of tax) be reflected as an
13 adjustment to the company's gas capitalization.
14 For steam operations, actual credits were \$48
15 million and rates reflected \$14 million.
16 Therefore, our recommended adjustment to steam
17 capitalization is \$34 million (\$22.1 million net
18 of tax).

19

20 **LABOR PROGRAM CHANGE**

21 Q. Mr. Muccilo at Page 5 of his gas and steam
22 testimony indicates that Consolidated Edison
23 intends to hire nine management employees prior
24 to the start of the rate year to address

1 increased work load resulting for the Sarbanes-
2 Oxley Act and reporting requirements of the SEC.

3 Do you accept the proposed program change?

4 A. No. The company has not provided adequate
5 support for this proposal. Therefore, we
6 recommend that the entire cost of the proposal
7 (\$841,000), plus appropriate labor loadings, be
8 eliminated from the company's gas and steam
9 revenue requirement requests. The labor costs
10 the company allocated to gas and steam were
11 \$136,000 and \$43,000, respectively.

12 Q. Why is the company's support of its request
13 inadequate?

14 A. We asked a series of questions in an attempt to
15 understand the basis of company's request.
16 Consolidated Edison's replies underscore the
17 need to reject the company's position. The
18 Sarbanes-Oxley Act was signed into law and
19 became effective on July 30, 2002 (Staff
20 Information Request 159). The Act and related
21 requirements require additional documentation
22 and testing of internal controls over financial
23 reporting, which are unidentified by the
24 company.

1 Q. How has the company met the requirements of the
2 Act thus far?

3 A. To date, the company has complied with the
4 requirements of the Act utilizing internal
5 resources (Staff Information Request 160).

6 Q. Has the company provided any analysis or
7 information supporting its request?

8 A. No cost benefits analysis was performed in the
9 decision to hire nine new management employees
10 (Staff Information Request 166). Moreover, no
11 formal documentation was submitted to management
12 to justify the need for the new employees (Staff
13 Information Request 165), and no analysis was
14 provided to determine the number of employees
15 required to comply with the Act (Staff
16 Information Request 170). The company did not
17 consider using contractor services to comply
18 with these activities (Staff Information Request
19 166). While the company indicates that it "is
20 in the process of seeking to hire new employees"
21 (Staff Information Request 163), no employees
22 have been hired to date (Staff Information
23 Request 167). Finally, the company indicates
24 that current Consolidated Edison employees are

1 eligible for the new positions. Overall these
2 points lead us to conclude that existing
3 resources are sufficient to perform this
4 function.

5

6 **Property Tax Reconciliation**

7 Q. Consolidated Edison proposes a true up of the
8 projected property tax expense for both the gas
9 and steam departments by deferring the entire
10 difference between the actual property tax
11 expense and the amount allowed in rates. Do you
12 have any concern about this request?

13 A. Yes. This is often an area of discussion in
14 multi-year rate plans. We are, however, opposed
15 to the use of such deferrals within the confines
16 of this one-year rate case, addressed in this
17 testimony. Moreover, given the shortened
18 forecast period and the opportunity, in this
19 case, to submit updates for known changes up to
20 the Brief on Exceptions, such a deferral is
21 unnecessary.

22

23 **Employee Welfare Expense**

24 Q. Please explain your adjustments to Employee

1 Welfare Expense.

2 A. The company's forecast of Employee Welfare
3 Expense for the gas and steam departments are
4 set forth in Exhibit__ (HJR-1) in each of the
5 company's filings. The first adjustment to both
6 the gas and steam departments' forecast of
7 Employee Welfare Expense is to correct the
8 amounts of Health and Group Life costs
9 capitalized. The company's capitalization of
10 health and group life insurance costs
11 inadvertently reflects a total company
12 capitalization factor of 25.25% for both
13 departments. Correctly apportioning the
14 capitalized amounts of Health and Group Life for
15 each department decreases the gas department's
16 expense by \$1.989 million while increasing the
17 steam department's cost by \$375,000.

18 Q. Please continue explaining your adjustments to
19 Employee Welfare Expense.

20 A. As noted in company witness Reyes' testimony,
21 projected health care costs for the rate year
22 are based on 2003 premiums and the number of
23 employee contracts at August 31, 2003 escalated
24 using health care cost rates of 8.75% for 2004

1 and 8.25% for 2005. The use of a separate
2 escalation factor for health care costs, other
3 than the general inflation escalation factor, is
4 inconsistent with the Commission's practice
5 regarding the projection of this cost element
6 (Commission Opinion No. 84-27, issued October
7 12, 1985 in Case 28695). Using the same 2003
8 information as the company, the difference
9 between the company's escalation rate and
10 inflation equates to a reduction of \$1.189
11 million in gas expense and of \$484,000 in steam
12 expense.

13 Q. Do you have any comments concerning updates for
14 known changes for health care costs?

15 A. Yes. Consolidated Edison has indicated plans to
16 submit an update for actual 2004 premiums that
17 will be finalized in early 2004 for various
18 health insurance coverages. Applying the
19 general escalation factor to updated 2004 known
20 costs is consistent with Commission practice and
21 we propose to update our forecast at a later
22 time.

23 Q. Please explain your final adjustments to
24 employee welfare benefits.

1 A. Our final adjustments reducing employee welfare
2 expenses, \$15,000 to gas and \$16,000 to steam,
3 relate to the estimated cost of benefits for new
4 employees. These decreases flow from reductions
5 to pension costs, as discussed elsewhere, and
6 the changes to employee welfare benefits
7 discussed before.

8

9 **Insurance Premiums**

10 Q. Please explain your adjustments to insurance
11 premiums.

12 A. For the 12 months ended June 30, 2003, gas and
13 steam premium costs totaled \$2.934 million and
14 \$1.648 million, respectively. For the 12 months
15 ending September 30, 2005, gas and steam premium
16 costs are projected to increase to \$7.610
17 million and \$3.655 million, respectively. The
18 increases are primarily for property and
19 liability insurance. Certain premiums, most
20 notably Director and Officer Liability
21 Insurance, were renewed in January 2004.
22 Reflecting these known premium changes reduces
23 gas costs by \$981,000 and steam costs by
24 \$309,000. Property insurance premiums and

1 excess public liability premiums will be known
2 by mid-year 2004 and these insurance premium
3 costs should be reflected at the time Briefs on
4 Exceptions are filed.

5 Q. Are there any other adjustments related to the
6 insurance premium updates?

7 A. Yes. Director and officers insurance costs are
8 allocated to Orange and Rockland Utilities, Inc.
9 pursuant to an inter-company shared services
10 agreement. Accordingly, the reduction in
11 director and officers insurance costs will
12 result in a decrease in gas and steam shared
13 services credits of \$99,000 and \$31,000,
14 respectively.

15

16 **MGP/Superfund**

17 Q. Please explain the company's proposal for the
18 treatment of MGP/Superfund program costs.

19 A. The company is proposing to increase the level
20 of environmental costs reflected in rates up to
21 \$31.9 million, the level it expects to disburse
22 during the rate year. Of the \$31.9 million,
23 \$5.1 million is allocable to gas and \$1.6
24 million to steam.

1 Q. Do you have any comments concerning the
2 company's proposal?

3 A. Yes. The company's current rate plans allow it
4 to defer environmental costs in excess of a \$5
5 million company-wide annual bogey for future
6 recovery from customers. Under the company's
7 current accounting/ratemaking practices, the
8 first \$5 million of recognized costs are
9 expensed and the deferral of costs in excess of
10 this annual bogey are not based on actual
11 amounts expended but on the estimate of costs
12 that will be incurred in the future or an
13 accrued liability. As actual remediation costs
14 are paid, the accrued liability is reduced.

15 Consolidated Edison's deferred
16 MGP/Superfund Site Regulatory Asset balance,
17 which represents the actual amount owed by
18 customers, as of December 31, 2003, is \$115.5
19 million. However, Consolidated Edison also has
20 recorded a \$153.1 million accrued liability for
21 amount to be expended in the future for
22 MGP/Superfund Site remediation as of December
23 31, 2003. Therefore, as of December 31, 2003,
24 customers owe Consolidated Edison \$115.5 million

1 for site remediation liabilities of \$153.1
2 million. Thus, customers have, through rates,
3 prepaid MGP/Superfund costs in the amount of
4 \$37.6 million.

5 Q. Given this amount of prepayments, what level of
6 environmental costs do you propose be reflected
7 in rates?

8 A. Given the amount of the customer prepayment and
9 the level of rates being sought in these cases,
10 we recommend retention of the existing
11 companywide annual bogey of \$5 million. This
12 results in decreases to gas expense of \$4.356
13 million and to steam expense of \$1.371 million.

14 We also recommend that deferral accounting
15 for any over/under expense of the MGP/Superfund
16 rate level be authorized net of any state and
17 federal tax credits, any insurance proceeds
18 and/or grants or other credits received by the
19 company related to the MGP/Superfund program be
20 included in the reconciliation process. A
21 carrying charge should be accrued on the gas and
22 steam portion on the net amount prepaid by
23 either customers or the company.

24

1 **Interest Deduction Adjustment**

2 Q. Does Staff propose any adjustments to the
3 company's rate year state and federal income tax
4 computations in Exhibit__ (RM-2) Schedule 2?

5 A. Yes, we have adjusted the gas and steam state
6 and federal interest expense deductions to
7 reflect the following formula: Staff's adjusted
8 rate base plus interest bearing construction
9 work in progress times Staff weighted cost of
10 debt. This approach is known as the Leighton
11 Adjustment and has been an accepted method of
12 the Commission for many years.

13 Q. How does your approach differ from the company's
14 approach?

15 A. The primary difference is that Consolidated
16 Edison adjusts its base for the average balance
17 of declared dividends. We did not include such
18 an **adjustment** because, after consulting with
19 Staff witness Hogan, we determined that there
20 were no declared dividends at the time he
21 measured the company's common equity.

22

23 **Gas Only Adjustment**

24

1 **Interference**

2 Q. Are you proposing to adjust the company's \$14
3 million forecast of gas interference expense?

4 A. Yes. The company's forecast of gas interference
5 costs includes company labor costs of \$2,985,000
6 (Staff Information Request 322). The historic
7 year labor component of gas interference expense
8 was \$2,736,000 (Staff Information Request 321).
9 The indicated escalation factor for gas
10 interference labor of 9% is well in excess of
11 the 4.99% escalation factor that was used to
12 forecast all other company labor costs.
13 Therefore, we excluded company labor from gas
14 interference costs and included such labor in
15 the company's labor costs so as to reflect the
16 appropriate escalation rate.

17

18 **Steam Only Adjustments**

19

20 **Other Operating Revenues**

21 Q. Please explain your adjustment to Other
22 Operating Revenues.

23 A. The current steam rate plan provides the company
24 with interest on various balances that will

1 ultimately be reflected in rates and charged to
2 customers. The company amortizes this
3 accumulated cost over three years: Our
4 adjustment reduces the amortization by \$30,000
5 to reflect the impact of an adjustment to
6 deferred taxes, (addressed later in this
7 testimony), and other minor corrections.

8 Q. Are you proposing any other adjustments to other
9 operating revenues?

10 A. Yes. company witness Lee's steam testimony
11 states that while the company seeks to optimize
12 the value of its storage capacity through the
13 storage of fuel by third parties, it did not
14 expect to generate revenues for the fuel
15 management program due to the loss of a third
16 party agreement. However, recent conversations
17 with the company indicate that this is no longer
18 the case. It now appears that up to \$400,000
19 may be generated through the fuel management
20 program. We have reflected this amount of
21 revenues as a placeholder subject to update as
22 better information becomes available.

23

24 **World Trade Center Cost Amortization**

1 Q. Please explain Staff's adjustment to the
2 amortization of the WTC related costs?

3 A. The company proposed to recover over a three-
4 year period deferred interference and security
5 expenditures that relate to the WTC incident.
6 Consistent with the Staff gas engineering panel
7 testimony, we have reversed the proposed
8 amortization expense of \$1.62 million and
9 removed these deferred costs from steam rate
10 base. The company has a petition pending before
11 the Commission in which it seeks authority to
12 defer WTC related costs. The Commission will
13 address the appropriate treatment of these costs
14 in that proceeding.

15

16 **Property Taxes**

17 Q. Please explain how the company projected
18 property taxes.

19 A. The company forecasted steam property taxes of
20 \$65.158 million. To arrive at that amount, the
21 company used known 2003 assessed valuations and
22 tax rates as a starting point. Assessed
23 valuations were projected using the construction
24 forecast. A three year average was then used to

1 split the assessed valuation by class. Tax
2 rates are escalated on the basis of a five-year
3 average. Property Taxes also include an
4 additional \$1.713 million for the amortization
5 of certain deferred costs allowed in prior rate
6 orders.

7 Q. Are you proposing any adjustments to the
8 property tax forecast?

9 A. Yes. We are proposing to reduce the property
10 tax forecast by \$248,000. The ERRP accounts for
11 approximately 90% of the projected growth in
12 steam's assessed valuations for both the tax
13 years 2003/2004 and 2004/2005. Following the
14 company's forecast methodology we calculated a
15 rate year ERRP property tax expense of \$26.716
16 million before the exemption for Industrial and
17 Commercial Incentive Program Credits and \$19.391
18 million net of this credit. We compared this
19 amount to information provided in Staff
20 Information Request 128 and to company
21 workpapers supporting rents charged to electric
22 operations for East River and found that ERRP
23 property taxes net of the credit were only
24 \$19.143 million. The difference is attributable

1 to a split of the assessed value among the
2 classes different from the average.

3

4 **Property Tax Amortizations**

5 Q. Please explain your adjustments to property tax
6 amortizations.

7 A. Company witness Muccilo's states that under the
8 current steam rate plan the company is allowed
9 to defer, for future recovery from customers,
10 86% of property taxes above a predetermined
11 annual expense level in each rate year. The
12 company estimates that property taxes over the
13 period of the current rate plan will exceed the
14 sum of predetermined annual levels by \$24.256
15 million, 86% of which is \$20.86 million. A
16 three-year recovery of this amount would
17 increase property taxes by \$6.953 million.

18 Our review indicates that property taxes
19 over the period of the existing rate plan should
20 exceed predetermined levels by \$19.929 million,
21 86% of which is \$17.139 million. A three-year
22 amortization of this amount reduces the
23 company's proposed amortization by \$1.240
24 million to \$5.713 million. The primary reasons

1 for the difference between our recommendation
2 and the company's position are that our
3 adjustment is based on more recent actual data
4 because it reflects actual book deferrals
5 through December 31, 2003, and it reflects the
6 exclusion of taxes associated with a delayed
7 startup date for ERRP (during the period July
8 2004 through September 2004, ERRP is anticipated
9 to be under construction). Therefore, it is
10 proper to capitalize such taxes. We also note
11 that even if such taxes are expensed, the
12 electric portion of such taxes should be
13 excluded from this steam department
14 reconciliation/deferral.

15 Q. Does this adjustment capture the effects of
16 changes in New York City's Special Franchise
17 Tax?

18 A. No. It excludes the effects of a Special
19 Franchise Tax reduction on the company's steam
20 property subject to the New York City Special
21 Franchise Tax. Witness Muccilo indicates that
22 customers will have their 86% share of this
23 benefit returned over a three-year period.
24 Consolidated Edison's determination of the

1 projected tax reduction beyond those recorded on
2 the books and records of the company as of
3 September 2004, however, inadvertently passed
4 back 100% of the reduction to customers. Our
5 adjustment increasing property tax expense by
6 \$388,000 corrects this oversight.

7

8 **East River Repowering, Transfer Costs and**
9 **Depreciation Reserve Deficiency**

10 Q. Company witness Rasmussen provides an overview
11 of the company's rate request. He addresses,
12 among other cost items, the proposed treatment
13 for the ERRP, 74th and 59th Street Station costs
14 and a change to depreciation rates and the
15 amortization of a reserve deficiency. Do you
16 wish to comment on the treatment of the items?

17 A. Yes. The rate stability benefits reflected in
18 the company's last case depended in large
19 measure upon the completion of the ERRP and the
20 retirement and sale of the Waterside Plant.
21 With the delay in the completion of ERRP and the
22 delay in the sale of Waterside and the other
23 First Avenue properties, it was not possible to
24 completely achieve the desired rate stability.

1 In order to avoid an abrupt rate change to the
2 extent possible, we believe that the treatment
3 of ERRP's costs and benefits and the anticipated
4 gain from the sale of Waterside and other
5 properties need to once again be carefully
6 factored into the establishing of steam rates.

7 Q. Please explain the company's proposal regarding
8 ERRP.

9 A. The company proposes to put the costs of ERRP
10 into base rates as of October 1, 2004 with
11 approximately two-thirds of the carrying costs
12 of the plant allocated to the electric
13 department through an interdepartmental rent.
14 Fuel savings would be reflected in lower fuel
15 adjustment costs. Because the commercial
16 operation date for the project is unknown and
17 could very well slip beyond October 1, 2004, the
18 company proposes to pass back to customers
19 through the steam fuel adjustment clause (FAC)
20 any overcollection in base rates for the plant
21 until the unit is in commercial operation.

22 Q. What does Staff propose?

23 A. Staff witness Van Cook proposes to exclude ERRP
24 from base rates given the uncertainty of the

1 commercial operation date. Should ERRP become
2 operational in the rate year, all net benefits
3 allocable to steam will be passed through the
4 steam FAC. Staff has made adjustments to other
5 operating revenues, company labor, water
6 chemicals, depreciation and amortization and
7 rate base in order to fully remove ERRP impacts
8 from the revenue requirement calculation.

9 Q. How does the company treat 74th and 59th Street
10 Station costs?

11 A. The company requests permission to continue to
12 receive reimbursements from the electric
13 department for the costs of operating the 74th
14 and 59th Street Plants through the Monthly
15 Adjustment Charge (MAC) as a rate mitigator
16 until proceeds from the sale of Waterside and
17 the other First Avenue properties are available
18 and can be used to offset this cost.

19 Q. What do you propose regarding this item?

20 A. We propose a treatment similar to the approach
21 used in the current rate plan. More
22 specifically, in the current rate plan, the
23 company was authorized to continue to recover
24 non-fuel O&M expenses, including property taxes

1 related to these plants, from the electric
2 department through the MAC until ERRP was in
3 service. Upon the actual in-service date of
4 ERRP the electric charge will end and the actual
5 costs of the 74th and 59th Street Plants become a
6 steam fuel charge.

7 We now know that if ERRP's in-service date is
8 delayed beyond the start of the heating season,
9 November 1, 2004, the anticipated level of fuel
10 savings needed to mitigate both these costs and
11 the large rate increase would be reduced.

12 Therefore, in that event, we propose to delay
13 the transfer of the 74th and 59th Street Plant
14 costs to steam until October 1, 2005.

15 Q. Please discuss the company's treatment of the
16 deficiency that exists in the accumulated
17 reserve for depreciation.

18 A. As noted by company witness Hutcheson,
19 Consolidated Edison acknowledged, in the last
20 case, that there was a steam system depreciation
21 reserve deficiency, and that as a result,
22 depreciation rates should be revised. To
23 mitigate the rate increase caused by increasing
24 depreciation rates, the parties proposed to use

1 the net gain from the sale of the First Avenue
2 Properties, including Waterside, allocable to
3 steam operations to offset or partially offset,
4 at the Commission's discretion, the reserve
5 deficiency as determined by a study to be
6 conducted once the ERRP is completed. Revised
7 steam depreciation rates would also be
8 considered at that time.

9 Because the sale will not be consummated prior
10 to the end of the rate year, the company would
11 no longer offset the depreciation reserve
12 deficiency with the proceeds of the First Avenue
13 sales. Instead, it proposes to amortize the
14 deficiency over a fifteen year period. The
15 company also proposes to increase depreciation
16 expense to reflect proposed changes in steam
17 depreciation rates.

18 Q. What is Staff's recommendation for this item?

19 A. Staff witness Rieder's analysis indicates that
20 there is no need to recover the steam system
21 depreciation reserve deficiency as proposed by
22 the company. Nor is there a need to use the net
23 gain from the sale of the First Avenue
24 Properties to offset the deficiency. The

1 appropriate use of the proceeds should be
2 determined when they are received.

3

4 **Steam Rate Base-Revised Construction Expenditures**

- 5 Q. Please explain your adjustment to Book Cost of
6 Plant.
- 7 A. Company witness Ricco's testimony acknowledges
8 that his net plant forecasts were based upon a
9 level of construction expenditures that have
10 since been revised and that he intends to update
11 his estimate. Reflecting the level of revised
12 construction expenditures to the company's net
13 plant forecasts, per the company's response to
14 Staff Information Request 129, decreases rate
15 base by \$2.399 million. The update requires a
16 reduction of \$2.548 million to the Book Cost of
17 Plant offset by tracking adjustments reducing
18 the Accumulated Reserve for Depreciation by
19 \$13,000 and Accumulated Deferred Federal Income
20 Taxes by \$136,000.
- 21 Q. Are there any other impacts from this update?
- 22 A. Yes. Property Taxes are reduced by \$9,000 and
23 Depreciation and Amortization Expenses decrease
24 by \$89,000.

1

2 **Deferred Accounting**

3 Q. Mr. Rasmussen indicates that the company seeks
4 to employ the use of deferred accounting for a
5 number of items including: pensions/OPEB
6 expense, costs associated with employee health
7 insurance, gas sales and transportation service
8 study, MGP/Superfund, WTC-related costs, capital
9 expenditures, and property taxes. Do you
10 support the company's request for reconciliation
11 accounting for these items?

12 A. Our recommendations on deferred accounting for
13 pension/OPEB's, property taxes, MPG/Superfund,
14 and WTC costs have been already addressed in our
15 testimony. Employee health insurance costs,
16 like property taxes, can be updated for known
17 changes up to Brief on Exceptions. Therefore,
18 given the shorter forecast period,
19 reconciliation of these costs is unwarranted.
20 The Commission has already addressed the
21 mechanism for recovery of gas sales and
22 transportation service study costs (Case 00-G-
23 0996, issued January 28, 2004). Therefore,
24 deferral of these study costs is not warranted.

1 Finally, we do not support the company's
2 proposal to reconcile its capital expenditures.
3 To our knowledge, such treatment has never been
4 granted in a single year rate case. Moreover,
5 Consolidated Edison did not address the need for
6 such treatment.

7 Q. Under the current steam FAC, there is no
8 periodic reconciliation of the over/under
9 collection of FAC revenues above the base cost
10 of fuel. The company now seeks to reconcile
11 fully its fuel costs to its fuel cost recoveries
12 similar to its electric Market Supply Charge. Do
13 you support the company's request to fully
14 reconcile these recoveries?

15 A. No. We note that the Commission has previously
16 determined that minor mismatches in costs and
17 revenues under the traditional FAC system do not
18 necessitate an annual reconciliation (Case
19 27137, Opinion No. 80-24, issued June 18, 1980).

20 Q. Does the information provided in Exhibit__ (EJR-
21 3) show significant mismatch in cost/recovery
22 that would warrant reconsideration of the
23 Commission's determination in Opinion No. 80-24?

24 A. No. The data provided by the company indicates

1 a cumulative under recovery of \$575,000 for the
2 period 1998-2002. We do not consider that
3 amount to be significant, so there is no need to
4 reconsider the requirements imposed by the
5 Commission in Opinion No. 80-24.

6 Q. Do you have any additional comments regarding
7 the company's proposal to fully reconcile FAC
8 recoveries?

9 A. Full reconciliation of FAC recoveries would
10 eliminate any incentive for the company to
11 minimize its fuel costs.

12 Q. Does this conclude your testimony?

13 A. Yes, it does.

BEFORE THE
STATE OF NEW YORK
PUBLIC SERVICE COMMISSION

In the Matter of

CONSOLIDATED EDISON COMPANY OF NEW YORK, INC.

Cases 03-G-1671 & 03-S-1672

MARCH 2004

Prepared Exhibit of:

ACCOUNTING & FINANCE PANEL
Robert Burke
Public Utilities Auditor III
State of New York
Department of Public Service
Three Empire State Plaza
Albany, New York 12223-1350

John Scherer
Public Utilities Auditor III
State of New York
Department of Public Service
Three Empire State Plaza
Albany, New York 12223-1350

GAS RATE CASE 03-G-1671
STEAM RATE CASE 03-S-1672

State of New York Department of Public Service: Interrogatory No. 87

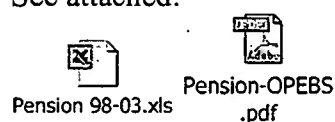
Responding Witness: Edward J. Rasmussen

Question:

- a. Please provide the calculations and workpapers supporting the response

Response

See attached:



<u>Gas Rate Year end</u>	<u>Corporate</u>	<u>In Rates</u>
9/97 thru 9/01	\$128.8 mil	\$14.613 mil
9/02	\$(273.7)	(31.043)
9/03 and 9/04 was escalated at 2.1%/rate year		

<u>Steam Rate Year end</u>	<u>Corporate</u>	<u>In Rates</u>
9/97	\$185.2 mil	\$5.556 mil
9/98 thru 9/01	110.1	3.365
9/02 thru 9/04	(207.4)	(8.064)

Line: O-O&m Service: C-Common Business Function: Administrative & Control
MAG Category: O-Operation
MAG Code: 49-Operation - Administrative And Gene
PSC Number: 92610-Employee Pensions

Account	Description	11 mos End					
		Yr 1998	Yr 1999*	Yr 2000	Yr 2001	Yr 2002	Yr 2003
C5506	Emp Pension-retire Group Life Ins	16,500,000	9,300,000	6,500,000	5,900,000	6,100,000	8,300,000
C5520	Emp Pen-aff Reimb-ret.health Plan	-	-	-	-	-	(73,765)
E5501	Emp Pens-elec/pens Reconcil-defer	-	-	-	-	-	-
G5502	Emp Pens-gas/pens Reconcil-defer	-	-	-	-	-	-
H5501	Pensions-elec-transfers To Pasny	(41,467)	(19,694)	44,208	(72,861)	(15,412)	(10,209)
H5506	Pensions-lump Sum Make Up-disabil	-	-	6,207	-	-	-
J5501	Emp Pens-elec/pens Reconcil-amort	-	-	500,000	2,000,000	2,000,000	2,000,000
J5502	Emp Pens-gas/pens Reconcil-amort	-	-	-	-	-	-
J5503	Emp Pens-stm/pens Reconcil-amort	380,800	734,400	816,000	326,400	326,400	326,400
S5503	Emp Pens-stm/pens Reconcil-defer	-	-	-	-	-	-
S5506	Emp Pens-retirees' Health Plan	65,759,000	81,000,000	34,700,000	44,000,000	32,500,000	29,400,000
S5520	Emp Pen-aff Reimb-ret Group Life	-	-	-	-	-	(167,377)
5501	Pensions-electric	27,548,820	(5,194,045)	(161,227,158)	(221,650,892)	(224,713,194)	(151,441,343)
5502	Pensions-gas	5,419,270	(1,176,981)	(32,649,685)	(41,291,730)	(46,256,083)	(31,173,440)
5503	Pensions-steam	1,571,554	(355,646)	(12,375,118)	(15,303,539)	(14,562,100)	(9,813,861)
5504	Pensions-elec-transf To Const	(4,640,030)	960,777	32,528,496	48,718,197	46,627,399	39,107,458
5505	Pensions-pens & Ben-retire For Ag	(49,000,000)	(97,200,000)	(249,200,000)	(325,400,000)	(324,400,000)	(230,900,000)
5507	Pensions-supplemental	1,280,644	173,328	1,741,832	(2,746,161)	268,622	212,989
5508	Pensions-transf To Const	(6,250,882)	1,328,518	43,680,000	61,373,390	64,163,202	53,815,134
5509	Pensions-transfers Of Common	(28,288,761)	5,398,154	162,571,961	216,872,771	221,368,175	138,613,510
5510	Pensions-gas-transf To Const	(1,395,197)	326,347	9,513,504	9,985,451	15,161,765	12,716,516
5514	Pensions-steam-transf To Const	(215,655)	41,394	1,638,000	2,669,742	2,374,038	1,991,160
5517	Emp Pens-elec-dir-o & R Emp	487,843	241,448	16,192	24,280	32,080	4,020
5518	Emp Pens-elec-dir-roseton Emp	(498,851)	(183,207)	(561,388)	(257,266)	-	-
5520	Emp Pen-aff Reimb-pensions	-	-	-	-	-	799,509
	TOTALS	28,617,086	(4,625,207)	(161,756,948)	(214,852,219)	(219,025,108)	(136,293,299)
	Capaitalization Rate	18.50%	19.75%	21.00%	22.25%	24.00%	28.25%
	Effective Capitalization Rate	18.10%	19.75%	21.23%	22.22%	22.63%	28.26%

*Note: 1999 does not exclude \$15 mil write off nor deferral of \$30 mil of early retirement benefits from electric global agreement. These amounts were reflected in Other Operating Revenues.

From: January 1999 To: December 1999 Account Type: O&M Activity

Line: O-O&m Service: C-Common Business Function: Administrative & Control
 MAG Category: O-Operation
 MAG Code: 49-Operation - Administrative And Gene
 PSC Number: 92610-Employee Pensions

Account	Description	January-99	February-99	March-99	April-99	May-99	June-99	July-99	August-99	September-99	October-99	November-99	December-99	Total
C5506	Emp Pension- retire Group Life Ins	1,587,000	1,583,000	1,583,000	1,583,000	(2,461,000)	775,000	775,000	775,000	775,000	775,000	775,000	775,000	9,300,000
C5520	Emp Pen-aff Reimb-rel.health Plan	0	0	0	0	0	0	0	0	0	0	0	0	0
E5501	Emp Pens-elec/pens Reconcil-defer	0	0	0	0	0	0	0	0	0	0	0	0	0
G5502	Emp Pens-gas/pens Reconcil-defer	0	0	0	0	0	0	0	0	0	0	0	0	0
H5501	Pensions-elec-transfers To Pasny	(2,760)	(1,976)	(3,633)	(1,181)	(1,106)	(1,220)	(1,255)	(795)	(2,320)	(1,679)	(780)	(989)	(19,694)
H5506	Pensions-lump Sum Make Up-disabil	0	0	0	0	0	0	0	0	0	0	0	0	0
J5501	Emp Pens-elec/pens Reconcil-amort	0	0	0	0	0	0	0	0	0	0	0	0	0
J5502	Emp Pens-gas/pens Reconcil-amort	0	0	0	0	0	0	0	0	0	0	0	0	0
J5503	Emp Pens-strn/pens Reconcil-amort	54,400	54,400	54,400	54,400	54,400	54,400	54,400	54,400	54,400	81,600	81,600	81,600	734,400
S5503	Emp Pens-strn/pens Reconcil-defer	0	0	0	0	0	0	0	0	0	0	0	0	0
S5506	Emp Pens-retirees' Health Plan	5,537,000	5,533,000	5,533,000	5,533,000	11,614,000	6,750,000	6,750,000	6,750,000	6,750,000	6,750,000	6,750,000	6,750,000	81,000,000
S5520	Emp Pen-aff Reimb-ret Group Life	0	0	0	0	0	0	0	0	0	0	0	0	0
5501	Pensions-electric	2,869,627	2,823,089	2,803,340	2,836,003	(5,640,352)	1,011,407	1,132,751	374,274	997,129	(7,699,221)	(3,351,046)	(3,351,046)	(5,194,045)
5502	Pensions-gas	544,543	535,712	531,964	538,163	(1,070,318)	191,926	233,171	77,042	205,254	(1,584,846)	(689,796)	(689,796)	(1,176,981)
5503	Pensions-steam	177,803	174,919	173,696	175,719	(349,477)	62,667	73,406	24,254	64,617	(498,933)	(217,158)	(217,158)	(355,646)
5504	Pensions-elec-transf To Const	(484,897)	(477,033)	(473,696)	(479,215)	953,081	(170,903)	(193,503)	(63,935)	(212,383)	1,350,768	587,915	624,577	960,777
5505	Pensions-pens & Ben- retire For Ag	(3,733,000)	(3,733,000)	(3,733,000)	(3,733,000)	(16,360,000)	(6,259,000)	(6,259,000)	(6,258,000)	(6,258,000)	(17,308,000)	(11,783,000)	(11,783,000)	(97,200,000)
5507	Pensions-supplemental	200,973	150,719	126,000	166,885	146,852	0	173,328	(791,429)	0	0	0	0	173,328
5508	Pensions-transf To Const	(664,515)	(653,738)	(649,165)	(656,729)	1,306,127	(234,210)	(266,276)	(87,981)	(292,257)	1,858,770	809,020	859,470	1,328,518
5509	Pensions-transfers Of Common	(2,927,458)	(2,879,981)	(2,859,835)	(2,893,156)	5,754,021	(1,031,790)	(1,173,052)	(387,590)	(974,743)	7,924,230	3,448,980	3,398,530	5,398,154
5510	Pensions-gas-transf To Const	(151,709)	(149,248)	(148,204)	(149,931)	298,189	(53,470)	(62,921)	(20,790)	(69,060)	439,227	191,171	203,093	326,347
5514	Pensions-steam-transf To Const	(27,910)	(27,457)	(27,265)	(27,583)	54,857	(9,837)	(9,852)	(3,255)	(10,814)	68,774	29,934	31,800	41,394
5517	Emp Pens-elec-dir-o & R Emp	42,449	35,750	44,155	33,097	34,680	48,680	(90)	480	0	0	0	2,247	241,448
5518	Emp Pens-elec-dir-roseton Emp	(15,079)	(16,962)	(12,314)	(18,134)	(15,431)	(14,255)	(15,488)	(17,378)	(13,913)	(15,418)	(15,418)	(13,417)	(183,207)
5520	Emp Pen-aff Reimb-pensions	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTALS		3,006,468	2,951,194	2,942,443	2,961,338	(5,681,478)	1,119,395	1,210,619	424,298	1,012,911	(7,859,727)	(3,383,578)	(3,329,089)	(4,625,207)
Capitalization Rate		19.75%	19.75%	19.75%	19.75%	19.75%	19.75%	19.75%	19.75%	19.75%	19.75%	19.75%	19.75%	19.75%
Effective Capitalization Rate		18.50%	18.50%	18.50%	18.50%	18.50%	18.50%	18.50%	18.50%	23.07%	19.00%	19.00%	20.18%	19.75%

Note: 1999 does not exclude \$15 mil write off nor deferral of \$30 mil of early retirement benefits from electric global agreement. These amounts were reflected in Other Operating Revenues.

Pensions/OPEBs - Electric

		2000
Estimated Gross Costs		<u>\$ (127,200)</u>
Supplemental		592
Total Gross		<u>(126,608) ✓</u>
Less Capitalized @	21.50%	<u>27,221</u>
Net Pensions/OPEBs		<u>\$ (99,387)</u>
 <u>Allocable to Electric</u>		
Gross @	78.70%	\$ (99,640)
Capitalized @	72.67%	<u>19,781</u>
Net - Electric		<u>\$ (79,859) *</u>
Three Months Ending Mar. 31, 2000		\$ (19,965)
Actual Nine Months Ended Dec. 31, 1999		<u>7130</u>
Twelve Months Ending Mar. 31, 2000		<u>\$ (12,835)</u>

*Estimated for Rate Years Ending March 2001 and Beyond

CONSOLIDATED EDISON COMPANY OF NEW YORK, INC.
GAS RATE CASE 03-G-1671
STEAM RATE CASE 03-S-1672

State of New York Department of Public Service: Interrogatory No. 98

Responding Witness: Edward J. Rasmussen

Question: Regarding the charge to OCI:

- a. Is any cash payment is triggered by a decline in the market value of pension/OPEB plan assets?
- b. If the answer to (a) is yes, please explain why.
- c. Is there any cash flow effect associated with such a charge to OCI?
- d. If the answer to (c) is yes, please explain.
- e. Is there any cash flow associated the regulatory asset CECONY seeks to create?
- f. If the answer to (e) is yes, please explain.
- g. Has CECONY discussed the potential effects of the charge with members of the financial community, including the rating agencies?
- h. If the answer to (g) is yes, please describe the status of those discussions and the concerns, if any, expressed by members of the financial community.
- i. Has CEI discussed the potential effects of the charge with members of the financial community, including the rating agencies?
- j. If the answer to (i) is yes, please describe the status of those discussions and the concerns, if any, expressed by members of the financial community.
- k. Please provide any reports by the financial community that address this issue.

Response:

- a. No, an additional minimum pension liability must be recognized with a corresponding charge to OCI if the fair value of plan assets is lower than the Accumulated Benefit Obligation (ABO) at December 31st. The charge to OCI is a determined for accounting purposes only. As such, it does not trigger any cash payments; these are based on funding requirements, which are calculated using a different valuation methodology and different interest rates. The charge to OCI is reversed when the fair value of assets exceeds the ABO.
- b. Not Applicable
- c. The charge to OCI is a non-cash charge with no cash flow effect.
- d. Not Applicable
- e. There is no cash flow associated with creating a regulatory asset to offset the additional minimum pension liability.

f. Not Applicable

g. CECONY disclosed the following information in its 2002 10-K:

An actuarial valuation of the plan's funded status was performed as of December 31, 2002. The valuation showed that the fair value of the company's pension plan assets exceeded its Accumulated Benefit Obligation (ABO) at December 31, 2002. However, the fair market value of Con Edison's pension plan assets could fall below the plan's ABO in future years. In that event, Con Edison would be required, under SFAS No. 87 and SFAS No. 132 "Employers' Disclosures about Pension and Postretirement Benefits," to accrue a liability equal in amount to the difference between the fair value of the plan assets and the ABO, plus its total accrued pension credits, through a non-cash charge to other comprehensive income (OCI). The charge to OCI, which would be net of taxes, would not affect the company's net income for common stock.

- h. CECONY was asked by the investor community for information regarding the likelihood of an OCI charge. The Company indicated that while there had not been a charge through December 2002, continued decreases in the market could result in an OCI charge in the future. Since that time the financial markets have started to make a comeback and at December 31, 2003 the estimated excess of plan assets over the ABO was approximately \$799 million.
- i. The response to g is the same for CEI.
- j. The response to h is the same for CEI, except the excess of plan assets over the ABO will be different because of the Orange and Rockland Plan assets compared to their ABO.
- k. I do not recall having received any formal reports from the financial community that address this issue. It has been an item that has been discussed by investors and rating agencies.

CONSOLIDATED EDISON COMPANY OF NEW YORK, INC.
GAS RATE CASE 03-G-1671
STEAM RATE CASE 03-S-1672

State of New York Department of Public Service: Interrogatory No. 99

Responding Witness: Edward J. Rasmussen

Question: Mr. Rasmussen states that "... the creation of this regulatory asset would not affect the Company's operating results or what customers pay currently" (page 18).

- a. Would the creation of the regulatory asset impact in any way the amount customers will pay in the future?
- b. If the answer to (a) is yes, please explain how and why it is appropriate. CECONY seeks authorization to record a regulatory asset in lieu of a charge to OCI in the event that such a charge would be required as a result of decline in the market value of pension/OPEB plan assets.

Response:

- a. The creation of the regulatory asset does not in and of itself have any impact on the amount customers will pay in the future. It is the actual gains and losses experienced by the Company's pensions assets that would impact the pension expense customers will pay in the future.
- b. Not applicable.

1998	59,205,663	60%	35,523,397.80
1999	(265,404,002)	70%	(185,782,801.40)
2000	87,597,863	80%	70,078,290.40
2001	123,526,017	90%	111,173,415.30
2002	194,177,352	100%	194,177,352.00
TOTAL	<u><u>\$ 408,187,054</u></u>		<u><u>\$ 276,022,875</u></u>

k. The Company did not perform a study during 2002 or 2003 to verify the reasonableness of assumptions used in the 2003 pension/OPEB calculations. As previously indicated, the Company reviews Mellon's survey of over 200 clients nationwide as a benchmarking report, attached is their latest survey.



FASInternal-02.pdf

CONSOLIDATED EDISON COMPANY OF NEW YORK, INC.
GAS RATE CASE 03-G-1671

Party Name & Interrogatory Number:

State of New York Department of Public Service – Interrogatory #S-128

Responding Witness: Hutcheson

Question:

- a. Please provide all workpapers and calculations that support Mr. Hutcheson's forecasted property tax amounts by month and year for the period 2004 through 2008.
- b. Please provide all workpapers and calculations supporting the development of the 2003 starting point.
- c. Please separately identify and provide all workpapers and supporting calculations for the amounts related to ERRP, including any related abatements.
- d. Please separately identify and provide all workpapers and supporting calculations for the forecasted continuation of the reduction for economic obsolescence in the steam special franchise assessments.

Response:

- a. The workpapers are attached.
- b. The attachment for interrogatory #S-127(a) and (a) above includes the information.
- c. The attachment for (a) above includes the information.
- d. As stated on page 21, lines 20-22 of my testimony, "...the forecast assumes that a current reduction for economic obsolescence in our steam special franchise taxes will continue to be available to the Company." There are no specific workpapers or calculations supporting this assumption. Since, however, the economic obsolescence benefit is based on the five-year average of the Company's financial performance, it was reasonable to assume in the forecast that some benefit would be available through year 2008 even if the Company's rate increase request is granted. Nevertheless, because this benefit cannot be guaranteed and is beyond the Company's control, as with all property taxes in general, 100% reconciliation is appropriate, as provided in my testimony.

Property Tax on First Avenue Property

Assumptions:

- Parking Lot - sold 11/06. Tax on land only Developer picks up taxes as of July 2005
- Kips Bay - equip/structure demolished/removed. Tax on structure/equip removed 04/05. Tax on land continues thru June 2005. Developer picks up tax thereafter
- Waterside - tax on all components continues thru June 2006. Property Decommissioned at 12/31/04. Taxes cease 1 yr later (time needed to demolish) effective July 2006
- 708 1st Ave. - structure demolished. Tax on structure is -\$0- eff 7/03. Tax on land continues thru June 2005 when developer takes over.

Waterside A356-28 & A356-28P (CLASS 4) & A356-28EP & A356-28E (CLASS 3)
PLANT SOLD 11/06. PLANT DECOMMISSIONED DEC 2004. ASSUME 1 YEAR TO DEMOLISH. TAXES DROP OFF EFF JUL 2006

	2003/2004 AV		2003/2004 TAX	
	CLASS 4	CLASS 3	CLASS 4	CLASS 3
A356-28	14,197,950		1,622,968	
A356-28P	12,370,213		1,414,039	
A356-28E		3,691,845		458,453
A356-28-EP		103,624,262		12,868,061
2004/2005	27,524,617	108,700,485	3,225,059	14,443,033
2005/2006	28,515,503	110,102,721	3,424,712	15,653,304
2006/2007	29,542,061	111,523,046	3,636,628	16,964,886
2007/2008	30,605,575	112,961,693	3,861,811	18,386,775
2008/2009	31,707,376	114,418,899	4,100,715	19,927,195
annual amount			CLASS 4	CLASS 3
2004			3,131,033	13,884,774
2005			3,324,886	15,048,169
2006			3,530,670	16,309,095
2007			3,749,220	17,675,831
2008			3,981,263	19,156,985
budget months effected	monthly amt		Total	
	CLASS 4	CLASS 3	monthly adj	total adj
7/06-12/06	294,223	1,359,091	1,653,314	9,919,884
1/07-12/07	312,435	1,472,986	1,785,421	21,425,052
1/08-12/08	331,772	1,596,415	1,928,187	23,138,244

Property Tax on First Avenue Property

Assumptions:

Parking Lot - sold 11/06. Tax on land only Developer picks up taxes as of July 2005

Kips Bay - equip/structure demolished/removed. Tax on structure/equip removed 04/05. Tax on land continues thru June 2005. Developer picks up tax thereafter

Waterside - tax on all components continues thru June 2006. Property Decommissioned at 12/31/04. Taxes cease 1 yr later (time needed to demolish) effective July 2006

708 1st Ave. - structure demolished. Tax on structure is -\$0- eff 7/03. Tax on land continues thru June 2005 when developer takes over.

708 1st Ave A356-28.1 CLASS 4-structure demolished. Taxes reduced to tax on land only by NYC effective 7/03
 land tax drops off eff 07/05- developer assumes taxes as of 7/1/05

	AV	TAX		
2003/2004	5,428,000	620,475		
2004/2005	5,428,000	635,999		
2005/2006	5,428,000	651,903		
2006/2007	5,428,000	668,187		
2007/2008	5,428,000	684,905		
2008/2009	5,428,000	702,003		
annual amount tax				
	2004	628,237		
	2005	643,951		
	2006	660,045		
	2007	676,546		
	2008	693,454		
budget months effected		monthly amt	no months	total
7/05-12/05		53,663	6	321,978
1/06-12/06		55,004	12	660,048
1/07-12/07		56,379	12	676,548
1/08-12/08		57,788	12	693,456

Economic Obsolescence Benefit

	2003/2004	2004/2005	2005/2006	2006/2007	2007/2008	2008/2009
tax benefit at 100%	8,057,677	9,185,752	10,471,757	11,937,803	13,609,095	15,514,368
benefit received	8,057,677	9,185,752	8,377,406	7,162,682	5,443,638	3,102,874
monthly incremental tax Rounded	671,473 671	765,479				
Jan thru june amount	4,028,838					
rounded (000's) {Jan-Jun 2004} {6 Month Total}	4,029,000					
rounded (000's) {July 2004-June 2005 - Monthly}		765,000				

Industrial and Commercial Incentive Program (ICIP)

East River Complex - Estimated Property Tax Savings from the ICIP

Tentative Assessment - 2003/04

Class	Total	Land	Total Excl. Land	Property Taxes
3 A356-30E	38,340,000	-	38,340,000	4,761,061
3 A356-30EP	77,109,150	-	77,109,150	9,575,414
4 A12-12	9,540,000	9,540,000	-	1,090,517
4 A356-10	1,273,500	1,273,500	-	145,574
4 A356-104	2,101,500	2,101,500	-	240,222
4 A356-30	26,203,069	5,400,000	20,803,069	2,995,273
4 A356-30P	61,009,895	-	61,009,895	6,974,041
	<u>215,577,114</u>	<u>18,315,000</u>	<u>197,262,114</u>	<u>25,782,102</u>

MRE at 10%

19,726,211

MRE at 25%

49,315,529

ERRP Total New Construction	670,000,000		
Non-Eligible (streetwork)	104,000,000		
Eligible Construction	566,000,000		
Assessed Value of Eligible Construction-Total	254,700,000		
Assessed Value of Eligible Construction-Class 4 component	52,111,620		
Assessed Value of Eligible Construction-Class 3 component	202,588,380		
Property Taxes Eligible for ICIP(exemption)-2005/2006-80% Assumed	29,300,198	July-Dec Amt	Jan-June Amt.
Property Taxes Eligible for ICIP(exemption)-2006/2007-80% Assumed	31,069,136	14,650,099	14,650,099
Property Taxes Eligible for ICIP(exemption)-2007/2008-80% Assumed	32,955,693	15,534,568	15,534,568
Property Taxes Eligible for ICIP(exemption)-2008/2009-80% Assumed	34,965,830	16,477,847	16,477,846
		17,482,915	17,482,915

Industrial and Commercial Incentive Program (ICIP)

Calculation of ERRP Incremental Property Taxes

	<u>AV-Total</u>	<u>CL 3 AV</u>	<u>CL 4 AV</u>	<u>Tax</u>	<u>Exemption-ICIP</u>	<u>Incremental Tax</u>
03/04	-	-	-	-	-	-
04/05(*)	164,700,000	131,002,380	33,697,620	21,354,636	-	21,354,636
05/06(*)	303,624,630	241,503,031	62,121,599	41,795,290	29,300,198	12,495,092
06/07	303,624,630	241,503,031	62,121,599	44,384,610	31,069,136	13,315,474
07/08	303,624,630	241,503,031	62,121,599	47,147,952	32,955,693	14,192,259
08/09	303,624,630	241,503,031	62,121,599	50,094,354	34,965,830	15,128,524
				<u>204,776,842</u>	<u>128,290,857</u>	<u>76,485,985</u>

Annualization of Fiscal Incremental Tax :(in 1,000's)

	<u>Amount (000)</u>
2004	10,677
2005	16,925
2006	12,905
2007	13,754
2008	14,660
TOTAL	<u>68,921</u>

- (*) Total ERRP construction - \$670 million; \$366 million hits 2004/05; balance hits 2005/06
 \$366 based on estimate of 75% of \$487.6 (per Gonella Testimony) (Assumes CWIP that will be accelerated into 2004/05 by NYC assessor.
 Balance of \$304 million reflected in 2005/06 taxes
 ICIP credit benefits to commence with 2005/06 tax year.

Industrial and Commercial Incentive Program (ICIP)

Summary of Plant Accounts to be Charged for ERRP & Development of the Percentage of Structures to Total Project to Date

Work Order	Actual Accounts	Proposed Change	OSP0200 - Repowering Project Description	Total to Date August 2003 for appropriation	
				Total	Structure
32594	9514	9714	Install Maintenance Office & Lunch Room	2,075,716.03	2,075,716.03
32596	9514	9714	Inst New Fire Protection Pump No. 1	925,132.41	925,132.41
32601	9514	9714	Build A New Oil Drum Storage Room	341,860.01	341,860.01
32608	9514	9714	Inst New 15th St. Entrance Security Sys.	204,134.13	204,134.13
32611	9514	9714	Inst New Telephone Conduit System.	2,457,886.10	2,457,886.10
11462	9561	9714	Ug Elec Conduit Relocations	214,895.52	214,895.52
15556	9561	9714	Ug Elec Conduit Relocations	686,126.60	686,126.60
15563	9561	9714	Inst. Telecom. Ducts	536,806.91	536,806.91
11463	9562	9714	Ug Elec Conductor Relocations	-	-
11471	9562	9714	Ug Elec Conductor Relocations	74,931.91	74,931.91
15557	9562	9714	Ug Elec Conductor Relocations	76,034.44	76,034.44
15552	9656	9714	Low Pressure Gas Distribution Main	354,038.72	354,038.72
15555	9656	9714	Install Gas Main At E. 20th Street	428,659.07	428,659.07
15553	9666	9714	Install Low Pressure Gas Services	33,547.16	33,547.16
15551	9684	9714	High Pressure Gas Transmission Main	23,260,941.18	23,260,941.18
32302	9684	9714	Eng., Survey, Test Pits For Trans. Main	-	-
32267	9714		Structural Renovations And Improvements	36,339,329.32	36,339,329.32
34184	9714		Installation Of Civil/structural Work	13,354,586.32	13,354,586.32
Total Account 9714				81,364,625.83	81,364,625.83
31757	9434	9716	Inst 2 Gas Turbine Generator Units	153,193,156.97	
34179	9434	9716	Install Combustion Gas Turbine Gen. #1	9,607,806.93	
34180	9434	9716	Install Combustion Gas Turbine Gen. #2	11,132,407.42	
34182	9434	9716	Install Various Other Generator Equipmen	2,732,569.19	
34357	9434	9716	E.r. Repowering-cost Seggen Const. Contr	3,221,256.43	
32595	9516	9716	Inst New 12" City Water Piping From Mete	1,172.61	
32597	9516	9716	Inst New Blowdown Piping For Blrs. 60&70	539.13	
32598	9516	9716	Inst New Boiler Acid Was Piping For Blrs	109,807.62	
32599	9516	9716	Inst New Sump Pit,pumps & Piping To Ows	1,405,280.00	
32606	9516	9716	Inst New Stuyvesant Condensate Return	217,646.57	
31995	9716		Inst 2 Heat Recovery Steam Generators	27,023,464.85	
34176	9716		Install Water Treatment System	196,480.84	

Industrial and Commercial Incentive Program (ICIP)

34177	9716		Install Various Boiler Plant Equipment	5,414,610.20	
34185	9716		Install Heat Recovery Steam Gen. #10	11,925,397.63	
34186	9716		Install Heat Recovery Steam Gen #20	11,006,679.67	
			Total Account 9716	237,188,276.06	
32270	9435	9718	Inst Accessory Electrical Equipment	5,863,547.54	
32609	9534	9718	Inst New Fresh Water & Salt Water Piping	518.51	
32610	9534	9718	Inst New Conduit,cables,boxes,trays,	57,984.03	
34175	9554	9718	Install Station Electrical Equipment	7,365,259.72	
32265	9718		Inst Electrical Auxiliary System	136,220.13	
			Total Account 9718	13,423,529.93	
32269	9720		Inst Compressed Air System With Dryers	13,428,168.64	
34183	9720		Install Closed Cycle Cooling System	2,896,333.84	
			Total Account 9720	16,324,502.48	
11460	9734		Steam Main-inst Approx. 120' Of New 24"	237,530.88	
15001	9734		Steam Mains - Tunnel	43,680,869.30	
15002	9734		Steam Mains - Piping	4,175,557.93	
			Total Account 9734	48,093,958.11	
32602	9735		Inst New Steam Send-out Piping,valves	440,319.15	
34178	9735		Install New Steam Sendout Piping,valves	895,027.91	
			Total Account 9735	1,335,347.06	
			Total OSP0200	397,730,239.47	81,364,625.83
			structure percentage		20.46%

RECEIPTS TAX-SPECIAL FRANCHISE

BUDGET-YEAR 2004

(\$1,000)

	TOTAL	ELECTRIC	GAS	Analyze Electric		Tax Accrual Periods Impacted by 626 Credits														
				Brooklyn	Richmond	Brooklyn, Manhattan & Richmond impact 1H Accrual		Brooklyn & Manhattan impact 2H Accrual		Manhattan		Brooklyn		Richmond						
						2H 03/04	1H 04/05	2H 04/05	1H 05/06	2H 05/06	1H 06/07	2H 06/07	1H 07/08	2H 07/08	1H 08/09	2H 08/09				
MANHATTAN - APRIL 2003 THRU SEPT 2003 PD OCT 2003	146		146			146														
BKLYN JAN-JUNE 2003 PD JULY 2003	5,076	5076				5076		5874												
RICHMOND JAN-DEC 2003	1,596	1596						1596												
BKLYN JUL-DEC 2003 PD JAN 2004 2004	5,874	5874																		
JANUARY	968	924	44	804	120															
FEBRUARY	1,042	993	49	864	129															
MARCH	1,060	1,011	49	880	131					212										
APRIL	1,017	978	39	851	127															
MAY	972	948	24	825	123															
JUNE	1,120	1,100	20	957	143															
JULY	1,522	1,500	22	1,305	195															
AUGUST	1,404	1,384	20	1,204	180															
SEPTEMBER	1,353	1,338	15	1,164	174															
OCTOBER	950	935	15	813	122															
NOVEMBER	846	824	22	717	107															
DECEMBER	950	915	35	796	119															
TOTAL	13,204	12,850	354	11,180	1,670															

BUDGET-YEAR 2005

(\$1,000)

	TOTAL	ELECTRIC	GAS		
JANUARY	987	942	45	820	122
FEBRUARY	1,063	1013	50	881	132
MARCH	1,081	1031	50	897	134
APRIL	1,038	998	40	868	130
MAY	992	967	25	841	126
JUNE	1,142	1122	20	976	146
JULY	1,553	1530	23	1,331	199
AUGUST	1,432	1412	20	1,228	184
SEPTEMBER	1,380	1365	15	1,188	177
OCTOBER	969	954	15	830	124
NOVEMBER	862	840	22	731	109
DECEMBER	969	933	36	812	121
TOTAL	13,468	13,107	361	11,403	1,704

BUDGET-YEAR 2006

(\$1,000)

	TOTAL	ELECTRIC	GAS		
JANUARY	1,007	961	46	836	125
FEBRUARY	1,084	1033	51	899	134
MARCH	1,103	1052	51	915	137
APRIL	1,059	1018	41	886	132
MAY	1,012	986	26	858	128
JUNE	1,164	1144	20	995	149
JULY	1,584	1561	23	1,358	203
AUGUST	1,460	1440	20	1,253	187
SEPTEMBER	1,407	1392	15	1,211	181
OCTOBER	988	973	15	847	126
NOVEMBER	879	857	22	746	111
DECEMBER	989	952	37	828	124
TOTAL	13,736	13,369	367	11,632	1,737

RECEIPTS TAX-SPECIAL FRANCHISE

BUDGET-YEAR 2004

(\$1,000)

Brooklyn, Manhattan & Richmond impact 1H Accrual
Brooklyn & Manhattan impact 2H Accrual
Tax Accrual Periods Impacted by 626 Credits

Manhattan
Brooklyn
Richmond

BUDGET-YEAR 2007

TOTAL
(\$1,000)

TOTAL ELECTRIC GAS

Analyze Electric
Brooklyn Richmond

2H 03/04 1H 04/05 2H 04/05 1H 05/06 2H 05/06 1H 06/07 2H 06/07 1H 07/08 2H 07/08 1H 08/09 2H 08/09

	TOTAL	ELECTRIC	GAS	Brooklyn	Richmond
JANUARY	1,027	980	47	853	127
FEBRUARY	1,106	1054	52	917	137
MARCH	1,125	1073	52	934	139
APRIL	1,080	1038	42	903	135
MAY	1,033	1006	27	875	131
JUNE	1,187	1167	20	1,015	152
JULY	1,615	1592	23	1,385	207
AUGUST	1,489	1469	20	1,278	191
SEPTEMBER	1,435	1420	15	1,235	185
OCTOBER	1,007	992	15	863	129
NOVEMBER	896	874	22	760	114
DECEMBER	1,009	971	38	845	126
TOTAL	14,009	13,636	373	11,863	1,773

225

5,487

147

1,773
8,366

BUDGET-YEAR 2008

(\$1,000)

TOTAL ELECTRIC GAS

	TOTAL	ELECTRIC	GAS	Brooklyn	Richmond
JANUARY	1,048	1000	48	870	130
FEBRUARY	1,128	1075	53	935	140
MARCH	1,147	1094	53	952	142
APRIL	1,102	1059	43	921	138
MAY	1,054	1026	28	893	133
JUNE	1,210	1190	20	1,035	155
JULY	1,647	1624	23	1,413	211
AUGUST	1,518	1498	20	1,303	195
SEPTEMBER	1,463	1448	15	1,260	188
OCTOBER	1,027	1012	15	880	132
NOVEMBER	913	891	22	775	116
DECEMBER	1,029	990	39	861	129
TOTAL	14,286	13,907	379	12,088	1,809

5,222 7,682 5,321 7,886 5,426 8,045 5,534 8,205 5,644 8,368

229

ESTIMATE OF 2003 RICHMOND 626 CREDIT	
ACTUAL TAX BOOKED 9 MOS 2003 ACCT 06042	10,009
ESTIMATED MONTHLY RICHMOND AMOUNT(12%)	133
ESTIMATED MONTHLY BROOKLYN AMOUNT(87%)	979

ESTIMATE OF OCTOBER THRU DECEMBER 2003 GAS	
USE OCTOBER THRU DEC 2002 ACCT 06082	70

RECEIPTS TAX-SPECIAL FRANCHISE

BUDGET-YEAR 2004

(\$1,000)

TOTAL ELECTRIC GAS

Analyze Electric
Brooklyn Richmond

Brooklyn, Manhattan & Richmond impact 1H Accrual
Brooklyn & Manhattan impact 2H Accrual
Tax Accrual Periods Impacted by 626 Credits

Manhattan
Brooklyn
Richmond

2H 03/04 1H 04/05 2H 04/05 1H 05/06 2H 05/06 1H 06/07 2H 06/07 1H 07/08 2H 07/08 1H 08/09 2H 08/09

626 CREDITS SCHEDULE-note do not enter data as credits

	ELECTRIC	GAS	TOTAL
2004			
Jan-Jun	5,076	146	5,222
Jul-Dec	7,470	212	7,682
Total	12,546	358	12,904
2005			
Jan-Jun	5,181	140	5,321
Jul-Dec	7,669	217	7,886
Total	12,850	357	13,207
2006			
Jan-Jun	5,283	143	5,426
Jul-Dec	7,824	221	8,045
Total	13,107	364	13,471
2007			
Jan-Jun	5,389	145	5,534
Jul-Dec	7,980	225	8,205
Total	13,369	370	13,739
2008			
Jan-Jun	5,497	147	5,644
Jul-Dec	8,139	229	8,368
Total	13,636	376	14,012

Property Tax Information by Plant

59th street plant	2003/2004 av		total tax
	class 3	class 4	
G532-1E	675		
G532-1EP	24,515,345		
G532-1P		21,269,492	
03/04 total av	24,516,020	21,269,492	5,475,715
04/05 total av	24,832,277	22,035,194	5,881,328
05/06 total av	25,152,613	22,828,461	6,317,645
06/07 total av	25,477,082	23,650,286	6,786,924
07/08 total av	25,805,736	24,501,696	7,292,024
08/09 total av	26,138,630	25,383,757	7,835,185
annual tax			
2004			5,678,522
2005			6,099,487
2006			6,552,285
2007			7,039,474
2008			7,563,605

74th street plant	class 3		class 4	total tax
E80-2			7,834,500	
E80-2E	9,549,000			
E80-2EP	51,130,039			
AA69-A			2,475	
A1872-1			2,295,000	
E80-2P			10,061,932	
LESS:75TH ST S/S:				
E80-2 LOC 333(1)			(1,084,500)	
E80-2E(2) LOC 333	(9,549,000)			
AV 74TH ST. ONLY 03/04	51,130,039	19,109,407		8,533,725
04/05 total av-74TH ST	51,789,617	19,797,346		9,200,941
05/06 total av-74TH ST	52,457,703	20,510,050		9,921,169
06/07 total av-74TH ST	53,134,407	21,248,412		10,698,486
07/08 total av-74TH ST	53,819,841	22,013,355		11,537,901
08/09 total av-74TH ST	54,514,117	22,805,836		12,443,657

annual tax	steam amt	monthly steam
2004	8,867,333	7,138,203
2005	9,561,055	7,696,649
2006	10,309,828	8,299,412
2007	11,118,194	8,950,146
2008	11,990,779	9,652,577
1) FULL VALUE 2,410,000		594,850
2) FULL VALUE 21,220,000		641,387
		691,618
		745,846
		804,381

Property Tax Information by Plant

Hudson Avenue

	class 3	class 4	Boiler 10/100(*)		Boiler 10/100	increase for	period amounts		
			class 3 AV	class 4 AV	total tax	Tax	boiler at full rcnld	july-dec	jan-june
C132-2		12,169,125							
C132-2E	81,162,000								
C132-2EP	58,296,555								
C132-2P		22,308,525							
03/04 total av	139,458,555	34,477,650	8,685,000		21,259,104	1,078,503			
04/05 total av(*)	149,942,570	35,718,845	17,370,000		25,262,022	2,307,952	1,229,449	614,725	614,725
05/06 total av(*)	151,876,829	37,004,723	0		23,567,103	0	-2,307,952		
06/07 total av	153,836,040	38,336,893	0		28,120,810	0	0		
07/08 total av	155,820,525	39,717,021	0		30,374,401	0	0		
08/09 total av	157,830,610	41,146,834	0		32,809,299	0	0		

(*) av of boiler should double at full rcnld eff with 04/05 yr jump in av for 04/05 due to full rcnld for boiler 10/100. But effective 05/06 10/100 to be retired annual tax

Year	class 3 AV	class 4 AV	total tax	Tax
2004	18,003,676	5,256,887	23,260,563	1,693,228
2005	18,896,872	5,517,691	24,414,563	1,153,976
2006	20,003,223	5,840,734	25,843,957	0
2007	22,637,647	6,609,959	29,247,606	0
2008	24,452,092	7,139,758	31,591,850	0

East River

	Class 3	Class 4
A356-30		26,203,069
A356-30E	38,340,000	
A356-30EP	77,109,150	
A356-30P		61,009,895

	Assessment Excl. ERRP				ERRP Project			Total East River Station
	Class 3	Class 4	Total	Tax Excl. ERRP	Full Tax on New Constr.	ICIP Abatement	ERRP Incremental	
03/04 total av	115,449,150	87,212,964	202,662,114	24,305,789	-	-	-	24,305,789
04/05 total av(*)	116,938,444	90,352,631	207,291,075	26,124,229	21,354,636	-	21,354,636	47,478,865
05/06 total av(*)	118,446,950	93,605,326	212,052,276	28,081,603	41,795,290	29,300,198	12,495,092	40,576,695
06/07 total av	119,974,916	96,975,118	216,950,034	30,188,221	44,384,610	31,069,136	13,315,474	43,503,695
07/08 total av	121,522,592	100,466,222	221,988,814	32,457,060	47,147,952	32,955,693	14,192,259	46,649,319
08/09 total av	123,090,233	104,083,006	227,173,239	34,898,450	50,094,354	34,965,830	15,128,524	50,026,974
					204,776,842	128,290,857	76,485,985	76,485,985

Property Tax Information by Plant

East River - Calendar & Dept. Summary

	Electric	Gas	Steam	Tax Excl. ERRP	Incremental Steam Tax	Total ER Annualized Tax
2004	22,491,788	58,152	2,665,069	25,215,009	10,677,000	35,892,009
2005	24,175,801	40,712	2,886,403	27,102,916	16,925,000	44,027,916
2006	25,988,342	64,920	3,081,650	29,134,912	12,905,000	42,039,912
2007	27,939,796	70,275	3,312,570	31,322,641	13,754,000	45,076,641
2008	30,040,557	76,071	3,561,127	33,677,755	14,660,000	48,337,755

Total ERRP construction - \$670 million; \$366 million hits 2004/05; balance hits 2005/06
 \$366 based on estimate of 75% of \$487.6 (per Gonella Testimony) (Assumes CWIP that will be accelerated into 2004/05 by NYC assessor.
 Balance of \$304 million reflected in 2005/06 taxes
 ICIP credit benefits to commence with 2005/06 tax year.

Iroquois Gas Project-\$23million cost (60% to con ed 3 of 5 structures) - assumes ICIP granted for 100% of tax increase eff july 2004

	AV	TAX
2004/2005	6,210,000	745,200
2005/2006	6,433,560	772,671
2006/2007	6,665,168	820,482
2007/2008	6,905,114	871,287
2008/2009	7,153,698	925,188

annual amount tax

2004	372,600
2005	758,936
2006	796,577
2007	845,885
2008	898,238

budget months effected	monthly amt	ICIP Credit	no months	total
7/04-12/04	62,100	(62,100)	6	0
1/05-12/05	63,245	(63,245)	12	0
1/06-12/06	66,381	(66,381)	12	0
1/07-12/07	70,490	(70,490)	12	0
1/08-12/08	74,853	(74,853)	12	0

Property Tax Information by Plant

Telecom

	AV	TAX
2003/2004	12,130,983	1,506,425
2004/2005	12,544,650	1,706,584
2005/2006	12,972,423	1,949,209
2006/2007	13,414,783	2,245,723
2007/2008	13,872,227	2,611,259
2008/2009	14,345,270	3,066,036

CALENDAR BASIS

	TAX
2004	1,606,505
2005	1,827,897
2006	2,097,466
2007	2,428,491
2008	2,838,648

Steam Case Case 03-S-1672
PSC Staff Request

Witness: John Ricco

Question S-129

Mr. Ricco acknowledges that his net plant forecasts were based upon a level of expenditures that have since been revised and that he intends to update his estimate at a later date. (steam testimony, page 5, lines 5 – 14)

- a Please provide Mr. Ricco's updated estimates, with supporting workpapers.
- b. Please provide an update of Mr. Hutcheson's property tax forecast, based on Mr. Ricco's updated estimates.
- c. Please provide all workpapers and calculations supporting the response to

Response

See Attached Worksheets

Analysis Of Affect Of Revised Construction Program (Bozgo Testimony)
(\$1,000)

Test Period	Current Rates			Proposed Rates			Depreciation Expense		Defered Taxes
	<u>BOOKCOST OF PLANT</u>	<u>ACCRUED DEPRECIATION</u>	<u>NET PLANT</u>	<u>BOOKCOST OF PLANT</u>	<u>ACCRUED DEPRECIATION</u>	<u>NET PLANT</u>	<u>Current</u>	<u>Proposed</u>	
Ending Sept 2005	(\$2,548)	(\$14)	(\$2,534)	(\$2,548)	(\$13)	(\$2,535)	(95)	(89)	(136)
Ending Sept 2006	(\$29,495)	(\$439)	(\$29,057)	(\$29,495)	(\$409)	(\$29,086)	(1,110)	(1,035)	(431)
Ending Sept 2007	(\$55,209)	(\$2,167)	(\$53,041)	(\$55,209)	(\$2,021)	(\$53,188)	(2,172)	(2,025)	(661)

Analysis Of Affect Of Revised Construction Program (Bozgo Testimony)
Property Taxes
 (\$1,000)

	Jan	Feb	Mar	Apr	May	June	6 Months Ending 6/30	July	Aug	Sep	Oct	Nov	Dec	6 Months Ending 12/31	Total
<u>Year 2004</u>															
Steam	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<u>Year 2005</u>															
Steam	-	-	-	-	-	-	-	(3)	(3)	(3)	(3)	(3)	(2)	(17)	(17)
<u>Year 2006</u>															
Steam	(3)	(3)	(3)	(3)	(3)	(2)	(17)	(74)	(74)	(74)	(74)	(74)	(71)	(441)	(458)
<u>Year 2007</u>															
Steam	(74)	(74)	(74)	(74)	(74)	(71)	(441)	(293)	(293)	(293)	(293)	(293)	(292)	(1,757)	(2,198)
<u>Year 2008</u>															
Steam	(293)	(293)	(293)	(293)	(293)	(292)	(1,757)	(450)	(450)	(450)	(450)	(450)	(452)	(2,702)	(4,459)

Proposed Rates

EXHIBIT NO. (JPR-2)
PAGE 1 OF 2

CONSOLIDATED EDISON COMPANY OF NEW YORK, INC.
ESTIMATED NET PLANT - STEAM
TWELVE MONTH AVERAGE ENDING SEPTEMBER 30, 2005
(\$1000)

	<u>BOOKCOST OF PLANT</u>	<u>ACCRUED DEPRECIATION</u>	<u>NET PLANT</u>		
SEPTEMBER 30, 2004 *	(\$242)	\$1	(\$243)		
OCTOBER 31, 2004	(536)	1	(537)	(53)	(1)
NOVEMBER 30, 2004	(498)	(3)	(495)	38	(2)
DECEMBER 31, 2004	(543)	(3)	(540)	(45)	(2)
JANUARY 31, 2005	(1,277)	(3)	(1,274)	(734)	(2)
FEBRUARY 28, 2005	(2,011)	(6)	(2,005)	(734)	(4)
MARCH 31, 2005	(2,745)	(10)	(2,735)	(734)	(6)
APRIL 30, 2005	(3,479)	(15)	(3,464)	(734)	(9)
MAY 31, 2005	(4,213)	(19)	(4,194)	(734)	(11)
JUNE 30, 2005	(4,197)	(24)	(4,173)	16	(13)
JULY 31, 2005	(4,890)	(26)	(4,864)	(693)	(13)
AUGUST 31, 2005	(3,749)	(28)	(3,721)	1,141	(15)
SEPTEMBER 30, 2005 *	(2,200)	(20)	(2,180)	(651)	(12)
TOTAL	(30,580)	(156)	(30,424)		
AVERAGE	(\$2,548)	(\$13)	(\$2,535)		(89)

* ONE HALF OF ENDING BALANCE

Bozgo Testimony

EXHIBIT NO. (JPR-2)
 PAGE 2 OF 2

Depr. Rate 0.003105 Proposed
 0.00333

CONSOLIDATED EDISON COMPANY OF NEW YORK, INC.
 ESTIMATED NET PLANT - STEAM
 JUNE 30, 2003 - SEPTEMBER 30, 2004
 (\$1000)

	<u>BOOKCOST OF PLANT</u>	<u>ACCRUED DEPRECIATION</u>	<u>NET PLANT</u>	<u>Plant Changes</u>	<u>Depreciation Expense</u>
JUNE 30, 2003 *	\$0	\$0	\$0	0	
JULY 31, 2003	0	0	0	0	0
AUGUST 31, 2003	0	0	0	0	0
SEPTEMBER 30, 2003	0	0	0	0	0
OCTOBER 31, 2003	0	0	0	0	
NOVEMBER 30, 2003	0	0	0	0	0
DECEMBER 31, 2003	0	0	0	0	0
JANUARY 31, 2004	282	0	282	282	0
FEBRUARY 29, 2004	564	1	563	282	1
MARCH 31, 2004	771	3	768	207	2
APRIL 30, 2004	868	4	864	97	3
MAY 31, 2004	1,085	5	1,080	217	3
JUNE 30, 2004	777	7	770	(308)	4
JULY 31, 2004	644	6	638	(133)	3
AUGUST 31, 2004	70	5	65	(574)	2
SEPTEMBER 30, 2004	(483)	2	(485)	(553)	0

* ACTUAL

EXHIBIT NO. (JPR-2)

Proposed Rates

CONSOLIDATED EDISON COMPANY OF NEW YORK, INC.
ESTIMATED NET PLANT - STEAM
TWELVE MONTH AVERAGE ENDING SEPTEMBER 30, 2006
(\$1000)

	<u>BOOKCOST OF PLANT</u>	<u>ACCRUED DEPRECIATION</u>	<u>NET PLANT</u>		
SEPTEMBER 30, 2005 *	(\$2,200)	(\$20)	(\$2,180)		
OCTOBER 31, 2005	(10,715)	(54)	(10,661)	(6,315)	(14)
NOVEMBER 30, 2005	(11,932)	(87)	(11,845)	(1,217)	(33)
DECEMBER 31, 2005	(13,155)	(124)	(13,031)	(1,223)	(37)
JANUARY 31, 2006	(14,418)	(165)	(14,253)	(1,263)	(41)
FEBRUARY 28, 2006	(34,976)	(209)	(34,767)	(20,558)	(45)
MARCH 31, 2006	(36,462)	(318)	(36,144)	(1,486)	(109)
APRIL 30, 2006	(38,548)	(431)	(38,117)	(2,086)	(113)
MAY 31, 2006	(40,084)	(551)	(39,533)	(1,536)	(120)
JUNE 30, 2006	(41,320)	(675)	(40,645)	(1,236)	(124)
JULY 31, 2006	(42,839)	(804)	(42,035)	(1,519)	(128)
AUGUST 31, 2006	(44,358)	(937)	(43,421)	(1,519)	(133)
SEPTEMBER 30, 2006 *	(22,939)	(537)	(22,401)	(1,519)	(138)
TOTAL	(353,946)	(4,912)	(349,034)		
AVERAGE	(\$29,495)	(\$409)	(\$29,086)		(1,035)

* ONE HALF OF ENDING BALANCE

Proposed Rates

EXHIBIT NO. (JPR-2)

CONSOLIDATED EDISON COMPANY OF NEW YORK, INC.
ESTIMATED NET PLANT - STEAM
TWELVE MONTH AVERAGE ENDING SEPTEMBER 30, 2007
(\$1000)

	<u>BOOKCOST OF PLANT</u>	<u>ACCRUED DEPRECIATION</u>	<u>NET PLANT</u>		
SEPTEMBER 30, 2006 *	(\$22,939)	(\$537)	(\$22,401)		
OCTOBER 31, 2006	(46,313)	(1,217)	(45,096)	(436)	(142)
NOVEMBER 30, 2006	(47,774)	(1,361)	(46,413)	(1,461)	(144)
DECEMBER 31, 2006	(49,242)	(1,509)	(47,733)	(1,468)	(148)
JANUARY 31, 2007	(51,160)	(1,662)	(49,498)	(1,918)	(153)
FEBRUARY 28, 2007	(53,078)	(1,821)	(51,257)	(1,918)	(159)
MARCH 31, 2007	(54,996)	(1,986)	(53,010)	(1,918)	(165)
APRIL 30, 2007	(56,914)	(2,156)	(54,758)	(1,918)	(171)
MAY 31, 2007	(58,832)	(2,333)	(56,499)	(1,918)	(177)
JUNE 30, 2007	(60,750)	(2,516)	(58,234)	(1,918)	(183)
JULY 31, 2007	(62,668)	(2,704)	(59,964)	(1,918)	(189)
AUGUST 31, 2007	(64,586)	(2,899)	(61,687)	(1,918)	(195)
SEPTEMBER 30, 2007 *	(33,252)	(1,550)	(31,702)	(1,918)	(201)
TOTAL	(662,504)	(24,251)	(638,253)		
AVERAGE	(\$55,209)	(\$2,021)	(\$53,188)	(66,504)	(2,025)

* ONE HALF OF ENDING BALANCE

PSC Staff's 7th Set Of Interrogatories
Steam Case 03-G-1671
Gas Case 03-S-1672
Witness: Robert Muccilo

Question No. 159

- a. When did the requirements of the Sarbanes-Oxley Act become applicable to Con Edison?
- b. Please reference the specific provision(s) of the Sarbanes-Oxley Act that require Con Edison to hire additional employees between the test period and the end of the rate year.
- c. Please explain why the specific provisions noted in the response to (b) result in incremental activities and costs to Con Edison.
- d. Please identify any incremental costs incurred to date by Con Edison to comply with the requirements of the Act.
- e. Please identify any incremental costs incurred to date by CEI to comply with the requirements of the Act.
- f. Please indicate how all incremental costs identified in the responses to (d) and (e) were accounted for.
- g. Please identify all Sarbanes-Oxley compliance costs allocated to gas operations.
- h. Please identify all Sarbanes-Oxley compliance costs allocated to steam operations.

Response

- a. The Sarbanes-Oxley Act was signed into law on July 30, 2002 and was effective as of that time.
- b-c. The Sarbanes-Oxley Act and the related rules adopted by the SEC have numerous requirements. After reviewing these requirements, the Company determined how many personnel it believed were necessary to comply with both existing and new requirements. These requirements include additional documentation and testing of internal controls over financial reporting as well as requirements relating to the Act from other agencies.
- d-e. \$200,000 of incremental costs to date related to Audit Fees, \$178,000 is allocable to Con Edison). These dollars are for costs incurred in 2003 and will be significantly higher in 2004 and beyond because Price Waterhouse Coopers will be required to test the controls that are being documented.
- f. Amounts applicable to Con Edison were accounted for as Administrative and General Expenses. Amounts applicable to other than Con Edison were accounted for by each individual subsidiary or CEI on its own books of account.
- g. In addition to the labor and labor related costs, rate year expenses applicable to gas include \$74,000 for Sarbanes-Oxley Audit Fees.
- h. In addition to the labor and labor related costs, rate year expenses applicable to steam include \$31,000 for Sarbanes-Oxley Audit Fees.

PSC Staff's 7th Set Of Interrogatories
Steam Case 03-G-1671
Gas Case 03-S-1672
Witness: Robert Muccilo

Question No. 160

- a. What resources have been utilized by Con Edison to comply with the requirements of the Act to date?
- b. What resources have been utilized by CEI to comply with the requirements of the Act to date?

Response

- a. The Company has utilized internal resources to comply with the requirements of the Act to date. There are currently a number of employees working full and part time on the project from various company organizations including Treasury, Customer Operations, Corporate Accounting, Purchasing, Property Records, Information Resources, Energy Management, Payroll, and Tax.
- b. For CECONY, see response to (a) above. Affiliates are handling their own compliance programs.

PSC Staff's 7th Set Of Interrogatories
Steam Case 03-G-1671
Gas Case 03-S-1672
Witness: Robert Muccilo

Question No. 163

What is the current status of Con Edison's plans to hire employees for nine new management positions?

Response

The Company is in the process of seeking to hire new employees to either fill the required positions or to replace those employees currently reassigned to the Sarbanes-Oxley effort that may remain with the project.

PSC Staff's 7th Set Of Interrogatories
Steam Case 03-G-1671
Gas Case 03-S-1672
Witness: Robert Muccilo

Question No. 165

Please provide copies of all documents used to justify to management and/or the Board of Directors the need for the nine new positions.

Response

No formal documentation was submitted to management to justify the need for nine new employees.

PSC Staff's 7th Set Of Interrogatories
Steam Case 03-G-1671
Gas Case 03-S-1672
Witness: Robert Muccilo

Question No. 166

- a. Did the company consider using contractor services to perform the activities to be performed by the nine new management personnel?
- b. If the answer to (a) is no, why not?
- c. If the answer to (a) is yes, why did this option rejected?
- d. Please provide any cost/benefit analyses that were relied on in the decision to hire the nine additional employees.

Response

- a. No.
- b. The Company generally performs all accounting and internal auditing services with Company employees, which it believes are better suited to perform these functions.
- c. Not applicable.
- d. There was no cost benefit analysis performed.

PSC Staff's 7th Set Of Interrogatories
Steam Case 03-G-1671
Gas Case 03-S-1672
Witness: Robert Muccilo

Question No. 167

- a. Have any employees been hired to date?
- b. If the answer to (a) is yes, please indicate the number hired and the associated pay rate(s) for each person hired.

Response

- a. No. As mentioned in the response to 163, the Company is currently in the process of hiring.
- b. Not applicable

PSC Staff's 7th Set Of Interrogatories
Steam Case 03-G-1671
Gas Case 03-S-1672
Witness: Robert Muccilo

Question No. 170

- a. How did Con Edison determine that nine new positions are necessary?
- b. Please provide any analysis performed in determining the number of new employees required.

Response

a-b. As discussed in response to 159, the Company reviewed the requirements of the Act and determined the staffing levels it believes to be appropriate.

CONSOLIDATED EDISON COMPANY OF NEW YORK, INC.
GAS RATE CASE 03-G-1671
STEAM RATE CASE 03-S-1672

State of New York Department of Public Service: Interrogatory No. 277

Responding Witness: Edward J. Rasmussen

Question: The Financial Accounting Standards Board recently issued guidance on accounting and disclosure requirements related to the Medical Prescription Drug, Improvement and Modernization Act of 2003 (the Act). Please indicate how and when Con Edison will account for the impact of the Act.

Response: The Medicare Prescription Drug, Improvement and Modernization Act of 2003 (the Act), enacted on December 8, 2003, introduced a prescription drug benefit under Medicare (Medicare Part D) as well as a subsidy to plan sponsors. The subsidy is based on 28% of annual prescription drug costs between \$250 and \$5,000 per individual.

In January 2004, the FASB announced that companies may reflect immediately the impact of the Act in their financial statements and disclosures as long as they believed that such effects could be reasonably estimated. Companies that do not reflect the impact immediately would have to defer recognition of the new law until more definitive guidance is issued.

Con Edison has elected to recognize the effects of the Act in its 2003 year-end obligations and 1/10th of that impact in the 2004 net periodic postretirement benefit cost. Con Edison's obligations reflect that the Company will recognize the 28% subsidy as an offset to plan costs and this is reflected as an unrecognized net gain to the plan. FASB's authoritative guidance, when issued, could require a change in the accounting.

CONSOLIDATED EDISON COMPANY OF NEW YORK, INC.
GAS RATE CASE 03-G-1671
STEAM RATE CASE 03-S-1672

State of New York Department of Public Service: Interrogatory No. 278

Responding Witness: Edward J. Rasmussen

Question: Please provide an estimate of the impact on Con Edison's OPEB costs for each of its electric, gas, and steam operations.

Response: Con Edison expects the Act to reduce its 2004 periodic postretirement benefit cost by \$18.5 million, of which, \$13.2 million will reduce O&M costs. The split among electric, gas and steam operations is \$9.6 million, \$3.1 million and \$0.5 million, respectively.

CONSOLIDATED EDISON COMPANY OF NEW YORK, INC.
GAS RATE CASE 03-G-1671
STEAM RATE CASE 03-S-1672

State of New York Department of Public Service: Interrogatory No. 279

Responding Witness: Edward J. Rasmussen

Question:

- a. Who will receive the cash reimbursements from the Act (e.g., Con Edison, the OPEB trustee, individual retirees receiving benefits)?
- b. If Con Edison or the OPEB trustee will receive the cash reimbursements, please explain how Con Edison will account for the funds.

Response:

- a. The plan sponsor, Con Edison, will receive the cash reimbursement from the Act.
- b. Pending FASB guidance on the subject, it is not clear how Con Edison will account for the funds. This issue is not addressed in existing accounting literature. Further, specific regulations regarding the payment / reimbursement mechanism for the subsidy are yet to be defined by the appropriate administrative agency.

CONSOLIDATED EDISON COMPANY OF NEW YORK, INC.
 GAS RATE CASE 03-G-1671
 STEAM RATE CASE 03-S-1672

State of New York Department of Public Service: Interrogatory No. 287

Responding Witness: Edward J. Rasmussen

The following questions relate to the company's response to Staff Information Request 84, in which it indicated that the company is proposing to include its prepaid /accrued pension and OPEB obligation in rate base.

Question: Please provide the amount of the prepaid pension balance allocated to each of the electric, gas, and steam businesses.

Response: The table below shows the allocation of pension prepayments and accruals to the electric, gas, and steam businesses as of September 30, 2003 and December 31, 2003.

Con Edison Company of NY, Inc.
 Net Prepaid Pension Balance
 \$000's

As of September 30, 2003	Balance		
	Prepaid	Accrued	Net
Electric	\$928,248.1	\$(8,240.4)	\$920,007.7
Gas	187,078.3	(1,781.0)	185,297.3
Steam	66,042.4	(656.6)	65,385.8
Total	<u>\$1,181,368.8</u>	<u>\$(10,678.0)</u>	<u>\$1,170,690.8</u>
As of December 31, 2003			
Electric	\$987,892.3	\$(7,869.6)	\$980,022.7
Gas	199,342.1	(1,704.6)	197,637.5
Steam	69,892.1	(632.5)	69,259.6
Total	<u>\$1,257,126.5</u>	<u>\$(10,206.7)</u>	<u>\$1,246,919.8</u>

Consolidated Edison Company of New York, Inc.
Case 03-G-1671

PSC Interrogatories of Company Witness Lee
Dated January 23, 2004

#321:

Exhibit HLL-6, Schedule 1, page 3, line 26 (Historic Gas Interference expenditures for the 12 months ending June 30, 2003) shows an amount of \$12,816,000.

- a. Does this amount include company labor costs?
- b. If the response to (b) is yes, please quantify the labor costs.

Response:

- a. Yes.
- b. The amount of labor in the historic year is \$2,736,000.

#322:

Exhibit HLL-6, Schedule 1, page 3, line 26 (Rate Year Gas Interference expenditures for the 12 months ending September 30, 2005) shows an amount of \$14,013,000.

- a. Does this amount include company labor costs?
- b. If the response to (b) is yes, please quantify the labor costs.

Response:

- a. Yes.
- b. The amount of labor in the rate year is \$2,985,000.

CONSOLIDATED EDISON COMPANY OF NEW YORK, INC.
GAS RATE CASE 03-G-1671
STEAM RATE CASE 03-S-1672

State of New York Department of Public Service: Interrogatory No. 324

Responding Witness: Edward J. Rasmussen

Question: CEI's Six Year Financials and Operating Statistics Report for 1997-2002 states that CEI's pension cost credit increased from \$34.8 million in 1999 to \$201.7 million in 2000.

- a. What were the main causes of this significant change?
- b. Were any of these credits used for the benefit of ratepayers?
- c. If the response to (b) is yes, how did they benefit ratepayer and what amount was used?

Response:

- a. The market-related value of pension plan assets earned 16.4% during 1999, which was significantly higher than the assumed return of 8.5%. This resulted in an actuarial gain that decreased the pension accounting cost in 2000 by \$101 million. Additionally, the 1999 pension accounting cost reflected the amortization of the actuarial gain on account of the Company's voluntary retirement plan ("VRISO Program") for the last four months of the year, whereas the 2000 accounting cost reflected a full year's amortization of the gain. This reduced the accounting cost by \$33 million. Changes in the assumptions for discount rate and inflation resulted in a net decrease of \$24 million.
- b-c. Electric customers benefited because the pension credits, among other factors, enabled the Company, Staff and other parties to modify and extend the then existing electric rate agreement and reduce its electric rates by an additional \$170 million on an annual basis, effective October 2000. Similarly, pension credits, among other factors, enabled the Company, Staff and other parties to reach agreements resulting in the Company's passing back to gas customers \$20 million during January – March 2001 and lowering base gas rates by \$25 million commencing October 2001.

BEFORE THE
STATE OF NEW YORK
PUBLIC SERVICE COMMISSION

In the Matter of
CONSOLIDATED EDISON COMPANY OF NEW YORK, INC.

Case 03-G-1671

March 2004

Prepared Testimony of:

MARTIN INSOGNA
Utility Consumer Program
Specialist
Office of Consumer Services
State of New York
Department of Public Service
Three Empire State Plaza
Albany, New York 12223-1350

1 Q. Please state your name and business address.

2 A. Martin Insogna, 3 Empire State Plaza, Albany, NY
3 12223.

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

5 A. I am employed as a Utility Consumer Program
6 Specialist 4 in the Office of Consumer Services
7 of the New York State Department of Public
8 Service.

9 Q. Please describe your educational background and
10 professional experience.

11 A. I hold a Bachelor's degree in philosophy and
12 economics from Colgate University. Prior to
13 joining the Department of Public Service, I was
14 employed in a wide range of customer service
15 fields, including as a representative of the
16 then-New York Telephone Company. I joined the
17 Consumer Services Division of the Department in
18 1990 as a Consumer Services Specialist,
19 investigating and resolving utility consumer
20 complaints. I was thereafter accepted into a
21 traineeship with the Office of Energy Efficiency
22 and Environment, with responsibility for policy
23 and operational considerations involving utility
24 energy efficiency and emerging environmental

1 issues. I was then promoted to the title of
2 Utility Rate Analyst, and was transferred to the
3 Electric Division, with responsibility for
4 review and analysis of utility rate and rate-
5 related filings. When the Department was
6 reorganized in 1999, I was assigned to the
7 Retail Competition section of the Office of
8 Electricity and Environment, with responsibility
9 for a wide variety of initiatives related to the
10 introduction of retail access. In January 2000,
11 I was promoted to the title of Associate Policy
12 and Compliance Analyst and transferred to the
13 Residential Advocacy Section of the Office of
14 Consumer Education and Advocacy, with
15 responsibility for advocating for residential
16 consumer needs. The Department of Civil Service
17 subsequently reclassified the title of Associate
18 Policy and Compliance Analyst to my current
19 title. In December 2003, the Department was
20 again reorganized, and the Office of Consumer
21 Services assumed responsibility for consumer
22 advocacy functions within the Department of
23 Public Service.

24 Q. Have you previously testified in proceedings

1 before the Commission?

2 A. Yes, I have. I have previously testified in
3 proceedings concerning Orange and Rockland, New
4 York State Electric and Gas, Niagara Mohawk,
5 Rochester Gas and Electric, and the Consolidated
6 Edison Company of New York, Inc. (Con Edison).
7 Subjects of my previous testimony have included
8 energy efficiency programs, systems benefits
9 charge implementation, rate design, consumer
10 protections, service quality and low income
11 programs.

12 Q. What is the scope of your testimony in this
13 proceeding?

14 A. I will address the continuation of a customer
15 service performance incentive for Con Edison,
16 the company's proposed new service fees, and its
17 general outreach and education program, that is,
18 outreach and education not related to retail
19 choice. I will also propose a low income rate
20 discount program.

21 Customer Service Performance Incentive

22 Q. What is the purpose of a customer service
23 performance incentive?

24 A. Customer service performance incentives (CSPIs)

1 help to align shareholder and ratepayer
2 interests by providing earnings consequences to
3 shareholders for the quality of service provided
4 to a utility's customers. Presently, CSPIs are
5 in effect at all of the major energy utilities
6 that link earnings directly to companies'
7 performance on specific measures of customer
8 service.

9 Q. Please describe Con Edison's gas CSPI.

10 A. Con Edison's gas CSPI has been in effect
11 continuously since it was adopted by the
12 Commission in an order issued on October 12,
13 1994 in Case 93-G-0996. The gas CSPI is based
14 on an average of biannual surveys of customer
15 satisfaction with the handling of emergency
16 calls relating to gas service, conducted by an
17 outside vendor. A customer satisfaction report
18 is submitted to the Department twice a year,
19 following the conduct of customer surveys in the
20 second and fourth quarters. In a given rate
21 year, should satisfaction fall below an 88.1
22 percent target, the company would refund to
23 customers a credit. The credit would be
24 calculated proportionately from zero at a

1 satisfaction level of 88.1 percent or above, up
2 to a maximum of 15 basis points to its return on
3 gas common equity (ROE) at a satisfaction level
4 of 87.5 percent or below. Presently, the
5 maximum adjustment is equivalent to
6 approximately \$2.4 million.

7 Q. Does the company propose to continue the gas
8 CSPI?

9 A. No. Company witness Rasmussen testifies at page
10 24 of his prepared gas testimony that "The
11 Company has achieved the customer satisfaction
12 target each year, which would indicate that
13 there is no need to continue with the current
14 mechanism."

15 Q. Does Staff agree with that assessment?

16 A. No. To the contrary, the fact that the company
17 has met or exceeded its annual target is
18 evidence that the CSPI has been effective in
19 keeping service to customers a priority. Staff
20 proposes further continuation of the company's
21 gas CSPI, which under the Commission's prior
22 orders remains in place unless or until replaced
23 or discontinued by the Commission, with certain
24 modifications.

- 1 Q. What modifications does Staff propose?
- 2 A. Staff proposes that any payments to ratepayers
3 for unacceptable performance should be provided
4 in dollars rather than a basis point adjustment
5 to ROE, with a maximum annual adjustment of \$4.8
6 million. Staff proposes that this modified gas
7 CSPI should remain in place unless or until
8 replaced or discontinued by the Commission.
- 9 Q. Why do you prefer a dollar amount over an
10 adjustment to ROE?
- 11 A. Downward adjustments to ROE are only meaningful
12 in the event the utility earns at least its
13 expected ROE. A utility that is under-earning
14 is even more likely to try to cut costs, and
15 customer service represents a potentially
16 attractive area for cost reductions. Customer
17 service functions do little to enhance profits,
18 so long as delivery service remains a monopoly.
19 Staff's proposal ensures that the company's gas
20 CSPI will continue to align ratepayer and
21 shareholder interests, even if the company
22 under-earns. In addition, because Staff is
23 presenting a traditional one-year rate case, an
24 adjustment to ROE for purposes of this

1 proceeding would be inappropriate should the
2 Commission decide not to maintain the CSPI on a
3 continuous basis.

4 Q. Why do you propose an increase in the amount at
5 risk?

6 A. Industry restructuring and the introduction of
7 competition has put pressure on utilities to
8 reduce costs and eliminate waste, which is
9 expected to lead to reductions in customer
10 bills. At the same time, there is a concern
11 that downsizing and restructuring could lead to
12 a decline in service quality. As many utilities
13 have restructured, staffing levels have already
14 been reduced, including reductions in customer
15 service areas. For example, Con Edison has
16 closed most of its customer service centers,
17 prompting the Commission to issue an order in
18 Case 99-M-0851 requiring the company to maintain
19 at least one center in each borough, and further
20 requiring the company to open facilities in
21 Staten Island and Westchester County to replace
22 those already closed. Moreover, recent events
23 have sharpened consumer focus on the energy
24 industry. Customers have become particularly

1 sensitive to the safety, reliability and
2 adequacy of utility service and they expect
3 utilities to continue to provide adequate
4 customer service. Larger incentives than have
5 been applied in the past are therefore needed in
6 order to keep service to customers a high
7 priority for utility management and ensure that
8 the quality of service that customers have come
9 to expect does not deteriorate.

10 Q. How does your proposed incentive level compare
11 to those for other utilities?

12 A. Staff's proposal will bring the amount of Con
13 Edison's incentive more in line with that of the
14 state's other utilities. The CSPIs currently in
15 place at all major New York energy utilities
16 carry an amount of dollars at risk with a mean
17 equivalent value of 35 basis points, and a
18 median equivalent value of 40 basis points. My
19 proposal for Con Edison would increase the risk
20 level from approximately 15 basis points to
21 about 30 basis points.

22 Proposed New Service Fees

23 Q. What new service fees does Con Edison propose?

24 A. A \$26 fee would be charged to customers to

- 1 seasonally disconnect gas service; a \$37.50 fee
2 would be charged to disconnect both electric and
3 gas services. Fees of \$66 and \$248 would be
4 charged to residential and all other customers,
5 respectively, to reconnect service to a seasonal
6 customer or a customer whose service has been
7 discontinued for non-payment; fees of \$29 and
8 \$45 for residential and all other customers,
9 respectively, would be charged for no access.
- 10 Q. Does Staff support the company's proposals?
- 11 A. No. First, we are opposed to establishing any
12 new charges for the disconnection of service.
13 Disconnection is the only means customers have
14 to prevent incurring further charges that they
15 may be unable to pay. It would be unfair and
16 unjust to charge customers for voluntarily
17 disconnecting service. In fact, if a customer
18 is to be disconnected involuntarily for non-
19 payment, such charges are expressly prohibited
20 by §42 of the Public Service Law. In addition,
21 the company has provided no cost justification
22 to support the amounts of the respective fees.
- 23 Q. How much revenue would the proposed fees
24 generate?

1 A. The company expects that all of its proposed new
2 charges will produce only about \$87,800 in
3 incremental revenues. The company estimates
4 that rate-year revenues from gas-only seasonal
5 disconnection fees will be \$1,300 and dual-
6 service (gas and electric) disconnection fees
7 will be \$9,375. The company estimates the
8 revenue from no-access fees to be \$780 from SC-1
9 residential customers and \$1,674 from all other
10 customers. The company's response to Staff
11 Information Request 427 provides details on all
12 of the proposed fees. It is attached as Exhibit
13 ____ (MI-1).

14 Q. Do you have any further comments on this
15 proposal?

16 A. Yes. Considering that Con Edison has over \$1
17 billion in annual gas revenues, the amount
18 expected to be produced by these charges does
19 not justify their introduction.

20 General Outreach and Education Program

21 Q. Please briefly describe Con Edison's general
22 outreach and education program.

23 A. Con Edison plans to spend about \$1.46 million on
24 outreach and education activities that are not

1 related to promotion of retail choice, of which
2 about \$0.26 million is allocated to gas
3 operations. The company's program is designed
4 to help customers understand their rights and
5 responsibilities, make maximum, efficient and
6 safe use of energy products and services and
7 make cognizant choices in the energy
8 marketplace. Principal vehicles include
9 literature, the company's web site, a toll-free
10 telephone line, bill inserts, media ads, an
11 annual conference and staffing information
12 booths at community events. The company has
13 also cultivated relationships with community and
14 civic organizations. These active partnerships
15 include board memberships to human services
16 organizations, local business improvement
17 districts and professional relationships with
18 various community assistance groups. All of
19 these professional connections facilitate
20 sharing and reinforcing energy messages
21 regularly and in-person. At this time, some
22 enhancements to Con Edison's messaging efforts
23 include new approaches to reach home owners and
24 people living in apartments via the company's

1 web site, designing material and associated
2 marketing efforts that will appeal to the middle
3 school children that are targeted on the
4 company's kids' web site and video and compact
5 disc production.

6 Q. Does Staff accept the company's outreach and
7 education plan?

8 A. Staff believes that, without expending
9 additional funds, the plan could be strengthened
10 by redirecting efforts in certain areas. Due to
11 the January 16, 2004 incident which resulted in
12 the death of Jodie Lane, the company placed ads
13 in major dailies, The New York Times, New York
14 Post and Newsday in late February. Ads were
15 also placed in multiple local papers, foreign
16 language and ethnic publications in the New York
17 City boroughs and Westchester County from late
18 February through early March. Letters were sent
19 to 900 community organizations. In addition,
20 during the month of March, the company plans to
21 send a bill insert to customers discussing its
22 efforts subsequent to this event. Staff
23 believes, however, that the company may need to
24 focus a greater portion of its outreach and

1 education efforts on facility safety. The
2 extent of this need may depend on the results of
3 the inquiry in Case 04-M-0159, which was
4 established by the Commission to investigate
5 issues that have arisen as a result of this
6 incident. In addition, the company recently
7 enhanced its program for customers with life
8 supporting equipment (LSE). The company
9 annually solicits identification of qualifying
10 customers and mails a spring/summer emergency
11 plan reminder letter to LSE customers and to
12 service provider organizations. Staff believes
13 Con Edison may need to similarly enhance its
14 outreach efforts for these customers. Finally,
15 Staff wants to ensure that the company is
16 including appropriate questions in its customer
17 surveys, in order to evaluate its customer
18 outreach and education program's results and
19 identify areas where its efforts could be
20 strengthened or improved. Staff proposes that
21 the company be directed to work with Staff to
22 develop a refocused outreach plan designed to
23 achieve these goals, with any disagreements
24 regarding the content or implementation of the

1 plan brought to the Commission for resolution.

2 Low Income Program

3 Q. Does Con Edison propose a gas low income
4 program?

5 A. No.

6 Q. Does Staff support a low income program for Con
7 Edison gas customers, and if so, why?

8 A. Yes. Energy costs represent a large burden on
9 low income families. Evidence from a variety of
10 sources, including the Residential Energy
11 Consumption Survey conducted quadrennially by the
12 Federal Energy Information Administration,
13 demonstrates that while mid- and higher income
14 customers experience energy costs in the general
15 area of one to five percent of income, lower
16 income customers experience energy costs in the
17 general area of 15 to 20 percent of income. As
18 a result, many low income customers cannot
19 afford essential services such as gas service.
20 These families typically must trade off among
21 food, shelter and energy purchase decisions. In
22 addition, for gas heating customers, loss of a
23 household's primary heat source presents serious
24 risks, both due to the potentially fatal effects

1 of cold weather and the fire and health hazards
2 resulting from using unsafe alternative heating
3 sources. Furthermore, low-income families tend
4 to live in poorly maintained housing. This not
5 only wastes energy, but makes it even more
6 likely that these households will be unable to
7 pay their utility bills. For these reasons,
8 programs to address the needs of low income
9 customers are necessary.

10 Q. Why should such programs be funded by Con Edison
11 ratepayers?

12 A. Helping low income customers to pay their gas
13 bills helps Con Edison and its ratepayers.
14 Utilities carry uncollectible expenses which are
15 paid for by all ratepayers as a cost of
16 business. Collection costs and working capital
17 on the unpaid bills of low income customers
18 impose additional costs on the utility and all
19 consumers. These costs can be reduced with the
20 effective implementation of low income programs.
21 Savings from low income programs include
22 reductions in costs associated with credit and
23 collection, arrears and bad debt, deposit
24 maintenance, regulatory expenses, repeated

1 payment plan negotiations, credit agency fees,
2 diversion of revenue from arrears to
3 reconnection fees, and diversion of revenue
4 resulting from forced moves. Finally, these
5 programs exist at all of the other major
6 utilities in the state, and Con Edison has a
7 complementary electric low income program.

8 Q. What type of gas program for low income
9 customers do you propose Con Edison to employ
10 for its customers?

11 A. Con Edison has proposed rate design changes that
12 would increase the monthly customer charge from
13 \$11.08 to \$14.08, a 27 percent increase.

14 Overall, the company's proposed rate changes
15 would increase an average residential heating
16 bill of 150 therms by about 11 percent, and an
17 average non-heating bill of 6 therms by about 20
18 percent. Staff has proposed adjustments that
19 would moderate the company's proposed increases,
20 and Staff witnesses Salony and Wade propose
21 corresponding modifications to rate design,
22 including changes to the amount of the minimum
23 charge. Even if a lower than requested increase
24 is granted, bill impacts could be significant.

1 While Staff is concerned about the impacts of
2 such increases on all customers, we are
3 particularly concerned with the impacts on low-
4 income customers. In order to mitigate the
5 impact of the proposed changes, Staff proposes
6 that the current monthly charge be frozen at
7 \$11.08 for qualified low-income customers,
8 representing a discount of \$3 per month,
9 relative to the company's proposed monthly
10 charge, or \$36 per year. Staff further proposes
11 that the rate discount be offered to customers
12 who receive grants under the Home Energy
13 Assistance Program (HEAP). Over the past
14 several years, the company has served
15 approximately 13,500 HEAP recipients annually.
16 The cost of such a program would total
17 approximately \$500,000 per year. A \$500,000
18 annual expenditure level, if included in base
19 rates and spread over all residential gas sales,
20 would result in a rate impact of about \$0.001
21 per therm. That is a reasonable funding level
22 for such a program, particularly given the
23 potential for offsetting benefits to the company
24 and all customers.

- 1 Q. Does this conclude your testimony?
- 2 A. Yes, it does.

BEFORE THE
STATE OF NEW YORK
PUBLIC SERVICE COMMISSION

In the Matter of
CONSOLIDATED EDISON COMPANY OF NEW YORK, INC.

Case 03-G-1671

March 2004

Prepared Exhibit of:

MARTIN INSOGNA
Utility Consumer Program
Specialist
Office of Consumer Services
State of New York
Department of Public Service
Three Empire State Plaza
Albany, New York 12223-1350

427. Regarding the service fees discussed at pages 2-3 of your testimony:
- a. Please separately estimate the annual incremental revenues derived from:
 - i. fees charged to residential customers to seasonally disconnect gas service;
See response to ii. below.
 - ii. fees charged to non-residential customers to seasonally disconnect gas service;
The Company has not estimated the potential revenue from residential and non-residential customers separately. The Company estimates that gas-only seasonal disconnection fees will be \$1,300 and dual-service (gas and electric) disconnection fees will be \$9,375.
 - iii. fees charged to residential customers to restore seasonal service;
The fees are differentiated by the nature of the service taken (non-heating and heating).
The estimated annual fee revenue from non-heating customers is \$13,200.
The estimated annual fee revenue from heating customers is \$61,504.
 - iv. fees charged to non-residential customers to restore seasonal service;
See response to iii above.
 - v. fees charged to residential customers to restore service discontinued for non-payment; and
 - vi. fees charged to non-residential customers to restore service discontinued for non-payment.
The estimated annual fee revenues for reconnections when service was discontinued for non-payment (whether residential or non-residential) are included in the response to iii above.

When Company personnel go to the customer's premises to reconnect service for any reason and cannot gain access to the meter and appliances, the Company will charge a customer served under SC 1 a \$29 fee and all other customers a \$45 fee. The Company estimates the revenue from such fees to be \$780 and \$1,674 respectively.

- b. Please reference the company's electric tariff leaves which set forth fees that mirror the proposed fees, specifying which of the proposed gas service fees corresponds to the referenced electric service fee.

	Gas Tariff	Electric Tariff
Seasonal disconnection (residential)	General Rule III-8(W), Leaf No. 76.1, \$26 if gas only, \$37.50 gas and electric	Special Services at Stipulated Rates IV-1(D), Leaf No. 81-A, \$26
Seasonal disconnection (non-residential)	General Rule III-8(W), Leaf No. 76.1, \$26 if gas only, \$37.50 gas and electric	Note 1
Seasonal reconnection (residential)	General Rule III-8(V), Leaf No. 76.1, \$66	Special Services at Stipulated Rates IV-1(D), Leaf No. 81-A, \$26
Seasonal reconnection (non-residential)	General Rule III-8(V), Leaf No. 76.1, \$248	Note 1
Reconnection for non-payment (residential)	General Rule III-8(V), Leaf No. 76.1, \$66; street reconnection at cost (T&M)	General Rule III-19(B), Leaf No. 79 (Note 2), \$26 (day), \$28 (other times), \$271 (street reconnection), Note 3
Reconnection for non-payment (non-residential)	General Rule III-8(V), Leaf No. 76.1, \$248; street reconnection at cost (T&M)	General Rule III-19(B), Leaf No. 79, \$26 (day), \$28 (other times), \$271 (street reconnection)
Premises Visit (chargeable only if visit does not result in reconnection)	General Rule III-8(V), Leaf No. 76.1, SC 1 customer - \$29; all other customers \$45	Note 4

Note 1 – The physical disconnection of demand-metered electric customers on a seasonal basis is not available.

Note 2 – The charge for street reconnection is not applicable to customers taking service under the residential service classification numbers 1 and 7 and any other customer whose use of service is primarily residential because the Company does not disconnect service in the street for non-payment of accounts of such customers.

Note 3 – Through March 31, 2005, customers who are recipients of Supplementary Security Income, who have received HEAP benefits in the last 12 months, or for whom electric bills are paid directly by the local Social Services District, are not charged reconnection charges.

Note 4 – The electric tariff includes a Collection Charge of \$29, General Rule III-19(A), Leaf No. 79, that is imposed when the Company must make a premises visit for the purpose of collecting the amount due on a termination notice or disconnecting service. The charge is not imposed on customers taking service under the residential service classification numbers 1 and 7 and any other customer whose use of service is primarily residential and may be assessed only twice to a customer otherwise liable for the charge.

- c. Please reference the gas tariff leaves which reflect similar service fees in connection with ESCO/marketer requests to suspend or restore service to SC9 transportation customers receiving consolidated bills, specifying which of the proposed fees corresponds to the referenced service fee.

The charges to ESCO/marketers for suspending or restoring service are on Leaf 398. The “Visit to End Suspension” charges are the same as the Reconnection charges (\$66 or \$248). The charge for “Suspension Visit to the Premises” was modeled on the electric tariff Collection Charge of \$29 (see General Rule III-19(A), Leaf No. 79).

- d. Please describe whether and under what circumstances the proposed fees would apply to customers of ESCOs/marketers, and state whether all or any portion of the proposed fees would be billed to the ESCO/marketer rather than the customer.

The fees on Leaf No. 76.1 would be applicable to the customers of ESCO/marketers and would not be charged to the ESCO/marketer. The fees on Leaf No. 398 will be billed only to an ESCO/Marketer.

- e. With respect to (a)(i) through (a)(iv) above, please cite references to the tariffs of other major gas utilities in New York State that provide for fees to be charged to customers in similar circumstances, specifying which of the proposed fees corresponds to the referenced service fee.

The Company objects to this question as it would require the Company to undertake a study.

BEFORE THE
STATE OF NEW YORK
PUBLIC SERVICE COMMISSION

In the Matter of
CONSOLIDATED EDISON COMPANY OF NEW YORK, INC.

Case 03-G-1671

MARCH 2004

Prepared Panel Testimony of:

Thomas Munnelly
Utility Supervisor

James Evensen
Utility Engineer 3

Kumar Desai
Utility Engineer 1

Patrick Raichel
Utility Engineer 1

Office of Gas and Water
State of New York
Department of Public Service
One Penn Plaza
New York, NY 10119-0002

BEFORE THE
STATE OF NEW YORK
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Office of Gas and Water
State of New York
Department of Public Service
One Penn Plaza
New York, NY 10119-0002

1 Q. Please state your names and business address.

2 A. Thomas Munnelly, James Evensen, Kumar Desai, and
3 Patrick Raichel, One Penn Plaza, New York City.

4 Q. Mr. Munnelly, what is your position with the
5 Department of Public Service?

6 A. I am a Utility Supervisor in the Gas Safety
7 Section of the Office of Gas and Water.

8 Q. Mr. Munnelly, please state your education and
9 experience.

10 A. I graduated from the City University of New York
11 in June 1986 with a Bachelor of Science degree
12 in Engineering Science. I have been employed by
13 the Department of Public Service since September
14 1976. I have held various positions of
15 responsibility within the Gas Safety Section
16 during this time.

17 Q. Mr. Munnelly, what are your duties in the Gas
18 Safety Section?

19 A. As Utility Supervisor of the Albany and New York
20 City Gas Safety field offices, I'm responsible
21 for the organization, scheduling, coordination
22 and direction of activities and assignments
23 under the NYS Pipeline Safety Program in the
24 Eastern portion of New York State. The program

1 involves comprehensive safety and reliability
2 evaluations of utilities and covers all aspects
3 of operations, maintenance and construction of
4 jurisdictional natural gas, liquid petroleum and
5 steam pipelines as well as propane and liquefied
6 natural gas peak shaving plants

7 Q. Mr. Evensen, what is your position with the
8 Department of Public Service?

9 A. I am a Utility Engineer 3 in the Water Rates
10 Section of the Office of Gas and Water and am
11 currently on temporary assignment to the Gas
12 Rates Section.

13 Q. Mr. Evensen, please state your education and
14 experience.

15 A. I graduated from Polytechnic Institute of
16 Brooklyn in May 1973 with a Bachelor of Science
17 degree in Mechanical Engineering. I have been
18 employed by the Department of Public Service
19 since August 1976. During the periods 1976 to
20 1986 and 1999 to present I worked in the
21 Department's Water Rates Section. Between 1986
22 and 1999 I worked in the Department's Office of
23 Utility Efficiency and Productivity (OUE&P).

24 Q. Mr. Evensen, what are your duties in the Water

1 Rates Section?

2 A. During my tenure in the Water Rates Section, I
3 have been responsible for conducting field
4 inspections of water companies to assure
5 equitable rates and adequate service, performing
6 original cost and related depreciation studies,
7 developing rates and rate structures, and
8 analyzing operation and maintenance expense
9 accounts. In addition, I have testified before
10 the New York State Department of Public Service
11 and the New York State Department of
12 Environmental Conservation. I prepared and
13 presented expert testimony on such topics as:
14 forecast of sales; review of capital
15 construction to determine need and
16 reasonableness; and review of forecasted
17 operating expenses to determine reasonableness
18 and applicability for rate setting.

19 Q. Mr. Evensen what were your duties in OUE&P?

20 A. When I was in OUE&P I was responsible for
21 conducting operational audits of all regulated
22 utilities (electric, gas, telecommunications,
23 and water) in New York State. These audits
24 focused on the areas of construction,

1 operations, and maintenance. I audited
2 functions (e.g. purchasing, construction, energy
3 conservation & load management, etc.) to
4 determine the extent to which they were
5 implemented in the most effective and efficient
6 manner. My duties included developing detailed
7 audit workplans; analyzing and evaluating audit
8 information and documentation developed or
9 obtained during the course of an audit;
10 reviewing and analyzing a broad range of utility
11 decisions and practices; preparing audit
12 reports; testifying in Commission proceedings
13 and conducting compliance audits to ensure that
14 utilities were properly implementing audit
15 recommendations.

16 Q. Mr. Desai, what is your position with the
17 Department of Public Service?

18 A. I am a Utility Engineer 1 in the Gas Safety
19 Section of the Office of Gas and Water and am
20 currently on temporary assignment to the Gas
21 Rates Section of the Office of Gas and Water.

22 Q. Mr. Desai, please state your education and
23 experience.

24 A. I graduated from The City University of New York

1 in 1992 with a Master of Science degree in
2 Mechanical Engineering. I have been employed by
3 the Department of Public Service since January
4 1996 as a Junior Engineer and promoted to
5 Utility Engineer 1 in mid 1997. From April 1993
6 to December 1995 I worked for the New York State
7 Department of Transportation as a Senior
8 Engineer Technician.

9 Q. Mr. Desai, what are your duties in the Gas
10 Safety Section?

11 A. I am responsible for the investigation and
12 analysis of gas pipeline utility facilities,
13 company standard practice and records related to
14 system design, construction, operation and
15 maintenance. I assure that the federal and state
16 pipeline safety regulations that apply to gas
17 utilities and operators such as Consolidated
18 Edison Company of New York, Inc. (Con Ed or
19 company) and KeySpan Energy Delivery are
20 followed. I investigate complaints from utility
21 customers and the public regarding pipeline
22 safety and service issues and facilitate
23 resolution with utilities and complainants. I
24 investigate natural gas and steam related

1 incidents to determine if there are pipeline
2 safety regulation violations and recommend
3 preventive measures to eliminate or mitigate
4 reoccurrence.

5 Q. Mr. Raichel, what is your position with the
6 Department of Public Service?

7 A. I am a Utility Engineer 1 in the Gas Safety
8 Section of the Office of Gas and Water.

9 Q. Mr. Raichel, please state your education and
10 experience.

11 A. I graduated in June 1991 from the State
12 University of New York at Buffalo with a
13 Bachelor's of Science degree in Mechanical
14 Engineering. I have been employed by the
15 Department of Public Service since December of
16 1995 as a Junior Engineer and promoted to
17 Utility Engineer 1 in mid 1997. From March 1994
18 to December 1995 I worked for the New York State
19 Insurance Fund as a Risk Management
20 Representative.

21 Q. Mr. Raichel, what are your duties in the Gas
22 Safety Section?

23 A. I am responsible for the investigation and
24 analysis of gas pipeline utility facilities,

1 company standard practices and records related
2 to system design, construction, operation and
3 maintenance. I assure that the federal and state
4 pipeline safety regulations that apply to gas
5 utilities and operators such as Con Ed and
6 Keyspan Energy Delivery are complied with. I
7 investigate complaints from utility customers
8 and the public regarding pipeline safety and
9 service issues and facilitate resolution with
10 utilities and complainants. I investigate
11 natural gas, steam and carbon monoxide related
12 incidents, and outages for violation of the
13 pipeline safety regulations and recommend
14 preventive measures to eliminate or mitigate
15 reoccurrence.

16 Q. Mr. Munnelly, Mr. Evensen, Mr. Desai, and Mr.
17 Raichel, what are your assignments in this
18 proceeding?

19 A. We are responsible for reviewing Con Ed's World
20 Trade Center (WTC) costs amortization, various
21 operation and maintenance expenses, capital
22 projects, and safety incentives.

23 Q. What is the purpose of your testimony?

24 A. The purpose of our testimony is to present our

1 rate year adjustments to the company's proposed
2 three year WTC costs amortization and to various
3 operation and maintenance expenses and one of
4 the capital projects proposed by Con Ed. In
5 addition, we will comment on the company's
6 proposal to discontinue certain safety incentive
7 mechanisms, recommend several adjustments to Con
8 Ed's current safety incentive mechanism
9 benchmarks, and propose a new safety incentive
10 mechanism.

11 Q. Have you prepared an exhibit?

12 A. Yes. We prepared Exhibit ____ (SAD-1), consisting
13 of five pages plus the title page. This exhibit
14 contains the company's response to our
15 Information Requests that we cite on the
16 following pages.

17 Q. Please explain your adjustment to the company's
18 proposed WTC costs amortization.

19 A. The company is proposing to recover \$11.4
20 million of WTC costs, which it has been
21 deferring, through a three year amortization
22 (\$3.8 million per year) to begin with the rate
23 year ending September 30, 2005. As stated in
24 Mr. Rasmussen's direct testimony on page 21,

1 lines 1 through 11 the company is currently in
2 the process of trying to recover these WTC costs
3 through federal funds. Since it is still
4 uncertain as to how much of this money the
5 company will recover from federal funds, we
6 recommend that the company continue to defer the
7 \$11.4 million and continue to accrue interest on
8 it at the Commission determined unadjusted
9 customer deposit rate. Once the company has
10 exhausted its federal and insurance recovery
11 efforts, it can then seek Commission approval to
12 amortize the WTC costs balance not recovered
13 plus interest in a future proceeding.

14 Q. What is the rate year impact of your WTC
15 amortization adjustment?

16 A. It will result in a \$3.8 million O&M expense
17 reduction and a \$5.7 million rate base
18 reduction.

19 Q. Please explain your adjustments to the proposed
20 O&M Program changes contained in Mr.
21 Ciminiello's Exhibit ____ (FJC-1).

22 A. We propose to eliminate the "Installing steel
23 protection plates over 2", 4", 6" & 8"
24 Transmission Mains" and the "Lower Manhattan

1 Reconstruction Project" programs. In addition,
2 we are proposing adjustments to the company's
3 "Pipeline Integrity" and "Soft Closure"
4 programs.

5 Q. Please explain the basis for your proposal to
6 eliminate the "Installing steel protection
7 plates over 2", 4", 6" & 8" Transmission Mains"
8 program.

9 A. The company stated in its response to Staff
10 Information Request 369 (See Page 1 of Exhibit__
11 (SAD-1)) that it has no history of third party
12 damage occurrences on record for the 24,940 feet
13 of main to be included in this program. The
14 company also states in its response that it is
15 not certain as to the depth of cover related to
16 the 24,940 feet of main. As a result, we
17 believe that implementation of this program will
18 pose more of a threat of damage to the 24,940
19 feet of main during excavation activities that
20 would be required to install the steel plate
21 covers. In addition, the company's proposed
22 Pipeline Integrity O&M program contained in Mr.
23 Ciminiello's Exhibit__ (FJC-1) will increase
24 the frequency of pipeline patrols from bi-weekly

1 to weekly. This will afford the company more
2 opportunities to observe and stop third party
3 contractors performing excavation near its
4 facilities that are not following the New York
5 City One Call Center procedures. This should
6 help to reduce possible damage by such parties.
7 Finally, the company's Construction Management
8 organization already has an existing program to
9 oversee third party construction, which also
10 helps to reduce the risk of damage to facilities
11 such as these.

12 Q. Do you have any other comments regarding Con
13 Ed's "Installing steel protection plates over
14 2", 4", 6" & 8" Transmission Mains" program?

15 A. Yes. The installation of these plates will also
16 have an adverse affect by reducing the
17 reliability of electronic instruments used to
18 determine gas main depth of cover, location, and
19 coating anomalies.

20 Q. Please explain your adjustment related to the
21 elimination of the "Installing steel protection
22 plates over 2", 4", 6" & 8" Transmission Mains"
23 program.

24 A. The elimination of this program will result in a

1 \$667,000 rate year O&M expense reduction.

2 Q. What is the basis for your proposed elimination
3 of the "Lower Manhattan Reconstruction Project"
4 program?

5 A. In its response to Staff Information Request 370
6 (See Page 2 of Exhibit___ (SAD-1)), Con Ed
7 stated that there were no recent leak repairs
8 recorded on the 1,990 feet of cast iron main
9 associated with this program. Con Ed also
10 stated that all of the 1,990 feet of main to be
11 Weco sealed is under pavement in the street.
12 The area where this main is located is scheduled
13 to be reconstructed under the proposed \$10.6
14 billion 10 year lower Manhattan revitalization
15 (New York City "Vision") project. At this time
16 it is uncertain whether or not this main will
17 remain in service or be replaced during the New
18 York City "Vision" project. Since there is no
19 recent leak history associated with this section
20 of gas main and it currently does not pose a
21 threat to the public, we believe that the
22 company should first determine if this section
23 of main will need to be replaced as part of the
24 New York City "Vision" project. We therefore

1 believe that at this time it would not be
2 prudent to install these seals.

3 Q. Please explain your adjustment related to your
4 recommendation for the company not to implement
5 the "Lower Manhattan Reconstruction Project"
6 program.

7 A. Our recommendation not to implement this program
8 at this time will result in a \$238,000 rate year
9 O&M expense reduction.

10 Q. Please explain the basis for your adjustment to
11 Con Ed's "Pipeline Integrity" program?

12 A. Staff acknowledges Con Ed's efforts to meet the
13 United States Department of Transportation -
14 Office of Pipeline Safety (OPS) rule making
15 which requires that Direct Assessment (DA) and
16 Preventive and Mitigative (P&M) methodologies be
17 performed on Con Ed's 80 miles of transmission
18 system. However, we believe Con Ed's cost
19 estimate to implement this program appears to be
20 excessive.

21 Q. Please explain.

22 A. In Con Ed's response to Staff Information
23 Request 368 (See Pages 3 and 4 of
24 Exhibit___ (SAD-1)) we found that Con Ed's

1 estimate for the DA activities (e.g., contract
2 labor, close interval survey, bar-hole survey
3 for close interval survey, and second electrical
4 survey) total \$116,696 per mile. Initially, OPS
5 estimated the cost for performing DA on natural
6 gas transmission pipelines at \$4,800 per mile in
7 their "Draft Regulatory Evaluation of Pipeline
8 Integrity Management in High Consequence Areas".
9 The document was posted by the OPS on its
10 website on or about June 26, 2002 (Docket
11 NO.RSPA-00-7666) for comments. We are aware
12 that members of the American Gas Association
13 (AGA) and the American Public Gas Association
14 (APGA) submitted an official document, which was
15 listed as input to Docket No. RSPA-00-7666. AGA
16 & APGA provided a summary of estimates from
17 their respective members to better refine the
18 cost-benefit for the proposed gas integrity
19 rule, and to help operators plan capital and
20 expense budgets for their respective companies
21 in preparing for this rule. The Technical
22 Pipeline Safety Standards Committee (TPSSC) at
23 its May 28-30, 2003 meeting adopted a number of
24 AGA & APGA recommended changes to the proposed

1 integrity management rule for gas transmission
2 pipelines. Subsequently, OPS re-evaluated the
3 cost associated with the rule, incorporating the
4 TPSSC recommended changes. This revision, which
5 was primarily based on the Interstate Natural
6 Gas Association of America's and Pacific Gas and
7 Electric's submissions, resulted in a range for
8 performing DA of \$15,000 to \$29,000 per mile
9 including verification digs.

10 Q. Please continue.

11 A. We believe based on this range that \$20,000 per
12 mile (excluding verification dig) times a factor
13 of two (to account for the fact that Con Ed
14 serves Manhattan a densely populated area with
15 an extensive infrastructure) would result in a
16 more appropriate cost per mile of \$40,000. We
17 then used the company's method for calculating
18 its total DA & P&M annual O&M expense factoring
19 in this \$40,000 cost per mile rather than the
20 company's proposed cost of \$116,696 per mile.
21 This resulted in a revised annual cost estimate
22 of \$2,206,460 to implement Con Ed's DA and P&M.

23 Q. What is the total impact of your proposed
24 adjustment to Con Ed's "Pipeline Integrity"

1 program?

2 A. Our adjustment will reduce Con Ed's \$2,621,575
3 rate year O&M annual DA and P&M cost estimate by
4 \$415,115.

5 Q. What are your comments regarding Con Ed's
6 proposed "Soft Closure" program, which concerns
7 the practice of leaving a gas service account
8 active while premises is temporary vacant
9 between occupants?

10 A. Staff recognizes Con Ed's efforts to meet soft
11 closure compliance standards, but believes Con
12 Ed's estimates of cost increases to implement
13 this program appear to be excessive.

14 Q. Please elaborate.

15 A. Con Ed estimates that a turn on and a turn off
16 would take at least three man-hours each to
17 perform. Even including travel time, this seems
18 excessive. Our experience with field trailing
19 audits found 1.5 man-hours for a turn off and 2
20 man-hours for a turn on to be more appropriate.
21 Field trailing audits are when we accompany
22 utilities to verify gas safety activities and
23 observe man-hours needed to perform such
24 activities. Using our man-hour allowances for a

1 turn off and a turn on would result in an annual
2 cost of \$79,450 related to these soft closure
3 activities, which is \$56,550 less than the
4 company's \$136,000 annual estimate.

5 Q. Do you have any other comments regarding Con
6 Ed's "Soft Closure" program?

7 A. We take exception with Con Ed's estimated cost
8 related to the Customer Operations aspect of
9 this program. In its response to Staff
10 Information Request 374 (See Page 5 of
11 Exhibit___(SAD-1)), Con Ed states that it will
12 have to allocate an additional \$240,000, or 46
13 man-hours per week, to administer this program.
14 Con Ed already has an individual that
15 administers a service line closure program. Our
16 previous audits of Con Ed's existing system for
17 soft closed service lines showed an average of
18 912 service lines in the system at any one time.
19 The additional 454 services would represent an
20 increase of about 50% to the existing program.
21 This increase does not support an additional 46
22 man-hours per week. We believe that a more
23 realistic number would be 20 man-hours per week.
24 Based on our 20 man-hours per week the

1 incremental cost to administer the additional
2 454 soft closures would be \$104,000, which is
3 \$136,000 less than Con Ed's incremental annual
4 estimate of \$240,000.

5 Q. What is the total impact of your proposed
6 adjustments to Con Ed's "Soft Closure" program?

7 A. Our adjustments will result in a \$192,550
8 reduction to Con Ed's rate year O&M expense.

9 Q. Do you support the company's proposed "Manhattan
10 Mitigation Valves" capital project contained on
11 page 2 of Mr. Ciminiello's Exhibit ____ (FJC-2)?

12 A. No. We do agree that a series of valves is
13 necessary on the Manhattan high-pressure
14 distribution system. In fact, these valves are
15 required by both federal and state gas safety
16 codes. Con Ed currently is in compliance with
17 these requirements through the use of manually
18 operated valves. We do not believe that these
19 valves need to have remote operation capability.

20 Q. Can you elaborate?

21 A. Mr. Ciminiello's testimony describes a case
22 where remote operation would be necessary for
23 timely shut down of the system. This would be
24 due to the company's inability to access the

1 valve location. Current industry and Con Ed
2 practice in this type of case would be to
3 operate the next closest accessible valve.
4 True, this would increase the number of
5 customers affected by the shut down, but the
6 increase in time it takes the gas to stop
7 flowing would be minimal. Con Ed's priority is
8 to secure the flow of gas first and to minimize
9 the number of customers affected by the outage
10 second.

11 Q. Does Staff have any other reservations regarding
12 this project?

13 A. Real world experience has shown that the
14 communication systems used on these types of
15 valve installations may become ineffective or
16 compromised during a major incident or terrorist
17 attack. During the hours following the
18 terrorist attacks on the WTC (9/11/01), both Con
19 Ed and Staff experienced problems with wire and
20 wireless communications. These are the primary
21 methods of communicating with remotely operated
22 valves. Loss of communication with the
23 automated valve operator may result in the
24 inability to remotely operate the valve. This

1 would only serve to delay the dispatch of a crew
2 to manually operate the valve.

3 Q. How would the installation of these valves
4 affect the costs of operating and maintaining
5 these valves?

6 A. As these valves have more operating parts and
7 equipment than the manually operated valves,
8 there is a corresponding increase to operating
9 and maintenance costs. These remote valves also
10 incur additional costs due to the primary and
11 secondary communication lines. This could
12 include such items as cellular modems or leased
13 telephone lines.

14 Q. What is your recommendation related to this
15 project and what impact will it have?

16 A. We recommend elimination of this project which
17 will result in a \$331,000 reduction to the
18 company's rate year average plant balance.

19 Q. Do you agree with Mr. Ciminiello's proposal as
20 stated on page 22, lines 2 through 9 of his
21 testimony to terminate the safety incentive
22 mechanisms related to leak management and
23 emergency response times currently in place?

24 A. No. As stated in Mr. Ciminiello's testimony on

1 page 22, lines 2 through 9, the purpose of these
2 incentive mechanisms is to encourage the company
3 to meet leak management and emergency response
4 time safety performance standard measures. We
5 believe that these standards are still valid and
6 a worthwhile goal. Past performance by Con Ed
7 has shown that it is capable of meeting these
8 standards. These measures are also formatted as
9 a negative incentive. As such, Con Ed will
10 incur costs only when it fails to maintain its
11 current efforts in the areas of safety.

12 Q. What does Staff recommend in the area of safety
13 performance measures?

14 A. Staff recommends several enhancements to Con
15 Ed's current leak management and emergency
16 response time incentive mechanisms.

17 Q. Please explain your proposed enhancements to Con
18 Ed's current leak management performance
19 incentives.

20 A. We recommend that Con Ed be required to meet the
21 following leak management targets:

22 a) Maintain a year-end backlog of leaks
23 less than or equal to 1,800 leaks.

1 b) Maintain a year-end backlog of
2 workable leaks less than or equal to
3 100 leaks. (A workable leak poses a
4 hazard to the public and must be
5 repaired within a period of no greater
6 than one year.)

7 Failure to meet (a), (b) or both (a) and (b)
8 will result in an annual pre-tax adjustment to
9 revenue of \$1,000,000.

10 Q. Would you please discuss the purpose of these
11 enhanced leak management performance measures?

12 A. The overall objective of the leak management
13 performance measure is to gauge the company's
14 performance in managing the number of leaks on
15 its system. Minimizing the number of leaks
16 helps reduce the potential for hazardous
17 incidents involving natural gas. A year end
18 tally of leak numbers will gauge the company's
19 year round efforts and minimize the hazards to
20 the public during frost conditions, when there
21 is a higher risk of gas migration into homes
22 because the gas cannot vent to atmosphere as
23 readily.

1 Q. How did you determine the number of leaks
2 allowable?

3 A. We reviewed data provided by the company for
4 calendar years 2002 and 2003. The year-end
5 backlog figures were 1,642 leaks and 1,923
6 leaks, respectively. During the same time
7 frames, Con Ed also had an annual workable
8 backlog of 102 and 98 leaks. We believe that
9 our proposed goals for leak management are well
10 within Con Ed's reach.

11 Q. What enhanced measures do you recommend in the
12 area of emergency response times?

13 A. We recommend that Con Ed be required to meet the
14 following annual emergency response time
15 targets:

16 a) Respond to 75% of all gas leak and
17 odor calls within 30 minutes.

18 b) Respond to 95% of all gas leak and
19 odor calls within 45 minutes.

20 Failure to meet (a), (b) or both (a) and (b)
21 will result in an annual pre-tax adjustment to
22 revenue of \$500,000.

23 Q. How will these measures increase public safety?

1 A. Leaks on inside piping, improperly operated or
2 installed appliances, and gas migration into a
3 building present a great risk to the general
4 public. The company recognizes this and
5 dispatches these types of calls on a priority
6 basis. The potential for an incident and
7 physical harm to the general public increases as
8 the company's response time lengthens.
9 Therefore, it is important to minimize the
10 response times to calls of gas odor and/or gas
11 leaks.

12 Q. Do you propose any new safety performance
13 measures?

14 A. Yes. We recommend that Con Ed meet the
15 following annual excavation damage prevention
16 targets:

17 a) Maintain a level of less than or equal
18 to 25 damages (annually) during
19 excavation due to incorrect marking of
20 company facilities.

21 b) Maintain a level of less than or equal
22 to 50 damages (annually) during
23 excavation due to excavation by
24 company personnel or outside

1 contractors in the company's
2 employment.

3 Failure to meet (a), (b) or both (a) and (b)
4 will result in an annual pre-tax revenue
5 adjustment of \$500,000.

6 Q. Please describe the performance measures
7 regarding the prevention of excavation damage.

8 A. As an operator of a natural gas distribution
9 system, Con Ed participates in the local one-
10 call/damage prevention system in effort to
11 minimize the amount of damage inflicted on its
12 facilities by excavation activities. In order
13 to comply with 16 NYCRR 753, Con Ed must respond
14 to all requests for mark out by excavators, and
15 physically locate its facilities, marking their
16 locations on the ground. This performance
17 measure will gauge how well these mark outs are
18 conducted. In 2003, over 13%, or 42 of 322
19 damages were attributed to improper mark outs.

20 Q. What does the performance measure include
21 regarding company excavators?

22 A. Con Ed, by the nature of its work, also conducts
23 its own excavations. At these sites, Con Ed is
24 not required to mark out its own underground

1 facilities, because there are maps and field
2 sketches readily available to the company
3 excavator which would identify the location of
4 the company facilities. Many times, Con Ed is
5 one of the biggest causes of damage to its own
6 facilities. By year-end 2003, Con Ed excavators
7 accounted for 90 of the 322 damages reported
8 that year. That's almost 28% of all damages to
9 company facilities that were directly under the
10 control of Con Ed.

11 Q. Are damages due to excavation a big concern in
12 Con Ed's service territory?

13 A. Yes. According to both New York State and
14 National statistics, the leading cause of
15 pipeline failures and incidents is damage by
16 excavators, also known as third party damage.
17 Marking of facilities related to company
18 sponsored excavation are some of the few areas
19 where Con Ed has direct control over the one-
20 call/mark-out process. Therefore, Con Ed should
21 concentrate its efforts in these areas where it
22 can have the most direct impact, and not have to
23 rely on influencing the actions of others.

24 Q. Please explain the basis for your proposed

- 1 \$1,000,000 leak management, \$500,000 emergency
2 response time, and \$500,000 excavation damage
3 annual non-compliance revenue adjustments.
- 4 A. Recent events related to Con Ed's electric
5 operations have focused attention on Con Ed's
6 safety and reliability practices (e.g. Case No.
7 04-M-1059). As a result we revisited Con Ed's
8 current gas safety operations non-compliance
9 revenue adjustments and determined that they are
10 too low to be considered sufficient for Con Ed
11 to maintain an adequate focus on gas safety and
12 reliability, especially for a company the size
13 of Con Ed.
- 14 Q. Where have you reflected the impact of your
15 adjustments?
- 16 A. Mr. Daniel has included the impact of our
17 adjustments to the company's filing on his
18 Exhibit ____ (CD-1).
- 19 Q. Does this conclude your panel testimony at this
20 time?
- 21 A. Yes.

BEFORE THE
STATE OF NEW YORK
PUBLIC SERVICE COMMISSION

In the Matter of
CONSOLIDATED EDISON COMPANY OF NEW YORK, INC.

Case 03-G-1671

MARCH 2004

Prepared Panel Exhibit of:

Thomas Munnelly
Utility Supervisor

James Evensen
Utility Engineer 3

Kumar Desai
Utility Engineer 1

Patrick Raichel
Utility Engineer 1

Office of Gas and Water
State of New York
Department of Public Service
One Penn Plaza
New York, NY 10119-0002

Question:

369. a. Please provide the depth of cover for the 24,940 feet of main included in the project entitled "Installing steel protection plates over 2", 4", 6", 8" Transmission Mains" in Exhibit FJC-1.
- b. Please provide the third party damage history for this footage of main.

Response:

- a. To our knowledge all the installations were installed with approximately 24" to 36" cover.
- b. Con Edison does not have any history of third party damage occurrences on record for the 24,940 feet of main included in this project. However, in 2003, there were over 200 separate incidents of damage to gas facilities resulting from excavating and/or drilling caused by third parties. We are initiating this program for several reasons: (1) because small diameter transmission piping is more vulnerable to failure as a result of third party damage; (2) because these piping systems can be easily pulled up by a backhoe; and (3) because permanent markings can expose us to terrorists' actions near our regulator stations.

Question:

370. a. Please provide the leak history for the 1,990 feet of large diameter low-pressure cast iron main associated with the project entitled "Lower Manhattan Reconstruction Project" in Exhibit FJC-1.
- b. Please provide Con Edison's experience on the failure rate, if any, for the Weco seal repair method to be used on this project.
- c. Please state whether this main is under the sidewalk or street.

Response:

- a. Recently, there have been no leak repairs recorded on the 1,990 feet of cast iron main associated with the "Lower Manhattan Reconstruction Project." As Mr. Ciminiello stated in his testimony, the Company is proposing to increase its preventative maintenance spending for the "Lower Manhattan Reconstruction project" as a result of the City of New York's plan to reconstruct its infrastructure in that area. The Company believes that WECO sealing this section of pipe will improve the gas system over the long term and in the end, result in less cost to firm customers.
- b. Con Edison successfully utilized the Weco seal method of repair on two projects in Manhattan as follows:
- In 1980, we WECO sealed 660 feet of 36-inch cast iron on W. 66 St between Columbus Ave and W. Central Park
- In 1995, we WECO sealed 575 feet of 30-inch cast iron in the intersection at W. 46 St & Broadway.
- Since the repair process was completed, we have experienced no main leaks at either of these two locations.
- c. All of the 1,990 feet of large diameter low-pressure cast iron main to be Weco sealed is under pavement in the street which is scheduled to be reconstructed under the New York City "Vision" project.

Question:

368. a. Please provide the details for all of the item estimates contained under both Direct Assessment and Preventive and Mitigative Measures categories for "Pipeline Integrity" in Mr. Ciminiello's workpapers. In responding to this question, please specify which items will be performed by contractors and which will be performed by in-house labor.
- b. Under Preventive and Mitigative Measures for Items 6 & 7, \$110,000 is included for weekly and daily pipeline patrols. Please provide the basis for this additional

Response:

- a. See attached file "Pipeline Integrity O&M Details"
- b. The combined estimate of \$110,000 for weekly and daily pipeline patrols for items 6 & 7 under Preventative and Mitigative Measures reflects human resource requirements to conduct these scheduled patrols of our 80-mile transmission system. The patrols are conducted along the pipeline route in order to identify unknown third party activity, right-of-way encroachments and outside force conditions (e.g., earth movement, flooding conditions, unstable bridge conditions) that could impact the integrity of the pipeline. Patrols also verify the existence of proper signage and or markers along the pipeline and provide an added measure of security against the threat of terrorism.

Weekly Patrol - one salaried HR @ \$75,000 annual salary

Daily Patrol (Manhattan only) - one salaried HR ½ day @ \$75,000 or \$35,000

Pipeline Integrity Annual Cost Estimate Using DA and P&M Methods

Direct Assessment Method	Annual Cost	Remarks	Contractors	In-House Labor
1 Incremental mappower to address pipeline integrity	\$375,000	5 additional personnel @ \$75,000 ea or consulting equivalent	X	X
2 Close Interval Survey	\$283,000	Based on 2002 testing estimated at \$32K/mi	X	X
3 Cost to perform barhole survey for Close Interval Survey	\$97,600	\$283K estimate based on 8.9 miles/yr @ \$32K /mile 2.9 miles/yr @ 5' intervals (50 bh/day @ \$100/hr x 16 hrs x 61 days)	X	X
4 Second electrical inspection method	\$283,000	Based on 2003 contractor inspection of 2.5 miles @ \$32K/mi	X	X
5 Perform examinations of pipe	\$2,002,500	\$283K estimate based on 8.9 miles/yr @ \$32K /mile Assume 3 excavations per mile @ \$75,000 ea (3 x 8.9 miles x \$75,000)	X	X
6 Perform one major repair or inspection per year	\$250,000	River crossing, close bridge or tunnel inspection, paving restoration for bar holes. Estimate based on 2003-2004 Harlem River project estimated at \$240K	X	X
Sub total DA	\$3,291,100			
Preventative &/or Mitigative Measure	Annual Cost	Remarks		
1 In HCAs perform perform semi-annual leak survey.	\$16,000	10 days x 2 men x 8hrs x \$100/hr		X
2 In HCAs and moderate risk areas inspect pipeline block valves semi-annually	\$104,400	(261 mv's x 2 mhr/insp x \$100/hr)2		X
3 When pipe is removed, measure tensile properties, determine chemical composition and transition temperature, and examine microstructure, particularly of seam if any When pipe is removed look for evidence of external & internal corrosion, stress corrosion cracking, or other forms of deterioration	\$132,000	Based on 2002 transmission main testing and analysis costs	X	X
4 Whenever pipe is exposed(i.e., coating has been removed) measure wall thickness of pipe for 360 degrees using technology such as compression-wave ultrasonic When piping is exposed perform an evaluation for MIC	\$30,000	2 men/8 hr/\$100/15 + \$6k x-ray, lab analysis	X	X
5 Identify areas of right-of-way where utility poles, guard rails, signs, culverts, ditches, etc. are present. Install markers visible from all locations within the affected area that warn of the presence of a buried pipeline and that drilling or auguring of holes for installing poles or posts could cause serious damage to the pipeline.	\$33,000	32 man-hours/week;10 times annually		X
6 Perform a weekly transmission patrol of right-of-way sto identify unknown third party activity, right-of-way encroachments, ground conditions that might indicate third party activity, and existence of proper signage and/or markers. For Manhattan only perform daily patrol.	\$75,000	Weekly patrol - 1 person @ \$75,000		X
7 Manhattan daily pipeline patrol	\$35,000	Daily patrol - ~1/2 person @ \$75,000		X
8 Drip leakage survey - 89 locations 4 x per year	\$213,600	(89 x 2 men x 3 hrs x \$100/hr)4		X
9 CIS/PCM survey of 20 dnp sites per year	\$24,000	(20 x 3 men x 4 hrs x \$100/hr)	X	X
10 Excavate, evaluate UT/X-ray 5 drips/year @ \$150,000 ea	\$750,000	Base on estimate of \$150K per site including \$100K for trenching, paving and labor and \$50K for contractor testing services	X	X
Sub total P&M	\$1,413,000			
Grand Total DA & P&M	\$4,704,100			

Con Edison Incremental O&M		
A	Gross Annual DA & P&M	\$ 4,704,100
B	NYF factor (47/80)	58.75%
C	NYF Gross	\$ 2,763,659 A*B
D	2003 NYF Actual 12 months ending June	\$ 520,014
E	NYF net incremental	\$ 2,243,645 C-D
F	Net Con Edison NYF Cost @ 33 %	\$ 747,134 E*.333
G	Con Edison Divisional Gross	\$ 1,940,441 A-C
H	2003 Con Edison Div Actual 12 months ending June	\$ 66,000
I	Net Con Edison Divisional Incremental	\$ 1,874,441 G-H
J	Con Edison Annual PI Incremental Cost	\$ 2,621,575 F+I

Question:

374.

- a. Please provide the basis for the \$240,000 customer operations cost for the project entitled "Soft Closure".
- b. Please provide the basis for the \$300 turn-off cost and \$300 turn-on cost associated with this project.

Response:

a. The \$240,000 Customer Operations requirement represents the human resources costs associated with screening and field evaluation associated with this process change. It has been estimated that an additional four human resources are required to perform this function.

b. The \$300 estimated unit cost for turn-off and turn-on of gas services was based upon the historical rate year system actual man-hour per unit performance for this work.

Rate Case historical year: July 2002 to June 2003

Turn on/off for Customer Operations

Units	Hours	Man-hours/unit
8,216	26,156	3 (rounded from 3.18)

3 man-hours per unit x \$100/hr man-hour rate =
 \$300/unit

BEFORE THE
STATE OF NEW YORK
PUBLIC SERVICE COMMISSION

In the Matter of
CONSOLIDATED EDISON COMPANY OF NEW YORK, INC.

Case 03-G-1671

MARCH 2004

Prepared Testimony of:

DEPRECIATION PANEL
Jerold A. Nadel
Utility Supervisor
Office of Gas and Water
State of New York
Department of Public Service
Three Empire State Plaza
Albany, New York 12223-1350

Aric Rider
Utility Engineer 1
Office of Gas and Water
State of New York
Department of Public Service
Three Empire State Plaza
Albany, New York 12223-1350

1 Jerold Nadel

2 Q. Please state your name and address.

3 A. My name is Jerold A. Nadel, and my business
4 address is Three Empire State Plaza, Albany, New
5 York 12223.

6 Q. By whom are you employed and in what capacity,
7 Mr. Nadel?

8 A. I am a Utility Supervisor in the Gas Policy,
9 Section of the Office of Gas and Water of the
10 New York State Department of Public Service.

11 Q. Please provide a summary of your educational and
12 professional experience.

13 A. I graduated in 1970 from the Pratt Institute
14 School of Engineering with the degree of
15 Bachelor of Industrial Engineering.

16 From February 1971 through March 1986 I was
17 employed by the Department of Public Service's
18 then Power Division (now the Office of
19 Electricity and the Environment), in various
20 engineering titles. My work involved the
21 engineering analysis of electric and steam
22 utility operations as they related to the
23 ratemaking process.

24 From March 1986 through January 1999 I was

1 assigned as a Utility Operations Examiner in the
2 then Office of Utility Efficiency and
3 Productivity where I participated in over a
4 dozen operational audits and investigations of
5 electric, gas, water and telephone utilities.

6 Since January 1999 I have been assigned to
7 the Office of Gas and Water to perform various
8 engineering analyses of gas utility operations.

9 I have testified in over thirty proceedings
10 before the New York State Public Service
11 Commission including, but not limited to, such
12 areas as revenue projections, capital
13 expenditures, operating expenses, depreciation,
14 fuel procurement, work crew productivity, R&D,
15 cost of service studies, revenue allocation, and
16 rate design.

17 Aric Rider

18 Q. Please state your full name and business address.

19 A. Aric J. Rider, Three Empire State Plaza, Albany,
20 New York 12223.

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

22 A. I am an engineer in the Gas Rates Section of the
23 Office of Gas and Water of the New York State
24 Department of Public Service.

1 Q. Please state your educational and professional
2 experience.

3 A. I hold a Bachelor of Science Degree in Civil
4 Engineering Technology, which I received in 2001
5 from the State University of New York Institute
6 of Technology at Utica/Rome. My duties with the
7 Department relate to gas utility matters
8 including cost of service studies, rate design,
9 and operating expenses.

10 Q. Have you previously presented testimony in
11 proceedings before the Commission?

12 A. Yes, I have submitted testimony regarding cost
13 of service and capital expenditures.

14 Findings and Recommendations

15 Q. What is the purpose of this panel's testimony?

16 A. The purpose of this panel's testimony is to
17 provide our findings and recommendations in the
18 area of depreciation for Consolidated Edison
19 Company of New York, Inc.'s (Con Edison) gas
20 business for the rate year October 1, 2004
21 through September 30, 2005.

22 Q. Please summarize the panel's findings and
23 recommendations.

24 A. The company's proposed rate year levels of

1 annual depreciation expense can be used for
2 setting rates in this proceeding. Further, the
3 company should analyze the long-term impact of
4 its programs to replace mains and services on
5 average service lives and retirement patterns
6 and the programs' resulting impact on the
7 theoretical reserve for depreciation.

8 Annual Depreciation Expense

9 Q. Please explain why the utility's proposed annual
10 depreciation expense is acceptable for the
11 purposes of this proceeding.

12 A. Staff has reviewed the various changes proposed
13 by Con Edison regarding average service life and
14 net salvage. Based on the information provided
15 by the company in its mortality and net salvage
16 studies for the period ended December 31, 2002,
17 we find that both the utility's studies and
18 proposed changes are reasonable for purposes of
19 setting rates in this proceeding. Per the
20 company's filing, these changes result in a \$3.8
21 million decrease in annual depreciation expense.

22 However, as we will discuss, further
23 analysis by Consolidated Edison is needed to
24 determine the proper "h" curves to be utilized

1 for the calculation of the theoretical reserve.
2 Accumulated Provision for Depreciation per Books
3 vs. Theoretical Reserve

4 Q. Please describe what book and theoretical
5 reserves are.

6 A. The book reserve is the amount of monies
7 actually expensed over time for the depreciation
8 of utility plant as it is being utilized in the
9 operation of the utility to provide service.
10 The theoretical reserve is the estimated amount
11 of depreciation that should have been accrued
12 based on the best judgment available regarding
13 the average service life, net salvage rate, and
14 theoretical life table (e.g., "h" curve) for
15 each particular class or type of plant, such as
16 services.

17 Q. Please explain what a life table is.

18 A. A life table is a theoretical survivor curve
19 that depicts a typical retirement pattern and is
20 used in the calculation of the amount of
21 depreciation that would have been expensed based
22 on the pattern of retirement of the items in a
23 particular class of plant.

24 Since there are quite a number of types of

1 plant, there are a number of life tables to
2 reflect the retirement patterns of the different
3 plant.

4 Q. What is the significance and usefulness of a
5 book versus theoretical reserve comparison?

6 A. When the theoretical reserve is calculated and
7 compared to the amount expensed on the company's
8 books and the amounts are relatively close, in
9 total, we can say that the existing depreciation
10 rates are, overall, expensing a reasonable
11 dollar amount for the depreciation of the plant
12 that is being used to serve the ratepayers.

13 However, a significant disparity between
14 the book and theoretical reserves indicates that
15 ratepayers are either not paying enough for the
16 plant being utilized for them (when theoretical
17 is higher than book) or are being charged too
18 much depreciation for the plant (when book is
19 higher than theoretical).

20 It is a general principle of rate-making
21 that ratepayers pay no more or no less than
22 their appropriate share of the depreciation
23 expense. In general, when there is a
24 significant difference between book and

1 theoretical reserves, the difference should be
2 analyzed as to cause, and changes be made to
3 more closely align the reserves.

4 Q. What constitutes a "significant" difference?

5 A. A differential of plus or minus 10%, which is a
6 generally accepted industry standard, would be
7 the point at which action should be taken to
8 more closely align the book and theoretical
9 reserves.

10 Q. What is the difference between the reserves in
11 this proceeding?

12 A. As shown on company Exhibit__ (CH-1), page 1 of
13 2, the book reserve is 9.9% higher than
14 theoretical reserve as of December 31, 2002 for
15 current depreciation rates and life tables. The
16 company recently advised us that for the year
17 ended December 31, 2003, the over-accrual has
18 grown to \$55.6 million, or 10.16%. Under the
19 company's proposed rates and life tables, the
20 December 31, 2002 over-accrual drops to
21 approximately \$30.3 million, or 5.6%.

22 Q. What is causing the disparity in the company's
23 presentation of the over-accrual between the
24 current and proposed theoretical reserves?

1 A. There are three accounts that comprise the vast
2 majority of gas plant: mains, services, and
3 meters. In its proposed rates for the
4 computation of the theoretical reserve, the
5 company has, among other things, changed the
6 applicable "h" curve for account 380 (services)
7 from h0.75 to h1.25. This one change in this
8 major account, by itself, results in reducing
9 the book vs. theoretical over-accrual by almost
10 \$23 million, or almost 50% of the current over-
11 accrual.

12 Q. Are the company's proposed "h" curve changes for
13 the theoretical reserve acceptable for this
14 proceeding?

15 A. Yes. The theoretical reserve under the existing
16 values and life tables is at the point where one
17 could consider an adjustment. Under the
18 company's new study, the theoretical reserve is
19 within a reasonable level when compared to the
20 book reserve.

21 Update of the Depreciation Analysis

22 Q. Earlier, you stated that Con Edison should
23 analyze the long-term impact of its capital
24 improvement programs on its depreciation factors

1 and theoretical reserve. Could you elaborate on
2 this recommendation?

3 A. When performing a depreciation analysis, the
4 analyst should not only review the numerical
5 output of the historical data, he or she should
6 also evaluate the causes of any significant
7 changes to existing rates in order to determine
8 long-term trends that affect the depreciation
9 rates. For example, Con Edison, over
10 approximately the last 10 years, has expended
11 substantial amounts of monies in replacing mains
12 and services. These replacements could have a
13 significant impact on the average service lives
14 and retirement patterns of those accounts.

15 Q. What programs is the panel referring to?

16 A. In its filing, the company highlights its
17 ongoing programs to replace cast iron and
18 unprotected steel mains. As part of these
19 programs, the company has replaced approximately
20 123 miles of main from January 1999 to September
21 2003.

22 The company also has a program to eliminate
23 its unprotected steel services. Over the last
24 ten years, Con Edison has replaced approximately

1 50,000 of its almost 375,000 services.

2 Q. Are these programs continuing?

3 A. Yes, they are expected to continue for at least
4 five more years.

5 Q. What impact could these programs have on average
6 service lives and retirement patterns for the
7 respective accounts?

8 A. These programs could shorten the lives of a
9 significant quantity of plant in the affected
10 accounts, while the replacement plant being
11 installed could lengthen the lives. Both of
12 these effects could impact average service lives
13 and retirement patterns in different ways.
14 These potential impacts should be studied to
15 determine what life tables to utilize, and what
16 average service lives can be expected in the
17 future.

18 Q. Has the company presented such qualitative
19 analyses of the effects on service lives from
20 these programs?

21 A. No. Con Edison has not presented such analyses,
22 as noted on the company's response to Staff
23 Information Request 271. (Exhibit__ (DP-1). For
24 the mortality study used in this rate

1 proceeding, the company based its findings
2 primarily on its review and analysis of the
3 historical data that makes up its study, as
4 noted on the company's response to Staff
5 Information Request 270. (Exhibit__(DP-2)).

6 Because those qualitative analyses were not
7 done, Staff is not able to determine whether the
8 depreciation factors proposed by the company in
9 its filing should continue to apply after the
10 rate year, or the extent of the impact, if any,
11 of the mains and services replacement programs
12 on average service lives and retirement patterns
13 for the calculation of the theoretical reserve.

14 Q. What specifically is the panel recommending?

15 A. The panel recommends that the company analyze
16 the impact of its mains and services replacement
17 programs on average service lives and retirement
18 patterns for the affected accounts in order to
19 determine the proper "h" curves to utilize for
20 the computation of the theoretical reserve.

21 This analysis should be performed and presented
22 as part of the mortality study in the company's
23 next rate case.

24 Q. Does this conclude the panel's testimony?

1 A. Yes, it does.

BEFORE THE
STATE OF NEW YORK
PUBLIC SERVICE COMMISSION

In the Matter of
CONSOLIDATED EDISON COMPANY OF NEW YORK, INC.

Case 03-G-1671

MARCH 2004

Prepared Exhibits of:

DEPRECIATION PANEL
Jerold A. Nadel
Utility Supervisor
Office of Gas and Water
State of New York
Department of Public Service
Three Empire State Plaza
Albany, New York 12223-1350

Aric Rider
Utility Engineer 1
Office of Gas and Water
State of New York
Department of Public Service
Three Empire State Plaza
Albany, New York 12223-1350

CONSOLIDATED EDISON COMPANY OF NEW YORK, INC.
GAS RATE CASE 03-G-1671

Party Name & Interrogatory Number:
State of New York Department of Public Service – Interrogatory #271

Responding Witness: Hutcheson

Question:

271. What effect would an aggressive replacement of transmission and distribution mains and services have on the company's proposed average service lives, net salvage factors, and life tables?

Response:

It would require a study to answer this hypothetical question and I have not performed such a study.

CONSOLIDATED EDISON COMPANY OF NEW YORK, INC.
GAS RATE CASE 03-G-1671

Party Name & Interrogatory Number:
State of New York Department of Public Service – Interrogatory #270

Responding Witness: Hutcheson

Question:

270. a. Does the company's depreciation analysis account for the company's aggressive replacement of transmission and distribution mains and services?
b. If the answer to (a) is yes, how?
c. If the answer to (a) is no, why not?

Response:

- a-c The Company would not refer to its replacement of gas transmission and distribution mains and services as "aggressive". Our construction program would best be described as a process done over time and in an orderly manner.

The depreciation analysis, as stated in my testimony, is based primarily on my review and analysis of the historical data comprising the Company's mortality studies, which employ actuarial methods based on past experience. Some of the other factors I consider when choosing appropriate depreciation parameters include the type of assets currently being added to plant, technological and obsolescence influences, and the expected level of retirements to be made on a going-forward basis.

BEFORE THE
STATE OF NEW YORK
PUBLIC SERVICE COMMISSION

In the Matter of

CONSOLIDATED EDISON COMPANY OF NEW YORK, INC.
Cases 03-G-1671

MARCH 2004

Prepared Testimony of:

William D. Wade
Utility Engineer 1
Office of Gas and Water
State of New York
Department of Public Service
Three Empire State Plaza
Albany, New York 12223-1350

Michael Salony
Utility Supervisor
Office of Gas and Water
State of New York
Department of Public Service
Albany, New York 12223-1350

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

2 A. William D. Wade, Three Empire State Plaza,
3 Albany, New York 12223.

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

5 A. I am employed by the New York State Department of
6 Public Service of the State of New York. I am an
7 engineer in the Gas Rates Section of the Office
8 of Gas & Water.

9 Q. Please state your educational and work
10 experience.

11 A. I graduated summa cum laude from Union College,
12 Schenectady, New York with a Bachelor of Science
13 degree in Civil Engineering in 1979. I
14 also received a Master of Engineering degree
15 from Union College in 1983 and a Bachelor of
16 Arts degree in Secondary Education from Trinity
17 College, Burlington, Vermont in 1990.

18 I joined the Department of Public Service
19 in 2003, coming from the New York Department of
20 Transportation where I held a civil engineering
21 position. My work experience includes thirteen
22 years in engineering, seven and half years in
23 business, and three and a half years in
24 education. My engineering experience includes

1 project, facilities, process, and quality
2 engineering positions with General Electric and
3 IBM. My business experience was with MKW
4 Enterprise Incorporated, a specialty valve
5 supply company I co-founded in 1992 and sold in
6 1999. At MKW, I oversaw the day to day
7 operations and was responsible for the company's
8 finances and accounting. My educational
9 experience involved teaching mathematics and
10 engineering to students at both the high school
11 and college level.

12 Q. Please state your full name and business address.

13 A. Michael Salony, Three Empire State Plaza, Albany,
14 New York 12223.

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

16 A. I am employed by the New York State Department of
17 Public Service of the State of New York. I am an
18 engineer and supervisor in the Gas Rates Section
19 of the Office of Gas & Water.

20 Q. Would you please state your educational
21 background and professional experience?

22 A. I received a Bachelor of Science degree in
23 Electrical Engineering from Pratt Institute in
24 1974. I joined the Department of Public Service

1 in May 1976. My responsibilities have included
2 the analysis of various rate and regulatory
3 issues, including rate design, gas sales and
4 revenue forecasts, operating and maintenance
5 expenses, depreciation and rate base, and I have
6 testified on these topics in several proceedings
7 before the Commission.

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

10 A. We are proposing adjustments to Consolidated
11 Edison Company of New York, Inc.'s (Con Edison or
12 the company) forecast for firm gas delivery
13 volumes and revenues, forecast price out
14 methodology, proposed treatment of non-firm
15 revenues, lost and unaccounted for gas, and gas
16 rate design. We will also comment on the
17 company's proposed tariff changes.

18 For simplicity, we will refer to firm gas
19 delivery volumes as sales or firm sales
20 throughout our testimony.

21 Sales and Revenue Forecast

22 Q. Do you agree with Con Edison's firm sales
23 forecast?

24 A. No. We believe that it must be adjusted.

- 1 Q. Please explain.
- 2 A. The company's normalized sales for the twelve
3 months ending January 2004 have already exceeded
4 the company's rate year forecast. This fact
5 indicates that the company's forecast is
6 understated. Specifically, weather normalized
7 sales for the twelve month period ending January
8 2004 is 99,530 thousand dekatherms (Mdt), which
9 is 165 Mdt higher than the company's rate year
10 ending September 2005 sales forecast of 99,365
11 Mdt, as presented in company Exhibit__ (FCY-1).
- 12 Q. To what do you attribute this increase in sales?
- 13 A. Our analysis indicates that the primary reason is
14 that commercial heating, commercial non-heating
15 and residential non-heating customers are on
16 average using more gas. This increase in usage
17 and sales also appears to be related to a
18 resurgence in the economy.
- 19 Q. How did the company determine its sales forecast?
- 20 A. The company began with the actual sales for the
21 test year, July 2002 through June 2003. These
22 sales were weather normalized. Annualization
23 adjustments were made for customer changes due to
24 new business and transfer of firm customers to

- 1 interruptible service during the test year.
2 Water normalization, which we discuss later, and
3 billing and schedule adjustments were also made
4 to obtain a base estimate. The sales forecast
5 for the rate year ending September 2005 was
6 achieved by making adjustments to the base
7 estimate to account for sales changes between the
8 test year and rate year due to new business,
9 transfer of firm customers of interruptible
10 service, conservation and attrition, and
11 employment.
- 12 Q. What is your proposed adjustment to the company's
13 sales forecast?
- 14 A. We propose to increase the company's rate year
15 forecast by 3,013 Mdt to 102,378 Mdt, as shown on
16 Exhibit_(WDW/MS-1).
- 17 Q. Please explain your Exhibit__(WDW/MS-1).
- 18 A. This exhibit presents the rolling twelve month
19 total for normalized sales from January 1999 to
20 January 2004, company forecasted sales from July
21 2003 to the end of the rate year, and our rate
22 year forecast.
- 23 Q. How did you determine the level of your
24 adjustment?

1 A. We started from the company's actual weather
2 normalized twelve month sales of 99,530 Mdt for
3 the period ending January 2004 and applied an
4 annual growth rate of 1.71% from January 2004 to
5 the end of the rate year, September 2005.

6 Q. How was the annual growth rate of 1.71%
7 developed?

8 A. We used the average growth rate of the rolling
9 twelve month total sales for the three year
10 period between January 1999 and December 2001,
11 which was 1.71%.

12 Q. Why did you use the growth rate for that period
13 rather than the most recent growth rate?

14 A. We selected the growth rate for the thirty-five
15 month period prior to the end of 2001 because we
16 consider the recent growth rate atypical. A
17 sharp downturn in sales occurred in the eleven
18 month period between December 2001 and November
19 2002 due to extraordinary events. Since then,
20 there has been a period of exceptional growth.
21 For the past fourteen months (November 2002 to
22 January 2004), sales have grown at an annual rate
23 of 2.88%. We considered it unlikely that the
24 annual growth rate of the past fourteen months

1 would be sustained for another twenty months
2 (from January 2004 to September 2005), since it
3 is on the high end of historic growth rates for
4 sales.

5 Q. Do you believe that the company will experience
6 at least a growth rate of 1.71% through the rate
7 year?

8 A. Yes. Apart from our conservative examination of
9 historic growth, information provided in the most
10 recent Federal Reserve Bank Second District - New
11 York's Beige Book report (March 4, 2004)
12 indicates that the economy has grown
13 "increasingly robust" and shown "strong
14 improvement" in the New York City and surrounding
15 areas. The section of the Beige Book on which we
16 have relied is attached in Exhibit __ (WDW/MS-2).

17 Q. Earlier you mentioned that the company used water
18 normalization as part of its forecast. Please
19 explain what you understand is meant by the term
20 "water normalization."

21 A. The company states that water temperature is a
22 factor in its customers' natural gas usage and
23 varies with changes in air temperature (i.e.,
24 weather). It is our understanding that the

1 company's position is that traditional weather
2 normalization, which adjusts customer usage for
3 space heating, will also capture adjustments to
4 customer usage for water heating. However,
5 weather normalization is applied to only the
6 heating classes for the months October through
7 June each year. According to the company, an
8 additional normalization, to adjust usage to
9 reflect normal water temperatures and normal
10 water heating, is required where weather
11 normalization is not applied (the summer months
12 for heating classes and year-round for the non-
13 heating classes).

14 Q. How does the company water normalize customer
15 usage?

16 A. The company takes the average of the New York
17 City's Department of Environmental Protection
18 (DEP) highest and lowest water temperatures
19 measured each month by DEP at its water quality
20 monitoring stations located throughout New York
21 City. The company then performs a statistical
22 analysis to correlate the average of the monthly
23 high and low water temperatures to the average
24 air temperature recorded at the National Oceanic

1 and Aeronautical Administration weather station
2 in Central Park. This correlation is performed
3 to determine a thirty year normal since the water
4 temperature data is available only back to 1989
5 while air temperature data for the past thirty
6 years is readily available. In classes where
7 they have found a statistically significant
8 correlation, water usage in these classes is
9 normalized in the same manner as weather.

10 Q. Do you have any comments or concerns about the
11 use of water normalization?

12 A. We have several concerns about the company's
13 water normalization adjustment. First, the data
14 used to justify the normalization is limited and
15 not well documented. Second, the average is
16 calculated from two measurements, the highest and
17 lowest water temperature recorded during a month,
18 rather than the water temperature taken each day
19 during the month. Third, the data collection is
20 neither standardized nor taken on a routine basis
21 in terms of location or place. Also, the
22 temperature is an ancillary measurement taken by
23 DEP; the primary purpose of DEP's monitoring is
24 to measure water quality. Fifth, not all of Con

1 Edison's customers use the same source of water
2 as New York City and no attempt was made to
3 account for this factor. Sixth, water
4 normalization requires a secondary correlation to
5 air temperature as only fifteen years of water
6 temperature data is available. These concerns
7 introduce error into the water normalization
8 adjustment. Because of these concerns, which the
9 company has neither discussed nor rationalized,
10 we do not believe that the company has submitted
11 sufficient evidence to justify the use of water
12 normalization and we did not include it in our
13 sales forecast.

14 Revenue Price-Out

15 Q. What effect will your adjustment of 3.013 Mdt to
16 the company's sales forecast have on revenues?

17 A. The company's base revenues (revenues before
18 taxes, also referred to as pure base revenues)
19 will increase \$10,899,000, as shown on our
20 Exhibit__ (WDW/MS-3).

21 Q. Exhibit__ (WDW/MS-3) shows a total base revenue
22 adjustment of \$17,787,000. Please explain the
23 difference between this amount and the
24 \$10,899,000.

1 A. We priced out our forecast for sales and customer
2 growth/loss using a "through the blocks" approach
3 for both new and existing customers

4 Q. Could you explain what a "through the blocks"
5 approach is?

6 A. The term "through the blocks" simply means we
7 price out usage at the block rate in which the
8 usage occurs. In our approach we began by using
9 the "through the block" billing and sales data
10 provided by the company's rate panel for the
11 calendar year 2002. We then adjusted the data to
12 reflect actual data prior to the company's
13 proposal to transfer religious customers and
14 other community organizations and weather
15 normalized that data since calendar year 2002 was
16 warmer than usual. We then adjusted the data for
17 new customers gained and lost between calendar
18 year 2002 and the rate year with the assumption
19 that the new customers will exhibit the same
20 usage pattern as existing customers. We then
21 adjusted the data for existing customer usage
22 gains and losses between calendar year 2002 and
23 the rate year, which are the sales needed to
24 arrive at the rate year forecast. Finally, we

1 priced out the resulting sales, in the rate
2 blocks in which they are used, in the same
3 "through the blocks" approach as used by the
4 company's rate panel.

5 Q. What is the effect of using a "through the
6 blocks" method?

7 A. We calculated base revenues for the rate year of
8 \$505,170,000. We then priced out the company's
9 forecast for sales and customer growth using the
10 same "through the block" approach and calculated
11 base revenues of \$494,271,000 which is \$6,888,000
12 more than the company's forecast of \$487,383,000
13 for the same gains and losses in sales and
14 customers.

15 Q. Do you recommend the base revenue be increased by
16 \$6,888,000?

17 A. Yes. This adjustment for the company's price-out
18 methodology brings the total adjustment we are
19 proposing to \$17,787,000.

20 Q. Please explain how the company priced out its
21 rate year sales forecast to arrive at its rate
22 year revenues.

23 A. The company used pricing relationships from the
24 historic year's sales and booked revenue data.

1 These relationships, which are non-linear, were
2 applied to that portion of the forecasted sales
3 associated with existing customers. The
4 forecasted sales related to new business was
5 priced out using a "though the blocks" method
6 which considers the projected average use per
7 customer, added customers and the existing block
8 rate structure of the applicable service
9 classifications.

10 Q. What are these pricing relationships and how are
11 they developed and used?

12 A. The pricing relationships are developed for each
13 service class by taking the historical monthly
14 pure base revenues, elapsed billing days (number
15 of days of usage reflected in a month's billing),
16 sales, and "sales squared" and performing a
17 multiple linear regression analysis to obtain a
18 relationship which best fits the historical data.
19 The pricing relationship is then applied to the
20 rate year forecasted sales and elapsed billing
21 days to calculate the pure base revenue forecast
22 for existing customer growth.

23 Q. What is "sales squared" and why is it used?

24 A. The company has observed non-linearity in the

1 relationship between sales and revenues. Where
2 non-linearity exists, introduction of a square of
3 the variable can yield a better curve fit. The
4 company squares sales in an attempt to achieve
5 better statistical correlation between sales and
6 revenues. The company contends this is
7 appropriate because the margins decrease with
8 incremental growth in a declining block
9 structure. While this is true for some cases, in
10 many instances incremental usage growth does not
11 move the new volumes into a new rate block. For
12 instance, in service class SC 1, there is only a
13 single block after the minimum charge.

14 Q. Do you believe the company's pricing relationship
15 should be used in this proceeding?

16 A. No.

17 Q. Why not?

18 A. The company has provided no theoretical basis for
19 the use of "sales squared" in its pricing
20 relationship. Further, it has not conducted any
21 study to show the validity of using pricing
22 relationships with a "sales squared" variable in
23 forecasting revenues twenty-seven months in the
24 future; that is, the time between the test year

1 and the rate year. Given these concerns, and the
2 fact that the "through the blocks" price-out
3 mechanism we employed produces a higher forecast
4 of future revenues, even using the company's
5 sales forecast, we do not believe that the
6 company's use of pricing relationships with a
7 "sales squared" variable provides an appropriate
8 forecast of future revenues and should not be
9 used in this proceeding.

10 Non-Firm Revenues

11 Q. Do you agree with Con Edison's proposal that a
12 portion of non-firm revenues currently being
13 refunded to customers in the monthly rate
14 adjustment (MRA) be imputed in base rates?

15 A. Yes. However, we recommend \$21 million be
16 included in base rates for rate moderation
17 purposes, not \$15 million as the company
18 proposes.

19 Q. What effect will this imputation have on
20 customer's bills?

21 A. The shift of non-firm revenues into base rates
22 will reduce the amount of credits going back to
23 customers in their bills through the MRA.

24 Q. Why have you increased the amount of the

1 imputation?

2 A. The company historically has collected in excess
3 of \$21 million each year, and our recommended
4 level will not put the company at risk. For
5 example, over the last eight years, annual non-
6 firm revenues derived from interruptible sales,
7 gas transportation for power generation,
8 interstate pipeline capacity release net
9 revenues and off-system sales have varied from
10 about \$50 to \$70 million per year. The company
11 forecasts rate year non-firm revenues of
12 slightly over \$40 million, not including any new
13 revenues from the gas deliveries to new
14 generation projects.

15 Q. Should the Commission consider revenue from new
16 generation projects?

17 A. Yes. Staff is aware of three new generation
18 projects in New York City to which Con Edison
19 will be providing gas deliveries—the East River
20 Repowering Project, the new Poletti generating
21 facility, and the SCS-Astoria generating
22 station. While the SCS project is not expected
23 to be complete by the end of the rate year, the
24 first two projects are expected to enter

1 commercial operations by then, and the revenues
2 generated from them should be considered by the
3 Commission in weighing our recommendation versus
4 the company's.

5 Q. Do you have a forecast of non-firm revenues for
6 the rate year?

7 A. No. However, because of the addition of the two
8 plants we just mentioned, both of which will
9 primarily burn natural gas, we expect the level
10 of non-firm revenues to be higher than \$40
11 million. The company should have included the
12 non-demand portion of revenues from these
13 projects in its non-firm revenue forecast to
14 properly account for these new sales.

15 Q. What is the current structure for sharing of
16 non-firm revenues?

17 A. Currently 100% of the first \$35 million is
18 allocated to firm customers through the MRA, 80%
19 of the non-firm revenues in excess of \$35
20 million up to \$70 million are allocated to
21 customers and 20% to the company, and 90% of the
22 non-firm revenues in excess of \$70 million are
23 allocated to customers and 10% to company.

24 Q. Has the company proposed an alternative sharing

1 of non-firm revenues?

2 A. Yes. In addition to the imputation in base
3 rates of the first \$15 million, the company
4 proposes to allocate the balance 75% to firm
5 customers and 25% to the company.

6 Q. How does the company's proposed sharing
7 structure and current sharing structure compare
8 for the company's rate year forecast for non-
9 firm revenues?

10 A. Using its forecast of \$40 million, the company
11 would earn \$6.25 million under its sharing
12 proposal, whereas it would earn only \$1.0
13 million under the current structure.

14 Q. What is your recommendation for the sharing
15 structure for non-firm revenues?

16 A We recommend that the frame work of the current
17 sharing structure should be continued. The
18 current sharing structure provides the company a
19 fair and reasonable incentive to maximize
20 revenues from its non-firm service offerings for
21 the joint benefit of its customers and its
22 stockholders. Since we have imputed \$21 million
23 in rate base, the company should be permitted to
24 retain the first \$21 million of non-firm

1 revenues. The next fourteen million would be
2 returned 100% to ratepayers, and non-firm
3 revenues in excess of \$35 million would be
4 shared consistent with the current methodology.

5 Lost-and-Unaccounted for Gas

6 Q. What is the current method for recognizing lost
7 and unaccounted for (LAUF) gas in the company's
8 gas distribution system?

9 A. The company is allowed losses of 2.3% of the gas
10 its purchases under the current LAUF method,
11 with a band of 1.0% around that figure. That
12 is, if actual losses are between 2.3% and 1.3%,
13 the company retains the benefit. The savings
14 associated with losses less than 1.3% are passed
15 on to firm customers. If actual losses are
16 between 2.3% and 3.3%, the company bears the
17 cost of the difference. The cost of losses
18 above 3.3% are passed on to firm customers.

19 Q. Is use of a band such as what you just described
20 typical for the LAUF mechanisms?

21 A. No.

22 Q. Why was the 1% band instituted?

23 A In its last rate filing, the company contended
24 that it could not control its LAUF percentage.

1 In adopting a rate plan for Con Edison in that
2 proceeding, the Commission approved the parties'
3 mutual recommendation of a mechanism using the
4 1.0% band. The mechanism was designed to create
5 an incentive for the company to minimize its
6 losses.

7 Q. What is the company proposing here?

8 A. The company proposes to eliminate the LAUF
9 mechanism and to fully recover all gas losses
10 from customers.

11 Q. Do you agree with the company's proposal?

12 A. No. The current method is equitable to both
13 customers and the company. It is also
14 consistent with Commission practice to establish
15 a LAUF mechanism in each gas rate proceeding to
16 properly account for system losses. LAUF gas
17 represents millions of dollars in expense that
18 is currently allocated between Con Edison's
19 customers and its stockholders based on the
20 company's ability to control losses. Ratepayers
21 fund the capital and maintenance expenses of the
22 company to permit it to provide safe and
23 adequate service; loss prevention is or should
24 be included in the funds provided. The

1 company's proposal to place 100% of the cost
2 responsibility on customers is unfair because
3 customers have no control over the company's
4 operational practices or daily expenditures. It
5 is the company's responsibility to prudently
6 manage its gas business.

7 Q. Has the company benefited from the current
8 mechanism?

9 A. Yes. In 2001 and 2002, the LAUF was below 2.3%
10 and Con Edison realized benefits of \$6.7 million
11 and \$3.4 million, respectively. In 2003, the
12 loss factor was above 2.3% and the company
13 absorbed those costs. The net benefit to Con
14 Edison for the three year period was \$4.7
15 million.

16 Q. What is your recommendation for LAUF?

17 A. We recommend that the current method of a fixed
18 LAUF factor with a 1.0% band be continued. To
19 reflect the company's recent LAUF experience, we
20 further recommend that the value of the fixed
21 LAUF factor be based on the average of the loss
22 experience for the three years ending August
23 2004. We will provide our calculation of the
24 LAUF figure in our Brief on Exceptions or

1 otherwise, depending on the schedule set by the
2 Administrative Law Judge.

3 Q. Do you have any additional comments on this
4 subject?

5 A. Yes. In a letter accompanying it's annual gas
6 adjustment clause (GAC) reconciliation, dated
7 October 15, 2003, Con Edison stated its belief
8 that gas losses for the twelve months ended
9 August 31, 2003 reflected an anomaly or error
10 that it had not yet been able to identify. It
11 stated that it was in the process of reviewing
12 all underlying data that gave rise to the
13 increase and would report its findings upon
14 conclusion of its analysis. The company
15 requested postponement of the LAUF adjustment in
16 light of its discrepancy. In an Order dated
17 December 23, 2003 in Case 03-G-1325, the
18 Commission referred the issue for resolution in
19 this case.

20 Q. Has the company presented a sufficient reason
21 for waiver of the \$5.4 million refund to firm
22 gas delivery customers required under the
23 existing LAUF mechanism?

24 A. No. The company did not specifically address

1 its review of this matter in its testimony or
2 identify either an anomaly on its system or an
3 error in its LAUF that gave rise to the increase
4 presented in its reconciliation. However, it
5 did generally discuss historic efforts to
6 identify the reasons for changes in the LAUF and
7 its inability to accurately identify the reasons
8 for the change from year to year.

9 Q. What do you recommend?

10 A. We recommend that the Commission deny Con
11 Edison's request for a waiver. We received
12 recent GAC reconciliations and noticed that the
13 company is already refunding this amount to firm
14 customers. Therefore, no other action on the
15 company's request is necessary.

16 Rate Design

17 Q. Staff's case recommends no change in base
18 delivery revenues and rates. Do you recommend
19 any rate design change given this condition?

20 A. No.

21 Q. If the Commission were to determine that some
22 rate relief is required, how do you propose that
23 it be recovered?

24 A. The manner in which the company arrived at its

1 proposed changes to its firm rate classes is
2 reasonable and should be adopted by the
3 Commission.

4 Q. What rate design do you recommend if the
5 Commission grants a lower than requested rate
6 increase?

7 A. We have examined the company's cost of service
8 study and start with the premise that the
9 allocation of revenues between classes should
10 take into consideration the differences in
11 returns found therein.

12 Q. Briefly, what does the study show?

13 A. It shows that the Residential Sales Service
14 class (SC-1) is contributing a below average
15 return while the General Heating Service and
16 General Non-Heating Service classes (SC-2HTG and
17 SC-2NH, respectively) are contributing a higher
18 return. The Residential Heating class (SC-3)
19 appears to contribute a return at the system
20 average.

21 Q. How should any increase be allocated to the
22 individual service classes?

23 A. After adjusting for changes in the
24 classification for religious institutions,

1 community centers and veterans' posts, as
2 proposed by the company, the revenues to firm
3 service should be allocated in the following
4 manner: SC-1 and the corresponding Residential
5 Firm Transportation (SC-9) sub-class should
6 receive an allocation of 1.25 times the average
7 delivery rate percentage increase (i.e., the
8 allowed rate year revenue increase divided by
9 the total rate year delivery revenues) in
10 recognition those classes' under recovery of
11 costs. SC-2HTG and the corresponding General
12 Transportation (SC-9) sub-class should receive
13 an allocation of 0.75 times the average delivery
14 rate percentage increase. The increase to SC-3
15 should be at the average delivery rate
16 percentage. The balance of the increase should
17 then be allocated on an equal percentage basis
18 to SC-2NH and the Seasonal Off-Peak Service
19 class (SC-13).

20 Q. Will this allocation of a revenue deficiency, if
21 one is found, correct the discrepancies between
22 the classes?

23 A. No. But it is a step in the right direction to
24 mitigate these discrepancies.

1 Q. How should the class increases be allocated to
2 rates within the individual service
3 classifications?

4 A. We recommend that the SC-1 minimum charge be
5 increased by 1.5 times the average delivery rate
6 percentage increase. This level of increase is
7 necessary to move the minimum charge closer to
8 cost.

9 Q. Why not raise the minimum by \$3.00 as proposed
10 by the company.

11 A. Rate design is not an exact science and other
12 factors have to be considered. For instance,
13 there is no firm rule which says all blocks of a
14 rate structure have to provide the same return,
15 and the subjective nature of a study of this
16 kind, while indicative of what exists, does not
17 provide definitive results. Thus, if the
18 Commission finds that the company is entitled to
19 some rate relief below the filed amount, a 30%
20 increase in firm service class minimum charges
21 would be inappropriately large from a customer
22 rate impact basis.

23 Q. Please continue.

24 A. For SC-1, the second or ultimate rate block, for

1 usage over three therms per month, should be
2 adjusted for the remaining increase allocated to
3 the class. To ensure low usage customer price
4 parity, and consistent with the company's
5 practice that the first two rate blocks of SC-2
6 and SC-3 be linked to those of SC-1, we further
7 recommend that the SC-2 and SC-3 initial two
8 blocks be set equal to SC-1 rates. The rates in
9 the remaining blocks of SC-2 and SC-3 should be
10 adjusted on a cents per unit basis to recover
11 the remaining increase allocated to the
12 respective classes. For SC-13, the remaining
13 revenues allocated to this service after the
14 increase to the minimum charge should be
15 recovered on an equal cents per unit basis. The
16 company's proposed changes to the SC-2 and SC-3
17 air conditioning rates and the Riders E, F, G
18 incentive rates follow changes to SC-2 and SC-3
19 and are acceptable as presented in the company's
20 rate panel testimony.

21 Q. Do you agree with the company's proposed
22 implementation of a minimum charge (bill) for
23 interruptible SC-9 (Rate B) and SC-12 (Rate 1)
24 customers?

1 A. No. The proposed change is premised on the
2 assumption that interruptible customers will
3 migrate to their alternate fuels if gas rates
4 become non-competitive and strand costs. Unlike
5 firm customers, for which the company is
6 required to maintain dedicated resources and
7 thus justify a minimum charge, SC-9 (Rate B) and
8 SC-12 (Rate 1) interruptible customers may be
9 interrupted for cause at any time. These
10 interruptible customers are also provided with
11 the lowest level of service assurance. Because
12 of our prior recommendations regarding the
13 recoupment of investments for these customers,
14 and because they impose little or no system
15 costs, the imposition of a minimum charge for
16 them is unnecessary.

17 Other Tariff Changes

18 Q. Could you briefly comment on the company's
19 proposed gas tariff changes?

20 A. Yes. The company is proposing tariff changes
21 permitting for recovery of net unrecovered cost
22 of facilities applicable to SC-12 Interruptible
23 Service customers as proposed in Mr. Hutcheson's
24 testimony. In Opinion No. 82-12, the Commission

1 permitted the company to accelerate depreciation
2 of interruptible plant to reduce stranded costs
3 in the event interruptible customers are lost
4 before the investment to serve them could be
5 recovered. The company estimates \$6.5 million
6 of net unrecovered cost of facilities applicable
7 to SC-12 customers added over the five-year
8 period 1997 through 2002. It proposes to
9 amortize that amount over a three-year period
10 (\$2.1 million per year) from revenues derived
11 from the customers' portion of non-firm
12 revenues.

13 Q. Do you agree with the proposed change?

14 A. No. We do not object to the recovery of the net
15 unrecovered cost from the customers' portion of
16 non-firm revenues for these past installations
17 but believe the amortization period is too
18 short. We recommend that the cost be amortized
19 over a five-year period, which is reflective of
20 the time period over which the deferrals have
21 accumulated. This would result in a write-off
22 of \$1.3 million per year as compared to the
23 company's request of \$2.1 million per year.

24 Q. Do you have any further comments on recovery of

1 plant expenditures made to serve interruptible
2 customers?

3 A. Yes. The energy climate has been in a state of
4 flux over the past few years and gas prices can
5 no longer be assumed to less than oil prices for
6 interruptible customers in Con Edison's service
7 territory. Thus customers may be attached but
8 not take sufficient service for the company to
9 recoup the cost of the facilities installed to
10 serve them. Under the present recovery
11 mechanism, this deficiency would be funded by
12 ratepayers even though the company would have
13 retained 20% of any revenues derived from the
14 account. Given these circumstances, we do not
15 believe it is fair or appropriate for customers
16 to be entirely liable for the stranded costs
17 associated with serving the interruptible
18 customers.

19 Q. What do you propose?

20 A. We believe that the company is entitled to
21 recoup its investment, including interest.
22 However, we recommend that, prospectively, the
23 revenues generated from each interruptible
24 customer should pay for the costs incurred to

1 serve that customer. Therefore, Con Edison
2 should be permitted to retain all revenues from
3 a new installation until all facility costs from
4 the installation are written off, after which
5 the revenue would be included in the non-firm
6 revenues sharing mechanism.

7 Q. Isn't this at odds with your recommendation
8 denying a minimum charge for SC-9 and SC-12
9 transportation customers?

10 A. No. For past investments we are keeping the
11 company whole for plant investment. Our
12 recommendations here achieve the same end but in
13 a different manner for new customers.

14 Q. What benefits do you see with the changes you
15 propose?

16 A. The company will bear some risk going forward.
17 Under the present recovery mechanism, ratepayers
18 are currently shouldering the entire burden and
19 there is no way to determine if some
20 installations are indeed providing any benefits
21 to the system. Our proposal will require the
22 company to be careful in designing the method of
23 cost recovery associated with infrastructure
24 installed to serve new interruptible customers.

1 Q. Do you agree with the company's proposal to
2 create a new transition surcharge to recover
3 retail access related costs, including the
4 inclusion of a new item to recover marketer and
5 direct customer non-payments?

6 A. No. The creation of a new transition surcharge
7 is unnecessary because there is an existing
8 mechanism in place to recover costs associated
9 with the operation of the competitive retail
10 access credit (CRCC) and other allowed retail
11 access related costs.

12 Further, it is our understanding that the
13 treatment of any potential costs related to the
14 recovery of marketer and direct customer non-
15 payments relate to changes in the company's
16 Uniform Business Rules and are currently being
17 considered in Case 98-M-1343. Therefore, we
18 recommend that any final changes on this issue
19 be established in that proceeding.

20 Q. Does this complete your testimony at this time?

21 A. Yes.

22

BEFORE THE
STATE OF NEW YORK
PUBLIC SERVICE COMMISSION

In the Matter of
CONSOLIDATED EDISON COMPANY OF NEW YORK, INC.
Cases 03-G-1671

MARCH 2004

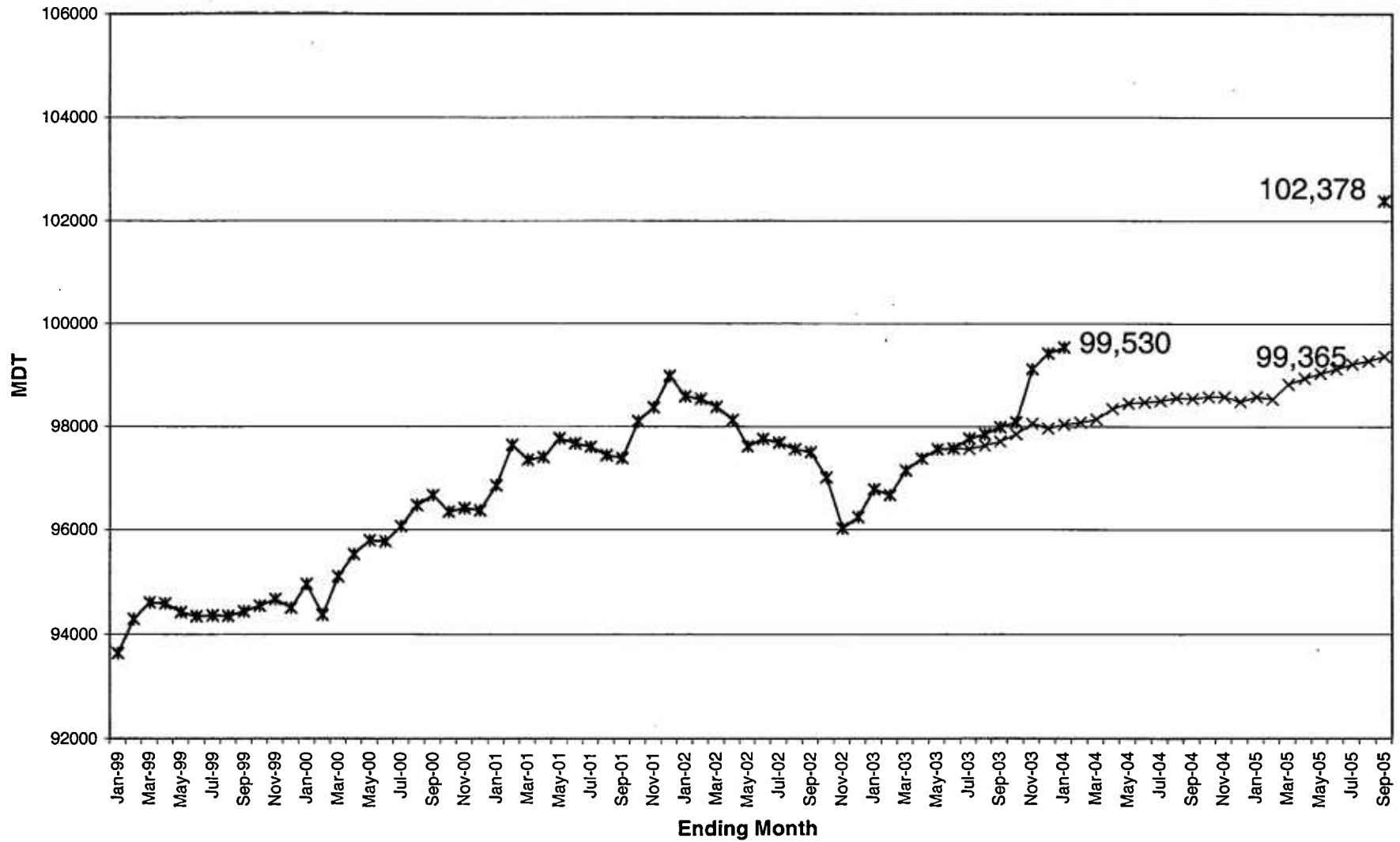
Prepared Exhibits of:

William D. Wade
Utility Engineer 1
Office of Gas and Water
State of New York
Department of Public Service
Three Empire State Plaza
Albany, New York 12223-1350

Michael Salony
Utility Supervisor
Office of Gas and Water
State of New York
Department of Public Service
Albany, New York 12223-1350

**Firm Sales 12 Month Rolling Total vs. Ending Month
(Actual 1999-present)**

—x— Company Projections
—*— Actual





March 3, 2004

Federal Reserve Districts



Second District--New York

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The Second District's economy appears to have grown increasingly robust in early 2004. Retailers generally report strong sales for January and the first half of February; most also indicate lean inventories and steady selling prices, with some moderation in insurance costs. Labor markets are said to be improving gradually but steadily. Consumer confidence in January climbed to its highest level in well over a year, based on two separate surveys. Similarly, surveys of manufacturers and purchasing managers, conducted in January and early February, point to widespread improvement in general business conditions.

Although snowy and icy weather has continued to constrain new home construction in recent weeks, contacts describe demand for both new and existing homes as strong and the inventory of homes on the market as low. Manhattan's office market improved in January, with vacancy rates edging down and asking rents continuing to rebound from low levels; also, the sales market for commercial properties is described as vigorous. Finally, bankers report some further weakening in demand for household loans but steady to improving delinquency rates.

Consumer Spending

Retailers report generally strong sales for January, as well as the first three weeks of February. Same-store sales gains at major retail chains ranged from 2 percent to 6 percent, compared with a year ago. In general, the more upscale chains continued to fare somewhat better than the discounters, and sales in discretionary categories were relatively strong. A number of contacts describe both sales of clearance merchandise and initial sales of spring apparel as robust; most characterize inventories as lean. Despite the unusually cold and snowy winter, most contacts did not consider weather to be much of a factor. Retailers indicate some stabilization in merchandise costs, which had been falling, and in property and casualty insurance costs, which had been rising sharply; they also note that medical insurance costs, though still rising noticeably, have decelerated somewhat.

Surveys of consumers in the district show confidence rising to its highest level in more than a year in January. The Conference Board's index for the Middle Atlantic states (NY, NJ, PA) climbed to a 16-month high in January, while Siena College's index, based on New York State residents, rose to a nearly two-year high.

Construction and Real Estate

Despite a weather-related drop-off in new home construction, residential real estate markets showed increasing signs of strength in early 2004. A contact in New Jersey's homebuilding industry reports that persistent snow and ice buildups this past winter have crimped new home construction, but that demand for housing remains quite strong and that prices continue to advance.

Similarly, contacts in Manhattan's real estate industry report an increasingly tight market for co-ops and condos in January and February. One major firm reports an increasing incidence of overbids and multiple offers, and indicates that prices are up 5-10 percent from a year ago, on fairly strong volume. In addition, the inventory of homes on the market has reportedly dwindled to roughly half of what it was a year ago. Another contact notes that there has been a particular pickup at the high end of the market.

Manhattan's office market improved somewhat in January: Midtown's (Class A) vacancy rate eased from 10.6 percent to 10.0 percent and Lower Manhattan's rate retreated from 14.2 percent to 13.7 percent. Asking rents continue to recover, though they remain substantially lower than a year earlier. In addition, sales transactions of office buildings have reportedly been brisk, with properties selling for record high prices.

Other Business Activity

A New York City employment agency reports gradual but steady improvement in demand for office workers. This contact notes that clients that have been "dormant" for a few years are now looking to hire. In particular, hiring has picked up further in the city's key financial sector, though activity remains far short of the late 1990s pace.

Surveys of manufacturers and purchasing managers point to continued strong improvement in business conditions. Our early-February survey of New York State manufacturers shows widespread increases in new orders, employment, and the average workweek. It also points to increased price pressures--a growing proportion of manufacturers report that input prices have risen and are expected to rise further in the months ahead. Similarly, purchasing managers in both the New York City and Buffalo areas report broad improvement in manufacturing-sector conditions; input prices are reported to have accelerated in the Buffalo area but remained stable in the New York area.

Manhattan hotels report that, while January is typically a slow month, business remained relatively strong. With occupancy rates about 4 percentage points above a year earlier, and room rates up marginally, total revenue was more than 7 percent ahead of last year--except for a year after the 9/11 terrorist attacks, this is the strongest year-over-year gain since 2000.

Financial Developments

Small to medium-sized district banks once again report little change in demand for commercial loans, but weaker demand for household loans: 40 percent of bankers report lower demand for consumer loans, while more than 60 percent note decreased demand for home mortgages (though not necessarily for new purchases). Overall, more than two-thirds of bankers report declines in refinancing activity, while virtually none reports an increase.

Credit standards were mostly unchanged: no bankers reported tightening standards and only one reported eased standards. Interest rates dropped in all loan categories, led by consumer loans. However, average deposit rates were higher overall--increases were reported by 24 percent of bankers, with only 7 percent reporting decreases. Finally, delinquency rates decreased for all categories of loans except consumer loans, which were unchanged.

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Last update: March 3, 2004

CONSOLIDATED EDISON COMPANY OF NEW YORK, INC.
FORECASTED FIRM GAS DELIVERY VOLUMES (Mdt's) AND REVENUES (\$1000s)
FOR 12 MONTHS ENDING SEPTEMBER 30, 2005
DELIVERY REVENUE ADJUSTMENTS AT CURRENT RATES

<u>Line No</u>	<u>Service Classification</u>	<u>Staff Gas</u>		<u>Company Gas*</u>		<u>Revised**</u>	<u>Base Revenue Adjustments</u>		
		<u>Delivery Volumes</u> (Column 1)	<u>Base Revenue</u> (Column 2)	<u>Delivery Volumes</u> (Column 3)	<u>Base Revenue</u> (Column 4)	<u>Base Revenue</u> (Column 5)	<u>Sales</u> (Column 6)	<u>Priceout Methodology</u> (Column 7)	<u>Total</u> (Column 8)
1	SC 1 - Residential & Religious (Non-Heating)	5,354	112,819	4,863	106,851	110,697	2,122	3,846	5,968
2	SC 2 - General, Commercial and Industrial (Non-Heating)	17,783	59,102	17,629	57,480	58,710	392	1,230	1,622
3	SC 2 - General, Commercial and Industrial (Heating)	27,401	96,378	26,265	92,970	92,861	3,517	(109)	3,408
4	SC 3 - Residential & Religious (Heating)	51,733	236,341	50,490	229,584	231,461	4,880	1,877	6,757
5	SC 13 - Seasonal Off Peak Water Heating	72	175	80	143	187	(12)	44	32
6	SC 14 - Natural Gas Vehicles	<u>35</u>	<u>355</u>	<u>38</u>	<u>355</u>	<u>355</u>	<u>-</u>	<u>-</u>	<u>-</u>
7	Total Firm Delivery	102,378	505,170	99,365	487,383	494,271	10,899	6,888	17,787

* taken from EXHIBIT_(FCY-2) in CASE 03-G-1671

** using Company Gas Delivery Volumes with Staff Gas Priceout Methodolgy

BEFORE THE
STATE OF NEW YORK
PUBLIC SERVICE COMMISSION

In the Matter of
CONSOLIDATED EDISON COMPANY OF NEW YORK, INC.

Case 03-S-1672

MARCH 2004

Prepared Testimony of:

William Romaine
Public Utilities Auditor II
Office of Accounting & Finance
State of New York
Department of Public Service
One Penn Plaza
New York, New York 10119

1 Q. Please state your name and business address.

2 A. William Romaine, One Penn Plaza, New York, New
3 York 10119.

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

5 A. I am employed by the New York State Department
6 of Public Service as a Public Utilities Auditor
7 II in the Office of Accounting and Finance.

8 Q. Please state your educational background and
9 professional experience.

10 A. I am a graduate of Williams College (B. A. cum
11 laude 1970) and of Cornell Law School (J.D.
12 1973). I have taken additional accounting
13 courses which qualified me for my present
14 position. Since joining the Department of
15 Public Service in 1981, I have worked on various
16 rate proceedings and general accounting
17 examinations. As a Public Utilities Auditor II,
18 I routinely examine accounts and records,
19 documentation, policies and procedures of
20 regulated utilities. I have assisted in the
21 preparation of revenue requirement computations
22 in other rate cases.

23 Q. Mr. Romaine, have you previously testified in
24 any Commission proceedings?

- 1 A. Yes, I testified in a New York Telephone Company
2 rate proceeding, Case 28961, regarding deferred
3 antitrust expense. Additionally, I submitted
4 testimony in Consolidated Edison Company of New
5 York, Inc.'s Steam Rate Case 96-S-1065
6 addressing certain operations and maintenance
7 costs elements.
- 8 Q. What is your responsibility in connection with
9 this case?
- 10 A. In addition to reviewing certain areas of the
11 Consolidated Edison Company of New York, Inc.'s
12 filing for accuracy and reasonableness, I have
13 prepared Staff's recommended revenue requirement
14 and income statement for Consolidated Edison
15 Company of New York, Inc.'s steam business for
16 the rate year October 1, 2004 through September
17 30, 2005. This information is set forth in
18 Exhibit ____ (WR-1).
- 19 Q. What is Staff's recommendation?
- 20 A. Staff proposes a revenue increase of \$49.7
21 million for the rate year. In calculating this
22 increase, I employed the cost of capital
23 developed by Staff witness Hogan and compiled
24 the recommendations of other Staff personnel,

1 calculating their total effect.

2 Q. Please describe your exhibit.

3 A. Exhibit__ (WR-1) contains eight schedules.

4 Schedule 1 is Staff's projection of steam
5 operating income, rate base and rate of return
6 for the twelve months ending September 30, 2005,
7 and includes Staff's proposed revenue increase.
8 This schedule is supported by Schedules 2
9 through 8.

10 Q. Please describe the format of Schedule 1.

11 A. Column 1 of Schedule 1 contains income
12 statement, rate base and rate of return figures
13 as filed by the company for the rate year,
14 without a revenue increase. Column 2 contains
15 references to the supporting schedules which
16 present the Staff adjustments set forth in
17 column 3. Column 4 presents Staff's projected
18 rate year figures unadjusted for a revenue
19 increase. Column 5 contains Staff's proposed
20 changes in revenues, and Column 6 is the
21 projected rate year income, rate base and rate
22 of return after this revenue increase.

23 Q. Please continue describing your exhibit.

24 A. Schedule 2 projects operation and maintenance

1 expense cost elements for the rate year, other
2 than fuel and depreciation expense, which appear
3 on Schedule 1. Schedule 3 projects taxes other
4 than income taxes.

5 Q. Please continue.

6 A. Schedules 4 and 5 project New York State and
7 Federal income tax income tax expenses,
8 respectively. The adjustments in these
9 schedules correspond primarily to adjustments
10 set forth in other schedules. Additionally,
11 they reflect the interest deduction adjustment
12 that is proposed by the Accounting & Finance
13 panel. Schedule 6 projects rate base for the
14 rate year ending September 30, 2005. Schedule 7
15 projects an allowance for cash working capital,
16 which is a component of rate base. Schedule 8
17 lists Staff's adjustments with their supporting
18 witnesses.

19 Q. Does this conclude your testimony at this time?

20 A. Yes, it does.

BEFORE THE
STATE OF NEW YORK
PUBLIC SERVICE COMMISSION

In the Matter of
CONSOLIDATED EDISON COMPANY OF NEW YORK, INC.

Case 03-S-1672

MARCH 2004

Prepared Exhibit of:

William Romaine
Public Utilities Auditor II
Office of Accounting & Finance
State of New York
Department of Public Service
One Penn Plaza
New York, New York 10119

Consolidated Edison Company of New York, Inc.
Steam Service
Operating Income, Rate Base & Rate of Return - PSC Staff
For the Twelve Months Ending September 30, 2005
(000's)

	Per company Exh. RM2	Ref.	Staff Adjustments	As filed by Staff	Revenue Increase	Per Staff After Increase
<u>Operating Revenues</u>						
Sales Revenues	\$379,979	Sch. 8	\$6,939	\$386,918	\$49,650	\$436,568
Other Operating Revenues	101,126	"	(75,738)	25,388		25,388
Net Revenues	<u>481,105</u>		<u>(68,799)</u>	<u>412,306</u>	<u>49,650</u>	<u>461,956</u>
<u>Operating Expense</u>						
Fuel	195,015	Sch. 8	1,995	197,010		197,010
Other fuel charges	4,152			4,152		4,152
Operation & maintenance expense	137,205	Sch. 2	(4,293)	132,912		132,912
Depreciation expense	49,313	Sch. 8	(31,541)	17,772		17,772
Taxes other than income taxes	81,067	Sch. 3	(20,081)	60,986	1,221	62,207
Total operating expense	<u>466,752</u>		<u>(53,920)</u>	<u>412,832</u>	<u>1,221</u>	<u>414,053</u>
Operating income before income taxes	14,353		(14,879)	(526)	48,429	47,903
New York State income tax	(1,526)	Sch. 4	(2,301)	(3,827)	3,632	(195)
Federal income tax	(9,598)	Sch. 5	823	(8,775)	15,679	6,903
Utility operating Income	<u>\$25,477</u>		<u>(\$13,401)</u>	<u>\$12,077</u>	<u>\$29,118</u>	<u>\$41,194</u>
Rate Base	<u>\$1,120,524</u>	Sch. 6	<u>(\$573,173)</u>	<u>\$547,351</u>		<u>\$547,351</u>
Rate of Return	2.27%			2.21%		7.53%
Weighted cost of debt and preferred stock	3.10%			3.32%		3.32%
Weighted return on equity	-0.82%			-1.11%		4.21%
Equity ratio	49.33%			45.74%		45.74%
Return on equity	-1.66%			-2.43%		9.20%

Consolidated Edison Company of New York, Inc.
Steam Service
Operation & Maintenance Expense* - PSC Staff
For the Twelve Months Ending September 30, 2005
(000's)

	Per company Exh HLL7	Sch. 8 Ref.	Staff Adjustments	Per Staff	Inflation	Per Staff After Increase
A&G Expense Capitalized	(\$793)			(\$793)		(\$793)
Asbestos removal and abatement	1,467			1,467		1,467
Betterment program	197			197		197
Boiler cleaning	536			536		536
Collection agency	1			1		1
Company labor	49,124	2a,b	1,410	50,534		50,534
Communication - telephone	508			508		508
Consultants	762			762		762
Contract labor	25			25		25
Disposal of obsolete M&S	3			3		3
EDP equipment rentals and maintenance	227			227		227
Electricity and gas used	10,369	2c	157	10,526		10,526
Employee pensions/OPEB's - net	(60)	2d,e	(2,638)	(2,698)		(2,698)
Employee welfare expense - net	5,737	2f,g,h	(125)	5,612		5,612
Environmental affairs - central services	1,736			1,736		1,736
Environmental programs	1,293			1,293		1,293
Financial services	255			255		255
Security	1,285			1,285		1,285
Information resources	754			754		754
Injuries and damages	2,977			2,977		2,977
Institutional dues and subscriptions	40			40		40
Insurance premiums	3,655	2i	(309)	3,346		3,346
Interference	1,894			1,894		1,894
Major maintenance projects	970			970		970
Manhour expense	1,907			1,907		1,907
Materials and supplies	1,098			1,098		1,098
MGP/Superfund	1,626	2j	(1,371)	255		255
Other - fossil	2,141			2,141		2,141
Outside legal	36			36		36
Paving	1			1		1
Plant component upgrade	940			940		940
Plant inspection and repair	1,617	2k	(1,494)	123		123
Postage	24			24		24
Preventive maintenance	3,441			3,441		3,441
Recovery of deferred expenses	4,043			4,043		4,043
Real estate expenses	196			196		196
Regulatory commission expenses	1,442			1,442		1,442
Rents	182			182		182
Rents - interdepartmental	11,586	2l	1,255	12,841		12,841
Research & development	621			621		621
Routine maintenance	4,890			4,890		4,890
Scheduled overhauls	3,765			3,765		3,765
Shared services	(262)	2m	31	(231)		(231)
Steam leaks	1,808			1,808		1,808
Steam transfer credit	(14)			(14)		(14)
Trenching	63			63		63
Water and water chemicals	8,722	2n,o	411	9,133		9,133
Other	4,370	2p	(1,620)	2,750		2,750
Total O & M Expense	<u>\$137,205</u>	Sch. 1	<u>(\$4,293)</u>	<u>\$132,912</u>		<u>\$132,912</u>

* Fuel and depreciation expense appear separately on Schedule 1

Consolidated Edison Company of New York, Inc.
Steam Service
Taxes other than income taxes - PSC Staff
For the Twelve Months Ending September 30, 2005
(000's)

	Per company <u>Exh HLL7</u>	Sch. 8 <u>Ref.</u>	Staff <u>Adjustments</u>	As filed by <u>Staff</u>	Effect of Revenue <u>Increase</u>	Per Staff <u>After Increase</u>
Property taxes	\$66,871	4a-e	(\$20,252)	\$46,619		\$46,619
Revenue taxes	9,361	4f	171	9,532	\$1,221	10,753
Payroll Taxes	3,077			3,077		3,077
Sales & compensating use tax	1,493			1,493		1,493
All Other	265			265		265
Total Taxes Other Than Income Taxes	\$81,067	Sch. 1	(\$20,081)	\$60,986	\$1,221	\$62,207

Consolidated Edison Company of New York, Inc.
Steam Service
New York State Income Tax - PSC Staff
For the Twelve Months Ending September 30, 2005
(000's)

	Per company <u>Exh. RM2</u>	Ref.	Staff <u>Adjustments</u>	As filed by <u>Staff</u>	Revenue <u>Increase</u>	Per Staff <u>After Increase</u>
Operating Income before income taxes	\$14,353	Sch. 1	(\$14,879)	(\$526)	\$48,429	\$47,903
<u>Adjustments that increase(decrease)</u>						
<u>book income</u>						
Interest expense	(34,581)	wkpaper	15,735	(18,846)		(18,846)
Dividends on preferred stock	(115)			(115)		(115)
Book depreciation	49,313	Sch 8:3	(31,541)	17,772		17,772
Capitalized interest	571			571		571
Deferred fuel cost	7,803			7,803		7,803
Contributions in aid of construction	566			566		566
MTA surcharge	19			19		19
Previously deferred interference expense	1,756			1,756		1,756
Previously deferred WTC expense	1,620	Sch8:2p	(1,620)			
Excess refund of storage & handling expense	667			667		667
Previously deferred property taxes	7,200	Sch8:4b	(1,240)	5,960		5,960
Special franchise tax refund	(5,487)	Sch8:4c	388	(5,099)		(5,099)
New York State depreciation	(100,984)			(100,984)		(100,984)
Removal costs	(6,443)			(6,443)		(6,443)
Amortization of capitalized interest	(10,369)			(10,369)		(10,369)
Deferred fuel costs	(1,091)			(1,091)		(1,091)
Unbilled revenues	(1,249)			(1,249)		(1,249)
Loss on MACRS retirements	(3,489)			(3,489)		(3,489)
MTA surcharge - tax basis	(116)			(116)		(116)
Capitalized overheads	(37,921)			(37,921)		(37,921)
Make-whole revenues	725			725		725
Discount steam A/C program	545			545		545
Negotiated steam service agreements	488			488		488
Interest on reconciliation balances	676	S. 8:1c	(30)	646		646
Total adjustments to book income	(129,896)		(18,308)	(148,204)		(148,204)
Taxable Income	(115,543)		(33,187)	(148,730)	48,429	(100,301)
Current NYS Income Tax Payable @ 7.5%	(8,666)		(2,489)	(11,155)	3,632	(7,523)
Deferred NYS Income tax	7,140		188	7,328		7,328
Total NYS Income Tax expense	(\$1,526)	Sch. 1	(\$2,301)	(\$3,827)	\$3,632	(\$195)

Consolidated Edison Company of New York, Inc.
Steam Service
Federal Income Tax - PSC Staff
For the Twelve Months Ending September 30, 2005
(000's)

	Per company Exh. RM2	Ref.	Staff Adjustments	As filed by Staff	Revenue Increase	Per Staff After Increase
Operating Income before income taxes	\$14,353	Sch. 1	(\$14,879)	(\$526)	\$48,429	\$47,903
NYS income tax expense	(1,526)	Sch. 4	(2,301)	(3,827)	3,632	(195)
<u>Adjustments that increase(decrease)</u> <u>book income</u>						
Book depreciation	49,313	Sch 8:3	(31,541)	17,772		17,772
Capitalized interest	181			181		181
Interest expense	(33,429)	wkpaper	14,583	(18,846)		(18,846)
Amortization of debt discount and expense	(335)	Sch8:5a	335			
Statutory depreciation	(37,055)	Sch 8:3	31,541	(5,514)		(5,514)
Removal costs	(8,718)			(8,718)		(8,718)
Amortization of capitalized interest	(3,318)			(3,318)		(3,318)
Dividends on preferred stock	(115)			(115)		(115)
Deferred fuel costs	7,803			7,803		7,803
MTA surcharge - book basis	19			19		19
Unbilled revenue	1,249			1,249		1,249
Advanced refunding - long-term debt	436	Sch8:5b	(436)			
Capitalized interest	390			390		390
Contributions in aid of Construction	566			566		566
Deferred interference expense	1,756			1,756		1,756
Deferred WTC expense	1,620	Sch8:2p	(1,620)			
Excess refund of storage and handling expense	667			667		667
Previously deferred property taxes	7,200	Sch8:4b	(1,240)	5,960		5,960
Special franchise tax refund	(5,487)	Sch8:4c	388	(5,099)		(5,099)
Deferred NYS income tax	7,140	Sch. 4	188	7,328		7,328
ADR/ACRS/MACRS depreciation	(68,188)	Sch 8:3	(31,541)	(99,729)		(99,729)
Loss on ACRS/MACRS retirements	(1,147)			(1,147)		(1,147)
Deferred fuel costs	(1,091)			(1,091)		(1,091)
MTA surcharge - tax basis	(116)			(116)		(116)
Amortization of capitalized interest	(7,051)			(7,051)		(7,051)
Capitalized overheads	(37,921)			(37,921)		(37,921)
Make-whole revenues	725			725		725
Discount steam A/C program	545			545		545
Negotiated steam service agreements	488			488		488
Interest on reconciliation balances	676	Sch8:1c	(30)	646		646
Total adjustments to book income	(\$123,197)		(\$19,374)	(\$142,571)		(\$142,571)
Federal taxable income	(\$107,318)		(\$31,951)	(\$139,270)	\$44,797	(\$94,473)
Current Federal income tax expense (35%)	(\$37,561)		(\$11,183)	(\$48,744)	\$15,679	(\$33,066)
Deferred Federal income tax expense	\$31,402		\$12,002	\$43,404		\$43,404
<u>Amortization of previously deferred FIT</u>						
Depreciation - ADR/ACRS/MACRS	(\$1,152)			(\$1,152)		(\$1,152)
Advanced refunding - long-term debt	(4)	Sch8:5c	4			
Capitalized overheads	(2,021)			(2,021)		(2,021)
Investment tax credit	(262)			(262)		(262)
Total Federal income tax expense	(\$9,598)	Sch. 1	\$823	(\$8,775)	\$15,679	\$6,903

Consolidated Edison Company of New York, Inc.
Steam Service
Rate Base - PSC Staff
For the Twelve Months Ending September 30, 2005
(000's)

	Per company Exh. RM1	Sch. 8 Ref.	Staff Adjustments	As filed by Staff
<u>Utility plant</u>				
Average Book Cost of Plant	\$1,503,093	6a-c	(\$644,166)	\$858,927
Average Accumulated Depreciation	(249,520)	6d-h	15,640	(233,880)
Net Utility Property	<u>1,253,573</u>		<u>(628,526)</u>	<u>625,047</u>
NIB/CWIP	12,348			12,348
Preferred stock expense	207			207
Unamortized debt discount, premium, expense	9,911			9,911
Deferred fuel - net of Federal income tax	2,727			2,727
Customer advances for construction	(2,012)			(2,012)
MTA surtax - net of FIT	191			191
Cash working capital	24,025	6i	(302)	23,723
Materials & supplies	9,950			9,950
Prepayments	16,029	6j	(155)	15,874
Excess rate base over capitalization	(7,714)	6k	(22,100)	(29,814)
Rate case amortizations - net of Federal income tax	618			618
Property tax reconciliation - net of FIT	335			335
Provision for refund - O&R merger benefits - net of FIT	44			44
Special franchise tax refund - net of FIT	(8,248)			(8,248)
First Avenue Sale - asset separation - net of FIT	1,528			1,528
First Avenue Sale - expenses - net of FIT	916			916
<u>Rate case reconciliations - net of FIT</u>				
Recovery of previously accrued make-whole revenues	1,090			1,090
Recovery of revenues - discount steam A/C	820			820
Recovery of revenues - negotiated steam service	733			733
Amortization of previously deferred interference exp.	2,640			2,640
Recovery of excess refund of storage & handling	1,002			1,002
Property taxes previously deferred	10,452	6l.m	(1,281)	9,171
Recovery of WTC incident expenses	2,435	6n	(2,435)	
<u>Accumulated deferred FIT</u>				
ADR/ACRS/MACRS deductions	(158,331)	6o	81,626	(76,705)
Vested vacation	943			943
Unbilled revenues	7,618			7,618
Contributions in aid of construction	593			593
Capitalized overheads	(1,585)			(1,585)
Advanced refunding of mortgage bonds	(30)			(30)
Change of accounting - section 263A	(58,208)			(58,208)
Call premium	(621)			(621)
Deferred NYSIT	(5,314)			(5,314)
Deferred FIT on Deferred NYSIT	1,859			1,859
Total Rate Base	<u>\$1,120,524</u>	Sch. 1	<u>(\$573,173)</u>	<u>\$547,351</u>

Consolidated Edison Company of New York, Inc.
Steam Service
Cash Working Capital Allowance - PSC Staff
For the Twelve Months Ending September 30, 2005
(000's)

	Per company <u>Exh. RM1</u>	Ref.	Staff <u>Adjustments</u>	As filed by <u>Staff</u>
Operations & Maintenance Expense	\$332,392	Sch. 2	(\$4,293)	\$328,099
Less:				
Purchased power expense	49,168			49,168
Gas portion of fuel	58,893			58,893
Recoverable fuel costs	51,071	Sch.8:1	1,995	53,066
Interdepartmental rents	11,586	" :2k	1,255	12,841
Uncollectibles	(459)	Corr'n	459	
Rate Case amortizations	4,043	S.8:2o	(1,620)	2,423
Pensions	(59)	S8:2d,e	(2,638)	(2,697)
	<u>174,243</u>		<u>(549)</u>	<u>173,694</u>
Net	<u>\$158,149</u>		<u>(\$3,744)</u>	<u>\$154,405</u>
Cash Working Capital @ 1/8	\$19,769		(\$468)	\$19,301
Recoverable fuel @ 1/12	4,256		166	4,422
Total cash working capital	<u>\$24,025</u>	Sch. 6	<u>(\$302)</u>	<u>\$23,723</u>

Consolidated Edison Company of New York, Inc.
Steam Service
Explanation of Adjustments - PSC Staff
For the Twelve Months Ending September 30, 2005
(000's)

Adj. No.	Explanation	Amount
<u>Operating revenues - Schedule 1</u>		
1a	To reflect Staff's sales forecast (Allen and Van Cook)	\$6,939
1b	To eliminate interdepartmental rents - East River Repowering Project (A&F Panel)	(\$76,168)
1c	To reflect fuel management program (A&F Panel)	400
1d	To decrease interest accrued on balances of reconciled items (A&F Panel)	30
	Total adjustment to other operating revenues	<u>(75,738)</u>
	Total Adjustments to Revenues	<u>(\$68,799)</u>
<u>Fuel expense - Schedule 1</u>		
1e	To reflect fuel cost associated with sales forecast (Van Cook)	<u>\$1,995</u>
<u>Operation and maintenance expense - Schedule 2</u>		
2a	To reverse effect of East River Repowering Project operation on company labor (A&F Panel)	\$1,453
2b	To eliminate new hires associated with Sarbanes Oxley Act (A&F Panel)	(43)
	Total adjustment to company labor	\$1,410
2c	To reflect electricity usage in connection with sales forecast (Van Cook)	157
2d	To update pension, OPEB cost estimates (A&F Panel)	(\$2,138)
2e	To reflect estimated OPEB savings from the Medical Prescription Drug Improvement and Modernization Act (A&F Panel)	(500)
	Total adjustment to OPEB expense	(2,638)
2f	To adjust capitalization of employee welfare expense (A&F Panel)	\$375
2g	To reflect general escalation for medical premium expense (A&F Panel)	(484)
2h	To eliminate benefit costs for new employees (A&F Panel)	(16)
	Total adjustment to employee welfare expense	(125)
2i	To update insurance premiums (A&F Panel)	(309)
2j	To reflect Staff's estimate of MGP/Superfund level (A&F Panel)	(1,371)
2k	To remove costs associated with enhanced plant insp'n and repair program (Kotula/Padula)	(1,494)
2l	To reverse interdepartmental rents on East River Repowering Project (A&F Panel)	1,255
2m	To adjust shared services for D&O liability insurance (A&F Panel)	31
2n	To reverse water and chemicals expense on East River Repowering Project (A&F Panel)	\$249
2o	To reflect water and chemical usage in connection with sales forecast (Van Cook)	162
	Total adjustment to water and chemicals expense	411
2p	To reverse amortization of deferred World Trade Center expenses (A&F Panel)	(1,620)
	Total adjustments to operation and maintenance expense	<u>(\$4,293)</u>
<u>Depreciation expense - Schedule 1</u>		
3a	To reverse depreciation of East River Repowering Project (A&F Panel)	(\$20,929)
3b	To reflect proposed changes in depreciation rates (Rieder)	(5,537)
3c	To reverse amortization of reserve deficiency (Rieder)	(4,920)
3d	To match depreciation to construction expenditures (A&F Panel)	(89)
3e	To reflect removal of unnecessary plant expenditures (Kotula/Padula)	(66)
	Total adjustments to depreciation expense	<u>(\$31,541)</u>

Consolidated Edison Company of New York, Inc.
Steam Service
Explanation of Adjustments - PSC Staff
For the Twelve Months Ending September 30, 2005
(000's)

Adj. No.	Explanation	Amount
<u>Taxes other than income taxes - Schedule 3</u>		
4a	To reverse property taxes related to East River Repowering Project (A&F Panel)	(\$19,143)
4b	To adjust recovery of property taxes deferred in 2000 Settlement Agreement (A&F Panel)	(1,240)
4c	To correct refund of special franchise tax (A&F Panel)	388
4d	To reflect Staff's level of property taxes (A&F Panel)	(248)
4e	To conform property taxes to construction expenditures (A&F Panel)	(9)
	Subtotal - adjustments to property taxes	(\$20,252)
4f	To reflect revenue taxes related to Staff sales forecast (Tracking Adjustment)	171
	Total adjustments to taxes other than income taxes	(\$20,081)
<u>Federal income tax - Schedule 5 - adjustments not arising from other schedules</u>		
<i>Current expense</i>		
5a	To disallow amortization of debt discount and expense (A&F Panel)	\$335
5b	To disallow advanced refunding of long-term debt (A&F Panel)	(436)
	Total	(\$101)
<i>Deferred expense</i>		
5c	To disallow advanced refunding of long-term debt (A&F Panel)	\$4
<u>Rate Base - Schedule 6</u>		
6a	To reverse book cost of plant for East River Repowering Project (A&F Panel)	(\$638,273)
6b	To conform book cost of plant to construction expenditures (A&F Panel)	(2,548)
6c	To reflect removal of unnecessary plant expenditures (Kotula/Padula)	(3,345)
	Total adjustment to book cost of plant	(\$644,166)
6d	To reverse accumulated depreciation for East River Repowering Project (A&F Panel)	\$10,385
6e	To reverse reserve deficiency amortization (A&F Panel)	2,460
6f	To reflect changes in depreciation rates (Rieder)	2,764
6g	To reflect removal of unnecessary plant expenditures (Kotula/Padula)	18
6h	To conform accumulated depreciation to construction expenditures (A&F Panel)	13
	Total adjustment to accumulated depreciation	15,640
6i	To adjust cash working capital for operating expense adjustments - computed	(302)
6j	To adjust prepaid insurance (see adjustment 2m)	(155)
6k	Excess Rate Base over capitalization - to treat prepaid pensions as a non-regulated asset (A&F Panel)	(22,100)
6l	To adjust deferred property taxes net of Federal income tax (A&F Panel)	(\$1,865)
6m	To correct deferred special franchise tax (A&F Panel)	584
	Total adjustment to deferred property taxes	(1,281)
6n	To adjust treatment of deferred World Trade Center expense (A&F Panel)	(2,435)
6o	To adjust accumulated deferred Federal income taxes for East River Repowering Project (A&F Panel)	81,626
	Total Adjustments to Rate Base	(\$573,173)

BEFORE THE
STATE OF NEW YORK
PUBLIC SERVICE COMMISSION

In the Matter of
CONSOLIDATED EDISON COMPANY OF NEW YORK, INC.

Cases 03-G-1671 and 03-S-1672

MARCH 2004

Prepared Testimony of:

Jeffrey S. Hogan
Principal Utility Financial
Analyst
Office of Accounting & Finance
State of New York
Department of Public Service
Three Empire State Plaza
Albany, New York 12223-1350

1 Q. Please state your name and business address.

2 A. My name is Jeffrey S. Hogan and my business
3 address is Three Empire State Plaza, Albany,
4 N.Y. 12223.

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

6 A. I have been employed by the New York State
7 Department of Public Service in the Office of
8 Accounting and Finance since 1994. I currently
9 work as a Principal Utility Financial Analyst.

10 Q. Please outline your educational and professional
11 background.

12 A. I received a Bachelor of Arts Degree in
13 Economics and Political Science from Syracuse
14 University in 1991. In 1993 I received a
15 Masters Degree in Business Administration with a
16 concentration in Finance from the State
17 University of New York at Albany. I joined the
18 Department of Public Service in February 1994
19 and subsequently took additional college courses
20 in Accounting.

21 Q. Please briefly summarize your duties with the
22 Department of Public Service.

23 A. My areas of responsibility include analyzing
24 rate of return and operation and maintenance

1 (O&M) expense levels. I also work on financing
2 approval requests (debt and equity) from
3 utilities and the formation of utility holding
4 corporations. In addition, I assist in
5 analyzing legislative proposals affecting the
6 utility industry.

7 Q. In what previous rate cases have you analyzed
8 the appropriate capital structure and/or cost of
9 equity for a utility?

10 A. In Case 02-W-1564, Sea Cliff Water Company, I
11 testified to the appropriate capital structure
12 and cost of common equity.

13 In Case 01-M-0075, Niagara Mohawk/National
14 Grid Merger, I analyzed Niagara Mohawk's
15 appropriate capital structure and cost of
16 equity.

17 In Case 94-W-0157, New Rochelle Water
18 Company, I assisted in the development of
19 Staff's recommended capital structure and cost
20 rates for New Rochelle.

21 In Case 94-G-0885, National Fuel Gas
22 Distribution Corporation, I analyzed the
23 appropriate capital structure for National Fuel
24 Gas and assisted in the calculation of an

1 appropriate return on common equity.

2 In Case 95-G-0761, Brooklyn Union Gas, I
3 assisted in the formation of an appropriate
4 capital structure for Brooklyn Union Gas as it
5 formed a holding company, as well as assisted in
6 the calculation of an appropriate return on
7 equity.

8 PURPOSE OF TESTIMONY

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

11 A. My testimony will consist of three main parts.
12 First, I will recommend a fair rate of return to
13 be used in the determination of the revenue
14 requirement for Consolidated Edison Company of
15 New York, Inc. (CECONY or "Company") for the
16 rate year ending September 30, 2005. Second, I
17 will respond to the testimony of Company witness
18 Rosenberg. Third, I will address the likely
19 impact of my recommendations on CECONY's credit
20 rating.

21

22 RATE OF RETURN RECOMMENDATION

23 CAPITAL STRUCTURE

24 Q. What is the after-tax rate of return you

1 recommend be allowed for the rate year?

2 A. I recommend an after-tax rate of return of
3 7.53%, compared to the Company's originally
4 filed 9.02% (updated in the response to Staff
5 Information Request (IR) 51 to 8.97%). My
6 proposed pro forma cost of capital can be seen
7 in Exhibit___(JSH-1).

8 Q. What is a fair rate of return for a regulated
9 utility?

10 A. A fair rate of return for a regulated utility is
11 one which enables the utility to provide safe
12 and adequate service to its customers while
13 assuring continuous support in the capital
14 markets for the utility's stocks and bonds at
15 reasonable terms. Investors in debt enter into
16 a contractual obligation with the utility and
17 receive a relatively fixed income stream.
18 Common equity investment, on the other hand, is
19 non-contractual. Investors may share in, but
20 are not guaranteed, a portion of the company's
21 residual earnings. The fair rate of return,
22 therefore, allows the utility to recover its
23 prudently incurred cost of debt, as well as
24 providing common equity investors the

1 opportunity to earn a return commensurate with
2 the risk of their investment.

3 Q. How is a fair rate of return calculated?

4 A. Generally, a fair rate of return can be
5 calculated through a weighted average of the
6 individual cost components of a company's
7 capital structure. Cost rates on long-term debt
8 are generally fixed on a historical basis and
9 are readily quantified. Additionally, the cost
10 of customer deposits are prescribed by the
11 Commission. The cost of common equity, however,
12 depends upon investor expectations and therefore
13 requires the application of one or more
14 methodologies such as the Discounted Cash Flow
15 (DCF) methodology and the Capital Asset Pricing
16 Model (CAPM) to estimate the return required by
17 equity investors.

18 Q. Please describe how your recommendation differs
19 from that of CECONY witness Fitzmartin.

20 A. The main differences are that I have lowered the
21 common equity ratio to 45.74% (from the
22 Company's 48.33%, as set forth in response to
23 Staff IR 51 and seen in Exhibit___ (JSH-2)) while
24 increasing the long-term debt ratio from 48.62%

- 1 to 50.67%. In addition, I am using a cost of
2 equity rate of 9.2%, as opposed to the 12.0%
3 rate recommended by witness Rosenberg, which
4 witness Fitzmartin reflects in his schedules.
- 5 Q. What was CECONY's original projected rate year
6 capital structure for its gas and steam
7 operations?
- 8 A. In Exhibit ___ (KF-1), CECONY witness Fitzmartin
9 used a long-term debt ratio of 47.16%, a common
10 equity ratio of 49.33%, a preferred stock ratio
11 of 1.75% and a customer deposit ratio of 1.76%.
- 12 Q. Did CECONY update the capitalization to reflect
13 its latest financial forecasts?
- 14 A. Yes it did. In response to Staff IR 51, CECONY
15 witness Fitzmartin updated the original capital
16 structure to reflect slightly higher long-term
17 debt balances (48.62%) and a slightly lower
18 common equity ratio (48.33%), as well as minor
19 adjustments to the other ratios.
- 20 Q. How did the Company develop this capitalization?
- 21 A. The rate year capitalization was developed based
22 upon an approach that began with CECONY's as-
23 reported "stand-alone" capital structure for the
24 test period. This "stand-alone" capitalization

1 was then projected through the end of the rate
2 year based upon the Company's assumptions about
3 construction expenditures, refunding needs and
4 internal cash flows. This projection was then
5 used to develop the average capitalization for
6 the rate year.

7 Q. Please describe what you mean by the term
8 "stand-alone" capital structure.

9 A. Utility holding companies report their overall
10 capital structure as part of their consolidated
11 balance sheet in various reports to the
12 Securities and Exchange Commission (SEC) as well
13 as in their Annual and Quarterly Reports to
14 Shareholders. The consolidated balance sheet
15 reflects the financial position of all of the
16 holding company's operations. Holding companies
17 with utility subsidiaries also present
18 individual financial statements for major
19 subsidiaries. The stand-alone capital structure
20 is the capitalization reported for each
21 individual subsidiary.

22 CECONY is a subsidiary of a holding company
23 parent, Consolidated Edison Inc. (CEI). CEI
24 owns CECONY and Orange and Rockland Utilities,

- 1 Inc. (ORU), and has investments in a number of
2 competitive ventures. CEI reports its
3 consolidated financial position to investors in
4 its annual 10-K report to the SEC; it also
5 issues stand-alone financial statements for
6 CECONY and ORU.
- 7 Q. Do you agree with the use of the reported stand-
8 alone capital structures for utilities which are
9 subsidiaries of larger holding companies?
- 10 A. Not necessarily. Stand-alone capital structures
11 for utility subsidiaries of holding companies do
12 not necessarily reflect rational capitalization
13 policies or actual common equity employed and
14 therefore may not produce reasonable results.
- 15 Q. Explain why the use of a stand-alone capital
16 structure does not necessarily produce a
17 reasonable result?
- 18 A. The stand-alone common equity balance reported
19 by any utility subsidiary of a holding company
20 may, in fact, not be financed by common equity
21 at the holding company level. Rather, it may
22 instead be proceeds from debt issues at the
23 holding company level that were classified on
24 the utility subsidiary's books as common equity

1 at the time they were invested in the utility
2 subsidiary. This is referred to as double
3 leverage.

4 In addition, the use of a stand-alone
5 subsidiary structure may obscure the fact that a
6 holding company parent has financed riskier
7 competitive non-utility operations with less
8 equity and more debt than the utility
9 subsidiaries. It is not possible to address this
10 issue by merely accepting, in isolation, the
11 stand-alone capital structure for the purpose of
12 setting utility rates.

13 Q. Does it appear that CEI has double leveraged
14 CECONY's common equity?

15 A. No, I do not believe that CEI has double
16 leveraged CECONY's common equity.

17 Q. Does it appear that CEI has used the strength of
18 its utility operations to fund unregulated non-
19 utility investments with less equity than would
20 be required for the unregulated investments to
21 achieve the same credit rating as the utility?

22 A. Yes, it appears that CEI's non-utility
23 investments have abnormally low equity ratios,
24 considering the business risk of those

1 enterprises. Business risk is the risk inherent
2 in a company's operation and it reflects the
3 risk that the company will fail to achieve its
4 expected financial performance. It is affected
5 by items such as a company's sensitivity to the
6 overall economy and a company's reliance on a
7 large customer or supplier. It is also affected
8 by the industry a company is in.

9 Q. Do non-utility operations typically have more or
10 less business risks than utility operations?

11 A. In general, non-utility activities have greater
12 business risk than utility operations. This is
13 because non-utility investments are unregulated
14 and face competition from other entities and are
15 not subject to "cost-plus" recovery of their
16 expenses. In addition, the product or service
17 of an unregulated company may have alternatives
18 that customers may switch to should prices
19 change dramatically.

20 Q. What are the financial profiles of CEI's utility
21 and non-utility subsidiaries?

22 A. Exhibit___(JSH-3) presents a condensed balance
23 sheet for CEI, CECONY and ORU based on CEI's 10-
24 K report for 2003. Column 1 presents CEI's

1 consolidated balance sheet results for all of
2 its operations. Column 2 shows balance sheet
3 information for CECONY. Column 3 shows balance
4 sheet information for ORU. Column 4 is the sum
5 of columns 2 and 3 and thus reflects the
6 combined balance sheet of CEI's two utility
7 subsidiaries. Column 5 is the difference
8 between columns 1 and 4. Column 5 reflects
9 CEI's balance sheet after removing the stand-
10 alone balance sheets of CEI's two utility
11 subsidiaries. Thus, the information in Column 5
12 reflects the financial profile of CEI's non-
13 utility operations, as reported by the CEI.

14 Q. What does this information indicate?

15 A. This information indicates that as of the end of
16 2003, CEI's unregulated assets are financed with
17 less equity and more debt than CEI's regulated
18 assets. This is seen by the fact that CEI's
19 accounting equity ratio supporting CEI's non-
20 utility assets is approximately 36% while its
21 accounting equity ratio for utility assets is
22 approximately 49%. By contrast, the utility
23 debt ratio (including long-term debt and
24 customer deposits) is about 49% while the non-

1 utility debt ratio is about 64%.

2 Q. What types of assets does the non-utility
3 capital structure support?

4 A. CEI's 2003 10-K states at page 8 that it has
5 four unregulated subsidiaries: Con Edison
6 Solutions, Inc - a retail energy services
7 company, Consolidated Edison Energy, Inc. - a
8 wholesale supply company, Consolidated Edison
9 Development, Inc. - owner and operator of
10 generation and infrastructure investments, and
11 Con Edison Communications, LLC - builder and
12 operator of fiber networks. None of these
13 companies are subject to rate regulation by the
14 New York State Public Service Corporation and
15 they all operate in competitive markets. The
16 non-utility capitalization also supports all or
17 a portion of the non-earning goodwill booked by
18 the company as a result of its acquisition of
19 ORU.

20 Q. Is it reasonable to expect utility companies to
21 finance assets devoted to the provision of T&D
22 service with more equity than assets used to
23 finance non-utility investments?

24 A. No it is not. Assets that are exposed to

1 greater business risks generally require higher
2 equity ratios than assets that are exposed to
3 less business risks. In this case, CEI's non-
4 utility operations face the risks of competition
5 while its T&D assets are primarily subject to
6 rate of return regulation. Thus, it would be
7 reasonable for CEI to finance its non-utility
8 assets with more equity than its T&D assets.

9 Q. Is there evidence from the financial community
10 that supports this viewpoint?

11 A. Yes. Witness Fetter has provided a report from
12 Standard & Poor's (S&P) that lists its target
13 financial ratios for various utility bond rating
14 levels and "Business Profile" ratings
15 (Exhibit___(SMF-1)). This report classifies
16 utilities according to their business position,
17 with a business position of 1 being the
18 strongest and a position of 10 being the
19 weakest. S&P notes that:
20 "The new financial targets, like the previous
21 benchmarks, pertain to risk-adjusted ratios,
22 that distinguish between lower-risk and
23 (higher)-risk activities. The targets have been
24 broadened to correspond with Standard & Poor's

1 10-point business profile assessments. The
2 business profile scores assess the qualitative
3 attributes of a firm, with "1" being considered
4 lowest risk and "10" highest risk. Thus, the
5 new targets allow for comparability on a single
6 scale between typically lower-risk activities,
7 such as water operations, gas distribution and
8 electric transmission, and higher-risk
9 activities, such as merchant power generation,
10 oil and gas explorations and production, and
11 energy trading and marketing."

12 A review of the various ratios required by
13 S&P at the end of the report indicates that
14 lower risk companies at a given bond rating can
15 take on more debt and have less common equity
16 than can higher risk companies that wish to
17 maintain the same bond rating.

18 Q. Please summarize the results of your analysis
19 thus far.

20 A. I have reviewed the reported capitalization
21 ratios for CECONY, CEI and CEI's non-utility
22 operations. My review indicates that CECONY has
23 a projected rate year equity ratio of 48.3%
24 while CEI's non-utility operations have a

1 projected rate year equity ratio of 36.4%.
2 Given the higher risks of CEI's non-utility
3 operations (as acknowledged in response to Staff
4 IRs 59, 60, 62, and 63 (see Exhibit___(JSH-2)),
5 it is unreasonable for them to employ less
6 equity than CECONY's regulated T&D assets. As a
7 result, it is necessary to adjust CECONY's, and
8 CEI's non-utility subsidiaries, rate year
9 capitalization to reflect a more appropriate
10 allocation of capital between utility and non-
11 utility operations.

12 Q. How did you allocate capital between utility and
13 non-utility operations?

14 A. I reviewed S&P's debt ratio requirements for an
15 "A" bond rating in Exhibit___(SMF-1) based on a
16 business position consistent with the risks of
17 CEI's non-utility operations (which I
18 conservatively estimate to be a "7", or just
19 slightly riskier than the average utility
20 investment). I used this information to develop
21 appropriate capitalization ratios for CEI's non-
22 utility operations. This is seen in Column 6 of
23 Exhibit___(JSH-3). I then subtracted the
24 adjusted non-utility capitalization amounts from

1 CEI's consolidated capital structure to arrive
2 at a residual capital structure which reflects
3 an appropriate debt/equity mix for CEI's
4 regulated operations, including CECONY. This
5 result can be seen in Column 7 of
6 Exhibit___(JSH-3).

7 Q. Given your adjustments, what rate year
8 capitalization do you recommend the Commission
9 apply to CECONY?

10 A. I recommend that the Commission employ a long-
11 term debt ratio of 50.67%, a common equity ratio
12 of 45.74%, a preferred stock ratio of 1.77% and
13 a customer deposit ratio of 1.81% as the rate
14 year capitalization for CECONY.

15 Q. Do you have any comparisons to substantiate that
16 your recommended capitalization ratios are
17 reasonable for a company with CECONY's level of
18 business risk?

19 A. Yes. In Exhibit___(RGR-1), Schedule 4, Company
20 witness Rosenberg calculated the median
21 capitalization ratios forecasted for 2004 for
22 his proxy group. There was a 50.5% long-term
23 debt ratio (versus my recommended 50.67%) and a
24 47.0% common equity ratio (versus my recommended

1 45.74%). This proxy group was supposedly
2 selected by Mr. Rosenberg because it had similar
3 risks to CECONY (Staff IR 23, see
4 Exhibit___(JSH-2)).

5 Q. Do the companies in Mr. Rosenberg's proxy group
6 operate only as regulated utility companies?

7 A. No, on average, the companies in Mr. Rosenberg's
8 proxy group have approximately 15% of their
9 assets invested in non-utility businesses (Staff
10 IR 6, see Exhibit___(JSH-2)). As I described
11 earlier, such investments are viewed by the
12 investment community as requiring higher levels
13 of common equity relative to investments in
14 regulated utilities to achieve similar credit
15 ratings. This indicates that the regulated
16 equity ratios of companies in Mr. Rosenberg's
17 proxy group should be lower than the 47.0% ratio
18 contained in the average consolidated capital
19 structure.

20 Q. Company witness Rosenberg has provided a
21 schedule (Exhibit___(RGR-1), Schedule 5) showing
22 that the median utility subsidiary in his proxy
23 group actually had a 50.6% common equity ratio
24 at the end of 2002. Is this number

1 representative of the proper utility equity
2 ratios?

3 A. No, this 50.6% regulated equity ratio is biased
4 upwards. It is higher than the consolidated
5 equity ratios reported by the holding company
6 parents of these utility subsidiaries. Based on
7 my foregoing discussion, I must conclude that
8 these circumstances indicate that the companies
9 in Mr. Rosenberg's proxy group have double
10 leveraged common equity and/or have non-utility
11 subsidiaries which are maintained with much
12 lower equity ratios than would be possible
13 without the support of regulated utilities with
14 much higher equity ratios. For these reasons,
15 the 50.6% reported equity ratio does not reflect
16 a reasonable utility equity ratio.

17 Q. Are there any other comparisons regarding
18 capital structures that might be relevant?

19 A. Yes. As Mr. Rosenberg points out on Page 52 of
20 his testimony, the median "electric utility" in
21 *Value Line* is expected to have a 45% common
22 equity ratio in 2004. Given that these results
23 are for entire companies, including unregulated
24 investments, a 45.74% common equity ratio for

1 actual utility operations reflects a stronger
2 financial profile than the average/median
3 electric company.

4 Q. Your capitalization recommendation is based on
5 balances as of December 31, 2003. Do you expect
6 similar levels throughout the rate year?

7 A. Yes. As seen in Exhibit___(KF-2), internally
8 generated funds are expected to cover all
9 capital requirements during the rate year. The
10 Company should be able to maintain this capital
11 structure for CECONY.

12 Q. Is the debt ratio reflected in your
13 capitalization consistent with the levels
14 recommended by S&P for an A-rated utility with a
15 business position of "3"?

16 A. Yes. As shown in the Standard & Poor's report
17 included in Exhibit___(SMF-1), such a company
18 would be expected to have a total debt ratio of
19 between 47.5% and 53.0%. My recommendation
20 falls within this range.

21 Q. Please summarize your capital structure
22 testimony.

23 A. It appears that CEI is using CECONY's strength
24 to fund or subsidize its unregulated

1 investments. By adjusting for this, a more
2 representative "utility" capital structure for
3 CECONY can be determined. My recommendation of
4 a 45.73% common equity ratio, which is very
5 similar to the actual capital structure of Mr.
6 Rosenberg's proxy group, falls within S&P's
7 recommendation for an A-rated utility with a
8 business risk of "3", is fair and reasonable,
9 and should be adopted by the Commission.

10

11 COST RATES

12 Q. Please explain how the cost rates shown in
13 Exhibit___ (JSH-1) were derived.

14 A. I am using the same cost rates for long-term
15 debt, preferred stock, and customer deposits
16 proposed by Company witness Fitzmartin. The
17 Company's proposed cost rate for common equity
18 (12.0%, which includes a stayout premium of 80
19 basis points), however, is excessive. I have
20 developed a cost of equity of 9.2% for the rate
21 year ending September 30, 2005.

22 Q. What methodology did you use to determine your
23 ROE of 9.2%?

24 A. My methodology uses the basic framework

1 recommended by the Co-Facilitators in the
2 Recommended Decision issued on July 19, 1994 in
3 Case 91-M-0509, the Generic Financing Proceeding
4 (GFC). The purpose of that proceeding was to
5 limit the controversy over how to calculate ROE
6 by developing a methodology that addressed the
7 issues of many parties and achieved a consensus
8 as to a fair way to set the ROE for a utility.
9 The Co-Facilitators determined that a generic
10 ROE should be calculated based on the results of
11 a proxy group DCF model analysis and the average
12 result of two proxy group CAPM analyses (the
13 traditional CAPM and the Zero Beta CAPM).

14 The Recommended Decision concluded that the
15 generic ROE should be the sum of two-thirds of
16 the DCF result and one-third of the average CAPM
17 result. I applied this approach to a proxy
18 group of electric and gas utilities using prices
19 for the six months ended February 2004. The
20 resultant cost of equity is 9.40% (see Pages 1-3
21 of Exhibit___(JSH-4)); the details of my
22 selection of a proper proxy group are discussed
23 later.

24 Q. Why is it appropriate to use a methodology based

1 on the Generic Finance Proceeding?

2 A. The GFC case methodology of weighting a DCF
3 result as two-thirds of the total equity cost
4 and a CAPM result as one-third has been approved
5 by the Commission in multiple cases.

6 For example, in Case 95-G-1034, Central
7 Hudson Gas & Electric Corporation, the
8 Commission authorized a cost of equity based on
9 a two-thirds DCF, one-third CAPM methodology,
10 specifically rejecting any use of a risk premium
11 analysis or a comparable earnings approach.

12 Again, in Cases 02-E-0198 and 02-E-0199,
13 Rochester Gas and Electric Corporation, the
14 Commission authorized a two-thirds DCF, one-
15 third CAPM methodology.

16 Q. Did you adjust the cost of equity result you
17 derived in any way?

18 A. Yes I did. I adjusted for the unregulated
19 investments owned by the proxy group companies
20 (since such riskier investments are not the
21 responsibility of CECONY's ratepayers and thus
22 customers should not have to pay a higher rate
23 of return because of them), by assuming that the
24 non-utility investments would earn a rate of

1 return equal to the market average rate of
2 return determined by Merrill Lynch in its
3 February 2004 edition of *Quantitative Profiles*.
4 This rate is 10.9%. I then calculated what
5 level of return the utility part of my proxy
6 group would have to earn so that, when combined
7 with the return of the non-utility investments,
8 the weighted result would be the 9.40% cost of
9 equity calculated using the framework of the GFC
10 methodology. This calculation is shown in
11 Exhibit___ (JSH-5). As can be seen, the
12 resulting ROE for the utility portion of the
13 proxy group is 9.2%.

14 Q. Why did you use this methodology to determine
15 the appropriate cost of equity for CECONY?

16 A. The goal of this part of my testimony is to
17 determine the cost of equity for investors in a
18 regulated utility with the business risk level
19 of CECONY. To reach this objective, the proxy
20 group should, ideally, reflect the risk level
21 facing the regulated assets of CECONY (not of
22 CEI). To the extent that this is not possible
23 and the proxy group's risk level deviates from
24 that of CECONY, an adjustment to the proxy

1 group's cost of equity result is required to
2 account for the at-risk difference.

3 USE OF PROXY GROUP

4 Q. Why are you using a proxy group to estimate the
5 cost of equity?

6 A. By using a group of proxy companies, the impact
7 of any irregularities in any one company's data
8 is diminished. The Co-Facilitators in the GFC
9 recommended this approach, and such a
10 methodology was approved in Case 95-G-1034 and
11 Cases 02-E-0198 and 02-G-0199.

12 Q. What companies are included in your proxy group?

13 A. I have nine companies, all of which Mr.
14 Rosenberg used in his proxy group. The list of
15 companies I used, including their parent company
16 credit ratings, percentage of utility assets
17 (see Staff IR 6), and their S&P business profile
18 assessment, is shown in Exhibit___(JSH-6). I
19 have, however, excluded four companies that Mr.
20 Rosenberg included in his proxy group.

21 Q. Do the companies you excluded (based upon the
22 bond rating criteria discussed below) have
23 anything in common?

24 A. Yes, as can be seen in Exhibit___(JSH-6), three

1 of the four excluded companies have relatively
2 high percentages of unregulated assets in
3 relation to my proxy group. It is desirable to
4 exclude such investments from the proxy group
5 because they carry risks greater than those of
6 CECONY, for whom we are trying to estimate the
7 correct cost of equity.

8 Q. How did you develop your proxy group?

9 A. I began by reviewing the proxy group used by Mr.
10 Rosenberg.

11 Q. Did you accept Mr. Rosenberg's selection
12 criteria in developing your own proxy group?

13 A. I accepted all of Mr. Rosenberg's proxy group
14 selection criteria with two exceptions. First,
15 rather than allow a company into the proxy group
16 based on its regulated subsidiary credit ratings
17 (as Mr. Rosenberg did), I instead focused on the
18 parent companies' senior secured credit ratings.
19 I believe that these are more appropriate to use
20 when deciding on inclusion in the proxy group.
21 Second, I analyzed the circumstances of any
22 potential merger activity to determine if the
23 company involved in the activity should remain
24 in the proxy group.

1 Q. Why is the parent company credit rating more
2 appropriate?

3 A. The methods I use for estimating the cost of
4 equity are based upon the stock prices of,
5 dividends paid by, and financial ratios reported
6 by the parent. Equity investors do not purchase
7 ownership of the individual utility
8 subsidiaries, they purchase ownership of the
9 entire holding company (which includes the
10 utility subsidiaries, the holding company parent
11 and any non-utility operations). Equity
12 investors will logically base their return
13 requirements on the risk level of the entire
14 company, rather than its strongest individual
15 components.

16 The price investors are willing to pay for
17 a share of stock is based on the investors'
18 expectations concerning the future of the entire
19 company and its associated risks. While an
20 individual utility subsidiary may be judged by
21 rating agencies to be worthy of approximately an
22 "A" rating, higher risks of non-utility
23 operations may make the risk level of the entire
24 enterprise closer to that of a "BBB" rating,

1 several notches lower.

2 Q. How might using only the subsidiary credit
3 ratings affect the estimate of the rate of
4 return required for an A-rated utility company?

5 A. It could overstate the cost of equity for
6 utility operations. If the proxy group focused
7 only on the credit rating of the regulated
8 subsidiaries, a company with an overall credit
9 rating of BBB or lower may wind up in the proxy
10 group. The proxy group would then include the
11 return estimates that investors require of
12 riskier companies (since the cost of equity
13 estimates are based on the entire company).
14 This will usually lead to overall estimates of
15 return requirements that do not reflect the
16 lower risk (and thus lower cost of equity) of
17 the utility business whose cost of equity we are
18 trying to determine.

19 Q. What criteria did you use to narrow/modify the
20 proxy group presented by Mr. Rosenberg?

21 A. As seen in Exhibit___(JSH-7), CECONY is
22 currently rated A1 by Moody's and A by S&P.
23 This is a split rating, as Moody's A1 is
24 equivalent to S&P's A+. I retained any company

1 from Mr. Rosenberg's proxy group which had both
2 a Moody's and S&P's senior secured bond rating
3 falling in the range of Aa2 to Baal for Moody's
4 (or the equivalent range for S&P of AA to BBB+).
5 If no parent company rating was available, I
6 used an equivalent Fitch, Inc. rating if
7 available. If there were no Moody's or Fitch
8 parent company ratings, then I looked at all of
9 the subsidiary ratings. If they were all within
10 my range, the Company was allowed to remain in
11 the proxy group. I added no new companies.

12 Q. How did you devise this range of credit ratings?

13 A. I revised the selection criteria to try and
14 achieve two goals: 1) To develop a proxy group
15 with companies closer in risk to CECONY and 2)
16 To maintain a reasonable number of companies in
17 the proxy group. As can be seen in
18 Exhibit___(JSH-8), this range allows parent
19 company ratings up to two notches higher than
20 CECONY's higher senior bond rating and up to two
21 notches lower than CECONY's lower senior bond
22 rating. Exhibit___(JSH-8) also shows the
23 frequency of each rating in my proxy group. As
24 can be seen, overall the proxy group has a

1 slightly lower credit rating on average than
2 CECONY. However, tightening the range by a
3 notch on each side would result in one-third of
4 the proxy group companies being discarded,
5 leaving only six. A balance must be struck
6 between selection criteria designed to achieve a
7 proxy group that perfectly reflects the risk of
8 the utility we are determining the appropriate
9 ROE for and the size of the proxy group. Nine
10 companies (rather than six) allows for a better
11 representation of a fair regulated return as
12 individual companies' vagaries are smoothed out
13 more in a nine member proxy group. This is
14 achieved while maintaining stringent enough
15 proxy group criteria.

16 Q. Is your proxy group a perfect match for CECONY
17 in relation to the level of business risk
18 investors face?

19 A. No, it is not. As I mentioned earlier, the
20 proxy group has over 10% of its assets in
21 unregulated investments. And, as can be seen in
22 Exhibit__ (JSH-7), the average credit rating of
23 the proxy group is nearly a notch lower than
24 that of CECONY. By definition, this implies

1 that the proxy group is slightly riskier than
2 CECONY. In addition, several of the proxy group
3 companies have investments in regulated
4 activities with higher levels of business risk
5 than the activities CECONY is engaged in. For
6 instance, some of them own nuclear power plants.

7 Q. You stated earlier that you would make a cost of
8 equity adjustment to remove the effect of
9 unregulated investments from the proxy group's
10 cost of equity. Do you propose a similar
11 adjustment to your recommended cost of equity to
12 account for the fact that some of the proxy
13 group companies have utility generation assets?

14 A. No I do not. While there is a definite
15 difference between CECONY and the companies in
16 my proxy group, I have not attempted to quantify
17 the impact of such differences.

18 Q. Had you used Mr. Rosenberg's proxy group in your
19 ROE methodology, what would the result have
20 been?

21 A. The use of Mr. Rosenberg's group would produce a
22 cost of equity of just under 9.2%, a little
23 lower than what is determined using my proxy
24 group. This is due to the fact that the DCF

1 result in the methodology, which is based on the
2 median result in the group, does not change.
3 And while the average beta of Mr. Rosenberg's
4 group is slightly higher (leading to a higher
5 CAPM methodology result), the unregulated
6 investment adjustment would have led to a
7 reduction in the rate from 9.43% to 9.18% (see
8 Exhibit___(JSH-9)).

9 Q. Were any of the companies in your proxy group
10 involved in any merger activity during the
11 period when the ROE was calculated?

12 A. Yes, one company was involved in merger
13 activity. Ameren is in negotiations to buy
14 Illinois Power.

15 Q. Should Ameren be excluded from the proxy group
16 because of this?

17 A. No. The asset they are looking to buy (Illinois
18 Power) is a fraction of Ameren's size (less than
19 20%) and consists of only a regulated T&D
20 electric company whose performance is well
21 known. In addition, Ameren has stated it is
22 willing to buy Illinois Power without any change
23 in that utility's rates, so the profitability of
24 this venture is fairly straight-forward for

1 investors to calculate (unlike some of the
2 generation under construction by other proxy
3 group members). Also, the stock price of Ameren
4 has remained steady over the pricing period
5 used.

6 Q. Were any of Mr. Rosenberg's proxy group
7 companies in merger negotiations during the
8 period of time when he calculated the average
9 stock price of his proxy group companies?

10 A. Yes. In September 2003, Exelon announced that
11 it was in merger negotiations with Illinois
12 Power (the same company now being sought by
13 Ameren).

14 Q. Do you propose that Exelon should be removed
15 from Mr. Rosenberg's proxy group because of
16 this?

17 A. No I do not. Illinois Power is a small fraction
18 of Exelon's size and the announcement came late
19 in the period Mr. Rosenberg uses to determine
20 each company's average stock price (and thus the
21 merger activity most likely has little impact on
22 the result). However, as I outlined earlier,
23 Exelon is not part of my proxy group for CECONY
24 because its parent is rated Baa2 by Moody's.

1 DISCOUNTED CASH FLOW METHODOLOGY

2 Q. Please describe your discounted cash flow
3 methodology and its result.

4 A. The calculation of the DCF for the proxy group
5 is shown on Pages 1-2 of Exhibit___ (JSH-4). For
6 each company in the proxy group, there is a six-
7 month average stock price (calculated by
8 averaging the high and low price for each
9 month). I have used the six-month period ending
10 February 2004. The model also contains *Value*
11 *Line* data for the beta, earnings per share,
12 dividends per share, book value per share and
13 the forecasted amount of common stock shares for
14 each company.

15 This data is used to estimate the dividends
16 that can be expected for each company in the
17 future (from mid-2004 on). The price investors
18 are paying for the stock is seen as the present
19 value of that dividend stream. By calculating
20 the discount rate required to turn the string of
21 expected dividend payments into the current
22 stock price, one can determine the rate of
23 return investors are expecting for each company.
24 The median result is used as the DCF methodology

1 result. At this time, the DCF methodology
2 produces a 9.56% return.

3 Q. How are dividends projected to change over time?

4 A. I have used the two-stage DCF method recommended
5 in the GFC. In the near-term (the first four
6 years), the estimates of Value Line are used
7 (using initial year estimates and growth rates
8 implied in Value Line's 2006 through 2008
9 dividend per share estimate). For the second
10 stage (2008 and on), a "sustainable growth" rate
11 is calculated for each company in the proxy
12 group based on its projected retention of
13 earnings and growth in common stock balances.

14 Q. What average sustainable growth figure was used
15 in your model?

16 A. 5.03%.

17 Q. Mr. Rosenberg advocates using his calculation of
18 projected Gross Domestic Product (GDP) growth as
19 a measure of the sustainable growth of utility
20 dividends. Is this appropriate?

21 A. No. I am aware of no time when the Commission
22 has used a GDP estimate as the sustainable
23 growth rate for utility dividends. There is no
24 reason to believe that such a rate is in any way

1 an indication as to the expected long-term
2 growth of utility-industry dividends, and Mr.
3 Rosenberg has offered no evidence explaining why
4 this new methodology would be appropriate.
5 Moreover, there is no valid financial theory
6 that would suggest GDP has any substantial
7 influence on utility sustainable earnings or
8 dividend growth levels.

9 Q. Mr. Rosenberg states that the utility industry
10 is in a "state of flux" (Rosenberg Steam
11 Testimony, Page 14). Do you believe there is
12 any reason to deviate from the sustainable
13 growth methodology outlined in the GFC?

14 A. No I do not. The dividend history of the proxy
15 group (seen in Exhibit___(JSH-10)) shows that,
16 in general, there has been slow and steady
17 growth in dividends over the past many years,
18 including recently. While certain segments of
19 the industry (utilities involved in unregulated
20 endeavors such as energy trading and merchant
21 generation) have experienced turmoil over the
22 past few years, Mr. Rosenberg offers no evidence
23 that any of the companies in his proxy group are
24 currently in such a "state of flux".

1 Q. Do the individual company results within the
2 proxy group appear reasonable?

3 A. Yes they do. Mr. Rosenberg has argued for
4 removing CH Energy's cost of equity result
5 because it is too low (Rosenberg Steam
6 Testimony, Page 17 Footnote). However, CH
7 Energy's cost of equity has been in this range
8 for several years and appears to reflect the
9 conservative financial profile of the overall
10 company. While CH Energy's DCF result is nearly
11 3% less than the average of the proxy group, MGE
12 Energy's is more than 2% higher than the
13 average.

14 Such variability is one of the reasons the
15 decision was made in the GFC to use a proxy
16 group, to "smooth out" potential variances. The
17 fact that the median and average individual-
18 company DCF results are so similar (as seen in
19 Exhibit___(JSH-4), Page 2) suggests that there
20 is a normal distribution of results within the
21 group. The lowest (or highest) return for a
22 group of companies in a proxy group should not
23 just be arbitrarily thrown out because it does
24 not meet an analyst's preconceived notion of the

1 proper cost of equity.

2 Q. What DCF rate of return does your methodology
3 result in for the proxy group?

4 A. The median company-specific DCF result for the
5 proxy group (which is used in the GFC
6 methodology as the DCF result) is 9.56%. As I
7 mentioned previously, the same result would be
8 achieved by applying the methodology to Mr.
9 Rosenberg's proxy group (see Pages 1-2 of
10 Exhibit___(JSH-9)).

11

12 CAPITAL ASSET PRICING MODEL METHODOLOGY

13 Q. Please describe the methodology used to
14 determine your CAPM results.

15 A. The idea behind the CAPM theory is that the
16 level of systematic risk for an asset determines
17 the level of return that investors will require
18 to invest in that asset. I have used the
19 methodology outlined in the GFC to determine my
20 CAPM result. This methodology uses two
21 different CAPM methods (the traditional and
22 "zero beta") to estimate the cost of equity.
23 The CAPM result is the average of the two
24 estimates.

- 1 Q. Please describe how a CAPM result is calculated
2 using the "traditional" CAPM method.
- 3 A. The traditional CAPM method calculates a
4 required return based on three inputs: The rate
5 of return on a risk-free investment (R_f), the
6 level of systematic risk for an investment (B),
7 and the expected risk premium of the market.
8 (R_p). The calculation can be represented as:
9 $\text{Required Return} = R_f + (B * R_p)$
- 10 Q. How did you determine the risk-free investment
11 rate and what was your result?
- 12 A. The GFC called for using a risk-free rate
13 determined by averaging the 10-year and 30-year
14 Treasury bond yields for a recent six-month
15 period. The Federal government discontinued the
16 issuance of 30-year Treasury bonds a few years
17 ago, so I have averaged the 10-year bonds with
18 the reported average of treasury bonds with
19 maturities of at least 25 years. Given the
20 "flat" yield curve for long-term Treasury bonds
21 (with only a few basis points separating the
22 yield of a 20 year Treasury bond from a 25-plus
23 year Treasury bond), this method is likely to be
24 nearly identical to that called for in the GFC.

1 The average of the 10-year and 25-plus year
2 Treasury bonds for the six-month period ending
3 February 2004 is 4.69%.

4 Q. Is this how Mr. Rosenberg calculated the risk-
5 free rate?

6 A. No it is not. Mr. Rosenberg used only the
7 average of the 25-plus year Treasury bonds.

8 Q. How did you determine the beta (a measure of
9 systematic risk) for the CAPM?

10 A. I used the methodology set forth in the GFC,
11 which is to use the average beta of the proxy
12 group, as reported by *Value Line*. The average
13 beta of my proxy group is 0.66.

14 Q. How did you determine what risk premium to use
15 and what was your result?

16 A. The risk premium is the difference between what
17 the expected return on common stock is and the
18 rate on a risk-free investment. In order to
19 determine the expected market return, I have
20 utilized a publication of Merrill Lynch entitled
21 *Quantitative Profiles* (Exhibit___(JSH-11)).
22 That publication estimates the required return
23 for the market to be 10.9%. Given my risk-free
24 rate of 4.69%, a risk-premium of 6.21% is

1 calculated.

2 Q. Why did you use the Merrill Lynch publication to
3 determine the expected market return?

4 A. This is an example of the type of research
5 available to investors, and could be used by
6 many in determining what levels of return to
7 expect for both the market as a whole and for
8 any particular investment that they may be
9 considering.

10 Q. Do you agree with Mr. Rosenberg that the
11 expected market return could be calculated based
12 on spreads between stocks and treasury
13 securities for a period commencing in 1926?

14 A. No. Mr. Rosenberg's use of a 7.0% historical
15 risk premium (based on Ibbotson Associates
16 financial data that goes back to 1926) does not
17 reflect the current investing climate. It is an
18 average of return differentials between bonds
19 and the stock market over periods much different
20 than today. Many in the financial community
21 believe that the equity risk premium has been
22 decreasing over time and is currently very low
23 (e.g. "*The Shrinking Equity Premium*", Jeremy
24 Siegel, *The Journal of Portfolio Management*,

1 Fall 1999). As a result, there is a debate
2 concerning the relevance of the Ibbotson data in
3 today's markets.

4 By contrast, Merrill Lynch's *Quantitative*
5 *Profiles* provides a more accurate and up-to-date
6 assessment of what today's investors require
7 because it is based upon current expected market
8 returns, which take into account only the
9 current business climate.

10 Q. Do you agree with Mr. Rosenberg that the
11 expected market return could be calculated based
12 upon an analysis that applies a single-stage DCF
13 model to the S&P 500?

14 A. No. The 13% dividend growth estimate used by
15 Mr. Rosenberg in his single-stage DCF estimate
16 for the S&P 500 is not only unreasonable on its
17 face, but also totally unrealistic on a long-
18 term basis.

19 Q. Why is this approach flawed?

20 A. Mr. Rosenberg has not explained why a single-
21 stage model is appropriate, and he has not
22 demonstrated how a 13% growth rate is
23 sustainable over the long run.

24 Q. Explain your concerns regarding Mr. Rosenberg's

1 use of a single-stage DCF model.

2 A. Mr. Rosenberg has indicated that because he
3 believes the regulated utility industry is in
4 such a "state of flux", a two-stage DCF model is
5 needed (Rosenberg Steam Testimony, Page 14) to
6 estimate the cost of equity for his utility
7 proxy group.

8 If one accepts this argument, then surely
9 the constant state of flux faced by competitive
10 companies in the S&P 500 requires at least a
11 two-stage DCF model.

12 Q. Explain your concerns regarding the
13 sustainability of dividend growth at a 13% rate
14 into perpetuity.

15 A. It is not believable that such rapid dividend
16 growth could be sustained indefinitely by the
17 500 largest companies in the country. More
18 specifically, the 13% growth rate far exceeds
19 the growth rate (2.1% above inflation) of S&P
20 500 dividends for the period 1946-1999 (Siegel,
21 "The Shrinking Equity Premium, Page 14).

22 Q. Using your stated inputs, what was your
23 "traditional" CAPM result?

24 A. 8.79%, calculated as follows:

1 4.69% + [0.66 * (10.9% - 4.69%)] = 8.79%

2 Q. Please describe how you calculated a rate of
3 return using the "zero beta" CAPM method.

4 A. Using the same inputs I described for the
5 traditional CAPM methodology, I used the same
6 methodology used in the GFC. Instead of only
7 multiplying beta times the risk premium as shown
8 in the calculation of the traditional CAPM
9 methodology, I have determined the risk premium
10 for the proxy group by multiplying .75 times
11 beta times the risk premium and adding .25 times
12 the risk premium. This can be shown as follows:

13 Required return = $R_f + (.75*B*Rp) + (.25*Rp)$

14 Q. What is the result of your zero-beta CAPM
15 methodology?

16 A. 9.32%, calculated as follows:

17 4.69% + [.75*.66*(10.9%-4.69%)] + [.25*(10.9%-
18 4.69%)] = 9.32%

19 Q. What CAPM result did you use in your calculation
20 of the required ROE for the proxy group?

21 A. Per the GFC methodology, I averaged the results
22 of my two CAPM methods to arrive at a result of
23 9.06%.

24 Q. Mr. Rosenberg has added a 60 basis point "size

1 premium" to his CAPM results for certain
2 companies. He does this to account for the fact
3 that some of the proxy group companies are
4 characterized by Ibbotson as "low-
5 capitalization" or "mid-capitalization" and thus
6 require (per Ibbotson) higher returns than the
7 CAPM results predict. Do you agree with this?

8 A. No I do not. Even if one assumes (I explain
9 later why I am not willing to agree to this
10 assumption) that smaller utilities do have a
11 higher cost of equity, there is no basis for
12 this adjustment. Before Mr. Rosenberg added his
13 "size premium", his CAPM result explicitly
14 assumed (due to the market premium employed)
15 that all of the companies in the proxy group are
16 large. The proxy group is used as a tool to
17 estimate the required return that should be
18 applied to CECONY's equity.

19 Because CECONY is a large company and
20 investors do not require a "premium" for
21 companies of this size, there is no need to
22 increase the basic proxy group cost of equity to
23 account for the fact that some of the companies
24 happen to be smaller than CECONY.

1 Q. Do you agree with the concept that smaller
2 capitalization utilities must have a higher cost
3 of equity than larger capitalization utilities?

4 A. No. The Commission has not adopted this
5 position in the past for its major utilities and
6 I see no reason to do so now. Such a position
7 fails to explain why a proxy group composed of
8 utilities with similar bond ratings should not
9 also have similar costs of debt and equity.
10 Such a position also fails to explain why the
11 betas of the proxy group companies do not
12 adequately capture all systematic risk.

13

14 RETURN ON EQUITY METHODOLOGY RESULT

15 Q. Please explain how you arrived at your overall
16 ROE for the proxy group.

17 A. Using the GFC methodology, I weighted the DCF
18 model (9.56%) as two-thirds of the total and the
19 CAPM average (9.06%) as one-third of the total.
20 This resulted in a return of 9.40% using a
21 methodology which essentially follows the GFC
22 methodology. This can be seen in
23 Exhibit___ (JSH-4).

24 Q. Please explain how you adjust the result of your

1 proxy group ROE methodology to account for the
2 fact that the average level of business risk of
3 the proxy group does not exactly reflect the
4 business risk of CECONY.

5 A. While the proxy group is similar in risk to
6 CECONY, it does not exactly match CECONY's risk
7 level. The utility holding companies in the
8 proxy group have, on average, higher levels of
9 business risk than CECONY. This can be seen by
10 the fact that most of the parent companies own
11 generation plants (including nuclear) and, on
12 average, contain over 10% unregulated assets
13 (see Exhibit___(JSH-6)) and have lower credit
14 ratings (see Exhibit___(JSH-8)). While I have
15 not developed specific adjustments for the
16 ownership of generation and for the lower credit
17 ratings, I am adjusting the proxy group cost of
18 equity downward to reflect the elimination of
19 risky non-utility assets.

20 Q. Why do you adjust the proxy group methodology
21 for the unregulated assets the companies own?

22 A. The 9.40% result of my proxy group ROE
23 methodology reflects all aspects of the proxy
24 group companies' businesses, including their

1 unregulated activities. Since the unregulated
2 investments carry additional risks, they have a
3 higher cost of equity than utility operations.
4 The overall cost of equity I have calculated
5 (9.40%) is a blend of the cost of equity for the
6 unregulated assets and the cost of equity for
7 the regulated utility investments.

8 Q. How is your adjustment made, and what is the
9 result?

10 A. By assuming the unregulated assets are, on
11 average, as risky as the market as a whole, I
12 have used an expected return on equity of 10.9%
13 for these assets (the Merrill Lynch return for
14 the market in the February 2004 *Quantitative*
15 *Profiles*). Since I know that the overall ROE
16 expected for all of the assets of the proxy
17 group companies is 9.40%, I can solve for the
18 required rate of return for the utility assets.
19 As seen in Exhibit__ (JSH-6), this is 9.2%.

20 Q. Do you recommend that your ROE results be
21 updated?

22 A. Yes I do. The generic methodology can be
23 updated through March 2004, and it can be
24 adjusted for interest rate changes at the time

1 of the Commission decision (as called for in the
2 Recommended Decision of the GFC).

3

4 STAYOUT PREMIUM

5 Q. Company witness Rosenberg has recommended an 80
6 basis point stayout premium (IR-200), which is
7 included in his recommended ROE. Do you propose
8 that a stayout premium be applied to your
9 results?

10 A. No I do not. I am testifying to the rate of
11 return appropriate for a one year rate case, for
12 the rate year ending September 30, 2005.

13

14 FINANCIAL INTEGRITY

15 Q. Given your recommended overall after-tax rate of
16 return of 7.53%, will the Company be able to
17 maintain its financial integrity?

18 A. Yes it will. The Company will have a pretax
19 interest coverage ratio of 3.3 times for the gas
20 and steam businesses. This ratio is on the
21 upper-end of the range suggested by S&P's to be
22 appropriate for an A-rated utility with a
23 business position of "3". In addition, the
24 50.67% debt ratio recommended in my rate of

1 return calculation is in the middle of the range
2 S&P's recommends for such a utility.

3 RISK PREMIUM APPROACH

4 Q. One of Mr. Rosenberg's cost of equity models is
5 a risk premium approach. Do you agree with the
6 use of such a methodology in this case?

7 A. No I do not. The Commission has specifically
8 rejected the use of a risk premium approach in
9 the past. In Case 95-G-1034, the Commission
10 stated: "...we have avoided reliance on the risk
11 premium approach because it reflects allowed
12 returns which are an inferior alternative to a
13 direct estimate of a company's own cost of
14 equity." In addition, the collaborators in the
15 GFC proceeding did not agree that it should be
16 used in setting a return. Finally, because the
17 CAPM relies on the market risk premium, it would
18 be redundant to rely on another risk premium
19 approach.

20 Q. Do you have any other comments regarding Mr.
21 Rosenberg's risk premium approach?

22 A. Yes I do. Mr. Rosenberg has stated (Staff IR
23 44, see Exhibit___(JSH-2)) that he has
24 performed no studies or analyses to determine

1 the extent to which CECONY is more or less risky
2 than the average electric utility contained in
3 Moody's electric utility common stock index for
4 the period 1932 to 2001.

5 He has performed no studies or analyses to
6 determine the extent to which the risks of bonds
7 used to calculate the yield for Moody's
8 composite bond index have remained at the same
9 level relative to the risks of the electric
10 utility stocks contained in Moody's electric
11 utility common stock index for the period 1932
12 to 2001.

13 Further, Mr. Rosenberg states that he has
14 performed no study or analysis to determine the
15 extent to which the risks of utility bonds have
16 remained at the same level relative to Treasury
17 securities over the 1932 to 2001 period.

18 In summary, Mr. Rosenberg has performed no
19 analysis to confirm that the risk premium
20 approach he advocates is applicable to CECONY
21 and that the risk premium hasn't changed over
22 time. I recommend that the Commission avoid the
23 use of a risk premium approach to calculate the
24 appropriate cost of equity for CECONY.

1

2 COMPARABLE EARNINGS APPROACH

3 Q. Mr. Rosenberg has proposed to use a comparable
4 earnings analysis as part of his ROE
5 calculation. Do you agree with such a
6 methodology in this case?

7 A. The Commission has specifically rejected the use
8 of a comparable earning methodology in the past.
9 In Case 95-G-1034, the Commission stated: "...we
10 have consistently found the comparable earnings
11 approach unreliable because it does not
12 adequately reflect the cost of equity of the
13 companies in the proxy group." In addition, the
14 collaborators in the GFC proceeding did not
15 agree that it should be used in setting a
16 return.

17 Q. Do you have any other concerns regarding the use
18 of a comparable earnings approach?

19 A. Yes. Mr. Rosenberg has used the return of
20 companies with a *Value Line* safety ranking of
21 "2". CEI has a *Value Line* safety ranking of
22 "1", a higher level of safety (and thus lower
23 required return). The companies Mr. Rosenberg
24 uses as "comparable" are not only riskier than

1 CEI (and thus even more so than CECONY), most
2 are not even subject to cost-based regulation.

3 As with the percentage of unregulated
4 assets and the size premium, using such a level
5 of comparable earnings would require an
6 adjustment to reflect the risk of CECONY, for
7 whom we are trying to determine what is a
8 reasonable ROE.

9 Finally, the result of Mr. Rosenberg's
10 comparable earnings methodology (14.0% to 14.5%)
11 demonstrates its lack of usefulness. The result
12 is higher than the expected return of the S&P
13 500, per First Call estimates (Rosenberg Steam
14 Testimony, Page 29). Mr. Rosenberg has failed
15 to explain or justify how a return in excess of
16 the market as a whole is "comparable" to what a
17 regulated utility with a *Value Line* safety
18 rating of "1" and a S&P business risk position
19 of "3" should earn.

20

21 MISCELLANEOUS

22 Q. Do you agree with Mr. Rosenberg's weighting of
23 his various methodologies in determining his ROE
24 recommendation?

- 1 A. Mr. Rosenberg does not state how he weights the
2 results of his various approaches. He states
3 only that the approaches, including an "issuance
4 adjustment" of 16 basis points (Rosenberg Steam
5 Testimony, Steam case) and a stayout premium of
6 80 basis points (Staff IR 200, see
7 Exhibit___(JSH-2)) total 12.0%.
- 8 Q. Excluding Mr. Rosenberg's "issuance adjustment"
9 and stayout premium, what is his recommended
10 ROE?
- 11 A. 11.04%.
- 12 Q. Do you agree with the use of an issuance
13 adjustment to cover the costs of issuing equity?
- 14 A. No I do not. We are setting rates for the rate
15 year ending September 30, 2005. Per Ex.__(KF-
16 2), no common stock issuances are planned. No
17 issuance costs will be incurred during the rate
18 year, per the Company's testimony. Therefore,
19 no allowance for issuance expenses should be
20 approved.
- 21 Q. Are you aware of any Commission rulings on this
22 issue?
- 23 A. Yes. In Cases 02-E-0198 and 02-G-0199, the
24 Commission stated, "We agree with the Judge's

1 recommendation to exclude a separate adjustment
2 for selling and issuance costs, because our
3 policy has been to allow recovery of such
4 expenses when they are incurred and there has
5 been no assertion by the Company in this case of
6 an external equity issuance." The same is true
7 in the current cases.

8

9 RESPONSE TO COMPANY WITNESS FETTER TESTIMONY

10 Q. Are your recommendations for how to calculate a
11 rate of return for CECONY consistent with past
12 Commission policies?

13 A. Yes they are. As I mentioned previously, the
14 Commission has approved ROEs based on a two-
15 thirds DCF / one-third CAPM in the recent past.
16 Further, the Commission has adjusted reported
17 utility capital structures as necessary to
18 reflect accurate capitalization required for a
19 regulated utility.

20 Q. Mr. Fetter has stressed the need for CECONY to
21 have a strong financial position and "healthy"
22 ROE given the changing regulatory environment
23 and the potential for "extreme shocks", such as
24 a terrorist attack (Fetter Steam Testimony, Page

1 14). Do your recommendations address these
2 concerns?
3 A. My recommendations on capital structure and cost
4 rates, along with Staff's other recommendations,
5 leave the Company in a strong financial
6 position. The debt and common equity ratios are
7 similar to the average company in the proxy
8 group as well as in *Value Line*. In addition, my
9 recommendations lead to a pretax interest
10 coverage ratio of 3.3 times. These ratios are
11 in line with the guidelines suggested by S&P for
12 an A-rated utility with a business position of
13 "3".

14 As for a "healthy" ROE, I do not believe
15 that any premium above-and-beyond investors'
16 expectations for a company with the business
17 risk of CECONY should be allowed. The ROE
18 estimate, using current market data which
19 reflects investors' outlook, factors in such
20 risks. I do not believe that ratepayers should
21 pay more, through the imputation of a higher
22 ROE, than is necessary for an indeterminate
23 amount of time just in case an event occurs and
24 negatively affects the Company over the long-

1 term.

2 Factoring in "extreme shocks" is not
3 appropriate in rate setting. Should such events
4 occur, the Commission and other governmental
5 bodies can address the situation as
6 circumstances warrant.

7 Q. Do you have any final points before concluding
8 your testimony?

9 A. Yes. The thrust of much of CECONY's financial
10 testimony is aimed at the goal of having the
11 Commission establish a reasonable return on
12 equity that enables the Company to attract
13 capital at reasonable terms. CECONY repeatedly
14 links the importance of maintaining financial
15 integrity to its ability to make all the
16 necessary investments to support its system.
17 These types of statements provide only a limited
18 view of the reality for the Company.

19 Q. Please explain why these statements are
20 incomplete.

21 A. The Company stresses its financial position but
22 leaves an important topic absent from its
23 presentation. It does not explain why it could
24 not issue new common equity to strengthen its

1 utility and non-utility balance sheets if it
2 believes the risks it faces are as high as
3 stated in testimony.

4 Q. Does this conclude your testimony?

5 A. Yes it does.

BEFORE THE
STATE OF NEW YORK
PUBLIC SERVICE COMMISSION

In the Matter of
CONSOLIDATED EDISON COMPANY OF NEW YORK, INC.

Cases 03-G-1671 and 03-S-1672

MARCH 2004

Prepared Exhibits of:

Jeffrey S. Hogan
Principal Utility Financial
Analyst
Office of Accounting &
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Three Empire State Plaza
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Hogan Con Edison Testimony

Exhibit 1

CONSOLIDATED EDISON COMPANY OF NEW YORK, INC.
 RATE OF RETURN REQUIRED FOR THE RATE YEAR
TWELVE MONTHS ENDING SEPTEMBER 30, 2005
 (Thousands of Dollars)

	<u>Average Capital Structure</u>	<u>Cost Rate</u>	<u>Cost of Capital</u>
	<u>Percent</u>		
Long Term Debt	50.67%	6.27%	3.18%
Preferred Stock	1.77%	5.43%	0.10%
Customer Deposits	<u>1.81%</u>	2.45%	<u>0.04%</u>
Subtotal	54.26%		3.32%
Common Equity	<u>45.74%</u>	9.20%	<u>4.21%</u>
Total	<u><u>100.00%</u></u>		<u><u>7.53%</u></u>

Hogan Con Edison Testimony

Exhibit 2

CONSOLIDATED EDISON COMPANY OF NEW YORK, INC.
GAS Case No. 03-G-1671
STEAM Case No. 03-S-1672

Response to Staff Interrogatories 1-47

Responding Witness: Robert G. Rosenberg

6. Regarding the process used to develop the proxy group: (pages 9-10)
- a. Please provide a list of all companies that were initially considered for inclusion in the proxy group.
 - b. Please indicate the specific reason(s) why individual companies were excluded.
 - c. Please describe the criteria/process used to determine if a company had "significant unregulated operations" and show how this criteria was applied to the candidate companies.
 - d. Please provide all underlying calculations and data related to the criteria/process described in the answer to (c).
 - e. Please describe how it was determined that Value Line had forecast a dividend cut.

Response

- a.&b. See the attached.
- c. Mr. Rosenberg examined the utility portion of total company revenues, income and assets of potential comparison companies. Companies were excluded if any of the three ratios was below 65% or if the average of the three ratios was below 75%.
- d. See the attached.
- e. A Value Line forecast dividend cut was determined either from (1) the Value Line text discussing a company or (2) Value Line showing two alternative dividend yield figures at the top of a company's page.

CONSOLIDATED EDISON COMPANY OF NEW YORK, INC.
GAS Case No. 03-G-1671
STEAM Case No. 03-S-1672

Attachment to Response to Staff Interrogatories 6(a)&(b)

BOND RATINGS FOR VALUE LINE ELECTRIC UTILITY INDUSTRY

Bond Rating at September 2003

Company/Subsidiary	Bond Rating	
	Moody's	S&P
<u>Allegheny Energy</u>		
Monongahela Power	Ba1	BB-
Potomac Edison	Ba1	BB-
West Penn Power	Ba1	B
<u>Atlete</u>		
Minnesota Power & Light	Baa1	A
<u>Alliant Energy</u>		
Interstate Power	A3	A-
Wisconsin Power & Light	A1	A
<u>Ameren</u>		
Central Illinois Light	A2	A-
Central Illinois P. S.	A1	A-
Union Electric	A1	A-
<u>American Electric Power</u>		
Appalachian Power	Baa2	BBB
Central Power & Light	Baa1	BBB
Columbus Southern Power	A3	BBB
Ind. Mich. Power	Baa2	BBB
Kentucky Power	Baa2	BBB
Ohio Power	A3	BBB
Public Service of Oklahoma	A3	BBB
Southwestern Electric Power	A3	BBB
West Texas Utilities	A3	BBB
<u>Aquila</u>		
UtiliCorp United	Caa1	B
<u>Avista</u>		
Washington Water Power	Baa3	BB+
Black Hills Corporation	Baa1	BBB
<u>Centerpoint Energy</u>		
Houston Lighting & Power	Baa2	BBB
Central Vermont P.S.	na	BBB
<u>CH Energy Group</u>		
Central Hudson Gas & Electric	A2	A
<u>GINergy</u>		
Cincinnati Gas & Electric	A3	A-
PSI Energy	A3	BBB

Non-util

BOND RATINGS FOR VALUE LINE ELECTRIC UTILITY INDUSTRY

Bond Rating at September 2003

Company/Subsidiary	Bond Rating	
	Moody's	S&P
CLECO Central Louisiana Electric	A3	BBB+
CMS Energy Consumers Energy	Baa3	BBB-
Consolidated Edison Inc Consolidated Edison Co. NY Orange & Rockland	A1 A1	A A
Constellation Energy Group Baltimore Gas & Electric	A1	A
Dominion Resources Consolidated Natural Gas Virginia Electric & Power	A3 A2	BBB+ A-
DPL Dayton Power & Light	Baa1	BBB
DQE Inc. Duquesne Light	Baa1	BBB+
DTE Energy Company Detroit Edison Michigan Consolidated Gas	A3 A2	A- BBB+
Duke Energy Duke Power PanEnergy	A3 na A3	A- na BBB
Edison International Southern California Edison	Ba2	BB
El Paso Electric	Baa3	BBB
Empire District Electric	Baa1	BBB
Energy East Berkshire Gas Central Maine Power Connecticut Natural Gas New York State E&G Rochester Gas & Electric Southern Connecticut Gas	na A3 A3 Baa1 Baa1 A3	na BBB+ A- BBB+ BBB+ A

Non-util.

Non-util.

Non-util.

BOND RATINGS FOR VALUE LINE ELECTRIC UTILITY INDUSTRY

Bond Rating at September 2003

Company/Subsidiary	Bond Rating	
	Moody's	S&P
Entergy		
Entergy Arkansas	Baa2	BBB+
Entergy Louisiana	Baa2	BBB+
Entergy Mississippi	Baa2	BBB+
Entergy Gulf States Utilities	Baa3	BBB-
Entergy New Orleans	Baa2	BBB
System Energy Resources	Baa3	BBB-
<u>Exelon Corp</u>		
Commonwealth Edison	A3	A-
Philadelphia Electric (PECO)	A2	A
FirstEnergy		
Cleveland Electric Illum.	Baa2	BBB
Jersey Central Power & Light	A2	BBB+
Metropolitan Edison	A2	BBB+
Ohio Edison	Baa1	BBB
Pennsylvania Electric	A2	BBB
Pennsylvania Power	Baa1	BBB
Toledo Edison	Baa2	BBB
<i>long-uti</i> FPL Group		
Florida Power & Light	Aa3	A
Great Plains Energy		
Kansas City Power & Light	A2	BBB
Green Mountain Power	Baa1	BBB
Hawaiian Electric Industries		
Hawaiian Electric	Baa2	BBB+
<i>Pos Div Cut</i> Idacorp		
Idaho Power	A2	A
<i>non-uti</i> MDU Resources	A2	A-
Montana Dakota Utilities	na	na
<u>MGE Energy</u>		
Madison Gas & Electric	Aa2	AA
NiSource		
Bay State Gas	Baa2	BBB
Columbia Gas	Baa2	BBB
Northern Indiana P.S.	Baa2	BBB
Northeast Utilities		
Connecticut Light & Power	A2	A-
Western Massachusetts Electric	Ba2	BBB+
Northwestern Corp		
Northwestern Public Service	B3	CCC

BOND RATINGS FOR VALUE LINE ELECTRIC UTILITY INDUSTRY

Bond Rating at September 2003

Company/Subsidiary	Bond Rating	
	Moody's	S&P
<u>N Star</u> Boston Edison	A1	A
OGE Energy Oklahoma Gas & Electric	A1	BBB+
Enogex	Baa3	BBB+
Transek	Baa3	A
<i>Non-Util</i> Otter Tail Corp.	A2	A
<u>PEPCO Holdings</u> Atlantic City Electric	A2	BBB+
Delmarva Power & Light	A2	A
Potomac Electric Power	A1	A-
<u>PG&E</u> Pacific Gas & Electric	B3	CCC
<u>Pinnacle West Capital</u> Arizona Public Service	A3	A-
PNM Resources Public Service of New Mexico	Baa3	BBB-
PPL Corporation Pennsylvania P&L (PP&L)	Baa1	A-
Progress Energy Carolina Power & Light	A3	BBB
Florida Power Corp.	A1	BBB+
<i>Non-Util</i> Public Service Enterprise Group Public Service Electric & Gas	A3	A-
Puget Energy Puget Sound Power & Light	Baa2	BBB
<u>SCANA Corp.</u> South Carolina Electric & Gas	A1	A-
Public Service of North Carolina	A2	A-
<i>Non-Util</i> Sempra Energy San Diego G&E	A1	A+
S. Calif. Gas	A1	A+
Sierra Pacific Resources Nevada Power	Ba2	BB
Sierra Pacific Power	Ba2	BBB+

BOND RATINGS FOR VALUE LINE ELECTRIC UTILITY INDUSTRY

Bond Rating at September 2003

Company/Subsidiary	Bond Rating	
	Moody's	S&P
Southern Company		
Alabama Power	A2	A
Georgia Power	A1	A
Gulf Power	A1	A+
Mississippi Power	A1	A+
Savannah Electric & Power	A1	A+
TECO Energy		
Tampa Electric	Baa1	BBB-
TXU Corporation		
Texas Utilities Electric	Baa1	BBB
Unisource Energy		
Tucson Electric Power	Ba2	BBB-
UHL Holdings		
United Illuminating	A3	na
Vectren Corporation		
Indiana Gas	Baa1	A-
Southern Indiana G&E	A3	A-
Wester Energy		
Kansas Gas & Electric	Ba1	BB+
Kansas P&I	na	na
Wisconsin Energy		
Wisconsin Electric Power	Aa3	A-
Wisconsin Gas	Aa2	A-
WPS Resources		
Wisconsin P.S.	Aa1	A
Xcel Energy		
Northern States Power	A3	BBB+
Public Service of Colorado	Baa1	BBB+
Southwestern Public Service	Aa3	BBB

na -- not available.

Source: Mergent (formerly Moody's) Bond Record, September 2003; and Standard & Poor's "Bond Guide," September 2003.

Non-util

CONSOLIDATED EDISON COMPANY OF NEW YORK, INC.
GAS Case No. 03-G-1671
STEAM Case No. 03-S-1672

Attachment to Response to Staff Interrogatories 6(d)

PERCENT UTILITY OPERATIONS 2002

	REVENUES			INCOME			ASSETS		
	Utility	Total	% Utility	Utility	Total	% Utility	Utility	Total	% Utility
Alliant Energy	2,163.7	2,608.8	83.7	333.6	321.7	103.7	4,726.2	7,001.4	67.5
Ameren	3,621.0	3,841.0	91.7	364.0	382.0	95.3	11,476.0	11,499.0	99.8
CH Energy	533.3	695.5	76.7	30.3	41.3	73.4	945.9	1,210.1	78.2
CINergy	2,840.0	11,960.0	22.1	270.0	381.0	74.8	7,284.0	13,214.0	55.1
Consolidated Edison	7,858.9	8,481.9	92.7	1,026.0	1,080.1	96.8	17,188.9	18,820.3	91.3
Constellation Energy	2,536.1	4,703.0	53.9	130.4	525.6	24.8	4,705.5	14,128.9	33.3
Dominion Resources	2,528.0	10,218.0	24.7	455.0	1,382.0	33.4	8,200.0	37,900.0	21.6
DTE	5,445.0	6,748.0	80.7	460.0	632.0	72.8	14,391.0	19,238.0	74.8
Duke Energy	7,218.0	15,663.0	46.1	2,762.0	2,869.0	97.0	28,671.0	60,966.0	47.0
Exelon	10,457.0	14,955.0	69.9	1,268.0	1,440.0	88.1	28,550.0	37,478.0	70.8
FPL Group	7,378.0	8,311.0	88.8	717.0	695.0	103.2	12,837.0	19,790.0	63.9
Idacorp	889.0	928.8	93.6	84.3	61.7	136.6	2,738.5	3,252.6	84.2
MDU Resources	349.2	2,031.5	17.2	19.4	147.7	13.1	481.2	2,937.2	16.4
MGE Energy	347.1	347.1	100.0	40.6	40.5	100.0	555.4	608.2	91.3
N Star	2,618.3	2,719.1	96.3	173.4	163.7	105.9	5,906.1	6,123.3	96.5
Otter Tail	307.4	710.1	43.3	53.7	82.0	65.6	550.9	878.7	62.7
Pepco Holdings	2,531.2	4,324.5	58.5	182.7	210.5	86.8	8,105.6	12,861.7	63.0
Pinnacle West	2,013.0	2,837.0	76.3	170.0	215.0	79.1	7,589.0	8,428.0	90.1
PS Enterprise Group	5,919.0	8,390.0	70.5	201.0	416.0	48.3	12,927.0	25,156.0	51.4
SCANA	2,258.0	2,954.0	76.4	482.0	514.0	95.7	7,344.0	7,754.0	94.7
Sempra Energy	4,554.0	6,020.0	75.6	415.0	591.0	70.2	9,202.0	17,757.0	51.8
Southern Company	10,091.1	10,549.0	95.7	1,241.7	1,318.0	94.2	28,323.0	31,799.0	89.1
Vectren	1,517.1	1,804.3	84.1	93.6	114.0	82.1	2,439.3	2,926.5	83.4
Wisconsin Energy	2,852.1	3,736.2	76.3	285.2	289.2	109.7	6,719.5	8,364.9	80.3
WPS Resources	1,073.8	2,674.9	40.1	79.4	109.4	72.6	1,867.3	3,207.9	58.2

Source: Derived from data in company financial reports.

CONSOLIDATED EDISON COMPANY OF NEW YORK, INC.
GAS Case No. 03-G-1671
STEAM Case No. 03-S-1672

Response to Staff Interrogatories 1-47

Responding Witness: Robert G. Rosenberg

23. a. Please explain why the risks of CEI, a holding company that owns regulated utilities and several unregulated business entities, including investments in merchant generation and competitive telecommunications ventures, has the same risk and therefore the same required return as CECONY.
- b. Please provide all studies and analyses used to make this determination at the time the proxy group was developed.

Response

a.&b. Mr. Rosenberg selected comparison companies based on the criteria discussed on pages 8-10 of his testimony. Among those criteria was a company's bond rating. Typically in New York, the bond ratings of the utility subsidiaries have been employed as a measure of risk by most parties (e.g., see the Generic Finance case updates). As Mr. Rosenberg indicated on page 9 of his testimony, the median senior bond rating of the group was close to that of CECONY. Therefore, Mr. Rosenberg is of the opinion that the overall risk of the proxy companies is similar to CECONY, despite any particular situational differences among the companies. Mr. Rosenberg screened out companies with significant unregulated operations, as indicated on page 9 of his testimony. Mr. Rosenberg examined the utility portion of revenues, income and assets in this determination. Thus, while the proxy companies possess some non-utility operations, Mr. Rosenberg is of the opinion that investors would regard them as essentially electric utilities and thus appropriate to use in analysis regarding CECONY.

CONSOLIDATED EDISON COMPANY OF NEW YORK, INC.

GAS Case No. 03-G-1671

STEAM Case No. 03-S-1672

Response to Staff Interrogatories 1-47

Responding Witness: Robert G. Rosenberg

44. The details of two risk premium approaches are discussed on pages 34-38:
- a. Please provide all studies and analyses performed to determine the extent to which CECONY is more or less risky than the average electric utility contained in Moody's electric utility common stock index for the period 1932 to 2001.
 - b. Please provide all studies and analyses performed to determine the extent to which the risks of bonds used to calculate the yield for Moody's composite bond index have remained at the same level relative to the risks of the electric utility stocks contained in Moody's electric utility common stock index for the period 1932 to 2001.
 - c. Please provide all studies and analyses performed to determine the extent to which the risks of utility bonds have remained at the same level relative to treasury securities (bonds and bills) over the 1932 to 2001 period.
 - d. Please describe the methodology that Moody's employs to develop the component companies in the electric utility bond and stock indices.
 - e. Please identify and provide the bond ratings for all companies currently in the Moody's bond and stock indices. Please provide similar data as of December 31, 2002 and 2001.
 - f. Please provide the data used to develop the allowed returns discussed on page 35.
 - g. Does this data include any returns allowed for multi-year rate plans?
 - h. If the answer to (g) is yes, please identify those returns and explain why they should be included in a study intended to develop a return for a one year rate case.

Response

- a.-c. No studies were performed.
- d. To Mr. Rosenberg's knowledge, Moody's does not make its methodology publicly known.
- e. See the attached list of companies taken from the 2002 Mergent Public Utility Manual. Bond ratings are provided in response to Interrogatory 6(a)&(b). Mr. Rosenberg does not possess the other data requested.
- f. See the attached.
- g. Mr. Rosenberg used quarterly averages in his analysis and did not investigate individual company data.
- h. Not applicable.

PSC December 2, 2003 Questions and CECONY Responses

51a. Please provide a calculation of the consolidated capitalization of CEI for the rate year.

Response

51a. Attachment 51-1 provides a calculation of the capitalization of CEI for the rate year.

51b. Please provide all calculations and assumptions necessary to understand the calculation provided in the response to (a).

Response:

51b. Please see attachments 51-2 and 51-3 for supporting calculations.

51c. Please provide the end of the test year CEI capitalization and include consolidated Funds Requirements and Sources statements for the period of time between the end of the test year and the beginning of the rate year.

Response:

51c. Attachment 51-1 provides the CEI capitalization at the end of the test year. In addition, attachment 51-4 provides the Funds Requirements and Sources for the periods from June 30, 2003 to the beginning of the rate year.

Attachment 51-1

CONSOLIDATED EDISON INC.
RATE OF RETURN REQUIRED FOR THE RATE YEAR
TWELVE MONTHS ENDING SEPTEMBER 30, 2005
(Thousands of Dollars)

	Actual Capital Structure for June 30, 2003		Average Capital Structure for September 30, 2005	
	Amount		CEI Consolidated Amount	Percent
Long Term Debt	\$ 6,375,000		\$ 7,004,467	48.62%
Preferred Stock	212,563		\$ 212,563	1.48%
Customer Deposits	219,000		\$ 226,249	1.57%
Subtotal	6,806,563		7,443,279	51.67%
Common Equity	6,324,000		6,962,687	48.33%
Total	\$ 13,130,563		\$ 14,405,966	100.00%

Staff Request 59.

a. Is it Mr. Fetter's opinion that CECONY's business risks are less than, equal to, or greater than the business risks of CEI?

b. Please explain the basis and rationale for the response to (a).

Answer:

a&b. While the regulated activities are generally considered to have less business risk than unregulated activities, Mr. Fetter considers CECONY's business risks to be generally the same as the business risks of CEI because CEI's investments in unregulated businesses are relatively modest. As a result, S&P currently has both CECONY and CEI rated at a '3' business profile, in the "above average" category. Please note that it is in this context in which the following questions are answered.

- Staff Request 60.*
- a. Is it Mr. Fetter's opinion that the business risks of competitive telecommunications companies are less than, equal to or greater than the business risks of CECONY?*
 - b. Please explain the basis and rationale for the response to (a)*

Answer:

- a. Greater than.**
- b. Mr. Fetter believes that competitive telecommunications activities have greater business risks than CECONY's T&D activities because T&D activities are regulated on essentially a cost of service basis.**

Staff Request 62.

a. Is it Mr. Fetter's opinion that the business risks of merchant generation are less than, equal to, or greater than the business risks of CECONY?

b. Please explain the basis and rationale for the response to (a).

Answer:

a&b. Mr. Fetter believes that merchant generation usually has business risks greater than CECONY's T&D activities because T&D activities are regulated on essentially a cost of service basis. It is often possible, however, to mitigate some to almost all merchant generation business risk through long-term contractual arrangements.

- Staff Request 63.*
- a. Is it Mr. Fetter's opinion that the risks of CEI's investment in merchant generation is less than, equal to, or greater than the business risks of CECONY?*
 - b. Please explain the basis and rationale for the response to (a).*

Answer:

a&b. Usually greater than, but see answer to 62 above.

CONSOLIDATED EDISON COMPANY OF NEW YORK, INC.
GAS Case No. 03-G-1671
STEAM Case No. 03-S-1672

Response to Staff Interrogatories 200-218

Responding Witness: Robert G. Rosenberg

200. Regarding Staff Information Request 47(b), please indicate what specific stayout premium is discussed at page 49 of Mr. Rosenberg's testimony.

Response

The stayout premium to which Mr. Rosenberg referred is the 80 basis point figure on page 49, line 10.

Hogan Con Edison Testimony

Exhibit 3

Adjusted CECONY Capital Structure
As of December 31, 2003
(\$ millions)

	Column 1	Column 2	Column 3	Column 4 (Col. 2 + Col. 3)	Column 5 (Col. 1 - Col. 4)	Column 6	Column 7 (Col. 1 - Col. 6)
	CEI	CECONY	ORU	Utility	As Reported Non-Utility Operations	Staff Adjusted Non-Utility Operations	Staff Adjusted Utility
Assets							
Utility Plant (Original Cost)							
Electric	\$12,097	\$11,324	\$773	\$12,097	\$0	\$0	\$12,097
Gas	2,699	2,381	318	2,699	0	0	2,699
Steam	799	799	0	799	0	0	799
General	1,482	1,363	119	1,482	0	0	1,482
Total Utility Plant	17,077	15,867	1,210	17,077	0	0	17,077
Less: Accumulated Depreciation	4,069	3,696	373	4,069	0	0	4,069
Net Plant	13,008	12,171	837	13,008	0	0	13,008
Construction Work in Progress	1,276	1,247	29	1,276	0	0	1,276
Net Utility Plant	14,284	13,418	866	14,284	0	0	14,284
Non-Utility Plant	941	25	0	25	916	916	25
Net Plant	15,225	13,443	866	14,309	916	916	14,309
Total Current Assets	1,592	1,218	166	1,384	208	208	1,384
Investments	248	3	0	3	245	245	3
Total Deferred Charges, Reg. Assets and Noncurrent Assets	3,901	3,100	237	3,337	564	564	3,337
Total Assets	\$20,966	\$17,764	\$1,269	\$19,033	\$1,933	\$1,933	\$19,033
Capitalization and Liabilities							
Capitalization							
Common Shareholders' Equity	\$6,423	\$5,482	\$370	\$5,852	\$571	\$925	\$5,498
Preferred Stock	213	213	0	213	0	0	213
Long-term Debt	6,733	5,435	301	5,736	997	643	6,090
Total Capitalization	13,369	11,130	671	11,801	1,568	1,568	11,801
Total Noncurrent Liabilities	707	518	165	683	24	24	683
Total Current Liabilities	1,911	1,597	151	1,748	163	163	1,748
Total Deferred Credits and Regulatory Liabilities	4,937	4,519	282	4,801	136	136	4,801
Total Capitalization and Liabilities	\$20,966	\$17,764	\$1,269	\$19,033	\$1,933	\$1,933	\$19,033
Customer Deposit Total: (Included in Current Liabilities)	228	214	14	218	0	0	218
Long-Term Debt:	49.5%	47.9%	43.9%	47.7%	63.6%	41.0%	50.67%
Preferred Stock:	1.6%	1.9%	0.0%	1.8%	0.0%	0.0%	1.77%
Customer Deposit:	1.7%	1.9%	2.0%	1.8%	0.0%	0.0%	1.81%
Common Equity:	47.2%	48.3%	54.0%	48.7%	36.4%	59.0%	45.74%

Hogan Con Edison Testimony

Exhibit 4

Calculation of Electric & Gas ROE (Staff Proxy Group)
(Parent Companies must be similarly-rated to CECONY)

(B)	(N) DPS Growth 2006-08	(O) Retention Rate 2007	(P) Return on Equity 2007	(Q) B x R	(R) Increase in Shares	(S) MBR 2002	(T) S Factor	(U) V Factor	(V) S x V	(W) Sustainable Growth	(X) Long-Form ROE
Company											
Ameren	1.04	0.21	11.34	2.34	1.09	1.70	1.84	0.41	0.76	3.10	8.48%
CH Energy	0.61	0.27	9.23	2.46	-1.21	1.47	-1.79	0.32	-0.57	1.89	6.51%
Con Edison	0.88	0.28	9.97	2.74	0.66	1.44	0.95	0.31	0.29	3.03	8.19%
MGE Energy	0.49	0.39	12.79	4.95	2.83	2.08	5.90	0.52	3.07	8.02	11.52%
Nstar	1.78	0.42	12.85	5.36	0.00	1.86	0.00	0.46	0.00	5.36	9.60%
SCANA	4.00	0.46	11.85	5.45	0.00	1.64	0.00	0.39	0.00	5.45	9.56%
Southern Company	3.62	0.31	14.48	4.53	1.33	2.28	3.05	0.56	1.71	6.24	10.81%
Vectren Corporation	3.36	0.37	12.40	4.53	0.36	1.70	0.62	0.41	0.25	4.78	9.47%
Wisconsin Energy	7.72	0.64	10.39	6.61	1.25	1.60	1.99	0.37	0.74	7.35	9.94%
Average	2.61	0.37	11.70	4.33	0.70	1.75	1.40	0.42	0.70	5.03 Median	9.34% Average 9.56%

Calculation of GFC Cost of Equity - Staff Proxy Group

Merril Lynch Cost of Market 10.90% (February 2004)

Treasury Rates

10 year 25+ year (FRB Statistical Release)

<http://www.federalreserve.gov/releases>

Sep-03	4.27%	5.23%
Oct-03	4.29%	5.24%
Nov-03	4.30%	5.20%
Dec-03	4.27%	5.15%
Jan-04	4.15%	5.05%
Feb-04	4.08%	4.99%

Risk Free Rate (9/03 - 2/04) 4.69%

Proxy Group Beta 0.66

Proxy Group DCF ROE 9.56%

Traditional CAPM ROE 8.79%

Zero Beta CAPM ROE 9.32%

Generic CAPM ROE 9.06%

2/3 DCF 1/3 CAPM Weighting
ROE 9.40%

Hogan Con Edison Testimony

Exhibit 5

**Calculation of Adjustment to Proxy Group for Non-Utility Assets
Staff Proxy Group - Staff ROE Methodology**

	<u>Percent of Assets</u>	<u>Required Return on Equity</u>	<u>Weighted Required Return on Equity</u>
Non-Utility Operations	10.60% (1)	10.90% (2)	1.16%
Utility Operations	<u>89.40%</u>	<u>9.22%</u>	<u>8.24%</u>
Total Proxy Group:			9.40%

(1) Exhibit__(JSH-4), Page 1

(2) Market return per Merrill Lynch, February 2004, Quantitative Profiles

Hogan Con Edison Testimony

Exhibit 6

Staff Proxy Group Characteristics

Company	Parent Company Rating (1)		S&P's Business Position	Percent Utility Assets (2)
	Moody's	S&P's		
Ameren	A3	A-	5	99.8%
CH Energy Group	A2	A	3	78.2%
Consolidated Edison, Inc.	A2	A	3	91.3%
MGE Energy	Aa3	AA	5	91.3%
NSTAR	A2	A	3	96.5%
SCANA	A3	A-	4	94.7%
Southern Company (3)	A	A	4	89.1%
Vectren Corporation (4)	Baa1	A-	4	83.4%
Wisconsin Energy	A3	BBB+	4	80.3%
Staff Proxy Group Average:			3.9	89.4%

Company Proxy Group Companies Eliminated From Staff Proxy Group :

Alliant (5)	Baa3/Baa1/A2	BBB+	67.5%
DTE	Baa2	BBB+	74.8%
Exelon	Baa2	A-	70.8%
Pinnacle West	Baa2	BBB	90.1%
Average of Eliminated Companies:			75.8%

(1) Source: SNL Financial Web Site. If Moody's not available, used Fitch.
If neither available, all subsidiaries had to qualify.

(2) Per Staff Information Request 6

(3) Fitch rating for parent. Moody's rates subsidiaries A1 and A2.

(4) All subsidiaries are rated Baa1.

(5) Parent not rated by moody's or Fitch.

Hogan Con Edison Testimony

Exhibit 7


Alliant Energy Corporation (NYSE: LNT)
Credit Ratings
Credit Ratings

	Fitch	Moody's	S & P
<u>Long-term Issuer/Senior Debt</u>	-	-	BBB+ 1/29/2004
<u>Short-term/Commercial Paper</u>	-	Prime-3 (R) 1/13/2003	A-2 1/29/2004

Ratings Watch Action Legend: (P) Positive, (N) Negative, (U) Uncertain, (R) Removed

Credit Ratings (Subsidiaries)

	Fitch	Moody's	S & P
<u>Alliant Energy Resources Inc.</u>			
Long-term Issuer/Senior Debt	-	Baa3 (R) 1/13/2003	BBB+ 1/29/2004
Short-term/Commercial Paper	-	Prime-3 (R) 1/13/2003	A-2 1/29/2004
<u>Interstate Power & Light Company</u>			
Long-term Issuer/Senior Debt	-	Baa1 (R) 1/13/2003	BBB+ 1/29/2004
Long-term Secured Debt	-	A3 (R) 1/13/2003	A- 1/29/2004
Subordinated Debt	-	Baa2 (R) 1/13/2003	BBB- 1/29/2004
Short-term/Commercial Paper	-	Prime-2 1/16/2003	A-2 1/29/2004
Preferred Stock	-	Baa3 (R) 1/13/2003	BBB- 1/29/2004
<u>Wisconsin Power and Light Company</u>			
Long-term Issuer/Senior Debt	-	A2 (R) 1/13/2003	A- 1/29/2004
Long-term Secured Debt	-	A1 (R) 1/13/2003	A 1/29/2004
Short-term/Commercial Paper	-	Prime-1 (R) 1/13/2003	A-2 1/29/2004
Preferred Stock	-	Baa1 (R) 1/13/2003	BBB 1/29/2004

Ratings Watch Action Legend: (P) Positive, (N) Negative, (U) Uncertain, (R) Removed

If a listed rating does not have a date, this means that while the rating was available from the ratings agency, the date was not available as of our data collection starting point.

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Ameren Corporation (NYSE: AEE)
Credit Ratings
Credit Ratings

	Fitch	Moody's	S & P
Long-term Issuer/Senior Debt	A- 2/3/2004	A3 (N) 2/4/2004	A- (N) 2/3/2004
Short-term/Commercial Paper	F2 2/3/2004	Prime-2 2/4/2004	A-2 2/3/2004

Ratings Watch Action Legend: (P) Positive, (N) Negative, (U) Uncertain, (R) Removed

Credit Ratings (Subsidiaries)

	Fitch	Moody's	S & P
Ameren Energy Generating Company			
Long-term Issuer/Senior Debt	BBB+ 5/29/2003	A3 4/29/2002	A- (N) 2/3/2004
Central Illinois Light Company			
Long-term Issuer/Senior Debt	A- (R) 5/29/2003	A3 (R) 2/10/2003	A- (N) 2/3/2004
Long-term Secured Debt	A (R) 5/29/2003	A2 (R) 2/10/2003	A- (N) 2/3/2004
Short-term/Commercial Paper	F2 (P) 1/31/2003	Prime-2 (R) 2/10/2003	-
Preferred Stock	BBB+ (R) 5/29/2003	Baa2 (R) 2/10/2003	BBB (N) 2/3/2004
Central Illinois Public Service Company			
Long-term Issuer/Senior Debt	-	-	A- (N) 2/3/2004
Long-term Secured Debt	-	-	A- (N) 2/3/2004
Short-term/Commercial Paper	-	-	(R) 8/15/2002
Preferred Stock	-	-	BBB (N) 2/3/2004
CILCORP Inc.			
Long-term Issuer/Senior Debt	BBB+ (R) 5/29/2003	Baa2 2/4/2004	A- (N) 2/3/2004
Union Electric Company			
Long-term Issuer/Senior Debt	A 5/29/2003	A2 (R) 2/10/2003	A- (N) 2/3/2004
Long-term Secured Debt	A+ 5/29/2003	A1 (R) 2/10/2003	A- (N) 2/3/2004
Subordinated Debt	A- 5/29/2003	A3 (R) 2/10/2003	BBB (N) 2/3/2004
Short-term/Commercial Paper	F1 5/29/2003	Prime-1 2/10/2003	A-2 2/3/2004
Preferred Stock	A-	Baa1 (R)	BBB (N)

| 5/29/2003 | 2/10/2003 | 2/3/2004 |

Ratings Watch Action Legend: (P) Positive, (N) Negative, (U) Uncertain, (R) Removed

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CH Energy Group, Inc. (NYSE: CHG)
Credit Ratings
Credit Ratings

	Fitch	Moody's	S & P
No credit ratings information is available for CH Energy Group, Inc			

Credit Ratings (Subsidiaries)

	Fitch	Moody's	S & P
Central Hudson Gas & Electric Corp			
Long-term Issuer/Senior Debt	A 5/8/2003	A2 3/15/2002	A 5/29/2003
Short-term/Commercial Paper	F1 5/8/2003	-	-
Preferred Stock	A- 5/8/2003	Baa1 3/15/2002	-

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Consolidated Edison, Inc. (NYSE: ED)
Credit Ratings
Credit Ratings

	Fitch	Moody's	S & P
Long-term Issuer/Senior Debt	A- 3/19/2002	A2 3/19/2002	A 6/10/2003
Short-term/Commercial Paper	F1 3/19/2002	Prime-1 (R) 6/11/2001	A-1 6/10/2003

Ratings Watch Action Legend: (P) Positive, (N) Negative, (U) Uncertain, (R) Removed

Credit Ratings (Subsidiaries)

	Fitch	Moody's	S & P
Consolidated Edison Company of New York, Inc.			
Long-term Issuer/Senior Debt	A+ 8/19/2002	A1 (R) 6/11/2001	A 6/10/2003
Subordinated Debt	A 8/19/2002	A2 (R) 6/11/2001	-
Short-term/Commercial Paper	F1 8/19/2002	Prime-1 (R) 6/11/2001	A-1 6/10/2003
Preferred Stock	A 8/19/2002	A3 -	BBB+ 6/10/2003
Orange and Rockland Utilities, Inc.			
Long-term Issuer/Senior Debt	A+ 3/19/2002	A1 (R) 6/11/2001	A 6/10/2003
Short-term/Commercial Paper	F1 3/19/2002	Prime-1 (R) 6/11/2001	A-1 6/10/2003

Ratings Watch Action Legend: (P) Positive, (N) Negative, (U) Uncertain, (R) Removed

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DTE Energy Company (NYSE: DTE)
Credit Ratings
Credit Ratings

	Fitch	Moody's	S & P
Long-term Issuer/Senior Debt	BBB (R) 11/10/2003	Baa2 1/28/2004	BBB+ 11/7/2003
Short-term/Commercial Paper	F2 11/10/2003	Prime-2 1/28/2004	A-2 11/7/2003
Trust Preferred	-	Baa3 1/28/2004	BBB- 11/7/2003

Ratings Watch Action Legend: (P) Positive, (N) Negative, (U) Uncertain, (R) Removed

Credit Ratings (Subsidiaries)

	Fitch	Moody's	S & P
Detroit Edison Company			
Long-term Issuer/Senior Debt	BBB+ 11/10/2003	Baa1 1/28/2004	BBB+ 11/7/2003
Long-term Secured Debt	A- 11/10/2003	A3 1/28/2004	A- 11/7/2003
Subordinated Debt	BBB 11/10/2003	Baa2 1/28/2004	BBB- 11/7/2003
Short-term/Commercial Paper	F2 11/10/2003	Prime-2 1/28/2004	A-2 11/7/2003
Preferred Stock	BBB 11/10/2003	-	-

Michigan Consolidated Gas Company

Long-term Issuer/Senior Debt	-	-	BBB+ 11/7/2003
Long-term Secured Debt	A 11/10/2003	A2 (N) 1/28/2004	BBB+ 11/7/2003
Short-term/Commercial Paper	F1 11/10/2003	Prime-1 (N) 1/28/2004	A-2 11/7/2003

Ratings Watch Action Legend: (P) Positive, (N) Negative, (U) Uncertain, (R) Removed

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Exelon Corporation (NYSE: EXC)
Credit Ratings
Credit Ratings

	Fitch	Moody's	S & P
Long-term Issuer/Senior Debt	BBB+ 5/2/2001	Baa2 (R) 4/27/2001	A- (R) 11/24/2003
Short-term/Commercial Paper	F2 8/19/2002	Prime-2 (R) 4/27/2001	A-2 (R) 11/24/2003

Ratings Watch Action Legend: (P) Positive, (N) Negative, (U) Uncertain, (R) Removed

Credit Ratings (Subsidiaries)

	Fitch	Moody's	S & P
Commonwealth Edison Company			
Long-term Issuer/Senior Debt	BBB+ 8/19/2002	Baa1 (R) 4/27/2001	A- (R) 11/24/2003
Long-term Secured Debt	A- -	A3 (R) 4/27/2001	A- (R) 11/24/2003
Short-term/Commercial Paper	F2 -	Prime-2 (R) 4/27/2001	A-2 (R) 11/24/2003
Preferred Stock	BBB -	Baa3 -	BBB (R) 11/24/2003
Trust Preferred	BBB 3/11/2003	Baa2 -	BBB (R) 11/24/2003
Exelon Generation Company, LLC			
Long-term Issuer/Senior Debt	BBB+ 5/2/2001	Baa1 5/2/2001	A- (R) 11/24/2003
Short-term/Commercial Paper	F2 8/19/2002	Prime-2 8/9/2002	A-2 (R) 11/24/2003
PECO Energy Company			
Long-term Issuer/Senior Debt	A- 10/25/2001	A3 (R) 4/27/2001	A- (R) 11/24/2003
Long-term Secured Debt	A -	A2 (R) 4/27/2001	A (R) 11/24/2003
Short-term/Commercial Paper	F1 10/25/2001	Prime-1 (R) 4/27/2001	A-2 (R) 11/24/2003
Preferred Stock	BBB+ 10/25/2001	Baa2 -	BBB (R) 11/24/2003
Trust Preferred	BBB+ -	Baa1 -	BBB (R) 11/24/2003

Ratings Watch Action Legend: (P) Positive, (N) Negative, (U) Uncertain, (R) Removed

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MGE Energy, Inc. (NASDAQ: MGEE)**Credit Ratings****Credit Ratings**

	Fitch	Moody's	S & P
No credit ratings information is available for MGE Energy, Inc			

Credit Ratings (Subsidiaries)

	Fitch	Moody's	S & P
Madison Gas and Electric Company			
Long-term Issuer/Senior Debt	-	Aa3 5/11/1995	AA -
Long-term Secured Debt	-	Aa2 4/28/1992	AA 2/18/1993
Short-term/Commercial Paper	-	Prime-1 -	A-1+ -

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NSTAR (NYSE: NST)
Credit Ratings
Credit Ratings

	Fitch	Moody's	S & P
<u>Long-term Issuer/Senior Debt</u>	A 8/12/2002	A2 11/30/1999	A 8/28/2003
<u>Short-term/Commercial Paper</u>	F1 8/12/2002	Prime-1 11/30/1999	A-1 8/28/2003

Credit Ratings (Subsidiaries)

	Fitch	Moody's	S & P
<u>Boston Edison Company</u>			
Long-term Issuer/Senior Debt	AA- 8/12/2002	A1 (R) 11/30/1999	A 10/4/2002
Short-term/Commercial Paper	F1+ 8/12/2002	Prime-1 (R) 11/30/1999	A-1 5/10/2001
Preferred Stock	A+ 8/12/2002	A3 -	BBB+ 5/10/2001

Ratings Watch Action Legend: (P) Positive, (N) Negative, (U) Uncertain, (R) Removed

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Pinnacle West Capital Corporation (NYSE: PNW)
Credit Ratings
Credit Ratings

	Fitch	Moody's	S & P
Long-term Issuer/Senior Debt	BBB (R) 5/9/2003	Baa2 3/2/2001	BBB 11/4/2002
Short-term/Commercial Paper	F2 (R) 5/9/2003	Prime-2 (N) 4/27/2001	A-2 11/4/2002

Ratings Watch Action Legend: (P) Positive, (N) Negative, (U) Uncertain, (R) Removed

Credit Ratings (Subsidiaries)

	Fitch	Moody's	S & P
Arizona Public Service Company			
Long-term Issuer/Senior Debt	BBB+ (R) 5/9/2003	Baa1 3/2/2001	BBB 11/4/2002
Long-term Secured Debt	A- 5/9/2003	A3 3/2/2001	A- 1/14/1997
Short-term/Commercial Paper	F2 12/4/2002	Prime-2 3/2/2001	A-2 11/4/2002

Ratings Watch Action Legend: (P) Positive, (N) Negative, (U) Uncertain, (R) Removed

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SCANA Corporation (NYSE: SCG)
Credit Ratings
Credit Ratings

	Fitch	Moody's	S & P
Long-term Issuer/Senior Debt	A- 7/29/2002	A3 (R) 12/15/1999	A- 6/6/2003
Long-term Secured Debt	-	-	A- 11/3/2003

Ratings Watch Action Legend: (P) Positive, (N) Negative, (U) Uncertain, (R) Removed

Credit Ratings (Subsidiaries)

	Fitch	Moody's	S & P
Public Service Company of North Carolina, Incorporated			
Long-term Issuer/Senior Debt	-	A2 12/15/1999	A- 6/6/2003
Short-term/Commercial Paper	-	Prime-1 7/28/2000	A-2 6/6/2003
South Carolina Electric & Gas Co.			
Long-term Issuer/Senior Debt	A 7/29/2002	A2 12/15/1999	A- 6/6/2003
Long-term Secured Debt	A+ -	A1 12/15/1999	A- 6/6/2003
Short-term/Commercial Paper	F1 7/29/2002	Prime-1 12/15/1999	A-2 6/6/2003
Preferred Stock	A 7/29/2002	Baa1 -	BBB 6/6/2003
Trust Preferred	A 7/29/2002	A3 -	BBB 6/6/2003

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Southern Company (NYSE: SO)
Credit Ratings
Credit Ratings

	Fitch	Moody's	S & P
Long-term Issuer/Senior Debt	A 12/6/2002	-	A 10/9/2003
Short-term/Commercial Paper	F1 12/6/2002	Prime-1 4/15/2002	A-1 10/9/2003
Trust Preferred	A- 12/6/2002	Baa1 -	BBB+ -

Credit Ratings (Subsidiaries)

	Fitch	Moody's	S & P
Alabama Power Company			
Long-term Issuer/Senior Debt	A 2/17/2004	A2 4/17/2000	A 10/9/2003
Long-term Secured Debt	A+ 2/17/2004	A1 4/17/2000	A 10/9/2003
Short-term/Commercial Paper	F1 2/17/2004	Prime-1 4/17/2000	A-1 10/9/2003
Preferred Stock	A- 2/17/2004	Baa1 -	BBB+ 10/9/2003
Trust Preferred	A- 2/17/2004	A3 9/26/2002	BBB+ 12/21/2000
Georgia Power Company			
Long-term Issuer/Senior Debt	A+ 12/6/2002	A2 4/17/2000	A 10/9/2003
Long-term Secured Debt	-	A1 4/17/2000	-
Short-term/Commercial Paper	-	-	A-1 10/9/2003
Preferred Stock	A 12/6/2002	Baa1 -	-
Trust Preferred	A 12/6/2002	A3 -	BBB+ 10/9/2003
Gulf Power Company			
Long-term Issuer/Senior Debt	A 12/6/2002	A2 4/17/2000	A 10/9/2003
Long-term Secured Debt	A+ -	A1 4/17/2000	A+ 10/9/2003
Subordinated Debt	A- 12/6/2002	-	A- 10/9/2003
Short-term/Commercial Paper	F1 12/6/2002	-	-
Preferred Stock	A- 12/6/2002	Baa1 -	BBB+ 10/9/2003
Trust Preferred	A- 12/6/2002	A3 -	BBB+ 12/22/2000

Mississippi Power Company

Long-term Issuer/Senior Debt	A+ 12/6/2002	A1 4/17/2000	A 10/9/2003
Long-term Secured Debt	AA- -	Aa3 4/17/2000	A+ 10/9/2003
Short-term/Commercial Paper	-	-	A-1 10/9/2003
Preferred Stock	A 12/6/2002	A3 -	BBB+ 10/9/2003
Trust Preferred	A 12/6/2002	A2 -	BBB+ (R) 4/29/2002

Savannah Electric and Power Company

Long-term Issuer/Senior Debt	-	A2 4/17/2000	A 10/9/2003
Long-term Secured Debt	-	A1 4/17/2000	A+ 10/9/2003
Preferred Stock	-	Baa1 -	-
Trust Preferred	-	A3 -	BBB+ 10/9/2003

Southern Power Company

Long-term Issuer/Senior Debt	BBB+ 7/1/2003	Baa1 10/9/2001	BBB+ 6/24/2003
Short-term/Commercial Paper	F2 7/1/2003	Prime-2 1/14/2003	A-2 2/4/2003

Ratings Watch Action Legend: (P) Positive, (N) Negative, (U) Uncertain, (R) Removed

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Vectren Corporation (NYSE: VVC)
Credit Ratings
Credit Ratings

	Fitch	Moody's	S & P
Long-term Issuer/Senior Debt	-	-	A- 7/23/2003

Credit Ratings (Subsidiaries)

	Fitch	Moody's	S & P
Indiana Gas Company, Inc.			
Long-term Issuer/Senior Debt	-	Baa1 (R) 11/25/2002	A- 7/23/2003
Southern Indiana Gas and Electric			
Long-term Issuer/Senior Debt	-	Baa1 (R) 11/25/2002	A- 7/23/2003
Long-term Secured Debt	-	A3 (R) 11/25/2002	A- 7/23/2003
Preferred Stock	-	-	BBB 7/23/2003
Vectren Utility Holdings, Inc.			
Long-term Issuer/Senior Debt	-	Baa1 (R) 11/25/2002	A- 7/23/2003
Short-term/Commercial Paper	-	Prime-2 (R) 11/25/2002	A-2 7/23/2003

Ratings Watch Action Legend: (P) Positive, (N) Negative, (U) Uncertain, (R) Removed

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Wisconsin Energy Corporation (NYSE: WEC)
Credit Ratings
Credit Ratings

	Fitch	Moody's	S & P
<u>Long-term Issuer/Senior Debt</u>	A- 10/15/2003	A3 2/4/2004	BBB+ 11/13/2003
<u>Short-term/Commercial Paper</u>	F2 10/15/2003	Prime-2 2/4/2004	A-2 11/13/2003
<u>Trust Preferred</u>	BBB+ 10/15/2003	Baa1 2/4/2004	BBB- 11/13/2003

Credit Ratings (Subsidiaries)

	Fitch	Moody's	S & P
<u>Wisconsin Electric Power Company</u>			
Long-term Issuer/Senior Debt	A+ 10/15/2003	A1 (R) 10/14/2003	A- 11/13/2003
Long-term Secured Debt	AA- 10/15/2003	Aa3 (R) 10/14/2003	A- 11/13/2003
Short-term/Commercial Paper	F1 10/15/2003	Prime-1 10/14/2003	A-2 11/13/2003
Preferred Stock	A 10/15/2003	A3 (R) 10/14/2003	BBB 11/13/2003
<u>Wisconsin Gas Company</u>			
Long-term Issuer/Senior Debt	A+ 10/15/2003	A1 (R) 10/14/2003	A- 11/13/2003
Short-term/Commercial Paper	F1 10/15/2003	Prime-1 10/14/2003	A-2 11/13/2003

Ratings Watch Action Legend: (P) Positive, (N) Negative, (U) Uncertain, (R) Removed

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Hogan Con Edison Testimony

Exhibit 8

Staff Proxy Group Selection Criteria - Parent Bond Ratings

<u>Moody's</u>	<u>Number of Ratings</u>	<u>S&P's</u>	<u>Number of Ratings</u>	
Aaa1		AAA+		
Aaa2		AAA		
Aaa3		AAA-		
Aa1		AA+		
Aa2		AA	1	
Aa3	1	AA-		Companies With Relevant Ratings In This Range Allowed In Staff Proxy Group (CECONY Rating Highlighted)
A1		A+		
A2	4	A	4	
A3	3	A-	3	
Baa1	1	BBB+	1	
Baa2		BBB		
Baa3		BBB-		
Ba1		BB+		
Ba2		BB		
Ba3		BB-		

Hogan Con Edison Testimony

Exhibit 9

Calculation of Electric & Gas ROE (Company Proxy Group)
 (Utility subsidiaries must be similarly-rated to CECONY,
 be 75%+ utility operations on average)

(B)	(N) DPS Growth 2006-08	(O) Retention Rate 2007	(P) Return on Equity 2007	(Q) B x R	(R) Increase in Shares	(S) MBR 2002	(T) S Factor	(U) V Factor	(V) S x V	(W) Sustainable Growth	(X) Long-Form ROE
Company											
Alliant	6.27	0.37	8.51	3.13	0.22	1.21	0.27	0.17	0.05	3.18	7.82%
Ameren	1.04	0.21	11.34	2.34	1.09	1.70	1.84	0.41	0.76	3.10	8.48%
CH Energy	0.61	0.27	9.23	2.46	-1.21	1.47	-1.79	0.32	-0.57	1.89	6.51%
Con Edison	0.88	0.28	9.97	2.74	0.66	1.44	0.95	0.31	0.29	3.03	8.19%
DTE	0.64	0.51	11.37	5.75	0.59	1.23	0.72	0.19	0.13	5.88	10.65%
Exelon	2.83	0.64	16.57	10.63	0.60	2.48	1.49	0.60	0.89	11.52	14.08%
MGE Energy	0.49	0.39	12.79	4.95	2.83	2.08	5.90	0.52	3.07	8.02	11.52%
Nstar	1.78	0.42	12.85	5.36	0.00	1.86	0.00	0.46	0.00	5.36	9.60%
Pinnacle West	5.19	0.37	9.81	3.67	0.00	1.25	0.00	0.20	0.00	3.67	8.84%
SCANA	4.00	0.46	11.85	5.45	0.00	1.64	0.00	0.39	0.00	5.45	9.56%
Southern Company	3.62	0.31	14.48	4.53	1.33	2.28	3.05	0.56	1.71	6.24	10.81%
Vectren Corporation	3.36	0.37	12.40	4.53	0.36	1.70	0.62	0.41	0.25	4.78	9.47%
Wisconsin Energy	7.72	0.64	10.39	6.61	1.25	1.60	1.99	0.37	0.74	7.35	9.94%
Average	2.96	0.40	11.66	4.78	0.59	1.69	1.16	0.38	0.56	5.34 Median	9.65% 9.56%

Calculation of GFC Cost of Equity - Company Proxy Group

Merril Lynch Cost of Market 10.90% (February 2004)

Treasury Rates

10 year 25+ year (FRB Statistical Release)

(<http://www.federalreserve.gov/releases>)

Sep-03	4.27%	5.23%
Oct-03	4.29%	5.24%
Nov-03	4.30%	5.20%
Dec-03	4.27%	5.15%
Jan-04	4.15%	5.05%
Feb-04	4.08%	4.99%

Risk Free Rate (9/03 - 2/04) 4.69%

Proxy Group Beta 0.68

Proxy Group DCF ROE 9.56%

Traditional CAPM ROE 8.92%

Zero Beta CAPM ROE 9.41%

Generic CAPM ROE 9.16%

2/3 DCF 1/3 CAPM Weighting
ROE 9.43%

**Calculation of Adjustment to Proxy Group for Non-Utility Assets
Company Proxy Group - Staff ROE Methodology**

	<u>Percent of Assets</u>	<u>Required Return on Equity</u>	<u>Weighted Required Return on Equity</u>
Non-Utility Operations	14.78% (1)	10.90% (2)	1.61%
Utility Operations	<u>85.22%</u>	<u>9.18%</u>	<u>7.82%</u>
Total Proxy Group:			9.43%

(1) Exhibit___(JSH-9), Page 1

(2) Market return per Merrill Lynch, February 2004, Quantitative Profiles

Hogan Con Edison Testimony

Exhibit 10


Ameren Corporation (NYSE: AEE)
Dividends
NYSE-AEE
Common Equity Dividends
LTM Div Payout (%) 78.2 Current Div Yield (%) 5.28
Description: Common stock, \$0.01 par value

Announce Date	Ex-Dividend Date	Pay Date	Amount (\$)	Frequency
2/13/2004	3/8/2004	3/31/2004	0.6350	Quarterly
10/10/2003	12/8/2003	12/31/2003	0.6350	Quarterly
8/25/2003	9/8/2003	9/30/2003	0.6350	Quarterly
4/22/2003	6/9/2003	6/30/2003	0.6350	Quarterly
2/14/2003	3/10/2003	3/31/2003	0.6350	Quarterly
10/11/2002	12/9/2002	12/31/2002	0.6350	Quarterly
8/23/2002	9/9/2002	9/30/2002	0.6350	Quarterly
4/23/2002	6/6/2002	6/28/2002	0.6350	Quarterly
2/8/2002	3/7/2002	3/29/2002	0.6350	Quarterly
10/12/2001	12/6/2001	12/31/2001	0.6350	Quarterly
8/23/2001	9/7/2001	9/28/2001	0.6350	Quarterly
4/24/2001	6/6/2001	6/29/2001	0.6350	Quarterly
2/9/2001	3/6/2001	3/30/2001	0.6350	Quarterly
10/13/2000	12/7/2000	12/29/2000	0.6350	Quarterly
8/25/2000	9/7/2000	9/29/2000	0.6350	Quarterly
4/25/2000	6/6/2000	6/30/2000	0.6350	Quarterly
2/11/2000	3/7/2000	3/31/2000	0.6350	Quarterly
10/8/1999	12/6/1999	12/31/1999	0.6350	Quarterly
8/27/1999	9/3/1999	9/30/1999	0.6350	Quarterly
4/27/1999	6/7/1999	6/30/1999	0.6350	Quarterly
2/12/1999	3/8/1999	3/31/1999	0.6350	Quarterly
10/9/1998	12/7/1998	12/31/1998	0.6350	Quarterly
8/28/1998	9/8/1998	9/30/1998	0.6350	Quarterly
4/28/1998	6/8/1998	6/30/1998	0.6350	Quarterly
2/13/1998	3/6/1998	3/31/1998	0.6350	Quarterly

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Dividend information is only comprehensive for primary common equities.

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CH Energy Group, Inc. (NYSE: CHG)
Dividends
NYSE-CHG
Common Equity Dividends
LTM Div Payout (%) 78.0 Current Div Yield (%) 4.39
Description: Common stock, \$0.10 par value

Announce Date	Ex-Dividend Date	Pay Date	Amount (\$)	Frequency
12/19/2003	1/7/2004	2/2/2004	0.5400	Quarterly
9/26/2003	10/6/2003	11/3/2003	0.5400	Quarterly
5/23/2003	7/8/2003	8/1/2003	0.5400	Quarterly
3/14/2003	4/8/2003	5/2/2003	0.5400	Quarterly
12/20/2002	1/8/2003	2/3/2003	0.5400	Quarterly
9/27/2002	10/8/2002	11/1/2002	0.5400	Quarterly
6/28/2002	7/8/2002	8/1/2002	0.5400	Quarterly
3/22/2002	4/8/2002	5/1/2002	0.5400	Quarterly
12/21/2001	1/8/2002	2/1/2002	0.5400	Quarterly
10/1/2001	10/5/2001	11/1/2001	0.5400	Quarterly
6/22/2001	7/6/2001	8/1/2001	0.5400	Quarterly
3/23/2001	4/6/2001	5/1/2001	0.5400	Quarterly
12/15/2000	1/8/2001	2/1/2001	0.5400	Quarterly
9/22/2000	10/5/2000	11/1/2000	0.5400	Quarterly
6/23/2000	7/6/2000	8/1/2000	0.5400	Quarterly
3/24/2000	4/6/2000	5/1/2000	0.5400	Quarterly
12/17/1999	1/6/2000	2/1/2000	0.5400	Quarterly
9/24/1999	10/6/1999	11/1/1999	0.5400	Quarterly
6/25/1999	7/7/1999	8/2/1999	0.5400	Quarterly
3/26/1999	4/7/1999	5/1/1999	0.5400	Quarterly
12/18/1998	1/7/1999	2/1/1999	0.5400	Quarterly
9/25/1998	10/7/1998	11/2/1998	0.5400	Quarterly
6/26/1998	7/8/1998	8/1/1998	0.5400	Quarterly
3/27/1998	4/7/1998	5/1/1998	0.5350	Quarterly
12/19/1997	1/7/1998	2/2/1998	0.5350	Quarterly
9/26/1997	10/8/1997	11/1/1997	0.5350	Quarterly
6/27/1997	7/8/1997	8/1/1997	0.5350	Quarterly
3/21/1997	4/8/1997	5/1/1997	0.5300	Quarterly
12/20/1996	1/8/1997	2/1/1997	0.5300	Quarterly
9/27/1996	10/8/1996	11/1/1996	0.5300	Quarterly
7/1/1996	7/8/1996	8/1/1996	0.5300	Quarterly
3/22/1996	4/8/1996	5/1/1996	0.5250	Quarterly
12/19/1995	1/8/1996	2/1/1996	0.5250	Quarterly
9/25/1995	10/5/1995	11/1/1995	0.5250	Quarterly
6/26/1995	7/6/1995	8/1/1995	0.5250	Quarterly
3/24/1995	4/4/1995	5/1/1995	0.5200	Quarterly

12/16/1994	1/4/1995	2/1/1995	0.5200	Quarterly
9/23/1994	10/4/1994	11/1/1994	0.5200	Quarterly
6/24/1994	7/5/1994	8/1/1994	0.5200	Quarterly
3/25/1994	4/5/1994	5/2/1994	0.5150	Quarterly
12/21/1993	1/4/1994	2/1/1994	0.5150	Quarterly
9/27/1993	10/4/1993	11/1/1993	0.5150	Quarterly
6/25/1993	7/2/1993	8/2/1993	0.5150	Quarterly
3/26/1993	4/2/1993	5/1/1993	0.5000	Quarterly
12/18/1992	1/5/1993	2/1/1993	0.5000	Quarterly
9/25/1992	10/5/1992	11/2/1992	0.5000	Quarterly
6/26/1992	7/6/1992	8/1/1992	0.5000	Quarterly
3/27/1992	4/6/1992	5/1/1992	0.4800	Quarterly
12/17/1991	1/6/1992	2/1/1992	0.4800	Quarterly
9/27/1991	10/4/1991	11/1/1991	0.4800	Quarterly
6/28/1991	7/3/1991	8/1/1991	0.4800	Quarterly
3/22/1991	4/4/1991	5/1/1991	0.4600	Quarterly
12/14/1990	1/4/1991	2/1/1991	0.4600	Quarterly
9/28/1990	10/3/1990	11/1/1990	0.4600	Quarterly
6/22/1990	7/3/1990	8/1/1990	0.4600	Quarterly
3/23/1990	4/4/1990	5/1/1990	0.4400	Quarterly
12/15/1989	1/4/1990	2/1/1990	0.4400	Quarterly

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Consolidated Edison, Inc. (NYSE: ED)
Dividends

NYSE-ED

Common Equity Dividends

LTM Div Payout (%) 94.1 Current Div Yield (%) 5.03

Description: Common stock, \$0.10 par value

Announce Date	Ex-Dividend Date	Pay Date	Amount (\$)	Frequency
1/22/2004	2/9/2004	3/15/2004	0.5650	Quarterly
10/16/2003	11/7/2003	12/15/2003	0.5600	Quarterly
7/17/2003	8/11/2003	9/15/2003	0.5600	Quarterly
4/17/2003	5/12/2003	6/15/2003	0.5600	Quarterly
1/16/2003	2/10/2003	3/15/2003	0.5600	Quarterly
10/17/2002	11/8/2002	12/15/2002	0.5550	Quarterly
7/18/2002	8/12/2002	9/15/2002	0.5550	Quarterly
4/18/2002	5/13/2002	6/15/2002	0.5550	Quarterly
1/17/2002	2/11/2002	3/15/2002	0.5550	Quarterly
10/18/2001	11/9/2001	12/15/2001	0.5500	Quarterly
7/19/2001	8/13/2001	9/15/2001	0.5500	Quarterly
4/19/2001	5/14/2001	6/15/2001	0.5500	Quarterly
1/18/2001	2/12/2001	3/15/2001	0.5500	Quarterly
10/19/2000	11/13/2000	12/15/2000	0.5450	Quarterly
7/20/2000	8/14/2000	9/15/2000	0.5450	Quarterly
4/20/2000	5/15/2000	6/15/2000	0.5450	Quarterly
1/20/2000	2/14/2000	3/15/2000	0.5450	Quarterly
10/26/1999	11/15/1999	12/15/1999	0.5350	Quarterly
7/27/1999	8/16/1999	9/15/1999	0.5350	Quarterly
4/27/1999	5/17/1999	6/15/1999	0.5350	Quarterly
1/26/1999	2/12/1999	3/15/1999	0.5350	Quarterly
10/27/1998	11/16/1998	12/15/1998	0.5300	Quarterly
7/28/1998	8/17/1998	9/15/1998	0.5300	Quarterly
4/28/1998	5/11/1998	6/15/1998	0.5300	Quarterly
1/27/1998	2/13/1998	3/15/1998	0.5300	Quarterly
10/28/1997	11/17/1997	12/15/1997	0.5250	Quarterly
7/22/1997	8/11/1997	9/15/1997	0.5250	Quarterly
4/22/1997	5/12/1997	6/15/1997	0.5250	Quarterly
1/28/1997	2/14/1997	3/15/1997	0.5250	Quarterly
10/22/1996	11/8/1996	12/15/1996	0.5200	Quarterly
7/23/1996	8/12/1996	9/15/1996	0.5200	Quarterly
4/23/1996	5/13/1996	6/15/1996	0.5200	Quarterly
1/23/1996	2/12/1996	3/15/1996	0.5200	Quarterly
10/24/1995	11/13/1995	12/15/1995	0.5100	Quarterly
7/25/1995	8/14/1995	9/15/1995	0.5100	Quarterly
4/25/1995	5/11/1995	6/15/1995	0.5100	Quarterly

1/24/1995	2/9/1995	3/15/1995	0.5100	Quarterly
10/25/1994	11/9/1994	12/15/1994	0.5000	Quarterly
7/26/1994	8/11/1994	9/15/1994	0.5000	Quarterly
4/26/1994	5/12/1994	6/15/1994	0.5000	Quarterly
1/25/1994	2/10/1994	3/15/1994	0.5000	Quarterly
10/26/1993	11/10/1993	12/15/1993	0.4850	Quarterly
7/27/1993	8/12/1993	9/15/1993	0.4850	Quarterly
4/27/1993	5/13/1993	6/15/1993	0.4850	Quarterly
1/26/1993	2/10/1993	3/15/1993	0.4850	Quarterly
10/27/1992	11/12/1992	12/15/1992	0.4750	Quarterly
7/28/1992	8/13/1992	9/15/1992	0.4750	Quarterly
4/28/1992	5/7/1992	6/15/1992	0.4750	Quarterly
1/28/1992	2/12/1992	3/15/1992	0.4750	Quarterly
10/22/1991	11/6/1991	12/15/1991	0.4650	Quarterly
7/23/1991	8/8/1991	9/15/1991	0.4650	Quarterly
4/23/1991	5/9/1991	6/15/1991	0.4650	Quarterly
1/22/1991	2/7/1991	3/15/1991	0.4650	Quarterly
10/23/1990	11/7/1990	12/15/1990	0.4550	Quarterly
7/24/1990	8/9/1990	9/15/1990	0.4550	Quarterly
4/24/1990	5/10/1990	6/15/1990	0.4550	Quarterly
1/23/1990	2/8/1990	3/15/1990	0.4550	Quarterly

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MGE Energy, Inc. (NASDAQ: MGEE)**Dividends**

NASDAQ-MGEE

Common Equity Dividends

LTM Div Payout (%) 78.8 Current Div Yield (%) 4.33

Description: Common Stock

Announce Date	Ex-Dividend Date	Pay Date	Amount (\$)	Frequency
1/16/2004	2/26/2004	3/15/2004	0.3383	Quarterly
11/21/2003	11/26/2003	12/15/2003	0.3383	Quarterly
8/15/2003	8/27/2003	9/15/2003	0.3383	Quarterly
5/20/2003	5/28/2003	6/15/2003	0.3358	Quarterly
2/28/2003	3/4/2003	3/15/2003	0.3358	Quarterly
11/15/2002	11/26/2002	12/15/2002	0.3358	Quarterly
8/16/2002	8/28/2002	9/15/2002	0.3358	Quarterly
5/14/2002	5/29/2002	6/15/2002	0.3333	Quarterly
2/22/2002	2/27/2002	3/15/2002	0.3333	Quarterly
11/16/2001	11/28/2001	12/15/2001	0.3333	Quarterly
8/17/2001	8/29/2001	9/15/2001	0.3333	Quarterly
5/22/2001	5/30/2001	6/15/2001	0.3308	Quarterly
2/23/2001	2/27/2001	3/15/2001	0.3308	Quarterly
11/17/2000	11/29/2000	12/15/2000	0.3308	Quarterly
8/18/2000	8/30/2000	9/15/2000	0.3308	Quarterly
5/9/2000	5/30/2000	6/15/2000	0.3283	Quarterly
2/18/2000	2/28/2000	3/15/2000	0.3283	Quarterly
11/19/1999	11/29/1999	12/15/1999	0.3283	Quarterly
8/20/1999	8/30/1999	9/15/1999	0.3280	Quarterly
5/4/1999	5/27/1999	6/15/1999	0.3258	Quarterly
2/19/1999	2/25/1999	3/15/1999	0.3258	Quarterly
11/20/1998	11/27/1998	12/15/1998	0.3258	Quarterly
7/17/1998	8/28/1998	9/15/1998	0.3258	Quarterly
5/5/1998	5/28/1998	6/15/1998	0.3233	Quarterly
2/20/1998	2/25/1998	3/15/1998	0.3233	Quarterly
11/21/1997	11/26/1997	12/15/1997	0.3233	Quarterly
8/15/1997	8/27/1997	9/15/1997	0.3233	Quarterly
5/5/1997	5/28/1997	6/15/1997	0.3200	Quarterly
2/21/1997	2/26/1997	3/15/1997	0.3200	Quarterly
11/15/1996	11/26/1996	12/15/1996	0.3200	Quarterly
8/16/1996	8/28/1996	9/15/1996	0.3200	Quarterly
5/6/1996	5/29/1996	6/15/1996	0.3167	Quarterly
2/16/1996	2/28/1996	3/15/1996	0.2111	Quarterly
11/17/1995	11/29/1995	12/15/1995	0.3167	Quarterly
8/18/1995	8/30/1995	9/15/1995	0.3167	Quarterly
5/19/1995	5/25/1995	6/15/1995	0.3133	Quarterly

2/17/1995	2/23/1995	3/15/1995	0.3133	Quarterly
11/18/1994	11/25/1994	12/15/1994	0.3133	Quarterly
8/12/1994	8/26/1994	9/15/1994	0.3133	Quarterly
5/20/1994	5/25/1994	6/15/1994	0.3100	Quarterly
2/18/1994	2/23/1994	3/15/1994	0.3100	Quarterly
11/19/1993	11/24/1993	12/15/1993	0.3100	Quarterly
8/20/1993	8/26/1993	9/15/1993	0.3100	Quarterly
5/21/1993	5/25/1993	6/15/1993	0.3033	Quarterly
2/19/1993	2/23/1993	3/15/1993	0.3033	Quarterly
11/20/1992	11/24/1992	12/15/1992	0.3033	Quarterly
8/21/1992	8/26/1992	9/15/1992	0.3033	Quarterly
5/15/1992	5/26/1992	6/15/1992	0.2933	Quarterly
2/21/1992	2/24/1992	3/15/1992	0.2933	Quarterly
10/18/1991	11/22/1991	12/15/1991	0.2933	Quarterly
8/16/1991	8/26/1991	9/15/1991	0.2933	Quarterly
5/17/1991	5/24/1991	6/15/1991	0.2889	Quarterly
2/15/1991	2/25/1991	3/15/1991	0.2889	Quarterly
11/16/1990	11/26/1990	12/15/1990	0.2889	Quarterly
8/17/1990	8/27/1990	9/15/1990	0.2889	Quarterly
5/18/1990	5/25/1990	6/15/1990	0.2845	Quarterly
2/16/1990	2/23/1990	3/15/1990	0.2845	Quarterly

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NSTAR (NYSE: NST)**Dividends**

NYSE-NST

Common Equity Dividends

LTM Div Payout (%) 59.7 Current Div Yield (%) 4.29

Description: Common stock, \$1.00 par value

Announce Date	Ex-Dividend Date	Pay Date	Amount (\$)	Frequency
12/18/2003	1/7/2004	2/1/2004	0.5550	Quarterly
9/25/2003	10/8/2003	11/1/2003	0.5400	Quarterly
6/26/2003	7/8/2003	8/1/2003	0.5400	Quarterly
3/27/2003	4/8/2003	5/1/2003	0.5400	Quarterly
12/19/2002	1/8/2003	2/1/2003	0.5400	Quarterly
9/26/2002	10/8/2002	11/1/2002	0.5300	Quarterly
6/27/2002	7/8/2002	8/1/2002	0.5300	Quarterly
3/28/2002	4/8/2002	5/1/2002	0.5300	Quarterly
12/20/2001	1/8/2002	2/1/2002	0.5300	Quarterly
9/27/2001	10/5/2001	11/1/2001	0.5150	Quarterly
6/28/2001	7/6/2001	8/1/2001	0.5150	Quarterly
3/22/2001	4/6/2001	5/1/2001	0.5150	Quarterly
12/21/2000	1/8/2001	2/1/2001	0.5150	Quarterly
9/28/2000	10/5/2000	11/1/2000	0.5000	Quarterly
6/22/2000	7/6/2000	8/1/2000	0.5000	Quarterly
3/23/2000	4/6/2000	5/1/2000	0.5000	Quarterly
12/16/1999	1/6/2000	2/1/2000	0.5000	Quarterly
9/23/1999	10/6/1999	11/1/1999	0.4850	Quarterly

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SCANA Corporation (NYSE: SCG)**Dividends**

NYSE-SCG

Common Equity Dividends

LTM Div Payout (%) 54.3 Current Div Yield (%) 4.03

Description: Common stock, no par value

Announce Date	Ex-Dividend Date	Pay Date	Amount (\$)	Frequency
2/19/2004	3/8/2004	4/1/2004	0.3650	Quarterly
11/7/2003	12/8/2003	1/1/2004	0.3450	Quarterly
7/31/2003	9/8/2003	10/1/2003	0.3450	Quarterly
5/1/2003	6/6/2003	7/1/2003	0.3450	Quarterly
2/20/2003	3/6/2003	4/1/2003	0.3450	Quarterly
10/31/2002	12/6/2002	1/1/2003	0.3250	Quarterly
8/1/2002	9/6/2002	10/1/2002	0.3250	Quarterly
5/2/2002	6/6/2002	7/1/2002	0.3250	Quarterly
2/21/2002	3/6/2002	4/1/2002	0.3250	Quarterly
11/1/2001	12/6/2001	1/1/2002	0.3000	Quarterly
8/2/2001	9/6/2001	10/1/2001	0.3000	Quarterly
5/3/2001	6/6/2001	7/1/2001	0.3000	Quarterly
2/22/2001	3/7/2001	4/1/2001	0.3000	Quarterly
10/17/2000	12/6/2000	1/1/2001	0.2875	Quarterly
8/16/2000	9/6/2000	10/1/2000	0.2875	Quarterly
4/27/2000	6/7/2000	7/1/2000	0.2875	Quarterly
2/22/2000	3/8/2000	4/1/2000	0.2875	Quarterly
10/19/1999	12/8/1999	1/1/2000	0.2750	Quarterly
8/18/1999	9/8/1999	10/1/1999	0.2750	Quarterly
4/22/1999	6/8/1999	7/1/1999	0.3850	Quarterly
2/17/1999	3/8/1999	4/1/1999	0.3850	Quarterly
10/20/1998	12/8/1998	1/1/1999	0.3850	Quarterly
8/18/1998	9/8/1998	10/1/1998	0.3850	Quarterly
4/23/1998	6/8/1998	7/1/1998	0.3850	Quarterly
2/17/1998	3/6/1998	4/1/1998	0.3850	Quarterly
10/21/1997	12/8/1997	1/1/1998	0.3775	Quarterly
8/20/1997	9/8/1997	10/1/1997	0.3775	Quarterly
4/24/1997	6/6/1997	7/1/1997	0.3775	Quarterly
2/18/1997	3/6/1997	4/1/1997	0.3775	Quarterly
10/22/1996	12/6/1996	1/1/1997	0.3675	Quarterly
8/21/1996	9/6/1996	10/1/1996	0.3675	Quarterly
4/25/1996	6/6/1996	7/1/1996	0.3675	Quarterly
2/20/1996	3/6/1996	4/1/1996	0.3675	Quarterly
10/17/1995	12/6/1995	1/1/1996	0.3600	Quarterly
8/23/1995	9/6/1995	10/1/1995	0.3600	Quarterly
4/26/1995	6/6/1995	7/1/1995	0.3600	Quarterly

2/14/1995	3/6/1995	4/1/1995	0.3600	Quarterly
10/18/1994	12/5/1994	1/1/1995	0.3525	Quarterly
8/24/1994	9/2/1994	10/1/1994	0.3525	Quarterly
4/28/1994	6/6/1994	7/1/1994	0.3525	Quarterly
2/15/1994	3/4/1994	4/1/1994	0.3525	Quarterly
10/19/1993	12/6/1993	1/1/1994	0.3425	Quarterly
8/25/1993	9/3/1993	10/1/1993	0.3425	Quarterly
4/29/1993	6/4/1993	7/1/1993	0.3425	Quarterly
2/16/1993	3/4/1993	4/1/1993	0.3425	Quarterly

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Southern Company (NYSE: SO)**Dividends**

NYSE-SO

Common Equity Dividends

LTM Div Payout (%) NA Current Div Yield (%) 4.57

Description: Common stock, \$5.00 par value

Announce Date	Ex-Dividend Date	Pay Date	Amount (\$)	Frequency
1/15/2004	1/29/2004	3/6/2004	0.3500	Quarterly
10/20/2003	10/30/2003	12/6/2003	0.3500	Quarterly
7/21/2003	7/31/2003	9/6/2003	0.3500	Quarterly
4/21/2003	5/1/2003	6/6/2003	0.3425	Quarterly
1/16/2003	1/30/2003	3/6/2003	0.3425	Quarterly
10/21/2002	10/31/2002	12/6/2002	0.3425	Quarterly
7/15/2002	8/1/2002	9/6/2002	0.3425	Quarterly
4/15/2002	5/2/2002	6/6/2002	0.3350	Quarterly
1/22/2002	1/31/2002	3/6/2002	0.3350	Quarterly
10/15/2001	11/1/2001	12/6/2001	0.3350	Quarterly
7/16/2001	8/2/2001	9/6/2001	0.3350	Quarterly
4/16/2001	5/3/2001	6/6/2001	0.3350	Quarterly
2/19/2001	4/3/2001	4/2/2001	13.7972	Special
1/17/2001	2/1/2001	3/6/2001	0.3350	Quarterly
10/16/2000	11/2/2000	12/6/2000	0.3350	Quarterly
7/17/2000	8/3/2000	9/6/2000	0.3350	Quarterly
4/17/2000	4/27/2000	6/6/2000	0.3350	Quarterly
1/14/2000	2/3/2000	3/6/2000	0.3350	Quarterly
10/18/1999	10/28/1999	12/6/1999	0.3350	Quarterly
7/19/1999	7/29/1999	9/4/1999	0.3350	Quarterly
4/19/1999	4/29/1999	6/5/1999	0.3350	Quarterly
1/19/1999	1/28/1999	3/6/1999	0.3350	Quarterly
10/19/1998	10/29/1998	12/5/1998	0.3350	Quarterly
7/20/1998	7/30/1998	9/5/1998	0.3350	Quarterly
4/20/1998	4/30/1998	6/6/1998	0.3350	Quarterly
1/19/1998	1/29/1998	3/6/1998	0.3350	Quarterly
10/20/1997	10/30/1997	12/6/1997	0.3250	Quarterly
7/21/1997	7/31/1997	9/6/1997	0.3250	Quarterly
4/21/1997	5/1/1997	6/6/1997	0.3250	Quarterly
1/20/1997	1/30/1997	3/6/1997	0.3250	Quarterly
10/21/1996	10/31/1996	12/6/1996	0.3150	Quarterly
7/19/1996	8/1/1996	9/6/1996	0.3150	Quarterly
4/15/1996	5/2/1996	6/6/1996	0.3150	Quarterly
1/15/1996	2/1/1996	3/6/1996	0.3150	Quarterly
10/16/1995	11/2/1995	12/6/1995	0.3050	Quarterly
7/17/1995	8/3/1995	9/6/1995	0.3050	Quarterly

4/17/1995	4/25/1995	6/6/1995	0.3050	Quarterly
1/16/1995	1/31/1995	3/6/1995	0.3050	Quarterly
10/17/1994	11/1/1994	12/6/1994	0.2950	Quarterly
7/18/1994	7/26/1994	9/6/1994	0.2950	Quarterly
4/18/1994	4/26/1994	6/6/1994	0.2950	Quarterly
1/17/1994	2/1/1994	3/5/1994	0.2950	Quarterly
10/18/1993	10/26/1993	12/6/1993	0.2850	Quarterly
7/19/1993	7/27/1993	9/6/1993	0.2850	Quarterly
4/19/1993	4/27/1993	6/5/1993	0.2850	Quarterly
1/18/1993	1/26/1993	3/6/1993	0.2850	Quarterly
10/19/1992	10/27/1992	12/5/1992	0.2750	Quarterly
7/20/1992	7/28/1992	9/5/1992	0.2750	Quarterly
4/20/1992	4/28/1992	6/6/1992	0.2750	Quarterly
1/20/1992	1/28/1992	3/6/1992	0.2750	Quarterly
10/21/1991	10/29/1991	12/6/1991	0.2675	Quarterly
7/15/1991	7/30/1991	9/6/1991	0.2675	Quarterly
4/15/1991	4/30/1991	6/6/1991	0.2675	Quarterly
1/21/1991	1/29/1991	3/6/1991	0.2675	Quarterly
10/15/1990	10/30/1990	12/6/1990	0.2675	Quarterly
7/16/1990	7/31/1990	9/6/1990	0.2675	Quarterly
4/16/1990	5/1/1990	6/6/1990	0.2675	Quarterly
1/15/1990	1/30/1990	3/6/1990	0.2675	Quarterly

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Dividend information is only comprehensive for primary common equities.

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Vectren Corporation (NYSE: VVC)
Dividends

NYSE-VVC

Common Equity Dividends

LTM Div Payout (%) NA Current Div Yield (%) 4.43

Description: Common stock, no par value

Announce Date	Ex-Dividend Date	Pay Date	Amount (\$)	Frequency
1/28/2004	2/11/2004	3/1/2004	0.2850	Quarterly
10/31/2003	11/12/2003	12/1/2003	0.2850	Quarterly
7/22/2003	8/13/2003	9/2/2003	0.2750	Quarterly
4/24/2003	5/13/2003	6/2/2003	0.2750	Quarterly
1/29/2003	2/12/2003	3/3/2003	0.2750	Quarterly
11/1/2002	11/13/2002	12/2/2002	0.2750	Quarterly
7/24/2002	8/13/2002	9/1/2002	0.2650	Quarterly
4/24/2002	5/13/2002	6/1/2002	0.2650	Quarterly
1/24/2002	2/13/2002	3/1/2002	0.2650	Quarterly
10/26/2001	11/13/2001	12/1/2001	0.2650	Quarterly
7/26/2001	8/13/2001	9/1/2001	0.2550	Quarterly
4/25/2001	5/11/2001	6/1/2001	0.2550	Quarterly
1/24/2001	2/13/2001	3/1/2001	0.2550	Quarterly
10/30/2000	11/13/2000	12/1/2000	0.2550	Quarterly
7/27/2000	8/11/2000	9/1/2000	0.2425	Quarterly
4/26/2000	5/11/2000	6/1/2000	0.2425	Quarterly

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SNL*i*

SNL Financial

Wisconsin Energy Corporation (NYSE: WEC)**Dividends**

NYSE-WEC

Common Equity Dividends

LTM Div Payout (%) 38.8 Current Div Yield (%) 2.55

Description: Common stock, \$0.01 par value

Announce Date	Ex-Dividend Date	Pay Date	Amount (\$)	Frequency
2/4/2004	5/12/2004	6/1/2004	0.2100	Quarterly
1/15/2004	2/11/2004	3/1/2004	0.2000	Quarterly
10/23/2003	11/12/2003	12/1/2003	0.2000	Quarterly
7/31/2003	8/12/2003	9/1/2003	0.2000	Quarterly
5/1/2003	5/12/2003	6/1/2003	0.2000	Quarterly
1/16/2003	2/12/2003	3/1/2003	0.2000	Quarterly
10/22/2002	11/12/2002	12/1/2002	0.2000	Quarterly
7/24/2002	8/12/2002	9/1/2002	0.2000	Quarterly
5/2/2002	5/10/2002	6/1/2002	0.2000	Quarterly
2/6/2002	2/12/2002	3/1/2002	0.2000	Quarterly
11/1/2001	11/9/2001	12/1/2001	0.2000	Quarterly
7/30/2001	8/10/2001	9/1/2001	0.2000	Quarterly
5/2/2001	5/10/2001	6/1/2001	0.2000	Quarterly
2/7/2001	2/12/2001	3/1/2001	0.2000	Quarterly
10/25/2000	11/10/2000	12/1/2000	0.2000	Quarterly
7/28/2000	8/10/2000	9/1/2000	0.3900	Quarterly
4/26/2000	5/10/2000	6/1/2000	0.3900	Quarterly
1/25/2000	2/10/2000	3/1/2000	0.3900	Quarterly
10/28/1999	11/9/1999	12/1/1999	0.3900	Quarterly
7/28/1999	8/10/1999	9/1/1999	0.3900	Quarterly
4/27/1999	5/10/1999	6/1/1999	0.3900	Quarterly
1/28/1999	2/10/1999	3/1/1999	0.3900	Quarterly
10/28/1998	11/9/1998	12/1/1998	0.3900	Quarterly
7/30/1998	8/10/1998	9/1/1998	0.3900	Quarterly
4/27/1998	5/8/1998	6/1/1998	0.3900	Quarterly
1/29/1998	2/10/1998	3/1/1998	0.3850	Quarterly
10/22/1997	11/10/1997	12/1/1997	0.3850	Quarterly
7/30/1997	8/11/1997	9/2/1997	0.3850	Quarterly
4/30/1997	5/9/1997	6/2/1997	0.3850	Quarterly
1/29/1997	2/11/1997	3/3/1997	0.3800	Quarterly
10/30/1996	11/8/1996	12/2/1996	0.3800	Quarterly
7/24/1996	8/9/1996	9/3/1996	0.3800	Quarterly
4/25/1996	5/9/1996	6/3/1996	0.3800	Quarterly
2/1/1996	2/9/1996	3/1/1996	0.3675	Quarterly
10/26/1995	11/6/1995	12/1/1995	0.3675	Quarterly
7/26/1995	8/4/1995	9/1/1995	0.3675	Quarterly

4/27/1995	5/2/1995	6/1/1995	0.3675	Quarterly
1/26/1995	2/2/1995	3/1/1995	0.3525	Quarterly
10/26/1994	11/2/1994	12/1/1994	0.3525	Quarterly
7/27/1994	8/2/1994	9/1/1994	0.3525	Quarterly
4/28/1994	5/3/1994	6/1/1994	0.3525	Quarterly
1/27/1994	2/2/1994	3/1/1994	0.3388	Quarterly
10/28/1993	11/2/1993	12/1/1993	0.3388	Quarterly
7/29/1993	8/3/1993	9/1/1993	0.3388	Quarterly
4/28/1993	5/4/1993	6/1/1993	0.3388	Quarterly
1/27/1993	2/2/1993	3/1/1993	0.3250	Quarterly
10/29/1992	11/3/1992	12/1/1992	0.3250	Quarterly
7/22/1992	8/4/1992	9/1/1992	0.3250	Quarterly
4/22/1992	5/1/1992	6/1/1992	0.3250	Quarterly
1/29/1992	2/3/1992	3/1/1992	0.3100	Quarterly
10/28/1991	11/1/1991	12/1/1991	0.3100	Quarterly
7/24/1991	8/1/1991	9/1/1991	0.3100	Quarterly
4/24/1991	5/1/1991	6/1/1991	0.3100	Quarterly
1/23/1991	2/1/1991	3/1/1991	0.2933	Quarterly
10/25/1990	11/1/1990	12/1/1990	0.2933	Quarterly
7/25/1990	8/1/1990	9/1/1990	0.2933	Quarterly
4/26/1990	5/1/1990	6/1/1990	0.2933	Quarterly
1/24/1990	2/1/1990	3/1/1990	0.2767	Quarterly

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Hogan Con Edison Testimony

Exhibit 11

Merrill Lynch Universe Sector/Industry Factor Evaluation (cont'd)

	Valuation Analysis											Expectation Analysis						
	# of Comp	% ML Univ	Impl. Return	Reqd Return	DDM Alpha	Eqty. Duration	ML Adj Beta	P/E Ratio	Price/ Book	Yield	Earnings (Decile)				PR 5yr Growth	EPS Growth		
											Surprise	Risk	Torp	Disp		Est. Rev.	2004E	2005E
Duration																		
9.46 To 24.49	148	15.1	12.1	9.1	3.0	21.1	0.77	14.4	2.6	3.0	6	5	4	5	5	8.6	0	1
24.49 To 28.41	148	21.1	11.7	9.8	1.9	26.6	0.86	16.1	3.2	2.1	5	5	5	4	5	11.6	8	9
28.48 To 32.01	149	16.0	10.7	9.9	0.8	30.1	0.87	18.0	3.0	1.7	6	4	4	3	6	11.7	12	14
32.02 To 36.99	148	12.8	10.0	10.0	0.0	34.7	0.89	20.8	4.0	1.0	5	5	4	4	5	12.8	20	14
37.07 To 76.37	148	18.4	-9.0	13.2	-4.2	45.9	1.30	24.6	3.5	0.4	5	5	6	5	4	14.1	28	20
Uncoded	482	16.6		12.2			1.17	23.3	2.5	1.2	5	5	6	6	5	14.6	37	27
Growth Sectors																		
Growth	559	47.4	10.9	11.4	-0.5	32.4	1.08	21.7	3.6	1.1	6	4	5	4	5	14.0	15	15
Growth Cyclical	323	22.4	10.2	11.6	-1.4	35.4	1.09	16.8	2.8	1.7	5	5	6	5	5	12.2	17	13
Growth Defensive	105	9.9	11.7	7.4	4.3	29.9	0.55	18.7	3.3	1.4	5	4	5	3	6	11.8	13	13
Cyclical	151	10.0	9.6	11.2	-1.6	33.0	1.05	16.8	2.5	1.9	5	5	6	6	4	10.2	26	20
Defensive	85	10.3	11.0	8.4	2.6	23.7	0.69	15.3	2.3	3.1	6	6	5	6	5	6.9	-3	-1
EPS Surprise																		
Most Optimistic	169	17.8	10.5	10.8	-0.3	33.4	0.99	18.7	3.3	1.4	1	5	5	4	5	13.0	20	10
Optimistic	170	20.5	11.2	10.8	0.4	30.2	0.99	17.4	3.0	1.6	4	5	5	4	5	12.9	17	12
Neutral	169	18.1	10.5	10.5	0.0	33.7	0.95	18.3	3.2	1.6	5	5	6	5	5	11.5	13	12
Less Optimistic	170	18.7	10.5	11.0	-0.5	31.3	1.02	20.2	3.6	1.6	7	4	4	4	6	11.7	8	14
Not Optimistic	169	14.7	10.9	10.1	0.8	30.7	0.90	20.4	2.6	1.5	10	6	5	5	6	11.5	15	17
Uncoded	376	10.2	10.2	11.5	-1.3	23.6	1.08	18.4	2.5	1.7		5	6	4	5	13.4	9	12
Quality Rank																		
A+	51	19.1	11.2	9.8	1.4	30.9	0.86	16.7	3.9	1.9	5	2	4	2	6	11.2	11	11
A	81	13.5	11.8	9.3	2.5	33.4	0.80	17.5	3.8	1.8	6	5	5	4	5	11.8	12	13
A-	100	12.9	10.9	9.5	1.4	28.4	0.82	16.1	2.8	2.4	5	5	5	4	5	9.6	5	6
B+	185	19.7	10.9	10.9	0.0	29.9	1.01	18.8	3.4	1.5	5	6	4	4	5	12.0	7	8
B	207	14.3	10.0	11.2	-1.2	33.6	1.04	18.1	2.7	1.4	6	7	6	6	5	11.8	12	14
B-	138	6.1	9.4	11.5	-2.1	36.3	1.09	21.2	2.2	0.7	6	8	6	6	6	14.4	31	22
C & D	133	4.5	7.9	16.0	-8.1	43.2	1.66	51.6	2.3	0.0	6	7	8	8	5	13.5	nm	73
Not Rated	328	10.0	9.6	12.4	-2.8	31.8	1.20	24.1	2.6	0.9	5	6	6	5	5	17.6	32	19
B+ or Better	417	65.1	11.2	10.0	1.2	30.7	0.88	17.3	3.5	1.9	5	4	5	4	5	14.2	9	10
B or Worse	806	34.9	9.6	12.2	-2.6	34.4	1.17	22.3	2.5	1.0	6	7	6	6	5	11.2	29	20
ML Universe	1223	100.0	10.7	10.7	0.0	31.8	0.98	18.8	3.1	1.6						12.3	14	13
S&P 500	500	88.6	10.9	10.7	0.2	31.8	0.98	18.2	3.2	1.6						11.7	12	12

Refer to important disclosures on pages 49 to 50.

BEFORE THE
STATE OF NEW YORK
PUBLIC SERVICE COMMISSION

In the Matter of
Consolidated Edison Company of New York, Inc.

Case 03-S-1672

MARCH 2004

Prepared Exhibits of:

Michael J. Rieder
Utility Engineer 2
Office of Electricity and
Environment
State of New York
Department of Public Service
Three Empire State Plaza
Albany, New York 12223-1350

SUMMARY OF ROLLING BANDS

EAR 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
943 TO 1952	0.00	0.000000	0.00	0.00	130.19	0.000221	206.23	3.04	116.74	0.000224	190.60	3.27
944 TO 1953	0.00	0.000000	0.00	0.00	163.61	0.000198	209.34	3.14	0.00	0.000000	0.00	0.00
945 TO 1954	0.00	0.000000	0.00	0.00	194.93	0.000182	209.05	3.18	122.69	0.000184	177.28	3.85
946 TO 1955	0.00	0.000000	0.00	0.00	235.76	0.000157	206.78	3.27	116.73	0.000158	173.48	4.03
947 TO 1956	0.00	0.000000	0.00	0.00	330.57	0.000165	197.39	3.57	114.72	0.000166	171.29	4.13
948 TO 1957	0.00	0.000000	0.00	0.00	555.69	0.000171	176.81	4.32	114.94	0.000172	170.08	4.19
949 TO 1958	0.00	0.000000	0.00	0.00	964.23	0.000157	103.55	5.10	117.37	0.000158	169.98	4.22
950 TO 1959	0.00	0.000000	0.00	0.00	811.52	0.000152	123.04	5.10	116.52	0.000152	169.50	4.23
951 TO 1960	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00	82.87	0.000777	158.69	3.84
952 TO 1961	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00	91.57	0.001006	161.08	3.98
953 TO 1962	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00	86.47	0.001150	161.32	3.64
954 TO 1963	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00	87.52	0.001214	161.68	3.53
955 TO 1964	49.91	0.011056	341.61	1.74	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
956 TO 1965	50.26	0.010867	347.22	1.67	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
957 TO 1966	50.54	0.010811	353.20	1.58	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
958 TO 1967	46.02	0.011334	411.73	0.96	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
959 TO 1968	39.79	0.011887	400.89	1.04	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
960 TO 1969	37.34	0.012758	389.71	1.17	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
961 TO 1970	37.61	0.013461	392.22	1.15	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
962 TO 1971	37.33	0.011840	397.78	1.07	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
963 TO 1972	37.24	0.011814	404.19	1.01	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
964 TO 1973	35.76	0.011827	423.68	0.83	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
965 TO 1974	58.13	0.005136	410.31	0.96	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
966 TO 1975	59.52	0.005257	399.06	1.07	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
967 TO 1976	60.81	0.004918	392.18	1.15	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
968 TO 1977	66.84	0.003923	358.34	1.53	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
969 TO 1978	99.87	0.001880	353.96	1.59	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
970 TO 1979	257.51	0.000711	373.38	1.37	0.00	0.000000	0.00	0.00	235.13	0.000710	146.51	3.31
971 TO 1980	261.75	0.000779	371.54	1.39	0.00	0.000000	0.00	0.00	218.31	0.000780	149.56	3.35
972 TO 1981	266.93	0.000731	369.94	1.41	0.00	0.000000	0.00	0.00	211.89	0.000732	151.26	3.39
973 TO 1982	272.05	0.000587	367.03	1.42	0.00	0.000000	0.00	0.00	214.02	0.000585	151.15	3.44
974 TO 1983	557.71	0.000153	179.03	1.89	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
975 TO 1984	746.31	0.000299	133.79	2.43	0.00	0.000000	0.00	0.00	337.27	0.000303	152.84	5.10
976 TO 1985	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00	151.44	0.000360	166.07	4.08
977 TO 1986	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00	145.16	0.000374	165.68	4.03
978 TO 1987	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00	141.38	0.000204	164.46	4.31
979 TO 1988	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00	149.22	0.000205	165.86	4.18
980 TO 1989	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00	156.92	0.000198	167.28	4.14
981 TO 1990	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00	153.48	0.000197	167.13	4.01
982 TO 1991	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00	155.99	0.000189	167.64	3.99
983 TO 1992	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00	160.70	0.000177	168.33	3.98
984 TO 1993	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00	154.84	0.000178	166.94	3.99
985 TO 1994	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00	162.98	0.000223	167.20	4.12
986 TO 1995	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00	176.49	0.000114	166.86	4.47
987 TO 1996	0.00	0.000000	0.00	0.00	257.46	0.000155	210.71	3.19	0.00	0.000000	0.00	0.00

SUMMARY OF ROLLING BANDS

EAR	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
988 TO 1997		0.00	0.000000	0.00	0.00	282.27	0.000146	210.96	3.13	0.00	0.000000	0.00	0.00
989 TO 1998		588.65	0.000539	169.63	1.34	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
990 TO 1999		0.00	0.000000	0.00	0.00	219.50	0.000662	219.36	2.47	0.00	0.000000	0.00	0.00
991 TO 2000		0.00	0.000000	0.00	0.00	225.74	0.000631	218.17	2.50	0.00	0.000000	0.00	0.00
992 TO 2001		0.00	0.000000	0.00	0.00	167.60	0.000598	235.38	2.30	0.00	0.000000	0.00	0.00
993 TO 2002		432.78	0.000501	230.72	0.25	174.61	0.000502	243.68	2.17	0.00	0.000000	0.00	0.00

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
2002 TO 2002		242.68	0.000480	348.41	1.67	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
2001 TO 2002		134.63	0.000754	325.70	1.96	131.46	0.000758	298.57	2.12	0.00	0.000000	0.00	0.00
2000 TO 2002		158.54	0.000712	335.89	1.83	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1999 TO 2002		0.00	0.000000	0.00	0.00	135.08	0.000879	230.60	2.23	0.00	0.000000	0.00	0.00
1998 TO 2002		204.78	0.000778	448.04	0.63	154.27	0.000781	281.01	1.66	0.00	0.000000	0.00	0.00
1997 TO 2002		227.94	0.000680	438.05	0.63	169.15	0.000683	282.89	1.66	0.00	0.000000	0.00	0.00
1996 TO 2002		363.66	0.000625	274.57	-0.34	154.63	0.000626	246.07	2.05	0.00	0.000000	0.00	0.00
1995 TO 2002		380.84	0.000578	262.18	-0.04	161.77	0.000579	243.86	2.11	0.00	0.000000	0.00	0.00
1994 TO 2002		401.05	0.000530	248.97	0.15	167.32	0.000531	242.35	2.18	0.00	0.000000	0.00	0.00
1993 TO 2002		432.78	0.000501	230.72	0.25	174.61	0.000502	243.68	2.17	0.00	0.000000	0.00	0.00
1992 TO 2002		446.88	0.000478	223.44	0.39	178.95	0.000479	242.25	2.22	0.00	0.000000	0.00	0.00
1991 TO 2002		466.54	0.000457	214.02	0.50	183.37	0.000458	241.31	2.24	0.00	0.000000	0.00	0.00
1990 TO 2002		484.98	0.000441	205.88	0.55	189.22	0.000443	243.37	2.20	0.00	0.000000	0.00	0.00
1989 TO 2002		493.15	0.000420	202.47	0.64	192.24	0.000422	242.67	2.24	0.00	0.000000	0.00	0.00
1988 TO 2002		474.91	0.000404	210.25	0.65	199.91	0.000406	245.87	2.20	0.00	0.000000	0.00	0.00
1987 TO 2002		479.23	0.000394	208.35	0.72	202.86	0.000395	245.24	2.22	0.00	0.000000	0.00	0.00
1986 TO 2002		551.62	0.000385	181.01	0.86	202.80	0.000386	242.85	2.25	0.00	0.000000	0.00	0.00
1985 TO 2002		0.00	0.000000	0.00	0.00	202.41	0.000381	240.84	2.25	0.00	0.000000	0.00	0.00
1984 TO 2002		0.00	0.000000	0.00	0.00	201.52	0.000373	238.43	2.28	0.00	0.000000	0.00	0.00
1983 TO 2002		0.00	0.000000	0.00	0.00	203.51	0.000364	238.07	2.29	0.00	0.000000	0.00	0.00
1982 TO 2002		0.00	0.000000	0.00	0.00	207.31	0.000352	239.01	2.29	0.00	0.000000	0.00	0.00
1981 TO 2002		0.00	0.000000	0.00	0.00	210.86	0.000323	239.26	2.30	0.00	0.000000	0.00	0.00
1980 TO 2002		0.00	0.000000	0.00	0.00	215.22	0.000317	240.45	2.29	0.00	0.000000	0.00	0.00
1979 TO 2002		0.00	0.000000	0.00	0.00	220.44	0.000290	241.57	2.28	0.00	0.000000	0.00	0.00
1978 TO 2002		0.00	0.000000	0.00	0.00	226.74	0.000274	243.67	2.25	0.00	0.000000	0.00	0.00
1977 TO 2002		595.72	0.000260	167.61	1.12	248.69	0.000261	253.94	2.08	0.00	0.000000	0.00	0.00
1976 TO 2002		574.53	0.000256	173.79	1.09	261.00	0.000257	257.66	2.03	0.00	0.000000	0.00	0.00
1975 TO 2002		555.12	0.000252	179.87	1.06	277.53	0.000253	263.57	1.95	0.00	0.000000	0.00	0.00
1974 TO 2002		539.65	0.000243	185.03	1.05	298.67	0.000244	270.70	1.85	0.00	0.000000	0.00	0.00
1973 TO 2002		452.39	0.000247	220.72	0.80	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1972 TO 2002		462.38	0.000245	215.95	0.82	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1971 TO 2002		471.46	0.000244	211.79	0.84	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1970 TO 2002		480.40	0.000242	207.85	0.86	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1969 TO 2002		223.17	0.000326	394.98	1.13	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1968 TO 2002		161.28	0.000835	385.35	1.23	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1967 TO 2002		160.97	0.000846	399.78	1.08	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1966 TO 2002		162.25	0.000839	399.69	1.08	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1965 TO 2002		163.44	0.000792	399.83	1.08	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1964 TO 2002		109.81	0.001556	390.23	1.17	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1963 TO 2002		110.32	0.001543	390.22	1.17	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1962 TO 2002		110.80	0.001533	391.25	1.16	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1961 TO 2002		111.58	0.001510	392.11	1.16	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1960 TO 2002		111.84	0.001457	393.85	1.14	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1959 TO 2002		112.50	0.001448	393.34	1.14	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1958 TO 2002		113.10	0.001422	393.02	1.15	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00

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STUDY NO. 027141

SUMMARY OF SHRINKING 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
1957 TO 2002		113.65	0.001399	391.98	1.15	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1956 TO 2002		114.16	0.001391	391.99	1.16	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1955 TO 2002		114.64	0.001382	391.24	1.16	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1954 TO 2002		115.07	0.001375	390.61	1.17	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1953 TO 2002		115.48	0.001369	390.12	1.17	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1952 TO 2002		115.87	0.001305	389.66	1.18	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1951 TO 2002		116.10	0.001299	389.74	1.18	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1950 TO 2002		116.57	0.001282	390.74	1.17	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1949 TO 2002		116.90	0.001278	390.52	1.18	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1948 TO 2002		117.19	0.001274	389.53	1.18	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1947 TO 2002		117.47	0.001270	389.47	1.18	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1946 TO 2002		117.72	0.001244	388.64	1.19	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1945 TO 2002		117.94	0.001239	388.75	1.19	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1944 TO 2002		118.14	0.001232	388.09	1.20	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1943 TO 2002		118.34	0.001228	388.27	1.20	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00

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
1943 TO 1952		156.08	0.000527	426.38	0.82	0.00	0.000000	0.00	0.00	81.54	0.000533	177.21	3.06
1944 TO 1953		169.91	0.000438	410.51	0.97	0.00	0.000000	0.00	0.00	190.64	0.000443	146.61	3.51
1945 TO 1954		164.85	0.000406	394.01	1.14	0.00	0.000000	0.00	0.00	137.08	0.000406	152.10	3.86
1946 TO 1955		199.75	0.000310	404.25	1.04	0.00	0.000000	0.00	0.00	105.81	0.000304	160.19	3.90
1947 TO 1956		223.33	0.000320	419.33	0.89	0.00	0.000000	0.00	0.00	92.94	0.000308	161.92	3.86
1948 TO 1957		341.84	0.000343	292.09	0.35	0.00	0.000000	0.00	0.00	96.72	0.000333	160.77	3.90
1949 TO 1958		387.92	0.000370	257.40	0.13	0.00	0.000000	0.00	0.00	89.64	0.000357	161.21	3.80
1950 TO 1959		0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00	73.42	0.000477	162.77	3.57
1951 TO 1960		0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00	68.24	0.000538	164.87	3.46
1952 TO 1961		0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00	75.56	0.000514	167.42	3.79
1953 TO 1962		0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00	80.06	0.000538	171.74	3.54
1954 TO 1963		0.00	0.000000	0.00	0.00	66.41	0.001155	220.59	2.31	58.11	0.001155	181.55	2.75
1955 TO 1964		40.99	0.009243	318.41	2.04	32.77	0.008988	224.29	1.32	34.07	0.008966	192.27	1.89
1956 TO 1965		40.87	0.009168	329.06	1.91	33.20	0.008987	230.45	1.31	33.96	0.008974	198.79	1.78
1957 TO 1966		40.85	0.008906	341.53	1.74	33.62	0.008784	236.45	1.29	34.02	0.008784	204.31	1.68
1958 TO 1967		35.63	0.009320	425.18	0.82	30.90	0.009326	286.42	0.77	31.06	0.009304	230.20	1.30
1959 TO 1968		27.22	0.010978	372.94	1.33	26.83	0.011045	322.36	1.24	25.79	0.011065	273.32	1.31
1960 TO 1969		27.05	0.012106	341.90	1.70	27.45	0.012142	282.30	1.58	25.28	0.012114	263.02	1.40
1961 TO 1970		26.53	0.012571	348.68	1.63	27.02	0.012649	305.37	1.63	24.96	0.012672	278.42	1.43
1962 TO 1971		25.58	0.012531	353.77	1.55	0.00	0.000000	0.00	0.00	23.77	0.012667	305.05	1.40
1963 TO 1972		25.25	0.012311	354.39	1.56	0.00	0.000000	0.00	0.00	23.30	0.012449	341.22	1.45
1964 TO 1973		25.25	0.013116	346.53	1.65	0.00	0.000000	0.00	0.00	23.77	0.013231	1297.87	-0.86
1965 TO 1974		31.31	0.006585	343.29	1.68	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1966 TO 1975		31.64	0.006479	342.88	1.71	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1967 TO 1976		31.67	0.006200	339.42	1.73	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1968 TO 1977		33.27	0.005094	332.10	1.84	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1969 TO 1978		25.39	0.009895	336.72	1.80	32.52	0.009788	226.05	2.25	31.28	0.009721	215.81	1.81
1970 TO 1979		26.59	0.009476	332.78	1.83	33.19	0.009397	227.46	2.29	32.93	0.009371	211.04	2.00
1971 TO 1980		26.54	0.008864	325.94	1.93	32.74	0.008770	227.52	2.36	32.97	0.008781	213.85	2.19
1972 TO 1981		26.66	0.008295	316.93	2.02	32.93	0.008167	220.17	2.48	33.31	0.008199	211.67	2.39
1973 TO 1982		26.52	0.007707	314.86	2.10	32.42	0.007551	220.53	2.55	32.69	0.007592	215.63	2.51
1974 TO 1983		26.70	0.007485	308.94	2.17	32.51	0.007282	213.79	2.64	32.63	0.007326	213.02	2.64
1975 TO 1984		26.25	0.007243	299.09	2.29	31.30	0.006981	215.67	2.61	0.00	0.000000	0.00	0.00
1976 TO 1985		25.35	0.008030	289.97	2.42	29.64	0.007719	214.22	2.60	0.00	0.000000	0.00	0.00
1977 TO 1986		24.88	0.007718	283.39	2.56	28.48	0.007256	212.44	2.67	0.00	0.000000	0.00	0.00
1978 TO 1987		24.37	0.007509	272.92	2.71	27.30	0.006448	203.30	2.77	0.00	0.000000	0.00	0.00
1979 TO 1988		50.13	0.001324	322.13	2.01	47.77	0.001324	256.45	2.47	0.00	0.000000	0.00	0.00
1980 TO 1989		52.99	0.001241	325.53	1.95	51.89	0.001248	290.04	2.15	0.00	0.000000	0.00	0.00
1981 TO 1990		57.43	0.001157	329.97	1.89	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1982 TO 1991		60.73	0.000990	331.77	1.88	60.31	0.000996	319.17	1.94	0.00	0.000000	0.00	0.00
1983 TO 1992		56.31	0.001146	334.75	1.83	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1984 TO 1993		59.83	0.001133	336.79	1.80	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1985 TO 1994		66.02	0.001028	347.62	1.67	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1986 TO 1995		74.73	0.000845	366.01	1.43	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1987 TO 1996		0.00	0.000000	0.00	0.00	69.53	0.001337	235.14	1.82	0.00	0.000000	0.00	0.00

ACCOUNT 9716. BOIL EXCL FULLY RCVRD 74ST PSC CASE 0

STUDY NO. 027161

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		0.00	0.000000	0.00	0.00	64.96	0.001321	287.12	1.05	0.00	0.000000	0.00	0.00
1989 TO 1998		0.00	0.000000	0.00	0.00	66.35	0.001320	276.56	1.14	0.00	0.000000	0.00	0.00
1990 TO 1999		0.00	0.000000	0.00	0.00	68.79	0.001263	285.66	1.03	0.00	0.000000	0.00	0.00
1991 TO 2000		0.00	0.000000	0.00	0.00	70.90	0.001229	277.16	1.10	0.00	0.000000	0.00	0.00
1992 TO 2001		0.00	0.000000	0.00	0.00	94.69	0.001487	586.68	-2.60	0.00	0.000000	0.00	0.00
1993 TO 2002		0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00

SUMMARY OF SHRINKING 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
2002	TO 2002	72.34	0.005049	365.64	1.44	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
2001	TO 2002	48.55	0.004271	400.59	1.05	0.00	0.000000	0.00	0.00	119.18	0.004248	264.73	-2.60
2000	TO 2002	60.43	0.003259	394.65	1.13	0.00	0.000000	0.00	0.00	493.15	0.003253	202.47	-2.60
1999	TO 2002	63.49	0.002301	391.38	1.16	0.00	0.000000	0.00	0.00	322.01	0.002277	194.56	-1.40
1998	TO 2002	67.60	0.001695	388.30	1.19	0.00	0.000000	0.00	0.00	534.13	0.001681	186.94	-1.90
1997	TO 2002	58.66	0.001781	452.58	0.58	0.00	0.000000	0.00	0.00	67.23	0.001756	238.74	0.85
1996	TO 2002	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1995	TO 2002	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 2002	0.00	0.000000	0.00	0.00	139.16	0.001465	591.77	-2.60	0.00	0.000000	0.00	0.00
1993	TO 2002	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 2002	92.04	0.001319	933.88	-2.60	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1991	TO 2002	86.09	0.001238	662.71	-1.23	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1990	TO 2002	85.41	0.001178	603.56	-0.69	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1989	TO 2002	82.84	0.001132	557.08	-0.29	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1988	TO 2002	79.95	0.001085	524.69	-0.03	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1987	TO 2002	77.22	0.001086	496.63	0.21	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1986	TO 2002	75.30	0.001083	480.08	0.35	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1985	TO 2002	71.06	0.001078	458.07	0.53	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1984	TO 2002	69.76	0.001064	447.94	0.62	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1983	TO 2002	69.85	0.001049	443.11	0.67	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1982	TO 2002	69.76	0.001030	436.47	0.73	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1981	TO 2002	69.74	0.001017	430.90	0.77	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1980	TO 2002	69.64	0.000994	425.74	0.82	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1979	TO 2002	69.52	0.000965	422.17	0.86	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1978	TO 2002	48.99	0.002912	372.52	1.36	47.33	0.002921	301.07	1.61	0.00	0.000000	0.00	0.00
1977	TO 2002	49.38	0.002885	371.57	1.36	47.74	0.002895	302.66	1.61	0.00	0.000000	0.00	0.00
1976	TO 2002	49.69	0.002854	371.30	1.36	48.06	0.002864	304.82	1.61	0.00	0.000000	0.00	0.00
1975	TO 2002	50.03	0.002702	372.79	1.36	48.43	0.002712	304.57	1.60	0.00	0.000000	0.00	0.00
1974	TO 2002	50.32	0.002672	372.59	1.36	48.75	0.002682	306.64	1.60	0.00	0.000000	0.00	0.00
1973	TO 2002	50.20	0.002655	371.52	1.37	48.72	0.002665	308.88	1.60	0.00	0.000000	0.00	0.00
1972	TO 2002	50.41	0.002646	371.92	1.37	48.93	0.002656	309.65	1.60	0.00	0.000000	0.00	0.00
1971	TO 2002	50.45	0.002636	371.67	1.37	49.00	0.002647	311.21	1.59	0.00	0.000000	0.00	0.00
1970	TO 2002	50.70	0.002625	371.80	1.36	49.23	0.002636	309.79	1.59	0.00	0.000000	0.00	0.00
1969	TO 2002	49.34	0.002629	365.83	1.42	48.00	0.002638	305.18	1.65	0.00	0.000000	0.00	0.00
1968	TO 2002	45.56	0.002726	356.68	1.54	45.02	0.002738	318.77	1.66	0.00	0.000000	0.00	0.00
1967	TO 2002	45.49	0.002716	357.22	1.52	45.01	0.002729	325.47	1.62	0.00	0.000000	0.00	0.00
1966	TO 2002	45.76	0.002710	359.45	1.51	45.25	0.002722	323.78	1.62	0.00	0.000000	0.00	0.00
1965	TO 2002	45.97	0.002682	360.03	1.51	45.42	0.002694	322.55	1.62	0.00	0.000000	0.00	0.00
1964	TO 2002	43.53	0.002768	352.60	1.59	43.21	0.002780	325.16	1.66	0.00	0.000000	0.00	0.00
1963	TO 2002	43.63	0.002752	354.12	1.58	43.28	0.002765	324.65	1.66	0.00	0.000000	0.00	0.00
1962	TO 2002	43.86	0.002747	354.52	1.57	43.48	0.002759	323.17	1.66	0.00	0.000000	0.00	0.00
1961	TO 2002	44.10	0.002740	354.85	1.56	43.68	0.002753	321.69	1.66	0.00	0.000000	0.00	0.00
1960	TO 2002	44.28	0.002730	355.65	1.56	43.82	0.002742	320.60	1.66	0.00	0.000000	0.00	0.00
1959	TO 2002	44.47	0.002724	356.45	1.55	43.97	0.002735	319.55	1.66	0.00	0.000000	0.00	0.00
1958	TO 2002	44.64	0.002707	355.05	1.55	44.11	0.002719	316.56	1.66	0.00	0.000000	0.00	0.00

SUMMARY OF SHRINKING BANDS

BAR	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
957 TO 2002		44.83	0.002702	355.82	1.55	44.25	0.002713	317.55	1.66	0.00	0.000000	0.00	0.00
956 TO 2002		45.00	0.002695	356.70	1.54	44.37	0.002706	316.64	1.67	0.00	0.000000	0.00	0.00
955 TO 2002		45.16	0.002674	355.42	1.54	44.49	0.002684	313.54	1.67	0.00	0.000000	0.00	0.00
954 TO 2002		45.31	0.002668	356.45	1.54	44.60	0.002679	312.78	1.68	0.00	0.000000	0.00	0.00
953 TO 2002		45.45	0.002663	357.57	1.54	44.70	0.002673	312.10	1.69	0.00	0.000000	0.00	0.00
952 TO 2002		45.57	0.002658	356.58	1.54	44.79	0.002668	311.48	1.69	0.00	0.000000	0.00	0.00
951 TO 2002		45.60	0.002651	356.33	1.54	44.81	0.002661	311.33	1.69	0.00	0.000000	0.00	0.00
950 TO 2002		45.71	0.002644	355.52	1.54	44.88	0.002654	308.62	1.70	0.00	0.000000	0.00	0.00
949 TO 2002		45.79	0.002638	357.03	1.54	44.94	0.002648	308.22	1.70	0.00	0.000000	0.00	0.00
948 TO 2002		45.87	0.002634	356.42	1.55	44.99	0.002643	307.87	1.71	0.00	0.000000	0.00	0.00
947 TO 2002		45.95	0.002630	355.84	1.55	45.04	0.002639	307.53	1.71	0.00	0.000000	0.00	0.00
946 TO 2002		46.02	0.002625	355.26	1.55	45.09	0.002635	304.98	1.72	0.00	0.000000	0.00	0.00
945 TO 2002		46.08	0.002620	354.84	1.55	45.12	0.002629	304.74	1.72	0.00	0.000000	0.00	0.00
944 TO 2002		46.13	0.002616	356.58	1.55	45.15	0.002625	304.51	1.73	0.00	0.000000	0.00	0.00
943 TO 2002		46.16	0.002612	356.36	1.55	45.17	0.002621	304.39	1.73	0.00	0.000000	0.00	0.00

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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
1943	TO 1952	331.84	0.000103	300.90	1.54	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1944	TO 1953	261.15	0.000120	352.86	1.62	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1945	TO 1954	302.99	0.000116	329.55	1.56	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1946	TO 1955	325.37	0.000109	306.88	1.55	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1947	TO 1956	335.64	0.000098	297.49	1.56	0.00	0.000000	0.00	0.00	165.15	0.000095	152.29	5.10
1948	TO 1957	348.52	0.000147	286.50	1.57	0.00	0.000000	0.00	0.00	122.69	0.000147	160.98	5.10
1949	TO 1958	329.29	0.000215	303.23	1.56	0.00	0.000000	0.00	0.00	104.53	0.000214	161.20	4.98
1950	TO 1959	342.76	0.000347	291.31	1.57	0.00	0.000000	0.00	0.00	115.99	0.000352	158.21	5.10
1951	TO 1960	48.25	0.004685	326.40	1.95	41.73	0.004651	192.90	3.98	0.00	0.000000	0.00	0.00
1952	TO 1961	49.95	0.004273	327.33	1.92	43.95	0.004283	203.64	3.63	0.00	0.000000	0.00	0.00
1953	TO 1962	51.55	0.003454	328.78	1.91	46.28	0.003479	221.48	3.13	0.00	0.000000	0.00	0.00
1954	TO 1963	53.05	0.003303	328.93	1.91	48.56	0.003337	239.93	2.72	0.00	0.000000	0.00	0.00
1955	TO 1964	47.14	0.003680	325.62	1.95	44.61	0.003713	236.51	2.78	0.00	0.000000	0.00	0.00
1956	TO 1965	48.56	0.003177	324.33	1.97	46.67	0.003212	262.50	2.42	0.00	0.000000	0.00	0.00
1957	TO 1966	50.01	0.003125	322.92	1.99	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1958	TO 1967	51.58	0.003066	320.85	2.00	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1959	TO 1968	45.02	0.003409	314.31	2.10	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1960	TO 1969	43.96	0.003691	310.53	2.15	43.37	0.003731	261.70	2.48	0.00	0.000000	0.00	0.00
1961	TO 1970	57.06	0.002679	318.09	2.05	52.27	0.002693	226.72	2.99	50.50	0.002718	193.06	3.41
1962	TO 1971	58.93	0.002666	318.19	2.05	54.12	0.002685	231.90	2.86	0.00	0.000000	0.00	0.00
1963	TO 1972	60.90	0.002832	317.72	2.06	56.15	0.002856	239.53	2.76	0.00	0.000000	0.00	0.00
1964	TO 1973	63.51	0.002806	318.83	2.04	58.43	0.002831	243.86	2.68	0.00	0.000000	0.00	0.00
1965	TO 1974	77.05	0.002238	325.12	1.97	66.55	0.002256	235.68	2.80	0.00	0.000000	0.00	0.00
1966	TO 1975	80.56	0.002701	327.10	1.94	69.16	0.002724	239.29	2.74	0.00	0.000000	0.00	0.00
1967	TO 1976	84.05	0.001729	328.95	1.91	71.96	0.001743	242.50	2.68	0.00	0.000000	0.00	0.00
1968	TO 1977	87.52	0.001717	330.79	1.90	74.99	0.001731	246.03	2.63	0.00	0.000000	0.00	0.00
1969	TO 1978	37.54	0.009444	278.36	2.63	39.87	0.009116	186.84	3.74	43.86	0.009116	153.91	5.10
1970	TO 1979	38.29	0.009110	280.74	2.62	40.00	0.008783	186.26	3.78	43.28	0.008828	160.59	5.10
1971	TO 1980	38.61	0.008834	281.01	2.61	39.83	0.008485	184.55	3.81	41.70	0.008550	169.06	4.57
1972	TO 1981	38.77	0.008628	282.40	2.57	39.38	0.008248	186.62	3.67	40.38	0.008319	177.07	3.99
1973	TO 1982	39.16	0.008373	284.74	2.55	39.16	0.007959	185.14	3.66	39.40	0.008025	184.00	3.73
1974	TO 1983	39.63	0.008175	283.85	2.55	38.91	0.007724	183.76	3.62	0.00	0.000000	0.00	0.00
1975	TO 1984	40.12	0.008051	282.93	2.59	38.49	0.007558	185.76	3.47	0.00	0.000000	0.00	0.00
1976	TO 1985	40.58	0.007999	279.72	2.62	37.93	0.007458	185.86	3.28	0.00	0.000000	0.00	0.00
1977	TO 1986	41.15	0.008703	278.27	2.65	37.33	0.008171	183.49	3.10	0.00	0.000000	0.00	0.00
1978	TO 1987	41.66	0.008981	277.23	2.67	36.60	0.008415	184.43	2.90	0.00	0.000000	0.00	0.00
1979	TO 1988	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00	85.77	0.000623	153.32	3.91
1980	TO 1989	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00	88.16	0.000599	155.97	3.76
1981	TO 1990	0.00	0.000000	0.00	0.00	927.94	0.000578	107.60	3.64	90.25	0.000566	157.89	3.68
1982	TO 1991	259.21	0.001110	385.21	0.81	89.27	0.001107	215.63	2.84	79.73	0.001104	164.94	3.93
1983	TO 1992	0.00	0.000000	0.00	0.00	93.23	0.001100	217.21	2.73	81.92	0.001099	166.62	3.66
1984	TO 1993	75.09	0.002448	312.29	2.15	57.62	0.002252	196.99	3.05	60.50	0.002226	166.11	3.84
1985	TO 1994	78.78	0.002362	315.42	2.09	59.85	0.002198	196.33	3.19	61.77	0.002176	165.94	3.82
1986	TO 1995	81.70	0.002303	327.41	1.94	61.51	0.002179	200.77	3.11	62.23	0.002145	167.93	3.49
1987	TO 1996	85.84	0.002087	336.08	1.81	63.21	0.001977	201.70	3.06	63.08	0.001937	170.41	3.33

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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		88.95	0.002111	337.82	1.80	65.31	0.002026	202.89	3.12	64.58	0.002000	171.11	3.38
1989 TO 1998		92.26	0.001996	330.06	1.90	66.94	0.001905	199.42	3.36	66.56	0.001899	170.52	3.73
1990 TO 1999		52.10	0.004027	311.88	2.13	51.03	0.004025	236.13	2.70	0.00	0.000000	0.00	0.00
1991 TO 2000		52.74	0.003674	317.58	2.06	51.34	0.003671	240.57	2.58	0.00	0.000000	0.00	0.00
1992 TO 2001		54.31	0.003726	321.32	2.01	52.67	0.003734	249.68	2.46	0.00	0.000000	0.00	0.00
1993 TO 2002		42.65	0.005269	460.69	0.50	40.46	0.005289	332.47	0.86	40.06	0.005299	270.87	0.97

SUMMARY OF SHRINKING 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
2002	TO 2002	0.00	0.000000	0.00	0.00	3.89	0.014114	2298.20	-2.60	0.00	0.000000	0.00	0.00
2001	TO 2002	0.00	0.000000	0.00	0.00	13.41	0.011645	868.63	-2.60	13.46	0.011716	850.87	-2.60
2000	TO 2002	0.00	0.000000	0.00	0.00	24.15	0.009607	557.04	-2.60	24.15	0.009662	486.56	-2.60
1999	TO 2002	22.59	0.009953	768.08	-2.41	0.00	0.000000	0.00	0.00	23.00	0.010068	504.72	-1.25
1998	TO 2002	28.05	0.008277	696.99	-1.58	0.00	0.000000	0.00	0.00	28.32	0.008369	422.02	-0.63
1997	TO 2002	32.82	0.007412	638.41	-1.01	0.00	0.000000	0.00	0.00	32.73	0.007491	368.13	-0.19
1996	TO 2002	36.91	0.006826	608.28	-0.72	0.00	0.000000	0.00	0.00	36.19	0.006896	335.76	0.07
1995	TO 2002	40.01	0.005685	588.56	-0.57	0.00	0.000000	0.00	0.00	38.69	0.005734	311.46	0.24
1994	TO 2002	43.43	0.005290	556.12	-0.28	0.00	0.000000	0.00	0.00	41.46	0.005336	295.46	0.45
1993	TO 2002	42.65	0.005269	460.69	0.50	40.46	0.005289	332.47	0.86	40.06	0.005299	270.87	0.97
1992	TO 2002	44.70	0.004847	464.24	0.48	42.02	0.004864	327.22	0.90	41.54	0.004874	266.03	1.02
1991	TO 2002	46.36	0.004573	447.55	0.61	43.28	0.004585	313.07	1.05	42.82	0.004595	258.04	1.15
1990	TO 2002	48.26	0.004281	444.45	0.65	44.65	0.004290	307.96	1.11	44.20	0.004301	254.52	1.22
1989	TO 2002	49.98	0.004061	443.22	0.66	45.79	0.004068	302.50	1.16	45.35	0.004080	252.47	1.27
1988	TO 2002	51.09	0.003900	447.23	0.62	46.47	0.003906	302.37	1.15	46.01	0.003917	248.84	1.28
1987	TO 2002	52.19	0.003603	443.58	0.66	47.09	0.003606	296.24	1.20	46.70	0.003615	245.18	1.34
1986	TO 2002	53.30	0.003426	436.20	0.72	47.79	0.003425	289.82	1.27	47.46	0.003435	243.38	1.41
1985	TO 2002	54.24	0.003317	430.53	0.77	48.36	0.003315	286.38	1.33	48.07	0.003325	242.36	1.46
1984	TO 2002	55.12	0.003248	423.65	0.83	48.98	0.003244	280.71	1.40	48.71	0.003255	239.15	1.52
1983	TO 2002	55.89	0.003163	417.77	0.89	49.57	0.003159	277.36	1.46	49.31	0.003170	238.28	1.58
1982	TO 2002	56.53	0.003045	413.08	0.93	50.04	0.003039	274.80	1.50	49.77	0.003050	236.11	1.63
1981	TO 2002	56.99	0.003001	414.95	0.92	50.20	0.002994	273.91	1.51	49.94	0.003005	235.31	1.64
1980	TO 2002	57.53	0.002949	409.36	0.97	50.67	0.002942	271.38	1.56	50.39	0.002953	233.16	1.69
1979	TO 2002	57.99	0.002906	404.35	1.02	51.09	0.002900	269.11	1.61	50.81	0.002910	231.26	1.73
1978	TO 2002	50.26	0.003729	357.14	1.53	46.38	0.003705	255.51	1.87	0.00	0.000000	0.00	0.00
1977	TO 2002	50.74	0.003672	357.71	1.54	46.78	0.003648	253.31	1.90	0.00	0.000000	0.00	0.00
1976	TO 2002	51.17	0.003599	356.62	1.56	47.16	0.003576	253.37	1.93	0.00	0.000000	0.00	0.00
1975	TO 2002	51.57	0.003542	353.89	1.57	47.53	0.003519	251.42	1.96	0.00	0.000000	0.00	0.00
1974	TO 2002	51.93	0.003476	353.38	1.58	47.86	0.003453	251.76	1.99	0.00	0.000000	0.00	0.00
1973	TO 2002	52.25	0.003437	353.11	1.59	48.12	0.003415	250.43	2.01	0.00	0.000000	0.00	0.00
1972	TO 2002	52.54	0.003413	353.03	1.60	48.32	0.003390	249.36	2.02	0.00	0.000000	0.00	0.00
1971	TO 2002	52.81	0.003381	351.24	1.61	48.52	0.003359	248.36	2.04	0.00	0.000000	0.00	0.00
1970	TO 2002	53.06	0.003356	351.52	1.62	48.71	0.003333	247.41	2.05	0.00	0.000000	0.00	0.00
1969	TO 2002	53.04	0.003310	349.71	1.64	48.74	0.003287	247.24	2.07	0.00	0.000000	0.00	0.00
1968	TO 2002	52.65	0.003264	348.51	1.65	48.56	0.003242	248.15	2.07	0.00	0.000000	0.00	0.00
1967	TO 2002	52.85	0.003215	347.24	1.66	48.70	0.003192	247.44	2.09	0.00	0.000000	0.00	0.00
1966	TO 2002	53.02	0.003196	347.99	1.66	48.82	0.003173	246.81	2.10	0.00	0.000000	0.00	0.00
1965	TO 2002	53.17	0.003177	346.97	1.67	48.94	0.003154	246.22	2.11	0.00	0.000000	0.00	0.00
1964	TO 2002	52.96	0.003152	346.49	1.68	48.85	0.003129	246.69	2.11	0.00	0.000000	0.00	0.00
1963	TO 2002	53.08	0.003120	345.73	1.68	48.95	0.003097	246.15	2.12	0.00	0.000000	0.00	0.00
1962	TO 2002	53.19	0.003100	345.00	1.69	49.05	0.003077	247.69	2.13	0.00	0.000000	0.00	0.00
1961	TO 2002	53.30	0.003080	346.18	1.69	49.16	0.003058	247.16	2.14	0.00	0.000000	0.00	0.00
1960	TO 2002	52.55	0.003094	345.38	1.70	48.82	0.003076	248.85	2.13	0.00	0.000000	0.00	0.00
1959	TO 2002	52.65	0.003082	344.73	1.70	48.91	0.003064	248.42	2.14	0.00	0.000000	0.00	0.00
1958	TO 2002	52.74	0.003070	344.17	1.70	48.99	0.003052	248.02	2.15	0.00	0.000000	0.00	0.00

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
1957 TO 2002		52.82	0.003059	343.64	1.71	49.07	0.003041	247.61	2.16	0.00	0.000000	0.00	0.00
1956 TO 2002		52.89	0.003047	343.16	1.71	49.15	0.003029	247.22	2.17	0.00	0.000000	0.00	0.00
1955 TO 2002		52.96	0.003039	344.60	1.71	49.20	0.003021	246.93	2.17	0.00	0.000000	0.00	0.00
1954 TO 2002		53.02	0.003035	344.20	1.71	49.24	0.003016	246.76	2.18	0.00	0.000000	0.00	0.00
1953 TO 2002		53.07	0.003030	343.87	1.71	49.26	0.003012	246.63	2.18	0.00	0.000000	0.00	0.00
1952 TO 2002		53.12	0.003026	343.55	1.71	49.29	0.003008	246.49	2.19	0.00	0.000000	0.00	0.00
1951 TO 2002		53.16	0.003023	343.27	1.71	49.31	0.003004	246.41	2.19	0.00	0.000000	0.00	0.00
1950 TO 2002		53.21	0.003020	342.99	1.71	49.33	0.003000	246.31	2.19	0.00	0.000000	0.00	0.00
1949 TO 2002		53.25	0.003016	342.74	1.71	49.34	0.002997	246.23	2.19	0.00	0.000000	0.00	0.00
1948 TO 2002		53.28	0.003013	342.51	1.72	49.36	0.002994	246.15	2.19	0.00	0.000000	0.00	0.00
1947 TO 2002		53.31	0.003011	342.31	1.72	49.38	0.002991	246.07	2.20	0.00	0.000000	0.00	0.00
1946 TO 2002		53.34	0.003008	342.13	1.72	49.39	0.002988	246.00	2.20	0.00	0.000000	0.00	0.00
1945 TO 2002		53.37	0.003004	341.97	1.72	49.40	0.002984	245.94	2.20	0.00	0.000000	0.00	0.00
1944 TO 2002		53.39	0.003000	341.83	1.72	49.42	0.002980	245.87	2.20	0.00	0.000000	0.00	0.00
1943 TO 2002		53.40	0.002995	341.73	1.73	49.43	0.002975	245.83	2.21	0.00	0.000000	0.00	0.00

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
.943	TO 1952	54.03	0.005293	415.51	0.92	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
.944	TO 1953	55.73	0.004371	386.65	1.20	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
.945	TO 1954	57.66	0.004121	378.93	1.30	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
.946	TO 1955	57.92	0.003812	375.52	1.33	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
.947	TO 1956	59.25	0.003414	377.24	1.32	0.00	0.000000	0.00	0.00	549.39	0.003159	174.65	-0.90
.948	TO 1957	62.79	0.003071	370.30	1.38	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
.949	TO 1958	65.81	0.002933	366.95	1.42	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
.950	TO 1959	68.65	0.002832	364.90	1.45	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
.951	TO 1960	71.66	0.002479	363.51	1.47	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
.952	TO 1961	352.42	0.000685	283.33	1.22	0.00	0.000000	0.00	0.00	84.76	0.000687	161.05	4.25
.953	TO 1962	189.25	0.000638	365.39	1.45	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
.954	TO 1963	203.13	0.000588	367.01	1.44	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
.955	TO 1964	36.19	0.008511	310.89	2.14	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
.956	TO 1965	37.17	0.006864	308.01	2.19	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
.957	TO 1966	38.17	0.006924	302.57	2.25	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
.958	TO 1967	39.07	0.007087	300.72	2.29	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
.959	TO 1968	40.04	0.007289	298.46	2.32	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
.960	TO 1969	36.92	0.007103	291.18	2.45	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
.961	TO 1970	37.73	0.007316	290.24	2.45	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
.962	TO 1971	38.20	0.007157	291.92	2.44	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
.963	TO 1972	39.31	0.007453	291.29	2.42	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
.964	TO 1973	40.31	0.009103	293.96	2.39	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
.965	TO 1974	72.38	0.004222	321.20	2.03	67.80	0.004261	263.27	2.43	0.00	0.000000	0.00	0.00
.966	TO 1975	75.98	0.004170	323.13	1.98	69.89	0.004207	259.69	2.46	0.00	0.000000	0.00	0.00
.967	TO 1976	79.48	0.004006	326.49	1.95	72.21	0.004041	259.65	2.46	0.00	0.000000	0.00	0.00
.968	TO 1977	82.97	0.003986	328.44	1.93	74.73	0.004020	258.92	2.45	0.00	0.000000	0.00	0.00
.969	TO 1978	86.45	0.004039	330.25	1.91	77.47	0.004073	260.11	2.43	0.00	0.000000	0.00	0.00
.970	TO 1979	389.69	0.000288	256.23	1.48	0.00	0.000000	0.00	0.00	108.25	0.000290	162.13	5.10
.971	TO 1980	420.35	0.000283	237.54	1.49	0.00	0.000000	0.00	0.00	108.07	0.000284	161.47	5.10
.972	TO 1981	999.00	0.000000	99.95	5.10	999.00	0.000000	99.95	5.10	999.00	0.000000	99.95	5.10
.973	TO 1982	999.00	0.000000	99.95	5.10	999.00	0.000000	99.95	5.10	999.00	0.000000	99.95	5.10
.974	TO 1983	999.00	0.000000	99.95	5.10	999.00	0.000000	99.95	5.10	999.00	0.000000	99.95	5.10
.975	TO 1984	999.00	0.000000	99.95	5.10	999.00	0.000000	99.95	5.10	999.00	0.000000	99.95	5.10
.976	TO 1985	999.00	0.000000	99.95	5.10	999.00	0.000000	99.95	5.10	999.00	0.000000	99.95	5.10
.977	TO 1986	999.00	0.000000	99.95	5.10	999.00	0.000000	99.95	5.10	999.00	0.000000	99.95	5.10
.978	TO 1987	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00	79.29	0.001549	154.50	3.18
.979	TO 1988	79.92	0.002060	340.95	1.75	67.40	0.002008	215.86	2.80	66.63	0.001957	162.83	3.27
.980	TO 1989	83.62	0.002389	408.37	0.99	72.59	0.002400	272.09	1.74	63.50	0.002293	169.29	2.30
.981	TO 1990	94.67	0.002222	420.96	0.87	84.18	0.002237	301.15	1.48	66.07	0.002153	170.27	2.33
.982	TO 1991	105.82	0.002120	430.44	0.78	103.46	0.002134	393.88	0.92	68.48	0.002070	170.13	2.36
.983	TO 1992	117.74	0.002157	441.22	0.68	0.00	0.000000	0.00	0.00	70.83	0.002127	170.11	2.41
.984	TO 1993	130.44	0.002072	452.69	0.59	0.00	0.000000	0.00	0.00	73.24	0.002052	169.98	2.46
.985	TO 1994	142.89	0.002112	458.75	0.53	0.00	0.000000	0.00	0.00	75.77	0.002103	169.58	2.50
.986	TO 1995	44.32	0.006745	298.96	2.32	54.43	0.006458	191.98	3.25	52.57	0.006264	175.95	2.16
.987	TO 1996	45.18	0.006206	299.93	2.30	55.20	0.005935	192.93	3.29	53.68	0.005790	174.17	2.34

ACCOUNT 9720. MISC EXCL FULLY RCVRD 748T PSC CASE 0 STUDY NO. 027201

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	46.62	0.005515	301.39	2.30	57.35	0.005247	187.46	3.78	57.45	0.005182	167.97	3.01
1989	TO 1998	47.27	0.005409	303.56	2.25	57.79	0.005191	189.48	3.82	58.10	0.005167	171.24	3.22
1990	TO 1999	47.87	0.005517	299.75	2.31	58.50	0.005309	185.48	4.09	61.14	0.005332	167.65	4.89
1991	TO 2000	47.57	0.005476	299.57	2.31	58.04	0.005287	186.93	4.06	59.49	0.005320	177.35	4.45
1992	TO 2001	47.31	0.005411	299.07	2.31	57.55	0.005236	188.52	4.01	57.94	0.005270	185.54	4.11
1993	TO 2002	47.09	0.005190	298.34	2.32	57.04	0.005018	190.21	3.97	0.00	0.000000	0.00	0.00

SUMMARY OF SHRINKING 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
2002 TO 2002		999.00	0.000000	99.95	5.10	999.00	0.000000	99.95	5.10	999.00	0.000000	99.95	5.10
2001 TO 2002		999.00	0.000000	99.95	5.10	999.00	0.000000	99.95	5.10	999.00	0.000000	99.95	5.10
2000 TO 2002		999.00	0.000000	99.95	5.10	999.00	0.000000	99.95	5.10	999.00	0.000000	99.95	5.10
1999 TO 2002		999.00	0.000000	99.95	5.10	999.00	0.000000	99.95	5.10	999.00	0.000000	99.95	5.10
1998 TO 2002		999.00	0.000000	99.95	5.10	999.00	0.000000	99.95	5.10	999.00	0.000000	99.95	5.10
1997 TO 2002		999.00	0.000000	99.95	5.10	999.00	0.000000	99.95	5.10	999.00	0.000000	99.95	5.10
1996 TO 2002		999.00	0.000000	99.95	5.10	999.00	0.000000	99.95	5.10	999.00	0.000000	99.95	5.10
1995 TO 2002		41.93	0.006745	294.51	2.39	53.04	0.006518	187.61	4.02	0.00	0.000000	0.00	0.00
1994 TO 2002		44.66	0.005698	296.69	2.35	55.19	0.005499	189.34	3.99	0.00	0.000000	0.00	0.00
1993 TO 2002		47.09	0.005190	298.34	2.32	57.04	0.005018	190.21	3.97	0.00	0.000000	0.00	0.00
1992 TO 2002		49.27	0.005009	301.42	2.29	58.65	0.004863	191.81	3.96	0.00	0.000000	0.00	0.00
1991 TO 2002		51.22	0.004747	303.56	2.27	60.06	0.004615	190.64	3.96	60.38	0.004644	187.99	4.04
1990 TO 2002		53.00	0.004520	304.69	2.25	61.29	0.004397	191.70	3.97	62.01	0.004424	183.03	4.17
1989 TO 2002		53.81	0.004123	309.40	2.18	61.54	0.004007	195.81	3.77	62.68	0.004031	179.49	4.02
1988 TO 2002		53.97	0.003984	308.48	2.18	61.67	0.003859	193.76	3.80	62.92	0.003881	178.81	4.10
1987 TO 2002		53.74	0.003948	311.67	2.13	61.11	0.003831	197.20	3.62	61.52	0.003848	181.24	3.57
1986 TO 2002		54.15	0.003912	313.04	2.14	61.23	0.003793	196.79	3.63	61.74	0.003810	180.59	3.60
1985 TO 2002		54.51	0.003875	310.94	2.14	61.34	0.003756	198.06	3.63	61.94	0.003772	180.02	3.63
1984 TO 2002		54.84	0.003834	310.89	2.15	61.44	0.003714	197.75	3.63	62.11	0.003730	179.51	3.66
1983 TO 2002		55.14	0.003793	311.01	2.15	61.53	0.003672	197.47	3.64	62.27	0.003688	179.05	3.68
1982 TO 2002		55.41	0.003753	311.29	2.15	61.60	0.003631	197.23	3.64	62.41	0.003647	178.65	3.71
1981 TO 2002		55.67	0.003715	311.68	2.16	61.67	0.003593	197.02	3.64	62.54	0.003608	178.28	3.73
1980 TO 2002		55.89	0.003682	310.43	2.16	61.72	0.003559	196.84	3.64	62.66	0.003574	177.96	3.74
1979 TO 2002		56.09	0.003656	311.10	2.16	61.77	0.003533	196.68	3.64	62.76	0.003548	177.66	3.76
1978 TO 2002		56.27	0.003630	310.10	2.16	61.82	0.003507	196.54	3.64	62.86	0.003521	177.39	3.78
1977 TO 2002		56.44	0.003605	310.97	2.16	61.86	0.003482	196.41	3.64	62.94	0.003496	177.15	3.79
1976 TO 2002		56.58	0.003580	310.17	2.16	61.90	0.003457	197.91	3.65	63.02	0.003471	176.92	3.81
1975 TO 2002		56.71	0.003553	311.22	2.16	61.93	0.003431	197.80	3.65	63.09	0.003444	176.72	3.82
1974 TO 2002		56.83	0.003530	310.57	2.16	61.96	0.003408	197.70	3.65	63.16	0.003420	176.54	3.83
1973 TO 2002		56.94	0.003512	309.96	2.16	61.99	0.003391	197.62	3.66	63.22	0.003403	176.37	3.84
1972 TO 2002		57.05	0.003498	311.16	2.16	62.00	0.003376	197.56	3.65	63.28	0.003388	176.21	3.85
1971 TO 2002		57.08	0.003482	310.97	2.16	61.97	0.003361	197.69	3.64	63.22	0.003373	176.36	3.83
1970 TO 2002		57.16	0.003466	310.53	2.16	61.98	0.003346	197.64	3.64	63.27	0.003357	176.22	3.84
1969 TO 2002		56.82	0.003443	310.65	2.16	61.67	0.003329	198.65	3.61	62.77	0.003340	177.64	3.75
1968 TO 2002		56.89	0.003431	310.24	2.16	61.68	0.003317	198.60	3.61	62.81	0.003328	177.51	3.76
1967 TO 2002		56.96	0.003416	309.88	2.16	61.70	0.003302	198.55	3.61	62.86	0.003312	177.38	3.77
1966 TO 2002		57.02	0.003406	309.56	2.17	61.71	0.003291	198.51	3.61	62.90	0.003302	177.26	3.78
1965 TO 2002		57.07	0.003394	311.03	2.17	61.72	0.003279	198.46	3.61	62.94	0.003290	177.15	3.79
1964 TO 2002		55.81	0.003365	310.87	2.15	60.52	0.003272	204.06	3.45	61.06	0.003280	184.25	3.43
1963 TO 2002		55.87	0.003354	312.32	2.15	60.55	0.003261	203.96	3.45	61.11	0.003269	184.10	3.44
1962 TO 2002		55.90	0.003343	312.14	2.15	60.55	0.003250	203.96	3.45	61.12	0.003258	184.08	3.45
1961 TO 2002		55.95	0.003333	311.87	2.15	60.58	0.003240	203.87	3.45	61.15	0.003248	183.96	3.45
1960 TO 2002		56.00	0.003323	311.63	2.15	60.60	0.003230	203.80	3.46	61.19	0.003237	183.85	3.46
1959 TO 2002		56.03	0.003313	311.42	2.15	60.62	0.003220	203.72	3.46	61.22	0.003228	183.76	3.46
1958 TO 2002		56.07	0.003304	311.23	2.15	60.64	0.003210	203.66	3.46	61.25	0.003218	183.68	3.47

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
1957 TO 2002		56.10	0.003295	311.07	2.14	60.66	0.003201	203.59	3.46	61.27	0.003209	181.98	3.47
1956 TO 2002		56.11	0.003286	312.80	2.14	60.66	0.003192	203.60	3.46	61.26	0.003199	182.01	3.47
1955 TO 2002		56.11	0.003277	312.76	2.14	60.65	0.003184	203.61	3.46	61.25	0.003191	182.05	3.46
1954 TO 2002		56.14	0.003270	312.63	2.14	60.67	0.003176	203.57	3.46	61.26	0.003183	182.00	3.47
1953 TO 2002		56.16	0.003263	312.51	2.13	60.68	0.003169	203.52	3.47	61.28	0.003176	181.96	3.47
1952 TO 2002		56.18	0.003257	312.40	2.13	60.69	0.003162	203.48	3.47	61.29	0.003169	181.93	3.47
1951 TO 2002		55.98	0.003252	313.53	2.12	60.45	0.003162	204.32	3.42	60.92	0.003167	183.03	3.38
1950 TO 2002		56.00	0.003250	313.40	2.12	60.45	0.003160	204.30	3.43	60.93	0.003165	183.00	3.39
1949 TO 2002		56.02	0.003249	313.29	2.12	60.46	0.003158	204.28	3.43	60.94	0.003163	182.97	3.39
1948 TO 2002		56.03	0.003247	313.20	2.12	60.46	0.003156	204.28	3.43	60.94	0.003161	182.95	3.39
1947 TO 2002		56.04	0.003245	313.16	2.12	60.45	0.003154	204.31	3.42	60.93	0.003159	182.98	3.39
1946 TO 2002		56.05	0.003243	313.10	2.12	60.45	0.003152	204.31	3.42	60.94	0.003157	182.98	3.39
1945 TO 2002		56.07	0.003241	313.02	2.12	60.45	0.003150	204.31	3.42	60.94	0.003155	182.96	3.39
1944 TO 2002		56.08	0.003240	312.95	2.12	60.45	0.003149	204.30	3.42	60.95	0.003154	182.93	3.39
1943 TO 2002		56.08	0.003238	312.92	2.12	60.44	0.003147	204.32	3.42	60.95	0.003152	182.94	3.39

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
1943 TO 1952		67.31	0.000582	360.30	1.51	57.18	0.000578	268.44	2.05	0.00	0.000000	0.00	0.00
1944 TO 1953		71.40	0.000503	376.07	1.31	61.94	0.000503	284.93	1.81	0.00	0.000000	0.00	0.00
1945 TO 1954		71.62	0.000460	380.47	1.27	63.74	0.000461	297.29	1.70	0.00	0.000000	0.00	0.00
1946 TO 1955		74.95	0.000429	392.94	1.14	70.52	0.000432	335.35	1.39	0.00	0.000000	0.00	0.00
1947 TO 1956		76.98	0.000409	405.93	1.01	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1948 TO 1957		75.61	0.000457	408.01	0.99	0.00	0.000000	0.00	0.00	68.80	0.000461	239.09	1.69
1949 TO 1958		74.22	0.000469	410.27	0.97	0.00	0.000000	0.00	0.00	71.70	0.000472	247.57	1.51
1950 TO 1959		73.36	0.000464	404.17	1.04	0.00	0.000000	0.00	0.00	106.25	0.000464	263.06	0.47
1951 TO 1960		78.34	0.000276	389.97	1.17	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1952 TO 1961		79.56	0.000283	396.54	1.11	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1953 TO 1962		84.40	0.000274	390.38	1.17	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1954 TO 1963		86.16	0.000302	416.10	0.92	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1955 TO 1964		82.26	0.000417	417.60	0.90	0.00	0.000000	0.00	0.00	80.59	0.000422	322.02	1.11
1956 TO 1965		78.19	0.000405	406.08	1.02	0.00	0.000000	0.00	0.00	76.24	0.000408	268.23	1.37
1957 TO 1966		76.34	0.000338	397.57	1.09	0.00	0.000000	0.00	0.00	76.68	0.000332	249.73	1.40
1958 TO 1967		75.30	0.000315	395.07	1.12	0.00	0.000000	0.00	0.00	89.75	0.000301	253.48	0.98
1959 TO 1968		74.94	0.000346	395.65	1.11	0.00	0.000000	0.00	0.00	73.58	0.000335	245.32	1.45
1960 TO 1969		78.56	0.000297	401.58	1.05	0.00	0.000000	0.00	0.00	80.20	0.000284	245.00	1.33
1961 TO 1970		78.17	0.000306	411.30	0.96	0.00	0.000000	0.00	0.00	177.40	0.000298	224.64	-0.42
1962 TO 1971		79.14	0.000273	407.48	1.00	0.00	0.000000	0.00	0.00	558.30	0.000260	178.85	-1.12
1963 TO 1972		81.25	0.000273	409.22	0.99	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1964 TO 1973		82.85	0.000259	401.34	1.06	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1965 TO 1974		81.11	0.000273	395.15	1.12	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1966 TO 1975		81.97	0.000255	401.96	1.05	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1967 TO 1976		78.09	0.000313	400.19	1.07	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1968 TO 1977		78.34	0.000285	402.72	1.04	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1969 TO 1978		78.96	0.000324	414.79	0.93	74.95	0.000326	343.55	1.23	0.00	0.000000	0.00	0.00
1970 TO 1979		77.71	0.000281	413.71	0.93	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1971 TO 1980		77.17	0.000276	420.49	0.87	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1972 TO 1981		75.76	0.000284	416.46	0.90	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1973 TO 1982		71.41	0.000596	448.79	0.61	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1974 TO 1983		72.41	0.000561	445.37	0.64	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1975 TO 1984		74.20	0.000682	454.86	0.56	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1976 TO 1985		75.70	0.000622	452.44	0.59	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1977 TO 1986		81.31	0.000593	464.28	0.49	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1978 TO 1987		80.63	0.000590	457.02	0.54	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1979 TO 1988		82.62	0.000509	448.42	0.62	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1980 TO 1989		86.02	0.000480	455.13	0.56	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1981 TO 1990		87.90	0.000452	446.51	0.64	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1982 TO 1991		85.50	0.000467	485.99	0.30	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1983 TO 1992		80.57	0.000346	550.47	-0.24	0.00	0.000000	0.00	0.00	77.04	0.000316	274.54	0.59
1984 TO 1993		74.76	0.000406	606.64	-0.72	0.00	0.000000	0.00	0.00	65.06	0.000354	265.13	0.72
1985 TO 1994		68.65	0.000463	599.42	-0.66	0.00	0.000000	0.00	0.00	59.10	0.000377	258.05	0.77
1986 TO 1995		62.67	0.000624	603.97	-0.70	0.00	0.000000	0.00	0.00	54.37	0.000494	256.58	0.68
1987 TO 1996		58.91	0.000761	583.13	-0.52	0.00	0.000000	0.00	0.00	51.99	0.000579	256.80	0.61

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	58.61	0.000854	580.98	-0.50	0.00	0.000000	0.00	0.00	51.46	0.000642	251.64	0.58
1989	TO 1998	55.77	0.000988	562.14	-0.34	0.00	0.000000	0.00	0.00	49.81	0.000729	255.95	0.46
1990	TO 1999	52.92	0.001126	548.95	-0.23	0.00	0.000000	0.00	0.00	47.92	0.000810	261.88	0.31
1991	TO 2000	54.81	0.001097	531.85	-0.09	0.00	0.000000	0.00	0.00	49.47	0.000777	255.72	0.38
1992	TO 2001	58.69	0.001027	513.75	0.06	0.00	0.000000	0.00	0.00	52.52	0.000722	244.65	0.54
1993	TO 2002	62.30	0.001023	488.79	0.27	0.00	0.000000	0.00	0.00	55.67	0.000783	234.40	0.75

ACCOUNT 9734. MAINS

PSC CASE 0

STUDY NO. 027340

SUMMARY OF SHRINKING BANDS

YEAR	YEAR	FIRST DEGREE				SECOND DEGREE				THIRD DEGREE			
		AVERAGE SERVICE LIFE (YEARS)	FIT INDEX	TERMINAL A/L RATIO (PERCENT)	EQUIV. R CURVE	AVERAGE SERVICE LIFE (YEARS)	FIT INDEX	TERMINAL A/L RATIO (PERCENT)	EQUIV. R CURVE	AVERAGE SERVICE LIFE (YEARS)	FIT INDEX	TERMINAL A/L RATIO (PERCENT)	EQUIV. R CURVE
2002 TO 2002		70.52	0.003181	462.96	0.49	0.00	0.000000	0.00	0.00	63.08	0.003170	217.99	1.16
2001 TO 2002		90.62	0.001867	438.67	0.71	0.00	0.000000	0.00	0.00	74.51	0.001844	195.27	1.66
2000 TO 2002		99.88	0.001368	432.01	0.77	0.00	0.000000	0.00	0.00	78.56	0.001338	189.02	1.85
1999 TO 2002		81.28	0.001360	454.59	0.56	0.00	0.000000	0.00	0.00	68.14	0.001267	201.78	1.35
1998 TO 2002		73.86	0.001265	461.00	0.51	0.00	0.000000	0.00	0.00	63.72	0.001121	211.08	1.12
1997 TO 2002		72.93	0.001149	468.24	0.45	0.00	0.000000	0.00	0.00	62.83	0.000988	212.49	1.09
1996 TO 2002		69.78	0.001027	470.74	0.43	0.00	0.000000	0.00	0.00	60.78	0.000816	217.99	1.00
1995 TO 2002		65.97	0.001042	478.23	0.37	0.00	0.000000	0.00	0.00	58.21	0.000810	224.20	0.88
1994 TO 2002		63.61	0.001052	480.26	0.35	0.00	0.000000	0.00	0.00	56.67	0.000821	230.28	0.81
1993 TO 2002		62.30	0.001023	488.79	0.27	0.00	0.000000	0.00	0.00	55.67	0.000783	234.40	0.75
1992 TO 2002		59.89	0.001028	508.43	0.10	0.00	0.000000	0.00	0.00	53.72	0.000761	241.06	0.61
1991 TO 2002		59.82	0.000968	515.71	0.05	0.00	0.000000	0.00	0.00	53.70	0.000699	243.01	0.62
1990 TO 2002		61.22	0.000913	515.36	0.05	0.00	0.000000	0.00	0.00	54.72	0.000661	240.30	0.69
1989 TO 2002		62.87	0.000857	517.77	0.03	0.00	0.000000	0.00	0.00	55.81	0.000620	239.21	0.75
1988 TO 2002		64.09	0.000813	517.21	0.03	0.00	0.000000	0.00	0.00	56.68	0.000591	237.31	0.81
1987 TO 2002		64.56	0.000772	513.47	0.07	0.00	0.000000	0.00	0.00	57.20	0.000560	236.87	0.84
1986 TO 2002		65.72	0.000738	512.04	0.08	0.00	0.000000	0.00	0.00	58.00	0.000538	237.06	0.88
1985 TO 2002		66.54	0.000708	510.25	0.09	0.00	0.000000	0.00	0.00	58.62	0.000515	236.26	0.91
1984 TO 2002		66.91	0.000689	508.91	0.11	0.00	0.000000	0.00	0.00	58.96	0.000500	236.59	0.92
1983 TO 2002		67.73	0.000659	505.68	0.13	0.00	0.000000	0.00	0.00	59.59	0.000475	235.76	0.96
1982 TO 2002		67.28	0.000648	512.04	0.08	0.00	0.000000	0.00	0.00	59.18	0.000472	237.41	0.93
1981 TO 2002		67.53	0.000627	507.15	0.11	0.00	0.000000	0.00	0.00	59.52	0.000456	237.72	0.95
1980 TO 2002		67.70	0.000613	508.89	0.11	0.00	0.000000	0.00	0.00	59.62	0.000443	237.34	0.95
1979 TO 2002		68.02	0.000596	506.44	0.12	0.00	0.000000	0.00	0.00	59.90	0.000426	237.90	0.96
1978 TO 2002		68.22	0.000576	507.89	0.12	0.00	0.000000	0.00	0.00	60.10	0.000411	238.75	0.96
1977 TO 2002		68.37	0.000560	505.34	0.13	0.00	0.000000	0.00	0.00	60.33	0.000395	239.52	0.96
1976 TO 2002		68.10	0.000551	501.50	0.17	0.00	0.000000	0.00	0.00	60.43	0.000391	240.77	0.96
1975 TO 2002		68.30	0.000542	500.01	0.18	0.00	0.000000	0.00	0.00	60.62	0.000383	240.03	0.97
1974 TO 2002		68.16	0.000527	496.62	0.21	0.00	0.000000	0.00	0.00	60.75	0.000368	241.17	0.97
1973 TO 2002		68.55	0.000518	495.25	0.22	0.00	0.000000	0.00	0.00	61.04	0.000362	240.00	0.98
1972 TO 2002		68.95	0.000511	493.84	0.23	0.00	0.000000	0.00	0.00	61.29	0.000357	239.03	1.00
1971 TO 2002		69.27	0.000506	492.99	0.24	0.00	0.000000	0.00	0.00	61.50	0.000353	239.83	1.01
1970 TO 2002		69.40	0.000499	492.07	0.24	0.00	0.000000	0.00	0.00	61.61	0.000349	239.40	1.01
1969 TO 2002		69.75	0.000494	492.50	0.24	0.00	0.000000	0.00	0.00	61.78	0.000346	238.74	1.03
1968 TO 2002		69.76	0.000491	491.00	0.25	0.00	0.000000	0.00	0.00	61.83	0.000343	238.54	1.03
1967 TO 2002		69.75	0.000488	489.58	0.27	0.00	0.000000	0.00	0.00	61.90	0.000339	238.29	1.04
1966 TO 2002		69.81	0.000486	487.72	0.29	0.00	0.000000	0.00	0.00	61.98	0.000335	237.97	1.04
1965 TO 2002		69.81	0.000483	484.86	0.30	0.00	0.000000	0.00	0.00	62.05	0.000333	237.70	1.05
1964 TO 2002		69.74	0.000481	483.91	0.31	0.00	0.000000	0.00	0.00	62.08	0.000332	237.61	1.05
1963 TO 2002		69.88	0.000478	485.86	0.30	0.00	0.000000	0.00	0.00	62.14	0.000331	237.39	1.05
1962 TO 2002		70.01	0.000477	484.90	0.31	0.00	0.000000	0.00	0.00	62.22	0.000331	237.06	1.06
1961 TO 2002		70.18	0.000474	485.17	0.31	0.00	0.000000	0.00	0.00	62.33	0.000330	236.66	1.07
1960 TO 2002		70.32	0.000472	484.22	0.31	0.00	0.000000	0.00	0.00	62.42	0.000329	236.31	1.08
1959 TO 2002		70.34	0.000469	484.08	0.31	0.00	0.000000	0.00	0.00	62.48	0.000327	236.07	1.08
1958 TO 2002		70.38	0.000467	483.81	0.31	0.00	0.000000	0.00	0.00	62.55	0.000325	235.83	1.09

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
1957 TO 2002	70.45	0.000465	483.33	0.32	0.00	0.000000	0.00	0.00	0.00	62.63	0.000325	235.51	1.09
1956 TO 2002	70.61	0.000462	483.67	0.32	0.00	0.000000	0.00	0.00	0.00	62.75	0.000325	235.05	1.10
1955 TO 2002	70.77	0.000460	483.95	0.32	0.00	0.000000	0.00	0.00	0.00	62.89	0.000326	234.55	1.11
1954 TO 2002	70.85	0.000459	483.44	0.32	0.00	0.000000	0.00	0.00	0.00	62.99	0.000326	234.18	1.11
1953 TO 2002	70.98	0.000456	482.56	0.32	0.00	0.000000	0.00	0.00	0.00	63.11	0.000327	233.72	1.12
1952 TO 2002	70.83	0.000454	482.16	0.33	0.00	0.000000	0.00	0.00	0.00	63.10	0.000323	233.77	1.12
1951 TO 2002	70.93	0.000451	482.88	0.33	0.00	0.000000	0.00	0.00	0.00	63.22	0.000323	233.32	1.12
1950 TO 2002	70.75	0.000453	482.66	0.33	0.00	0.000000	0.00	0.00	0.00	63.15	0.000324	233.57	1.12
1949 TO 2002	70.78	0.000449	482.50	0.33	0.00	0.000000	0.00	0.00	0.00	63.22	0.000320	234.88	1.12
1948 TO 2002	70.87	0.000445	481.90	0.33	0.00	0.000000	0.00	0.00	0.00	63.34	0.000319	234.45	1.13
1947 TO 2002	70.97	0.000440	481.17	0.33	0.00	0.000000	0.00	0.00	0.00	63.48	0.000314	233.92	1.13
1946 TO 2002	71.09	0.000434	480.40	0.34	0.00	0.000000	0.00	0.00	0.00	63.64	0.000310	234.91	1.14
1945 TO 2002	71.17	0.000429	479.87	0.34	0.00	0.000000	0.00	0.00	0.00	63.77	0.000306	234.42	1.14
1944 TO 2002	71.23	0.000424	479.41	0.35	0.00	0.000000	0.00	0.00	0.00	63.90	0.000302	233.96	1.14
1943 TO 2002	71.28	0.000418	479.10	0.36	0.00	0.000000	0.00	0.00	0.00	64.03	0.000297	235.04	1.15

ACCOUNT 9735. DESUPERHEATING EQUIPMENT PSC CASE 0 STUDY NO. 027350

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
1943 TO 1952		0.00	0.000000	0.00	0.00	32.57	0.014271	327.03	-2.48	21.83	0.014589	281.71	-0.67
1944 TO 1953		0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00	25.79	0.011046	261.75	-0.45
1945 TO 1954		0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00	31.00	0.010919	246.81	-0.35
1946 TO 1955		0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1947 TO 1956		0.00	0.000000	0.00	0.00	67.05	0.011472	252.79	-0.35	0.00	0.000000	0.00	0.00
1948 TO 1957		0.00	0.000000	0.00	0.00	36.01	0.007526	212.45	1.69	0.00	0.000000	0.00	0.00
1949 TO 1958		0.00	0.000000	0.00	0.00	37.83	0.004626	210.16	1.84	0.00	0.000000	0.00	0.00
1950 TO 1959	180.64	0.000729	398.87	1.09	0.00	0.00	0.000000	0.00	0.00	56.21	0.000727	166.33	3.74
1951 TO 1960		0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00	53.28	0.000943	167.98	3.33
1952 TO 1961		0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00	58.32	0.000951	170.62	3.31
1953 TO 1962		0.00	0.000000	0.00	0.00	119.83	0.000775	203.21	3.14	61.30	0.000782	168.84	3.89
1954 TO 1963		0.00	0.000000	0.00	0.00	102.15	0.000771	206.08	3.12	65.66	0.000779	171.34	3.83
1955 TO 1964		0.00	0.000000	0.00	0.00	96.05	0.000731	205.63	3.16	70.59	0.000740	174.96	3.77
1956 TO 1965		0.00	0.000000	0.00	0.00	88.89	0.001005	233.44	2.46	67.25	0.001019	185.12	3.21
1957 TO 1966		0.00	0.000000	0.00	0.00	72.91	0.000955	221.49	2.61	0.00	0.000000	0.00	0.00
1958 TO 1967		0.00	0.000000	0.00	0.00	89.28	0.000871	236.90	2.26	0.00	0.000000	0.00	0.00
1959 TO 1968		0.00	0.000000	0.00	0.00	85.18	0.000707	228.35	2.39	0.00	0.000000	0.00	0.00
1960 TO 1969		0.00	0.000000	0.00	0.00	105.38	0.000645	239.62	2.13	0.00	0.000000	0.00	0.00
1961 TO 1970		0.00	0.000000	0.00	0.00	215.49	0.000615	299.09	1.31	0.00	0.000000	0.00	0.00
1962 TO 1971	256.94	0.000636	388.62	0.18	0.00	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1963 TO 1972	243.86	0.000590	409.45	0.47	0.00	0.000000	0.00	0.00	0.00	0.00	0.000000	0.00	0.00
1964 TO 1973		0.00	0.000000	0.00	0.00	61.91	0.002624	210.79	2.27	0.00	0.000000	0.00	0.00
1965 TO 1974		0.00	0.000000	0.00	0.00	70.35	0.002355	218.20	2.27	0.00	0.000000	0.00	0.00
1966 TO 1975	36.68	0.008234	516.59	0.04	0.00	0.000000	0.00	0.00	32.15	0.008338	237.96	0.91	
1967 TO 1976	34.66	0.009218	976.65	-2.60	0.00	0.000000	0.00	0.00	28.36	0.009268	252.11	0.14	
1968 TO 1977	37.41	0.008559	958.21	-2.60	0.00	0.000000	0.00	0.00	30.26	0.008645	249.50	0.30	
1969 TO 1978	37.02	0.007486	771.29	-2.47	0.00	0.000000	0.00	0.00	31.25	0.007578	263.98	0.29	
1970 TO 1979	39.73	0.007352	781.45	-2.60	0.00	0.000000	0.00	0.00	33.47	0.007470	270.40	0.32	
1971 TO 1980	43.24	0.006644	836.09	-2.60	0.00	0.000000	0.00	0.00	36.15	0.006761	280.74	0.28	
1972 TO 1981	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00	39.98	0.006483	298.90	0.11	
1973 TO 1982	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00	
1974 TO 1983	57.49	0.005775	971.42	-2.60	0.00	0.000000	0.00	0.00	45.05	0.005878	271.92	0.53	
1975 TO 1984	0.00	0.000000	0.00	0.00	53.88	0.005746	414.83	-0.57	0.00	0.000000	0.00	0.00	
1976 TO 1985	0.00	0.000000	0.00	0.00	71.71	0.003269	221.04	1.69	0.00	0.000000	0.00	0.00	
1977 TO 1986	121.35	0.000992	370.43	1.39	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00	
1978 TO 1987	105.52	0.001192	380.51	1.28	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00	
1979 TO 1988	119.45	0.001184	398.91	1.08	0.00	0.000000	0.00	0.00	239.67	0.001168	140.82	2.17	
1980 TO 1989	137.54	0.001136	417.71	0.90	0.00	0.000000	0.00	0.00	160.46	0.001127	151.76	2.55	
1981 TO 1990	138.79	0.001215	425.45	0.83	0.00	0.000000	0.00	0.00	290.78	0.001119	136.70	2.26	
1982 TO 1991	107.23	0.001495	421.06	0.87	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00	
1983 TO 1992	58.25	0.003525	321.87	2.00	53.99	0.003529	239.85	2.38	55.80	0.003508	174.74	3.02	
1984 TO 1993	52.41	0.003826	332.98	1.86	49.73	0.003840	262.40	2.10	50.89	0.003832	193.54	2.44	
1985 TO 1994	49.43	0.003465	334.82	1.81	48.17	0.003465	285.44	2.00	48.16	0.003497	219.05	2.17	
1986 TO 1995	50.39	0.003209	350.30	1.63	48.69	0.003225	288.55	1.87	48.53	0.003225	215.34	2.04	
1987 TO 1996	33.55	0.007950	380.05	1.26	0.00	0.000000	0.00	0.00	34.11	0.007964	318.13	0.86	

ACCOUNT 9735. DESUPERHEATING EQUIPMENT PSC CASE 0 STUDY NO. 027350

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	33.90	0.007741	376.11	1.31	0.00	0.000000	0.00	0.00	33.91	0.007732	317.03	0.74
1989	TO 1998	34.61	0.007312	379.97	1.26	0.00	0.000000	0.00	0.00	34.33	0.007305	316.09	0.61
1990	TO 1999	35.55	0.007209	375.52	1.32	0.00	0.000000	0.00	0.00	34.85	0.007189	308.45	0.54
1991	TO 2000	36.64	0.006832	372.53	1.36	0.00	0.000000	0.00	0.00	35.68	0.006793	304.08	0.49
1992	TO 2001	38.31	0.006479	366.75	1.41	0.00	0.000000	0.00	0.00	37.26	0.006431	293.87	0.51
1993	TO 2002	42.09	0.005752	383.72	1.23	0.00	0.000000	0.00	0.00	44.78	0.005606	269.08	-0.18

ACCOUNT 9735. DESUPERHEATING EQUIPMENT

PSC CASE 0

STUDY NO. 027350

SUMMARY OF SHRINKING 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
2002	TO 2002	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
2001	TO 2002	174.83	0.000979	485.34	0.31	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
2000	TO 2002	204.12	0.000682	440.66	0.69	0.00	0.000000	0.00	0.00	215.56	0.000686	151.00	2.74
1999	TO 2002	222.02	0.000527	417.76	0.90	0.00	0.000000	0.00	0.00	151.96	0.000530	162.22	3.15
1998	TO 2002	0.00	0.000000	0.00	0.00	159.12	0.000565	229.70	2.33	0.00	0.000000	0.00	0.00
1997	TO 2002	144.82	0.000987	428.46	0.80	0.00	0.000000	0.00	0.00	226.71	0.000990	148.87	2.17
1996	TO 2002	41.90	0.006936	383.05	1.23	0.00	0.000000	0.00	0.00	41.45	0.006743	283.48	-0.58
1995	TO 2002	43.45	0.006480	387.82	1.18	0.00	0.000000	0.00	0.00	43.74	0.006310	266.34	-0.31
1994	TO 2002	43.16	0.005903	385.73	1.22	0.00	0.000000	0.00	0.00	45.49	0.005744	267.11	-0.27
1993	TO 2002	42.09	0.005752	383.72	1.23	0.00	0.000000	0.00	0.00	44.78	0.005606	269.08	-0.18
1992	TO 2002	40.28	0.006029	371.16	1.37	0.00	0.000000	0.00	0.00	39.84	0.005988	282.37	0.56
1991	TO 2002	40.96	0.005903	372.36	1.35	0.00	0.000000	0.00	0.00	41.02	0.005872	281.58	0.61
1990	TO 2002	42.17	0.005781	373.46	1.35	0.00	0.000000	0.00	0.00	42.68	0.005763	275.30	0.70
1989	TO 2002	43.42	0.005421	374.24	1.34	0.00	0.000000	0.00	0.00	44.32	0.005406	271.90	0.78
1988	TO 2002	44.22	0.005309	374.25	1.33	0.00	0.000000	0.00	0.00	45.40	0.005299	267.59	0.82
1987	TO 2002	44.70	0.004925	374.75	1.32	0.00	0.000000	0.00	0.00	46.19	0.004907	265.23	0.84
1986	TO 2002	45.63	0.004830	375.82	1.33	0.00	0.000000	0.00	0.00	47.43	0.004818	264.58	0.89
1985	TO 2002	45.94	0.004758	375.49	1.33	0.00	0.000000	0.00	0.00	48.02	0.004745	263.45	0.89
1984	TO 2002	46.68	0.004688	373.80	1.34	0.00	0.000000	0.00	0.00	49.01	0.004680	262.20	0.92
1983	TO 2002	47.39	0.004614	372.40	1.34	0.00	0.000000	0.00	0.00	49.95	0.004608	261.25	0.95
1982	TO 2002	47.86	0.004553	375.08	1.34	0.00	0.000000	0.00	0.00	50.60	0.004549	259.87	0.96
1981	TO 2002	48.44	0.004496	372.63	1.35	0.00	0.000000	0.00	0.00	51.33	0.004494	258.11	0.98
1980	TO 2002	48.96	0.004437	372.72	1.36	0.00	0.000000	0.00	0.00	51.96	0.004436	256.92	1.00
1979	TO 2002	49.40	0.004240	371.46	1.37	0.00	0.000000	0.00	0.00	52.49	0.004236	256.25	1.02
1978	TO 2002	49.49	0.004189	370.78	1.38	0.00	0.000000	0.00	0.00	52.64	0.004182	255.51	1.02
1977	TO 2002	49.87	0.004136	369.95	1.39	0.00	0.000000	0.00	0.00	53.03	0.004130	253.63	1.04
1976	TO 2002	49.26	0.004116	396.90	1.10	0.00	0.000000	0.00	0.00	51.82	0.004127	255.71	0.95
1975	TO 2002	45.93	0.004121	410.41	0.97	0.00	0.000000	0.00	0.00	48.00	0.004123	267.73	0.80
1974	TO 2002	46.28	0.004085	407.30	0.99	0.00	0.000000	0.00	0.00	48.35	0.004086	265.75	0.82
1973	TO 2002	46.33	0.003969	417.63	0.90	0.00	0.000000	0.00	0.00	48.74	0.003979	273.88	0.72
1972	TO 2002	46.63	0.003933	417.09	0.91	0.00	0.000000	0.00	0.00	49.04	0.003943	272.25	0.74
1971	TO 2002	46.88	0.003915	417.06	0.91	0.00	0.000000	0.00	0.00	49.27	0.003925	270.95	0.76
1970	TO 2002	47.13	0.003862	414.83	0.91	0.00	0.000000	0.00	0.00	49.49	0.003871	269.75	0.77
1969	TO 2002	47.34	0.003843	415.11	0.92	0.00	0.000000	0.00	0.00	49.64	0.003853	266.90	0.79
1968	TO 2002	47.54	0.003825	415.41	0.92	0.00	0.000000	0.00	0.00	49.82	0.003835	267.95	0.80
1967	TO 2002	47.71	0.003794	413.95	0.92	0.00	0.000000	0.00	0.00	49.93	0.003804	265.36	0.81
1966	TO 2002	47.83	0.003782	415.00	0.92	0.00	0.000000	0.00	0.00	50.05	0.003792	266.72	0.82
1965	TO 2002	47.86	0.003766	414.79	0.92	0.00	0.000000	0.00	0.00	50.13	0.003776	266.32	0.81
1964	TO 2002	48.01	0.003759	413.49	0.92	0.00	0.000000	0.00	0.00	50.25	0.003769	265.69	0.83
1963	TO 2002	48.14	0.003751	414.38	0.93	0.00	0.000000	0.00	0.00	50.36	0.003762	265.12	0.84
1962	TO 2002	48.27	0.003743	413.29	0.93	0.00	0.000000	0.00	0.00	50.45	0.003755	264.60	0.85
1961	TO 2002	48.39	0.003735	414.38	0.93	0.00	0.000000	0.00	0.00	50.54	0.003747	262.18	0.86
1960	TO 2002	48.48	0.003725	415.62	0.92	0.00	0.000000	0.00	0.00	50.59	0.003738	261.93	0.86
1959	TO 2002	48.58	0.003719	414.80	0.92	0.00	0.000000	0.00	0.00	50.66	0.003731	261.56	0.87
1958	TO 2002	48.67	0.003711	414.05	0.93	0.00	0.000000	0.00	0.00	50.72	0.003724	261.23	0.88

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
1957	TO 2002	48.74	0.003704	413.39	0.93	0.00	0.000000	0.00	0.00	50.78	0.003717	260.91	0.88
1956	TO 2002	48.81	0.003668	414.90	0.93	0.00	0.000000	0.00	0.00	50.82	0.003681	260.72	0.89
1955	TO 2002	48.87	0.003664	414.32	0.93	0.00	0.000000	0.00	0.00	50.88	0.003677	260.44	0.90
1954	TO 2002	48.93	0.003621	413.82	0.93	0.00	0.000000	0.00	0.00	50.93	0.003633	260.18	0.90
1953	TO 2002	48.99	0.003617	413.35	0.93	0.00	0.000000	0.00	0.00	50.98	0.003629	259.92	0.90
1952	TO 2002	48.96	0.003611	413.58	0.93	0.00	0.000000	0.00	0.00	50.97	0.003623	259.97	0.90
1951	TO 2002	49.01	0.003598	413.18	0.93	0.00	0.000000	0.00	0.00	51.02	0.003611	259.70	0.91
1950	TO 2002	49.05	0.003595	412.83	0.94	0.00	0.000000	0.00	0.00	51.07	0.003608	259.44	0.91
1949	TO 2002	49.13	0.003582	420.33	0.88	0.00	0.000000	0.00	0.00	51.25	0.003599	264.41	0.85
1948	TO 2002	49.16	0.003579	420.04	0.88	0.00	0.000000	0.00	0.00	51.30	0.003596	264.13	0.85
1947	TO 2002	48.94	0.003574	419.93	0.87	0.00	0.000000	0.00	0.00	50.93	0.003590	264.07	0.86
1946	TO 2002	48.87	0.003572	420.51	0.86	0.00	0.000000	0.00	0.00	50.82	0.003587	262.68	0.86
1945	TO 2002	48.90	0.003570	420.27	0.86	0.00	0.000000	0.00	0.00	50.88	0.003585	262.39	0.86
1944	TO 2002	48.89	0.003567	420.35	0.86	0.00	0.000000	0.00	0.00	50.90	0.003582	262.29	0.86
1943	TO 2002	48.91	0.003565	420.15	0.87	0.00	0.000000	0.00	0.00	50.95	0.003580	263.98	0.86

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
1943	TO 1952	30.52	0.001143	519.33	0.01	27.09	0.001067	326.75	0.83	26.82	0.001070	300.19	0.90
1944	TO 1953	31.18	0.001030	505.11	0.12	27.85	0.000950	324.95	0.90	27.51	0.000949	292.63	0.97
1945	TO 1954	30.49	0.000964	516.51	0.04	27.92	0.000922	345.62	0.72	27.30	0.000910	294.92	0.87
1946	TO 1955	30.56	0.001025	479.34	0.36	28.65	0.001001	347.29	0.85	27.95	0.000988	288.03	1.00
1947	TO 1956	30.51	0.001059	467.07	0.44	29.00	0.001047	353.39	0.84	28.16	0.001028	285.91	1.03
1948	TO 1957	29.95	0.000996	469.05	0.42	28.80	0.000989	369.82	0.76	27.84	0.000960	289.14	0.98
1949	TO 1958	29.20	0.001045	467.42	0.44	28.70	0.001050	409.44	0.61	27.63	0.001028	298.54	0.90
1950	TO 1959	29.76	0.001023	478.80	0.36	29.27	0.001029	418.56	0.53	28.13	0.001011	303.98	0.85
1951	TO 1960	31.33	0.000916	470.76	0.43	30.24	0.000910	372.07	0.75	29.38	0.000900	297.00	0.96
1952	TO 1961	31.56	0.000834	470.58	0.43	30.76	0.000834	388.47	0.68	30.10	0.000834	320.63	0.85
1953	TO 1962	31.26	0.000838	465.44	0.47	0.00	0.000000	0.00	0.00	30.55	0.000847	351.91	0.70
1954	TO 1963	31.60	0.000868	460.45	0.50	0.00	0.000000	0.00	0.00	31.09	0.000870	348.99	0.66
1955	TO 1964	31.85	0.000908	447.47	0.61	0.00	0.000000	0.00	0.00	31.51	0.000906	350.66	0.70
1956	TO 1965	32.21	0.000906	467.32	0.46	0.00	0.000000	0.00	0.00	32.20	0.000905	380.39	0.46
1957	TO 1966	32.14	0.000907	465.16	0.46	0.00	0.000000	0.00	0.00	31.56	0.000909	350.10	0.63
1958	TO 1967	31.94	0.000853	458.71	0.53	0.00	0.000000	0.00	0.00	31.71	0.000842	364.20	0.56
1959	TO 1968	32.98	0.000708	468.53	0.44	0.00	0.000000	0.00	0.00	33.38	0.000699	414.90	0.28
1960	TO 1969	33.42	0.000706	465.29	0.47	0.00	0.000000	0.00	0.00	65.68	0.000695	1191.45	-2.60
1961	TO 1970	33.87	0.000697	465.06	0.47	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1962	TO 1971	35.29	0.000671	460.49	0.52	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1963	TO 1972	37.64	0.000593	460.94	0.50	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1964	TO 1973	39.45	0.000584	462.65	0.48	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1965	TO 1974	41.68	0.000564	469.00	0.44	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1966	TO 1975	43.27	0.000568	451.76	0.58	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1967	TO 1976	43.60	0.000735	443.85	0.66	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1968	TO 1977	47.32	0.000668	440.62	0.69	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1969	TO 1978	42.48	0.000666	472.03	0.41	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1970	TO 1979	43.64	0.000629	486.94	0.28	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1971	TO 1980	41.46	0.000635	490.79	0.25	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1972	TO 1981	38.49	0.000678	513.11	0.07	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1973	TO 1982	39.40	0.000630	508.82	0.10	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1974	TO 1983	41.13	0.000623	511.77	0.07	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1975	TO 1984	38.89	0.000651	518.11	0.02	0.00	0.000000	0.00	0.00	39.20	0.000640	391.59	0.06
1976	TO 1985	40.62	0.000651	525.55	-0.04	0.00	0.000000	0.00	0.00	40.54	0.000643	371.25	0.14
1977	TO 1986	42.55	0.000680	525.26	-0.03	0.00	0.000000	0.00	0.00	40.13	0.000669	292.77	0.68
1978	TO 1987	33.37	0.000906	549.89	-0.25	0.00	0.000000	0.00	0.00	32.65	0.000872	326.20	0.50
1979	TO 1988	36.66	0.000810	525.15	-0.03	0.00	0.000000	0.00	0.00	35.55	0.000780	305.23	0.26
1980	TO 1989	37.93	0.000831	536.48	-0.12	37.90	0.000835	531.60	-0.11	36.44	0.000807	303.23	0.50
1981	TO 1990	40.35	0.000774	524.16	-0.03	40.00	0.000777	481.25	0.09	38.47	0.000758	297.63	0.61
1982	TO 1991	42.90	0.000745	520.96	0.00	42.62	0.000749	489.26	0.09	40.42	0.000717	280.80	0.73
1983	TO 1992	42.48	0.000725	533.17	-0.10	0.00	0.000000	0.00	0.00	40.17	0.000684	282.55	0.63
1984	TO 1993	42.52	0.000746	520.98	0.00	0.00	0.000000	0.00	0.00	40.47	0.000701	280.44	0.65
1985	TO 1994	46.49	0.000642	519.51	0.02	0.00	0.000000	0.00	0.00	43.42	0.000615	275.22	0.78
1986	TO 1995	46.32	0.000615	514.90	0.06	0.00	0.000000	0.00	0.00	43.64	0.000583	276.09	0.74
1987	TO 1996	46.26	0.000590	522.04	0.00	0.00	0.000000	0.00	0.00	43.99	0.000556	285.27	0.63

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
988	TO 1997	59.22	0.000457	529.34	-0.06	0.00	0.000000	0.00	0.00	52.93	0.000446	263.54	0.94
989	TO 1998	57.14	0.000463	515.43	0.04	0.00	0.000000	0.00	0.00	52.19	0.000430	259.61	0.92
990	TO 1999	56.10	0.000446	524.92	-0.03	0.00	0.000000	0.00	0.00	51.75	0.000410	265.71	0.81
991	TO 2000	61.67	0.000388	542.42	-0.18	0.00	0.000000	0.00	0.00	55.54	0.000368	265.57	0.83
992	TO 2001	67.16	0.000325	530.80	-0.07	0.00	0.000000	0.00	0.00	60.92	0.000314	270.01	0.86
993	TO 2002	71.93	0.000325	526.19	-0.03	0.00	0.000000	0.00	0.00	64.65	0.000317	265.27	0.93

SUMMARY OF SHRINKING 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
2002 TO 2002	2002	108.84	0.001355	524.17	-0.02	0.00	0.000000	0.00	0.00	81.13	0.001355	197.83	1.73
2001 TO 2002	2002	119.72	0.000677	498.23	0.19	0.00	0.000000	0.00	0.00	89.86	0.000676	203.09	1.80
2000 TO 2002	2002	188.70	0.000557	529.15	-2.60	114.11	0.000559	315.04	1.09	0.00	0.000000	0.00	0.00
1999 TO 2002	2002	0.00	0.000000	0.00	0.00	87.23	0.000464	334.19	0.76	0.00	0.000000	0.00	0.00
1998 TO 2002	2002	88.25	0.000403	586.39	-0.54	0.00	0.000000	0.00	0.00	76.05	0.000405	278.10	0.82
1997 TO 2002	2002	82.86	0.000374	622.14	-0.86	0.00	0.000000	0.00	0.00	70.44	0.000375	278.96	0.75
1996 TO 2002	2002	75.57	0.000370	585.57	-0.53	0.00	0.000000	0.00	0.00	67.09	0.000368	279.49	0.71
1995 TO 2002	2002	72.86	0.000348	556.52	-0.29	0.00	0.000000	0.00	0.00	65.53	0.000342	272.41	0.79
1994 TO 2002	2002	73.58	0.000339	547.03	-0.21	0.00	0.000000	0.00	0.00	66.18	0.000335	274.25	0.82
1993 TO 2002	2002	71.93	0.000325	526.19	-0.03	0.00	0.000000	0.00	0.00	64.65	0.000317	265.27	0.93
1992 TO 2002	2002	70.11	0.000312	528.45	-0.05	0.00	0.000000	0.00	0.00	63.07	0.000298	162.42	0.93
1991 TO 2002	2002	68.42	0.000328	532.71	-0.09	0.00	0.000000	0.00	0.00	60.85	0.000307	255.57	0.96
1990 TO 2002	2002	67.07	0.000321	522.57	-0.01	0.00	0.000000	0.00	0.00	60.11	0.000301	258.69	0.97
1989 TO 2002	2002	68.01	0.000297	540.39	-0.15	0.00	0.000000	0.00	0.00	60.09	0.000286	263.76	0.93
1988 TO 2002	2002	67.96	0.000274	540.75	-0.15	0.00	0.000000	0.00	0.00	60.08	0.000266	268.81	0.91
1987 TO 2002	2002	56.87	0.000329	538.94	-0.14	0.00	0.000000	0.00	0.00	52.78	0.000307	281.36	0.69
1986 TO 2002	2002	56.78	0.000325	531.02	-0.08	0.00	0.000000	0.00	0.00	52.47	0.000306	281.10	0.74
1985 TO 2002	2002	57.47	0.000312	529.88	-0.07	0.00	0.000000	0.00	0.00	52.95	0.000296	280.43	0.77
1984 TO 2002	2002	55.70	0.000335	525.18	-0.04	0.00	0.000000	0.00	0.00	51.79	0.000311	279.01	0.74
1983 TO 2002	2002	56.43	0.000325	523.62	-0.02	0.00	0.000000	0.00	0.00	52.29	0.000303	278.26	0.77
1982 TO 2002	2002	56.73	0.000315	519.14	0.01	0.00	0.000000	0.00	0.00	52.66	0.000296	280.09	0.78
1981 TO 2002	2002	55.06	0.000319	523.95	-0.02	0.00	0.000000	0.00	0.00	51.55	0.000299	286.14	0.71
1980 TO 2002	2002	53.77	0.000334	523.52	-0.01	0.00	0.000000	0.00	0.00	50.54	0.000310	285.92	0.69
1979 TO 2002	2002	53.65	0.000328	526.56	-0.04	0.00	0.000000	0.00	0.00	50.46	0.000307	290.33	0.67
1978 TO 2002	2002	52.25	0.000327	536.98	-0.12	0.00	0.000000	0.00	0.00	49.31	0.000303	295.04	0.59
1977 TO 2002	2002	52.33	0.000319	534.08	-0.10	0.00	0.000000	0.00	0.00	49.47	0.000297	296.13	0.59
1976 TO 2002	2002	51.81	0.000311	529.77	-0.07	0.00	0.000000	0.00	0.00	49.39	0.000287	300.67	0.55
1975 TO 2002	2002	51.80	0.000303	526.02	-0.04	0.00	0.000000	0.00	0.00	49.51	0.000280	301.99	0.55
1974 TO 2002	2002	51.83	0.000297	523.78	-0.02	0.00	0.000000	0.00	0.00	49.69	0.000274	302.86	0.55
1973 TO 2002	2002	51.94	0.000295	522.67	0.00	0.00	0.000000	0.00	0.00	49.84	0.000273	303.96	0.55
1972 TO 2002	2002	52.12	0.000292	520.91	0.01	0.00	0.000000	0.00	0.00	50.03	0.000271	304.84	0.56
1971 TO 2002	2002	52.06	0.000286	517.63	0.03	0.00	0.000000	0.00	0.00	50.12	0.000266	308.24	0.55
1970 TO 2002	2002	51.84	0.000281	517.97	0.03	0.00	0.000000	0.00	0.00	50.09	0.000262	310.45	0.53
1969 TO 2002	2002	51.53	0.000281	517.13	0.04	0.00	0.000000	0.00	0.00	49.99	0.000261	313.09	0.50
1968 TO 2002	2002	51.43	0.000278	518.14	0.03	0.00	0.000000	0.00	0.00	49.96	0.000258	315.26	0.48
1967 TO 2002	2002	50.86	0.000278	516.12	0.04	0.00	0.000000	0.00	0.00	49.67	0.000256	319.10	0.45
1966 TO 2002	2002	50.51	0.000277	517.71	0.04	0.00	0.000000	0.00	0.00	49.57	0.000256	323.78	0.41
1965 TO 2002	2002	50.35	0.000275	519.38	0.02	0.00	0.000000	0.00	0.00	49.51	0.000254	326.23	0.38
1964 TO 2002	2002	50.03	0.000276	514.64	0.05	0.00	0.000000	0.00	0.00	49.44	0.000254	328.65	0.36
1963 TO 2002	2002	49.86	0.000275	514.39	0.06	0.00	0.000000	0.00	0.00	49.40	0.000253	330.98	0.35
1962 TO 2002	2002	49.61	0.000274	512.99	0.07	0.00	0.000000	0.00	0.00	49.32	0.000249	333.53	0.33
1961 TO 2002	2002	49.41	0.000271	513.02	0.07	0.00	0.000000	0.00	0.00	49.33	0.000247	337.50	0.29
1960 TO 2002	2002	49.27	0.000268	512.53	0.08	0.00	0.000000	0.00	0.00	49.32	0.000242	339.59	0.27
1959 TO 2002	2002	49.08	0.000266	512.45	0.07	0.00	0.000000	0.00	0.00	49.24	0.000240	340.20	0.26
1958 TO 2002	2002	48.82	0.000267	511.06	0.08	0.00	0.000000	0.00	0.00	49.17	0.000239	342.70	0.23

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
1957	TO 2002	48.57	0.000268	511.64	0.08	0.00	0.000000	0.00	0.00	49.04	0.000239	345.67	0.21
1956	TO 2002	48.41	0.000265	513.36	0.07	0.00	0.000000	0.00	0.00	48.99	0.000235	348.03	0.18
1955	TO 2002	48.22	0.000267	511.16	0.08	0.00	0.000000	0.00	0.00	48.96	0.000236	348.27	0.16
1954	TO 2002	48.09	0.000266	512.60	0.08	0.00	0.000000	0.00	0.00	48.89	0.000233	348.72	0.15
1953	TO 2002	48.00	0.000266	511.47	0.08	0.00	0.000000	0.00	0.00	48.94	0.000233	352.51	0.13
1952	TO 2002	47.95	0.000266	512.03	0.08	0.00	0.000000	0.00	0.00	48.91	0.000233	352.61	0.12
1951	TO 2002	47.83	0.000265	511.15	0.08	0.00	0.000000	0.00	0.00	48.88	0.000231	352.92	0.11
1950	TO 2002	47.57	0.000268	511.86	0.08	0.00	0.000000	0.00	0.00	48.58	0.000231	350.99	0.11
1949	TO 2002	47.39	0.000271	511.73	0.08	0.00	0.000000	0.00	0.00	48.42	0.000232	350.09	0.11
1948	TO 2002	47.38	0.000271	511.85	0.08	0.00	0.000000	0.00	0.00	48.45	0.000232	349.85	0.11
1947	TO 2002	47.31	0.000272	512.61	0.07	0.00	0.000000	0.00	0.00	48.39	0.000233	350.30	0.10
1946	TO 2002	47.26	0.000272	515.24	0.06	0.00	0.000000	0.00	0.00	48.35	0.000234	352.60	0.09
1945	TO 2002	47.19	0.000269	515.99	0.04	0.00	0.000000	0.00	0.00	48.28	0.000231	353.12	0.07
1944	TO 2002	47.19	0.000267	515.99	0.05	0.00	0.000000	0.00	0.00	48.38	0.000229	354.50	0.06
1943	TO 2002	47.12	0.000267	514.69	0.05	0.00	0.000000	0.00	0.00	48.32	0.000228	354.95	0.06

ACCOUNT 9738. METERS

PSC CASE 0

STUDY NO. 027380

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
1943 TO 1952		24.21	0.002571	435.71	0.70	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1944 TO 1953		23.70	0.002774	411.44	0.95	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1945 TO 1954		22.50	0.003041	380.03	1.25	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1946 TO 1955		23.02	0.003155	354.01	1.52	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1947 TO 1956		22.60	0.003298	338.52	1.75	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1948 TO 1957		22.31	0.003345	324.97	1.91	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1949 TO 1958		22.09	0.003115	319.15	2.00	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1950 TO 1959		21.67	0.003096	306.89	2.15	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1951 TO 1960		20.82	0.003551	300.17	2.24	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1952 TO 1961		19.69	0.004409	297.03	2.32	19.89	0.004457	289.10	2.33	0.00	0.000000	0.00	0.00
1953 TO 1962		19.00	0.005277	297.38	2.34	19.47	0.005331	279.92	2.37	0.00	0.000000	0.00	0.00
1954 TO 1963		18.55	0.005495	293.83	2.39	19.28	0.005539	272.30	2.44	0.00	0.000000	0.00	0.00
1955 TO 1964		18.73	0.005224	290.94	2.43	19.92	0.005216	263.53	2.54	0.00	0.000000	0.00	0.00
1956 TO 1965		18.66	0.004892	286.68	2.49	20.34	0.004765	248.26	2.68	0.00	0.000000	0.00	0.00
1957 TO 1966		18.98	0.004598	281.81	2.55	21.09	0.004289	234.66	2.85	0.00	0.000000	0.00	0.00
1958 TO 1967		19.40	0.004562	275.79	2.60	21.83	0.004013	222.19	3.07	0.00	0.000000	0.00	0.00
1959 TO 1968		19.60	0.004777	273.00	2.67	22.20	0.003850	209.44	3.35	0.00	0.000000	0.00	0.00
1960 TO 1969		20.72	0.004999	277.56	2.64	22.84	0.004004	203.56	3.48	0.00	0.000000	0.00	0.00
1961 TO 1970		23.03	0.005064	284.39	2.55	23.98	0.004184	202.29	3.51	0.00	0.000000	0.00	0.00
1962 TO 1971		30.08	0.003655	300.91	2.28	27.73	0.003320	203.78	3.34	0.00	0.000000	0.00	0.00
1963 TO 1972		43.21	0.002165	322.82	1.97	35.22	0.002109	220.04	2.93	0.00	0.000000	0.00	0.00
1964 TO 1973		66.37	0.000570	350.30	1.63	48.94	0.000553	238.07	2.53	48.12	0.000554	206.76	2.81
1965 TO 1974		82.71	0.000384	366.93	1.43	61.44	0.000382	254.70	2.24	55.58	0.000377	189.80	2.96
1966 TO 1975		94.50	0.000253	379.38	1.29	0.00	0.000000	0.00	0.00	69.07	0.000239	174.46	3.15
1967 TO 1976		75.83	0.000286	363.29	1.48	0.00	0.000000	0.00	0.00	80.31	0.000288	253.38	1.71
1968 TO 1977		83.71	0.000259	369.75	1.40	0.00	0.000000	0.00	0.00	71.24	0.000257	200.02	2.50
1969 TO 1978		69.20	0.000342	354.75	1.57	0.00	0.000000	0.00	0.00	64.51	0.000346	250.34	2.02
1970 TO 1979		44.78	0.001394	322.71	1.98	38.20	0.001324	221.21	3.08	0.00	0.000000	0.00	0.00
1971 TO 1980		35.07	0.002111	320.80	1.98	32.48	0.002009	226.32	2.87	0.00	0.000000	0.00	0.00
1972 TO 1981		34.05	0.002138	318.69	2.03	31.99	0.001985	220.41	3.04	0.00	0.000000	0.00	0.00
1973 TO 1982		32.49	0.002052	315.49	2.07	31.22	0.001859	219.38	3.09	0.00	0.000000	0.00	0.00
1974 TO 1983		32.78	0.001761	315.72	2.06	31.59	0.001594	223.18	3.00	0.00	0.000000	0.00	0.00
1975 TO 1984		33.60	0.001475	319.90	2.03	32.33	0.001364	230.43	2.83	0.00	0.000000	0.00	0.00
1976 TO 1985		34.82	0.001313	320.22	2.02	33.43	0.001244	234.78	2.74	0.00	0.000000	0.00	0.00
1977 TO 1986		35.97	0.001251	321.07	2.00	34.51	0.001215	244.87	2.60	0.00	0.000000	0.00	0.00
1978 TO 1987		36.88	0.001196	321.31	1.99	35.48	0.001180	252.26	2.48	0.00	0.000000	0.00	0.00
1979 TO 1988		38.38	0.001169	319.18	2.02	36.82	0.001157	251.25	2.51	0.00	0.000000	0.00	0.00
1980 TO 1989		40.96	0.001092	330.79	1.86	39.92	0.001096	291.81	2.06	38.34	0.001082	225.62	2.34
1981 TO 1990		49.62	0.000824	329.52	1.88	45.57	0.000819	255.67	2.39	43.08	0.000794	200.81	2.79
1982 TO 1991		55.09	0.000793	334.89	1.82	48.51	0.000784	246.35	2.43	45.15	0.000750	191.58	2.98
1983 TO 1992		49.36	0.001705	377.84	1.30	0.00	0.000000	0.00	0.00	41.75	0.001593	190.41	2.37
1984 TO 1993		54.65	0.001443	396.19	1.10	0.00	0.000000	0.00	0.00	43.36	0.001322	185.65	2.47
1985 TO 1994		58.79	0.001408	410.80	0.96	0.00	0.000000	0.00	0.00	44.41	0.001308	183.51	2.52
1986 TO 1995		62.38	0.001382	428.85	0.79	0.00	0.000000	0.00	0.00	44.99	0.001295	181.13	2.52
1987 TO 1996		62.75	0.001373	432.66	0.76	0.00	0.000000	0.00	0.00	45.35	0.001295	181.92	2.47

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	65.40	0.001352	442.64	0.67	0.00	0.000000	0.00	0.00	46.20	0.001286	182.92	2.42
1989	TO 1998	71.96	0.001364	499.57	0.18	0.00	0.000000	0.00	0.00	46.35	0.001277	182.31	2.32
1990	TO 1999	69.74	0.001286	438.08	0.70	0.00	0.000000	0.00	0.00	49.02	0.001241	184.61	2.36
1991	TO 2000	66.23	0.001284	435.62	0.73	0.00	0.000000	0.00	0.00	46.98	0.001217	186.24	2.29
1992	TO 2001	78.93	0.001557	634.11	-0.96	0.00	0.000000	0.00	0.00	44.59	0.001463	189.51	1.92
1993	TO 2002	67.67	0.001020	413.30	0.95	56.79	0.001018	277.35	1.70	48.99	0.001003	196.99	2.25

SUMMARY OF SHRINKING 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
2002 TO 2002		35.43	0.003724	388.07	1.17	0.00	0.000000	0.00	0.00	32.22	0.003721	256.06	1.22
2001 TO 2002		43.91	0.003608	502.15	0.16	0.00	0.000000	0.00	0.00	34.12	0.003551	230.06	0.97
2000 TO 2002		47.20	0.002773	460.79	0.51	45.37	0.002786	373.57	0.83	37.35	0.002731	218.18	1.34
1999 TO 2002		49.63	0.002472	448.32	0.61	47.26	0.002484	358.69	0.97	39.24	0.002443	212.82	1.51
1998 TO 2002		54.15	0.002211	453.37	0.57	51.62	0.002222	371.01	0.89	41.08	0.002180	205.71	1.64
1997 TO 2002		57.81	0.001901	441.99	0.67	53.03	0.001910	330.92	1.16	43.34	0.001881	201.88	1.82
1996 TO 2002		59.03	0.001665	432.84	0.75	54.37	0.001672	330.16	1.21	44.67	0.001651	202.62	1.91
1995 TO 2002		61.98	0.001426	425.16	0.83	55.05	0.001431	304.26	1.42	46.39	0.001415	201.53	2.03
1994 TO 2002		65.02	0.001194	417.58	0.89	55.91	0.001194	287.07	1.58	47.78	0.001180	197.80	2.15
1993 TO 2002		67.87	0.001020	413.30	0.95	56.79	0.001018	277.35	1.70	48.99	0.001003	196.99	2.25
1992 TO 2002		59.55	0.001630	482.78	0.32	0.00	0.000000	0.00	0.00	42.62	0.001559	198.24	1.82
1991 TO 2002		60.22	0.001421	460.79	0.50	0.00	0.000000	0.00	0.00	43.67	0.001359	195.78	1.94
1990 TO 2002		60.48	0.001363	443.98	0.66	0.00	0.000000	0.00	0.00	44.69	0.001319	195.78	2.02
1989 TO 2002		59.52	0.001348	459.53	0.52	0.00	0.000000	0.00	0.00	43.59	0.001278	196.13	1.98
1988 TO 2002		59.65	0.001282	443.45	0.67	0.00	0.000000	0.00	0.00	44.43	0.001226	194.68	2.05
1987 TO 2002		60.13	0.001239	434.92	0.74	0.00	0.000000	0.00	0.00	44.98	0.001188	194.53	2.11
1986 TO 2002		60.39	0.001203	429.68	0.79	0.00	0.000000	0.00	0.00	45.45	0.001158	194.72	2.15
1985 TO 2002		60.82	0.001151	420.06	0.87	0.00	0.000000	0.00	0.00	46.06	0.001110	194.31	2.21
1984 TO 2002		61.10	0.001080	414.91	0.92	0.00	0.000000	0.00	0.00	46.42	0.001037	192.79	2.26
1983 TO 2002		60.42	0.001027	407.98	1.00	0.00	0.000000	0.00	0.00	46.66	0.000987	193.97	2.28
1982 TO 2002		59.78	0.000990	397.22	1.10	0.00	0.000000	0.00	0.00	46.48	0.000955	196.87	2.24
1981 TO 2002		56.24	0.000970	388.51	1.18	0.00	0.000000	0.00	0.00	46.36	0.000940	199.52	2.23
1980 TO 2002		52.71	0.000944	389.88	1.17	0.00	0.000000	0.00	0.00	45.34	0.000913	208.41	2.06
1979 TO 2002		50.85	0.000944	382.48	1.25	0.00	0.000000	0.00	0.00	45.16	0.000920	213.69	1.99
1978 TO 2002		50.73	0.000919	379.42	1.27	0.00	0.000000	0.00	0.00	45.21	0.000893	215.64	1.98
1977 TO 2002		51.05	0.000890	379.07	1.29	0.00	0.000000	0.00	0.00	45.41	0.000866	214.70	2.00
1976 TO 2002		51.08	0.000848	378.81	1.30	0.00	0.000000	0.00	0.00	45.57	0.000824	216.17	2.00
1975 TO 2002		51.24	0.000824	377.64	1.30	0.00	0.000000	0.00	0.00	45.72	0.000800	215.43	2.01
1974 TO 2002		51.48	0.000814	375.91	1.31	0.00	0.000000	0.00	0.00	45.93	0.000793	214.46	2.02
1973 TO 2002		51.65	0.000805	374.60	1.32	0.00	0.000000	0.00	0.00	46.11	0.000786	215.78	2.03
1972 TO 2002		51.76	0.000793	373.88	1.33	0.00	0.000000	0.00	0.00	46.24	0.000775	215.16	2.04
1971 TO 2002		51.82	0.000785	373.43	1.34	0.00	0.000000	0.00	0.00	46.34	0.000767	216.85	2.04
1970 TO 2002		51.86	0.000777	375.06	1.34	0.00	0.000000	0.00	0.00	46.41	0.000760	216.53	2.04
1969 TO 2002		51.92	0.000767	374.64	1.33	0.00	0.000000	0.00	0.00	46.41	0.000750	216.56	2.05
1968 TO 2002		51.93	0.000757	374.52	1.34	0.00	0.000000	0.00	0.00	46.51	0.000741	216.07	2.05
1967 TO 2002		51.98	0.000749	372.27	1.35	0.00	0.000000	0.00	0.00	46.61	0.000733	215.63	2.06
1966 TO 2002		52.03	0.000740	371.93	1.36	0.00	0.000000	0.00	0.00	46.71	0.000725	217.30	2.06
1965 TO 2002		51.97	0.000733	370.40	1.37	0.00	0.000000	0.00	0.00	46.69	0.000718	217.40	2.06
1964 TO 2002		51.94	0.000727	370.65	1.38	0.00	0.000000	0.00	0.00	46.70	0.000713	217.34	2.07
1963 TO 2002		51.45	0.000733	368.32	1.40	0.00	0.000000	0.00	0.00	46.56	0.000720	220.13	2.05
1962 TO 2002		50.37	0.000737	366.28	1.42	0.00	0.000000	0.00	0.00	46.05	0.000727	222.58	2.02
1961 TO 2002		48.70	0.000753	364.46	1.46	0.00	0.000000	0.00	0.00	45.01	0.000746	227.75	2.01
1960 TO 2002		47.66	0.000773	361.93	1.49	0.00	0.000000	0.00	0.00	44.41	0.000769	230.82	1.99
1959 TO 2002		46.82	0.000794	357.74	1.52	0.00	0.000000	0.00	0.00	43.82	0.000793	233.94	2.00
1958 TO 2002		46.48	0.000806	358.24	1.54	0.00	0.000000	0.00	0.00	43.75	0.000807	238.84	1.98

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
1957 TO 2002		45.91	0.000824	356.15	1.56	0.00	0.000000	0.00	0.00	43.48	0.000827	242.62	1.96
1956 TO 2002		45.31	0.000839	354.23	1.58	0.00	0.000000	0.00	0.00	43.22	0.000843	248.72	1.94
1955 TO 2002		44.90	0.000846	352.97	1.59	0.00	0.000000	0.00	0.00	43.13	0.000852	253.87	1.91
1954 TO 2002		44.25	0.000845	351.38	1.61	0.00	0.000000	0.00	0.00	42.87	0.000852	262.42	1.87
1953 TO 2002		43.89	0.000836	349.74	1.62	0.00	0.000000	0.00	0.00	42.84	0.000843	271.97	1.83
1952 TO 2002		43.38	0.000823	349.25	1.63	0.00	0.000000	0.00	0.00	42.73	0.000830	284.35	1.77
1951 TO 2002		42.99	0.000804	350.07	1.63	0.00	0.000000	0.00	0.00	42.69	0.000811	296.35	1.71
1949 TO 2002		42.79	0.000792	349.34	1.63	0.00	0.000000	0.00	0.00	42.72	0.000799	305.49	1.67
1948 TO 2002		42.62	0.000784	350.75	1.62	0.00	0.000000	0.00	0.00	42.74	0.000790	312.33	1.63
1947 TO 2002		42.57	0.000778	351.21	1.62	0.00	0.000000	0.00	0.00	42.76	0.000784	314.57	1.62
1946 TO 2002		42.49	0.000775	351.89	1.61	0.00	0.000000	0.00	0.00	42.72	0.000780	314.80	1.61
1945 TO 2002		42.47	0.000771	352.02	1.60	0.00	0.000000	0.00	0.00	42.73	0.000776	314.76	1.60
1945 TO 2002		42.32	0.000768	353.23	1.59	0.00	0.000000	0.00	0.00	42.65	0.000772	315.33	1.58
1944 TO 2002		42.36	0.000764	352.94	1.59	0.00	0.000000	0.00	0.00	42.67	0.000769	315.24	1.58
1943 TO 2002		42.31	0.000763	353.32	1.59	0.00	0.000000	0.00	0.00	42.57	0.000767	308.90	1.59

ACCOUNT 9740. ACRES EQUIP ON CUST PREM

PSC CASE 0

STUDY NO. 027400

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
1951 TO 1960		19.78	0.001713	573.91	-0.43	0.00	0.000000	0.00	0.00	20.34	0.001255	376.14	-0.01
1952 TO 1961		16.24	0.002567	495.70	0.18	0.00	0.000000	0.00	0.00	16.61	0.002433	424.51	0.46
1953 TO 1962		16.27	0.003321	470.22	0.41	0.00	0.000000	0.00	0.00	16.66	0.003227	453.08	0.65
1954 TO 1963		16.31	0.003327	475.18	0.39	0.00	0.000000	0.00	0.00	16.86	0.003089	554.55	0.57
1955 TO 1964		16.48	0.003411	470.30	0.39	0.00	0.000000	0.00	0.00	18.11	0.002991	875.35	-2.60
1956 TO 1965		16.63	0.003568	454.11	0.53	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1957 TO 1966		17.03	0.003787	449.29	0.60	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1958 TO 1967		17.48	0.004080	437.54	0.67	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1959 TO 1968		17.83	0.004470	434.61	0.70	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1960 TO 1969		18.29	0.005010	423.84	0.80	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1961 TO 1970		23.16	0.004231	390.71	1.13	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1962 TO 1971		36.57	0.002441	370.52	1.39	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1963 TO 1972		43.87	0.001423	379.56	1.28	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1964 TO 1973		46.85	0.001266	372.43	1.36	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1965 TO 1974		49.31	0.001177	368.10	1.41	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1966 TO 1975		60.54	0.000660	369.19	1.40	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1967 TO 1976		59.16	0.000736	360.86	1.49	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1968 TO 1977		58.77	0.000682	364.96	1.44	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1969 TO 1978		52.80	0.000797	383.53	1.24	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1970 TO 1979		48.64	0.000806	381.34	1.26	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1971 TO 1980		47.88	0.000805	374.91	1.32	0.00	0.000000	0.00	0.00	265.78	0.000769	375.69	-2.60
1972 TO 1981		48.29	0.000775	371.72	1.35	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1973 TO 1982		47.63	0.000747	374.77	1.34	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1974 TO 1983		48.20	0.000746	376.52	1.31	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1975 TO 1984		48.72	0.000735	378.70	1.28	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1976 TO 1985		49.25	0.000781	380.74	1.26	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1977 TO 1986		51.41	0.000740	388.05	1.19	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1978 TO 1987		53.59	0.000810	402.13	1.04	51.67	0.000811	337.71	1.24	0.00	0.000000	0.00	0.00
1979 TO 1988		58.94	0.000692	374.10	1.34	58.46	0.000696	358.39	1.39	0.00	0.000000	0.00	0.00
1980 TO 1989		67.32	0.000551	378.07	1.29	64.37	0.000552	319.27	1.52	0.00	0.000000	0.00	0.00
1981 TO 1990		70.36	0.000571	393.01	1.14	64.76	0.000567	300.33	1.54	0.00	0.000000	0.00	0.00
1982 TO 1991		75.02	0.000513	403.23	1.04	68.20	0.000509	302.79	1.49	0.00	0.000000	0.00	0.00
1983 TO 1992		86.28	0.000500	415.52	0.92	74.19	0.000495	287.76	1.57	0.00	0.000000	0.00	0.00
1984 TO 1993		96.37	0.000478	432.17	0.76	78.92	0.000473	283.21	1.58	0.00	0.000000	0.00	0.00
1985 TO 1994		82.03	0.000610	406.57	1.01	72.71	0.000607	293.64	1.56	0.00	0.000000	0.00	0.00
1986 TO 1995		90.63	0.000569	415.42	0.92	78.32	0.000567	291.76	1.56	0.00	0.000000	0.00	0.00
1987 TO 1996		90.59	0.000553	406.76	1.00	81.83	0.000554	308.58	1.47	0.00	0.000000	0.00	0.00
1988 TO 1997		82.43	0.000833	424.02	0.84	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1989 TO 1998		90.11	0.000799	418.93	0.89	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1990 TO 1999		83.02	0.000758	392.08	1.15	82.87	0.000762	389.18	1.16	0.00	0.000000	0.00	0.00
1991 TO 2000		92.01	0.000635	383.10	1.25	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1992 TO 2001		98.48	0.000630	388.40	1.19	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1993 TO 2002		101.70	0.000602	391.83	1.15	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00

SUMMARY OF SHRINKING 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
2002 TO 2002		999.00	0.000000	99.95	5.10	999.00	0.000000	99.95	5.10	999.00	0.000000	99.95	5.10
2001 TO 2002		999.00	0.000000	99.95	5.10	999.00	0.000000	99.95	5.10	999.00	0.000000	99.95	5.10
2000 TO 2002		999.00	0.000000	99.95	5.10	999.00	0.000000	99.95	5.10	999.00	0.000000	99.95	5.10
1999 TO 2002		131.08	0.000351	342.17	1.75	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1998 TO 2002		143.99	0.000281	343.44	1.73	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1997 TO 2002		122.17	0.000827	459.62	0.52	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1996 TO 2002		110.15	0.000757	425.33	0.83	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1995 TO 2002		117.37	0.000676	417.92	0.90	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1994 TO 2002		97.04	0.000661	395.19	1.12	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1993 TO 2002		101.70	0.000602	391.83	1.15	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1992 TO 2002		105.82	0.000556	388.86	1.19	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1991 TO 2002		105.44	0.000515	384.58	1.23	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1990 TO 2002		101.62	0.000528	395.10	1.13	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1989 TO 2002		102.36	0.000515	402.01	1.06	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1988 TO 2002		100.86	0.000499	407.00	1.01	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1987 TO 2002		101.79	0.000490	426.85	0.82	96.83	0.000493	363.02	1.08	0.00	0.000000	0.00	0.00
1986 TO 2002		99.62	0.000480	423.09	0.85	95.19	0.000482	364.02	1.09	0.00	0.000000	0.00	0.00
1985 TO 2002		97.68	0.000463	417.18	0.91	95.23	0.000465	379.62	1.05	0.00	0.000000	0.00	0.00
1984 TO 2002		96.54	0.000450	411.74	0.96	95.19	0.000453	389.24	1.04	0.00	0.000000	0.00	0.00
1983 TO 2002		95.50	0.000442	405.76	1.01	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1982 TO 2002		92.48	0.000428	402.79	1.04	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1981 TO 2002		90.39	0.000420	397.72	1.10	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1980 TO 2002		87.19	0.000408	396.27	1.11	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1979 TO 2002		82.62	0.000406	401.26	1.05	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1978 TO 2002		80.09	0.000399	423.88	0.84	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1977 TO 2002		78.84	0.000386	428.10	0.80	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1976 TO 2002		77.14	0.000384	424.56	0.83	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1975 TO 2002		77.13	0.000372	422.04	0.86	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1974 TO 2002		77.29	0.000364	418.54	0.89	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1973 TO 2002		77.39	0.000357	414.14	0.93	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1972 TO 2002		77.30	0.000351	410.75	0.96	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1971 TO 2002		76.99	0.000344	409.78	0.98	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1970 TO 2002		76.54	0.000337	409.58	0.97	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1969 TO 2002		75.94	0.000331	408.87	0.98	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1968 TO 2002		75.75	0.000332	411.25	0.96	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1967 TO 2002		75.03	0.000331	411.18	0.96	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1966 TO 2002		74.39	0.000324	412.03	0.95	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1965 TO 2002		71.76	0.000328	415.95	0.92	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1964 TO 2002		71.58	0.000325	417.01	0.90	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1963 TO 2002		71.23	0.000323	420.49	0.87	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1962 TO 2002		68.04	0.000414	419.63	0.87	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1961 TO 2002		57.81	0.000579	459.27	0.52	0.00	0.000000	0.00	0.00	158.20	0.000483	260.11	-2.60
1960 TO 2002		52.28	0.000666	505.95	0.13	0.00	0.000000	0.00	0.00	59.43	0.000478	281.82	0.07
1959 TO 2002		52.04	0.000654	514.05	0.07	0.00	0.000000	0.00	0.00	58.48	0.000466	282.98	0.07
1958 TO 2002		51.51	0.000655	517.38	0.03	0.00	0.000000	0.00	0.00	57.30	0.000456	283.59	0.10

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
1957	TO 2002	50.88	0.000654	525.70	-0.03	0.00	0.000000	0.00	0.00	56.24	0.000448	285.37	0.07
1956	TO 2002	50.32	0.000657	533.56	-0.10	0.00	0.000000	0.00	0.00	55.41	0.000449	286.05	0.03
1955	TO 2002	49.75	0.000657	543.74	-0.19	0.00	0.000000	0.00	0.00	54.48	0.000444	289.11	0.00
1954	TO 2002	49.39	0.000656	549.70	-0.23	0.00	0.000000	0.00	0.00	53.97	0.000440	290.00	-0.02
1953	TO 2002	49.07	0.000657	555.32	-0.28	0.00	0.000000	0.00	0.00	53.60	0.000444	292.00	-0.06
1952	TO 2002	48.85	0.000639	568.12	-0.38	0.00	0.000000	0.00	0.00	53.36	0.000433	295.14	-0.15
1951	TO 2002	48.52	0.000633	584.26	-0.53	0.00	0.000000	0.00	0.00	52.54	0.000430	297.86	-0.20

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
1951 TO 1960		25.00	0.001457	614.10	-0.78	0.00	0.000000	0.00	0.00	24.80	0.001269	332.60	-0.06
1952 TO 1961		19.92	0.002090	504.43	0.12	0.00	0.000000	0.00	0.00	20.27	0.002020	402.07	0.19
1953 TO 1962		20.30	0.001905	480.41	0.35	0.00	0.000000	0.00	0.00	20.85	0.001836	496.33	0.10
1954 TO 1963		21.00	0.001887	478.51	0.34	0.00	0.000000	0.00	0.00	22.14	0.001778	566.93	-0.48
1955 TO 1964		21.93	0.001879	476.58	0.37	0.00	0.000000	0.00	0.00	41.84	0.001763	923.87	-2.60
1956 TO 1965		23.02	0.001797	471.23	0.40	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1957 TO 1966		23.55	0.001968	465.02	0.46	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1958 TO 1967		24.46	0.001910	459.85	0.51	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1959 TO 1968		25.63	0.001896	474.01	0.40	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1960 TO 1969		26.52	0.002020	461.95	0.50	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1961 TO 1970		28.95	0.002270	440.40	0.67	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1962 TO 1971		39.46	0.001549	442.27	0.66	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1963 TO 1972		43.26	0.001414	433.44	0.75	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1964 TO 1973		46.14	0.001117	434.53	0.73	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1965 TO 1974		49.21	0.001089	444.04	0.66	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1966 TO 1975		53.19	0.001093	446.54	0.63	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1967 TO 1976		51.89	0.001155	442.25	0.66	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1968 TO 1977		49.96	0.001120	421.31	0.86	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1969 TO 1978		44.23	0.001273	417.16	0.90	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1970 TO 1979		40.45	0.001264	421.53	0.84	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1971 TO 1980		40.34	0.001264	430.14	0.77	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1972 TO 1981		40.74	0.001114	438.19	0.70	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1973 TO 1982		40.13	0.001146	447.29	0.62	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1974 TO 1983		39.70	0.001156	454.63	0.56	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1975 TO 1984		40.01	0.001064	466.13	0.47	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1976 TO 1985		39.37	0.001064	476.27	0.36	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1977 TO 1986		41.04	0.001045	476.34	0.36	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1978 TO 1987		42.37	0.001122	487.32	0.28	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1979 TO 1988		47.29	0.001119	470.50	0.42	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1980 TO 1989		56.02	0.000765	450.71	0.60	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1981 TO 1990		58.24	0.000719	449.01	0.62	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1982 TO 1991		59.73	0.000829	437.84	0.71	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1983 TO 1992		67.31	0.000807	443.47	0.67	65.99	0.000811	402.35	0.79	0.00	0.000000	0.00	0.00
1984 TO 1993		75.23	0.000754	456.61	0.55	70.19	0.000758	358.31	0.94	0.00	0.000000	0.00	0.00
1985 TO 1994		69.80	0.000822	456.31	0.55	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1986 TO 1995		78.03	0.000758	447.88	0.63	77.99	0.000762	445.59	0.63	0.00	0.000000	0.00	0.00
1987 TO 1996		81.19	0.000759	439.09	0.71	0.00	0.000000	0.00	0.00	0.00	0.000000	0.00	0.00
1988 TO 1997		72.48	0.000897	427.01	0.81	0.00	0.000000	0.00	0.00	380.22	0.000869	200.80	-2.05
1989 TO 1998		79.34	0.000873	420.32	0.88	0.00	0.000000	0.00	0.00	178.98	0.000847	197.50	0.22
1990 TO 1999		72.62	0.000884	400.05	1.07	0.00	0.000000	0.00	0.00	98.74	0.000855	243.56	0.54
1991 TO 2000		81.21	0.000797	384.78	1.23	0.00	0.000000	0.00	0.00	104.54	0.000772	228.15	0.99
1992 TO 2001		88.94	0.000718	385.10	1.23	0.00	0.000000	0.00	0.00	123.63	0.000676	195.34	1.26
1993 TO 2002		90.89	0.000693	381.22	1.27	0.00	0.000000	0.00	0.00	116.32	0.000644	194.73	1.38

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
2002 TO 2002		999.00	0.000000	99.95	5.10	999.00	0.000000	99.95	5.10	999.00	0.000000	99.95	5.10
2001 TO 2002		999.00	0.000000	99.95	5.10	999.00	0.000000	99.95	5.10	999.00	0.000000	99.95	5.10
2000 TO 2002		999.00	0.000000	99.95	5.10	999.00	0.000000	99.95	5.10	999.00	0.000000	99.95	5.10
1999 TO 2002		115.89	0.000641	355.08	1.57	0.00	0.000000	0.00	0.00	121.74	0.000642	216.44	1.86
1998 TO 2002		128.34	0.000539	355.71	1.57	0.00	0.000000	0.00	0.00	129.62	0.000541	211.00	2.05
1997 TO 2002		89.64	0.001255	376.51	1.33	0.00	0.000000	0.00	0.00	110.71	0.001232	198.27	1.30
1996 TO 2002		89.72	0.000868	378.39	1.29	0.00	0.000000	0.00	0.00	105.31	0.000821	198.94	1.37
1995 TO 2002		95.59	0.000773	378.17	1.30	0.00	0.000000	0.00	0.00	112.93	0.000734	192.59	1.54
1994 TO 2002		86.62	0.000766	381.53	1.26	0.00	0.000000	0.00	0.00	108.00	0.000708	200.47	1.26
1993 TO 2002		90.89	0.000693	381.22	1.27	0.00	0.000000	0.00	0.00	116.32	0.000644	194.73	1.38
1992 TO 2002		94.78	0.000658	380.37	1.28	0.00	0.000000	0.00	0.00	125.80	0.000618	190.38	1.47
1991 TO 2002		91.79	0.000671	376.39	1.32	0.00	0.000000	0.00	0.00	114.07	0.000644	206.45	1.39
1990 TO 2002		87.20	0.000680	383.62	1.24	0.00	0.000000	0.00	0.00	107.11	0.000644	210.53	1.28
1989 TO 2002		87.80	0.000650	385.52	1.22	0.00	0.000000	0.00	0.00	112.62	0.000616	209.10	1.25
1988 TO 2002		86.02	0.000615	387.71	1.19	0.00	0.000000	0.00	0.00	109.61	0.000575	210.30	1.21
1987 TO 2002		83.69	0.000620	396.09	1.11	0.00	0.000000	0.00	0.00	110.60	0.000590	221.98	0.97
1986 TO 2002		82.36	0.000611	400.08	1.08	0.00	0.000000	0.00	0.00	111.89	0.000580	222.09	0.89
1985 TO 2002		80.65	0.000605	403.58	1.03	0.00	0.000000	0.00	0.00	105.52	0.000568	224.13	0.90
1984 TO 2002		80.38	0.000569	403.73	1.04	0.00	0.000000	0.00	0.00	118.39	0.000531	218.35	0.75
1983 TO 2002		79.20	0.000567	403.42	1.03	0.00	0.000000	0.00	0.00	127.98	0.000525	213.71	0.61
1982 TO 2002		77.15	0.000584	407.62	1.00	0.00	0.000000	0.00	0.00	130.44	0.000537	212.74	0.48
1981 TO 2002		76.06	0.000573	408.24	0.99	0.00	0.000000	0.00	0.00	122.01	0.000521	216.78	0.52
1980 TO 2002		73.52	0.000588	415.52	0.92	0.00	0.000000	0.00	0.00	110.90	0.000532	224.98	0.48
1979 TO 2002		69.10	0.000617	432.01	0.76	0.00	0.000000	0.00	0.00	99.35	0.000556	238.05	0.25
1978 TO 2002		65.78	0.000650	446.20	0.63	0.00	0.000000	0.00	0.00	82.33	0.000568	249.60	0.38
1977 TO 2002		64.49	0.000641	450.44	0.60	0.00	0.000000	0.00	0.00	80.77	0.000556	253.17	0.32
1976 TO 2002		63.46	0.000640	456.16	0.55	0.00	0.000000	0.00	0.00	74.55	0.000539	255.54	0.46
1975 TO 2002		63.88	0.000628	454.79	0.56	0.00	0.000000	0.00	0.00	76.24	0.000532	253.82	0.45
1974 TO 2002		64.20	0.000617	452.53	0.58	0.00	0.000000	0.00	0.00	78.89	0.000523	251.63	0.41
1973 TO 2002		64.63	0.000604	449.50	0.61	0.00	0.000000	0.00	0.00	82.04	0.000514	249.28	0.36
1972 TO 2002		64.56	0.000587	448.43	0.62	0.00	0.000000	0.00	0.00	85.52	0.000499	247.30	0.28
1971 TO 2002		64.27	0.000583	447.30	0.63	0.00	0.000000	0.00	0.00	87.49	0.000495	246.30	0.21
1970 TO 2002		63.36	0.000596	447.43	0.62	0.00	0.000000	0.00	0.00	85.14	0.000500	247.24	0.23
1969 TO 2002		62.85	0.000609	451.07	0.60	0.00	0.000000	0.00	0.00	78.38	0.000505	250.71	0.40
1968 TO 2002		62.79	0.000599	454.70	0.57	0.00	0.000000	0.00	0.00	77.75	0.000497	251.43	0.40
1967 TO 2002		62.43	0.000607	460.50	0.51	0.00	0.000000	0.00	0.00	74.06	0.000503	253.17	0.47
1966 TO 2002		62.00	0.000591	463.68	0.48	0.00	0.000000	0.00	0.00	73.86	0.000484	253.87	0.42
1965 TO 2002		61.75	0.000586	468.80	0.45	0.00	0.000000	0.00	0.00	72.45	0.000477	254.65	0.44
1964 TO 2002		61.58	0.000579	468.52	0.44	0.00	0.000000	0.00	0.00	72.63	0.000469	255.40	0.41
1963 TO 2002		61.52	0.000568	472.22	0.42	0.00	0.000000	0.00	0.00	73.30	0.000461	257.18	0.35
1962 TO 2002		60.85	0.000564	483.95	0.31	0.00	0.000000	0.00	0.00	74.46	0.000460	259.86	0.17
1961 TO 2002		56.97	0.000624	522.19	-0.01	0.00	0.000000	0.00	0.00	62.39	0.000480	266.88	0.24
1960 TO 2002		55.80	0.000627	549.29	-0.23	0.00	0.000000	0.00	0.00	59.15	0.000463	269.67	0.21
1959 TO 2002		55.67	0.000623	564.95	-0.37	0.00	0.000000	0.00	0.00	57.84	0.000455	268.87	0.22
1958 TO 2002		55.18	0.000630	568.13	-0.39	0.00	0.000000	0.00	0.00	57.15	0.000454	268.58	0.22

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
1957	TO 2002	54.99	0.000626	586.45	-0.54	0.00	0.000000	0.00	0.00	56.32	0.000452	270.76	0.18
1956	TO 2002	54.96	0.000622	595.85	-0.62	0.00	0.000000	0.00	0.00	56.09	0.000453	271.86	0.15
1955	TO 2002	54.63	0.000621	612.27	-0.76	0.00	0.000000	0.00	0.00	55.36	0.000452	273.65	0.11
1954	TO 2002	54.36	0.000625	618.99	-0.82	0.00	0.000000	0.00	0.00	54.81	0.000453	274.56	0.10
1953	TO 2002	54.18	0.000624	622.89	-0.86	0.00	0.000000	0.00	0.00	54.67	0.000453	275.30	0.07
1952	TO 2002	54.45	0.000613	660.24	-1.20	0.00	0.000000	0.00	0.00	54.12	0.000455	278.10	0.01
1951	TO 2002	54.50	0.000608	687.16	-1.47	0.00	0.000000	0.00	0.00	53.43	0.000450	279.82	-0.02

**CONSOLIDATED EDISON COMPANY OF NEW YORK, INC.
SUMMARY OF HISTORICAL NET SALVAGE**

ACCOUNT	9714	STRUCTURES AND IMPROVEMENTS							
		BOOK COST OF PLANT RETIRED	COST OF REMOVAL	SALVAGE	AMOUNT	N E T S A L V A G E			
						PERCENTAGE OF BOOK COST RETIRED			
YEAR					ONE YEAR BAND	SHRINKING BAND ENDING 2002	1978	5 YEAR BAND	
	\$\$	\$\$	\$\$	\$\$	%	%	%	%	
1978	-	307.52	-	(307.52)	**	(494.02)	**		
1979	-	210.00	-	(210.00)	**	(493.98)	**		
1980	-	3,330.21	-	(3,330.21)	**	(493.94)	**		
1981	-	-	-	-	0.00	(493.42)	**		
1982	-	-	-	-	0.00	(493.42)	**	**	
1983	2,234.68	-	-	-	0.00	(493.42)	(172.18)	(158.42)	
1984	28,176.09	1,809.92	-	(1,809.92)	(6.42)	(495.16)	(18.60)	(16.90)	
1985	59,412.03	7,500.00	-	(7,500.00)	(12.62)	(517.98)	(14.65)	(10.36)	
1986	24,000.00	5,920.00	-	(5,920.00)	(24.67)	(573.16)	(16.76)	(13.38)	
1987	-	6,000.00	-	(6,000.00)	**	(598.46)	(22.03)	(18.65)	
1988	10,223.94	225,831.30	-	(225,831.30)	(2,208.85)	(597.31)	(202.27)	(202.82)	
1989	-	121.65	-	(121.65)	**	(565.00)	(202.37)	(262.05)	
1990	25,655.85	(169,667.55)	13.92	169,681.47	661.38	(564.97)	(54.34)	(113.88)	
1991	5,291.28	56,521.85	-	(56,521.85)	(1,068.21)	(629.95)	(88.95)	(288.54)	
1992	-	100,951.50	-	(100,951.50)	**	(625.10)	(154.09)	(519.16)	
1993	16,599.96	23,442.41	-	(23,442.41)	(141.22)	(604.03)	(152.84)	(23.88)	
1994	-	-	-	-	0.00	(620.64)	(152.84)	(23.63)	
1995	-	22,982.19	-	(22,982.19)	**	(620.64)	(166.23)	(931.41)	
1996	60,008.32	6,573.80	-	(6,573.80)	(10.95)	(615.67)	(126.00)	(200.96)	
1997	16,364.57	25,796.73	-	(25,796.73)	(157.64)	(705.86)	(128.09)	(84.75)	
1998	78,346.09	579,548.13	-	(579,548.13)	(739.73)	(729.10)	(274.94)	(410.36)	
1999	202,864.51	70,001.60	-	(70,001.60)	(34.51)	(726.40)	(182.77)	(197.13)	
2000	21,115.88	564,032.33	-	(564,032.33)	(2,671.13)	(2,065.91)	(278.25)	(329.01)	
2001	64,629.39	168,415.48	-	(168,415.48)	(260.59)	(1,913.17)	(276.39)	(367.26)	
2002	19,039.33	1,432,308.35	-	(1,432,308.35)	(7,522.89)	(7,522.89)	(494.02)	(729.10)	
TOTAL	633,961.92	3,131,937.42	13.92	(3,131,923.50)	(494.02)				

**CONSOLIDATED EDISON COMPANY OF NEW YORK, INC.
SUMMARY OF HISTORICAL NET SALVAGE**

ACCOUNT	9716	BOILER PLANT EQUIPMENT	N E T S A L V A G E						
			BOOK COST OF PLANT RETIRED	COST OF REMOVAL	SALVAGE	AMOUNT	PERCENTAGE OF BOOK COST RETIRED		
							ONE YEAR BAND	SHRINKING BAND ENDING 2002	1978
YEAR	\$\$	\$\$	\$\$	\$\$	%	%	%	%	
1978	7,897,452.09	395.40	-	(395.40)	(0.01)	(62.56)	(0.01)		
1979	(6,476.97)	20,153.76	-	(20,153.76)	*	(84.63)	(0.26)		
1980	551.46	9,904.17	-	(9,904.17)	(1,795.99)	(84.52)	(0.39)		
1981	44,963.65	6,576.72	(4,106.92)	(10,683.64)	(23.76)	(84.48)	(0.52)		
1982	57,315.70	51,817.50	-	(51,817.50)	(90.41)	(84.60)	(1.16)	(1.16)	
1983	91,362.10	34,584.82	(302.46)	(34,887.28)	(38.19)	(84.58)	(1.58)	(67.89)	
1984	374,408.29	509,026.47	555.16	(508,471.31)	(135.81)	(84.77)	(7.52)	(108.29)	
1985	691,552.44	324,934.86	-	(324,934.86)	(46.99)	(83.90)	(10.50)	(73.90)	
1986	340,810.00	662,184.85	-	(662,184.85)	(194.30)	(85.11)	(17.10)	(101.73)	
1987	225,615.17	2,545,296.09	238.58	(2,545,057.51)	(1,128.05)	(83.32)	(42.90)	(236.43)	
1988	602,319.38	1,151,393.86	(339.60)	(1,151,733.46)	(191.22)	(71.85)	(51.55)	(232.35)	
1989	400,134.74	2,095,561.56	-	(2,095,561.56)	(523.71)	(68.25)	(69.18)	(299.92)	
1990	186,050.91	174,458.28	28.65	(174,429.63)	(93.75)	(58.94)	(69.60)	(377.73)	
1991	93,721.86	161,700.63	-	(161,700.63)	(172.53)	(58.60)	(70.47)	(406.44)	
1992	1,562,164.16	1,090,196.16	(135.52)	(1,090,331.68)	(69.80)	(58.05)	(70.39)	(164.31)	
1993	98,388.40	2,040,982.65	1,150.00	(2,039,832.65)	(2,073.25)	(57.01)	(85.95)	(237.64)	
1994	454,069.65	1,705,042.93	(4,325.92)	(1,709,368.85)	(376.46)	(45.76)	(96.01)	(216.16)	
1995	973,827.66	532,154.45	-	(532,154.45)	(54.65)	(37.01)	(93.15)	(173.89)	
1996	2,924,117.31	572,738.31	128,384.55	(444,353.76)	(15.20)	(35.95)	(79.75)	(96.73)	
1997	4,498,167.72	1,147,806.47	162.70	(1,147,643.77)	(25.51)	(40.52)	(68.41)	(65.63)	
1998	456,855.98	144,414.51	563.78	(143,850.73)	(31.49)	(48.22)	(67.64)	(42.74)	
1999	819,868.17	283,363.61	-	(283,363.61)	(34.56)	(49.14)	(66.45)	(26.38)	
2000	3,226,835.80	1,977,324.27	(9,174.53)	(1,986,498.80)	(61.56)	(50.73)	(65.85)	(33.59)	
2001	3,313,208.16	655,173.16	-	(655,173.16)	(19.77)	(42.54)	(60.64)	(34.24)	
2002	954,844.56	1,160,647.45	-	(1,160,647.45)	(121.55)	(121.55)	(62.56)	(48.22)	
TOTAL	<u>30,282,128.39</u>	<u>19,057,832.94</u>	<u>112,698.47</u>	<u>(18,945,134.47)</u>	(62.56)				

**CONSOLIDATED EDISON COMPANY OF NEW YORK, INC.
SUMMARY OF HISTORICAL NET SALVAGE**

ACCOUNT	9718	ACCESSORY POWER EQUIPMENT						
		BOOK COST OF PLANT RETIRED	COST OF REMOVAL	SALVAGE	AMOUNT	N E T S A L V A G E		
						ONE YEAR BAND	SHRINKING BAND ENDING	
YEAR	\$\$	\$\$	\$\$	\$\$	%	2002	1978	%
1978	690,726.05	-	-	-	0.00	(7.38)	0.00	
1979	-	1,194.96	-	(1,194.96)	**	(8.71)	(0.17)	
1980	-	-	-	-	0.00	(8.68)	(0.17)	
1981	67,839.80	-	-	-	0.00	(8.68)	(0.16)	
1982	21,090.05	6,100.26	-	(6,100.26)	(28.92)	(8.83)	(0.94)	(0.94)
1983	-	(598.56)	-	598.56	**	(8.72)	(0.86)	(7.53)
1984	-	-	-	-	0.00	(8.74)	(0.86)	(6.19)
1985	16,183.97	35,431.00	-	(35,431.00)	(218.93)	(8.74)	(5.29)	(38.94)
1986	-	(28,552.50)	-	28,552.50	**	(7.82)	(1.71)	(33.21)
1987	27,350.88	1,106.80	-	(1,106.80)	(4.05)	(8.59)	(1.78)	(16.97)
1988	90,036.07	6,747.21	2,281.40	(4,465.81)	(4.96)	(8.62)	(2.10)	(9.32)
1989	13,759.01	713.43	1,997.59	1,284.16	9.33	(8.71)	(1.93)	(7.58)
1990	-	-	-	-	0.00	(8.78)	(1.93)	18.50
1991	30,000.00	75,134.47	-	(75,134.47)	(250.45)	(8.78)	(9.72)	(49.29)
1992	52,505.08	3,658.23	-	(3,658.23)	(6.97)	(6.75)	(9.57)	(44.00)
1993	201,681.72	108,510.40	-	(108,510.40)	(53.80)	(6.75)	(16.94)	(62.43)
1994	-	-	-	-	0.00	(3.88)	(16.94)	(65.91)
1995	104,205.82	-	-	-	0.00	(3.88)	(15.60)	(48.23)
1996	41,722.42	-	-	-	0.00	(4.00)	(15.12)	(28.03)
1997	20,868.16	22,844.00	-	(22,844.00)	(109.47)	(4.06)	(16.55)	(35.65)
1998	-	1,320.00	-	(1,320.00)	**	(3.36)	(16.64)	(14.49)
1999	1,356,282.47	1,308.39	-	(1,308.39)	(0.10)	(3.31)	(8.44)	(1.67)
2000	48,454.23	37.50	(11,688.88)	(11,726.38)	(24.20)	(5.76)	(8.71)	(2.54)
2001	-	21,785.65	-	(21,785.65)	**	(5.24)	(9.49)	(4.14)
2002	1,737,268.88	69,317.52	-	(69,317.52)	(3.99)	(3.99)	(7.38)	(3.36)
TOTAL	4,519,974.61	326,058.76	(7,409.89)	(333,468.65)	(7.38)			

**CONSOLIDATED EDISON COMPANY OF NEW YORK, INC.
SUMMARY OF HISTORICAL NET SALVAGE**

ACCOUNT 9720 MISCELLANEOUS STATION EQUIPMENT

YEAR	BOOK COST OF PLANT RETIRED \$\$	COST OF REMOVAL \$\$	SALVAGE \$\$	AMOUNT \$\$	N E T S A L V A G E			
					PERCENTAGE OF BOOK COST RETIRED			
					ONE YEAR BAND %	SHRINKING BAND ENDING		5 YEAR BAND %
				2002 %	1978 %			
1978	-	-	-	-	0.00	(10.14)	0.00	
1979	-	-	-	-	0.00	(10.14)	0.00	
1980	-	-	-	-	0.00	(10.14)	0.00	
1981	-	-	-	-	0.00	(10.14)	0.00	
1982	-	-	-	-	0.00	(10.14)	0.00	0.00
1983	-	-	-	-	0.00	(10.14)	0.00	0.00
1984	-	-	-	-	0.00	(10.14)	0.00	0.00
1985	-	-	-	-	0.00	(10.14)	0.00	0.00
1986	-	-	-	-	0.00	(10.14)	0.00	0.00
1987	29,141.78	9,195.67	-	(9,195.67)	(31.55)	(10.14)	(31.55)	(31.55)
1988	20,023.32	850.00	-	(850.00)	(4.25)	(8.42)	(20.43)	(20.43)
1989	33,248.34	3,647.51	-	(3,647.51)	(10.97)	(8.66)	(16.62)	(16.62)
1990	-	7,384.87	-	(7,384.87)	**	(8.41)	(25.58)	(25.58)
1991	-	1,358.10	-	(1,358.10)	**	(6.03)	(27.22)	(27.22)
1992	-	-	-	-	0.00	(5.59)	(27.22)	(24.85)
1993	-	-	-	-	0.00	(5.59)	(27.22)	(37.27)
1994	-	-	-	-	0.00	(5.59)	(27.22)	**
1995	309,848.91	2,820.00	-	(2,820.00)	(0.91)	(5.59)	(6.44)	(1.35)
1996	-	-	-	-	0.00	**	(6.44)	(0.91)
1997	-	1,642.00	-	(1,642.00)	**	**	(6.86)	(1.44)
1998	-	-	-	-	0.00	**	(6.86)	(1.44)
1999	-	-	-	-	0.00	**	(6.86)	(1.44)
2000	-	-	-	-	0.00	**	(6.86)	**
2001	-	-	-	-	0.00	**	(6.86)	**
2002	-	12,858.49	-	(12,858.49)	**	**	(10.14)	**
TOTAL	392,262.35	39,756.64	-	(39,756.64)	(10.14)			

**CONSOLIDATED EDISON COMPANY OF NEW YORK, INC.
SUMMARY OF HISTORICAL NET SALVAGE**

ACCOUNT 9732 STRUCTURES AND IMPROVEMENTS

YEAR	BOOK COST OF PLANT RETIRED \$\$	COST OF REMOVAL \$\$	SALVAGE \$\$	AMOUNT \$\$	N E T S A L V A G E			
					PERCENTAGE OF BOOK COST RETIRED			
					ONE YEAR BAND %	SHRINKING BAND ENDING		5 YEAR BAND %
				2002 %	1978 %			
1978	-	-	-	-	0.00	(153.53)	0.00	
1979	-	-	-	-	0.00	(153.53)	0.00	
1980	-	-	-	-	0.00	(153.53)	0.00	
1981	-	-	-	-	0.00	(153.53)	0.00	
1982	-	-	-	-	0.00	(153.53)	0.00	0.00
1983	-	-	-	-	0.00	(153.53)	0.00	0.00
1984	-	-	-	-	0.00	(153.53)	0.00	0.00
1985	-	-	-	-	0.00	(153.53)	0.00	0.00
1986	-	-	-	-	0.00	(153.53)	0.00	0.00
1987	-	-	-	-	0.00	(153.53)	0.00	0.00
1988	-	-	-	-	0.00	(153.53)	0.00	0.00
1989	-	-	-	-	0.00	(153.53)	0.00	0.00
1990	-	-	-	-	0.00	(153.53)	0.00	0.00
1991	-	-	-	-	0.00	(153.53)	0.00	0.00
1992	-	-	-	-	0.00	(153.53)	0.00	0.00
1993	-	-	-	-	0.00	(153.53)	0.00	0.00
1994	-	-	-	-	0.00	(153.53)	0.00	0.00
1995	-	8,476.27	-	(8,476.27)	**	(153.53)	**	**
1996	5,520.79	-	-	-	0.00	0.00	(153.53)	(153.53)
1997	-	-	-	-	0.00	0.00	(153.53)	(153.53)
1998	-	-	-	-	0.00	0.00	(153.53)	(153.53)
1999	-	-	-	-	0.00	0.00	(153.53)	(153.53)
2000	-	-	-	-	0.00	0.00	(153.53)	0.00
2001	-	-	-	-	0.00	0.00	(153.53)	0.00
2002	-	-	-	-	0.00	0.00	(153.53)	0.00
TOTAL	5,520.79	8,476.27	-	(8,476.27)	(153.53)			

**CONSOLIDATED EDISON COMPANY OF NEW YORK, INC.
SUMMARY OF HISTORICAL NET SALVAGE**

ACCOUNT 9734 MAINS

YEAR	BOOK COST OF PLANT RETIRED \$\$	COST OF REMOVAL \$\$	SALVAGE \$\$	AMOUNT \$\$	N E T S A L V A G E			
					PERCENTAGE OF BOOK COST RETIRED			
					ONE YEAR	SHRINKING BAND ENDING		5 YEAR
					BAND	2002	1978	BAND
					%	%	%	%
1978	1,049,308.25	143,521.68	-	(143,521.68)	(13.68)	(103.66)	(13.68)	
1979	769,995.33	194,594.86	-	(194,594.86)	(25.27)	(105.45)	(18.58)	
1980	1,216,922.13	171,453.12	231.70	(171,221.42)	(14.07)	(106.65)	(16.78)	
1981	742,933.46	140,643.86	-	(140,643.86)	(18.93)	(108.87)	(17.20)	
1982	2,346,412.44	169,028.26	8,128.24	(160,900.02)	(6.86)	(110.21)	(13.24)	(13.24)
1983	485,737.55	256,185.64	-	(256,185.64)	(52.74)	(115.32)	(16.14)	(16.60)
1984	1,063,939.64	152,438.74	-	(152,438.74)	(14.33)	(115.97)	(15.89)	(15.05)
1985	730,804.14	257,159.66	6.93	(257,152.73)	(35.19)	(118.32)	(17.57)	(18.01)
1986	641,477.43	283,150.58	34.95	(283,115.63)	(44.13)	(119.67)	(19.45)	(21.07)
1987	1,037,301.75	205,519.06	3,301.58	(202,217.48)	(19.49)	(120.76)	(19.45)	(29.07)
1988	828,843.43	251,659.43	18,905.87	(232,753.56)	(28.08)	(123.17)	(20.11)	(26.21)
1989	799,133.13	369,160.30	-	(369,160.30)	(46.20)	(125.01)	(21.89)	(33.30)
1990	1,008,388.20	1,809,784.90	-	(1,809,784.90)	(179.47)	(126.52)	(34.38)	(67.14)
1991	2,676,764.61	2,637,753.39	9,867.61	(2,627,885.78)	(98.17)	(125.21)	(45.47)	(82.54)
1992	5,370,926.97	4,831,230.81	-	(4,831,230.81)	(89.95)	(127.11)	(56.97)	(92.39)
1993	3,775,747.26	4,989,662.65	-	(4,989,662.65)	(132.15)	(133.18)	(68.54)	(107.31)
1994	3,834,491.30	4,951,308.06	2,515.50	(4,948,792.56)	(129.06)	(133.32)	(76.72)	(115.25)
1995	4,504,900.90	4,781,543.63	15.00	(4,781,528.63)	(106.14)	(133.97)	(80.75)	(110.00)
1996	3,635,979.28	5,469,787.55	-	(5,469,787.55)	(150.44)	(140.02)	(87.69)	(118.46)
1997	3,076,153.34	4,277,386.08	-	(4,277,386.08)	(139.05)	(137.80)	(91.68)	(129.96)
1998	4,043,539.82	5,109,740.02	-	(5,109,740.02)	(126.37)	(137.52)	(94.89)	(128.76)
1999	4,651,820.14	5,031,790.68	-	(5,031,790.68)	(108.17)	(142.05)	(96.17)	(123.89)
2000	1,106,698.45	1,943,627.88	924.56	(1,942,703.32)	(175.54)	(171.72)	(97.95)	(132.20)
2001	1,020,248.54	1,385,349.75	136.14	(1,385,213.61)	(135.77)	(170.71)	(98.71)	(127.69)
2002	3,185,626.10	5,794,725.35	-	(5,794,725.35)	(181.90)	(181.90)	(103.66)	(137.52)
TOTAL	53,604,093.59	55,608,205.94	44,088.08	(55,564,137.86)	(103.66)			

**CONSOLIDATED EDISON COMPANY OF NEW YORK, INC.
SUMMARY OF HISTORICAL NET SALVAGE**

ACCOUNT 9735 DESUPERHEATING EQUIPMENT

YEAR	BOOK COST OF PLANT RETIRED \$\$	COST OF REMOVAL \$\$	SALVAGE \$\$	AMOUNT \$\$	N E T S A L V A G E			
					PERCENTAGE OF BOOK COST RETIRED			
					ONE YEAR BAND %	SHRINKING BAND ENDING		5 YEAR BAND %
					2002 %	1978 %		
1978	37,014.46	(2,671.92)	-	2,671.92	7.22	(42.66)	7.22	
1979	2,500.00	3,312.00	-	(3,312.00)	(132.48)	(43.32)	(1.62)	
1980	-	19,899.00	-	(19,899.00)	**	(43.24)	(51.98)	
1981	-	-	-	-	0.00	(42.53)	(51.98)	
1982	38,088.04	383.65	-	(383.65)	(1.01)	(42.53)	(26.96)	(26.96)
1983	-	-	-	-	0.00	(43.11)	(26.96)	(58.13)
1984	2,550.00	-	-	-	0.00	(43.11)	(26.10)	(49.91)
1985	66,289.44	1,883.73	-	(1,883.73)	(2.84)	(43.15)	(15.57)	(2.12)
1986	858.39	28,152.00	-	(28,152.00)	(3,279.63)	(44.14)	(34.59)	(28.22)
1987	72,113.26	10,400.00	-	(10,400.00)	(14.42)	(43.11)	(27.96)	(28.51)
1988	45,973.22	-	-	-	0.00	(43.90)	(23.12)	(21.53)
1989	-	16,760.20	-	(16,760.20)	**	(44.69)	(29.44)	(30.88)
1990	14,768.38	10,107.25	-	(10,107.25)	(68.44)	(44.03)	(31.49)	(48.93)
1991	95,051.78	38,398.59	-	(38,398.59)	(40.40)	(43.89)	(33.75)	(33.20)
1992	216,682.94	276,872.04	-	(276,872.04)	(127.78)	(44.03)	(68.17)	(91.85)
1993	241,420.69	116,813.66	-	(116,813.66)	(48.39)	(35.91)	(62.44)	(80.81)
1994	159,634.94	(15,397.47)	-	15,397.47	9.65	(34.40)	(50.85)	(58.66)
1995	122,796.61	(7,818.70)	-	7,818.70	6.37	(38.23)	(44.55)	(48.93)
1996	1,350,019.58	23,294.28	-	(23,294.28)	(1.73)	(41.43)	(21.10)	(18.84)
1997	122,229.50	52,752.85	-	(52,752.85)	(43.16)	(189.29)	(22.15)	(8.50)
1998	100,122.20	251,636.96	235.31	(251,401.65)	(251.09)	(263.61)	(30.67)	(16.40)
1999	-	281,687.35	67.87	(281,619.48)	**	(272.55)	(41.15)	(35.47)
2000	-	34,187.78	2,817.84	(31,369.94)	**	(71.67)	(42.32)	(40.73)
2001	12,398.21	34,846.77	2,504.11	(32,342.66)	(260.87)	(49.29)	(43.32)	(276.67)
2002	127,793.64	36,758.10	-	(36,758.10)	(28.76)	(28.76)	(42.66)	(263.61)
TOTAL	2,828,305.28	1,212,258.12	5,625.13	(1,206,632.99)	(42.66)			

**CONSOLIDATED EDISON COMPANY OF NEW YORK, INC.
SUMMARY OF HISTORICAL NET SALVAGE**

ACCOUNT 353 MAINS & DESUPERHEATING EQUIPMENT

YEAR	BOOK COST OF PLANT RETIRED	COST OF REMOVAL	SALVAGE	AMOUNT	N E T S A L V A G E			
					PERCENTAGE OF BOOK COST RETIRED			
					ONE YEAR BAND	SHRINKING BAND ENDING 2002	1978	5 YEAR BAND
\$\$	\$\$	\$\$	\$\$	%	%	%	%	
1978	1,086,322.71	140,849.76	-	(140,849.76)	(12.97)	(100.60)	(12.97)	
1979	772,495.33	197,906.86	-	(197,906.86)	(25.62)	(102.32)	(18.22)	
1980	1,216,922.13	191,352.12	231.70	(191,120.42)	(15.71)	(103.41)	(17.23)	
1981	742,933.46	140,643.86	-	(140,643.86)	(18.93)	(105.41)	(17.56)	
1982	2,384,500.48	169,411.91	8,128.24	(161,283.67)	(6.76)	(106.63)	(13.41)	(13.41)
1983	485,737.55	256,185.64	-	(256,185.64)	(52.74)	(111.37)	(16.27)	(16.91)
1984	1,066,489.64	152,438.74	-	(152,438.74)	(14.29)	(111.94)	(15.99)	(15.29)
1985	797,093.58	259,043.39	6.93	(259,036.46)	(32.50)	(114.08)	(17.53)	(17.70)
1986	642,335.82	311,302.58	34.95	(311,267.63)	(48.46)	(115.44)	(19.69)	(21.21)
1987	1,109,415.01	215,919.06	3,301.58	(212,617.48)	(19.16)	(116.35)	(19.64)	(29.05)
1988	874,816.65	251,659.43	18,905.87	(232,753.56)	(26.61)	(118.69)	(20.18)	(26.02)
1989	799,133.13	385,920.50	-	(385,920.50)	(48.29)	(120.47)	(22.06)	(33.19)
1990	1,023,156.58	1,819,892.15	-	(1,819,892.15)	(177.87)	(121.76)	(34.32)	(66.59)
1991	2,771,816.39	2,676,151.98	9,867.61	(2,666,284.37)	(96.19)	(120.44)	(45.19)	(80.83)
1992	5,587,609.91	5,108,102.85	-	(5,108,102.85)	(91.42)	(122.09)	(57.28)	(92.37)
1993	4,017,167.95	5,106,476.31	-	(5,106,476.31)	(127.12)	(126.98)	(68.34)	(106.25)
1994	3,994,126.24	4,935,910.59	2,515.50	(4,933,395.09)	(123.52)	(126.96)	(75.84)	(112.88)
1995	4,627,697.51	4,773,724.93	15.00	(4,773,709.93)	(103.16)	(127.47)	(79.56)	(107.57)
1996	4,985,998.86	5,493,081.83	-	(5,493,081.83)	(110.17)	(132.49)	(83.47)	(109.49)
1997	3,198,382.84	4,330,138.93	-	(4,330,138.93)	(135.39)	(138.87)	(87.41)	(118.31)
1998	4,143,662.02	5,361,376.98	235.31	(5,361,141.67)	(129.38)	(139.65)	(91.16)	(118.81)
1999	4,651,820.14	5,313,478.03	67.87	(5,313,410.16)	(114.22)	(143.86)	(93.27)	(116.96)
2000	1,106,698.45	1,977,815.66	3,742.40	(1,974,073.26)	(178.37)	(169.15)	(95.08)	(124.25)
2001	1,032,646.75	1,420,196.52	2,640.25	(1,417,556.27)	(137.27)	(166.80)	(95.90)	(130.16)
2002	3,313,419.74	5,831,483.45	-	(5,831,483.45)	(176.00)	(176.00)	(100.60)	(139.65)
TOTAL	56,432,398.87	56,820,464.06	49,693.21	(56,770,770.85)	(100.60)			

**CONSOLIDATED EDISON COMPANY OF NEW YORK, INC.
SUMMARY OF HISTORICAL NET SALVAGE**

ACCOUNT	9736	SERVICES	N E T S A L V A G E							
			BOOK COST OF PLANT RETIRED	COST OF REMOVAL	SALVAGE	AMOUNT	PERCENTAGE OF BOOK COST RETIRED			
							ONE YEAR	SHRINKING BAND ENDING		5 YEAR
							BAND	2002	1978	BAND
YEAR	\$\$	\$\$	\$\$	\$\$	%	%	%	%		
1978	543,602.08	125,378.02	25.92	(125,352.10)	(23.06)	(113.14)	(23.06)			
1979	234,250.21	130,442.13	(9.00)	(130,451.13)	(55.69)	(119.53)	(32.89)			
1980	367,643.56	163,030.27	415.89	(162,614.38)	(44.23)	(121.54)	(36.53)			
1981	462,864.83	123,414.50	452.11	(122,962.39)	(26.57)	(125.56)	(33.66)			
1982	89,426.72	171,363.22	7,393.99	(163,969.23)	(183.36)	(132.50)	(41.55)	(41.55)		
1983	79,748.92	200,054.13	-	(200,054.13)	(250.85)	(131.80)	(50.94)	(63.22)		
1984	395,552.23	227,917.52	-	(227,917.52)	(57.62)	(130.33)	(52.15)	(62.89)		
1985	100,724.13	160,249.70	-	(160,249.70)	(159.10)	(135.09)	(56.89)	(77.56)		
1986	177,241.96	182,784.92	0.07	(182,784.85)	(103.13)	(134.69)	(60.23)	(110.95)		
1987	1,244,514.68	129,315.01	-	(129,315.01)	(10.39)	(135.66)	(43.45)	(45.07)		
1988	202,121.02	127,565.70	1,111.99	(126,453.71)	(62.56)	(170.19)	(44.44)	(38.99)		
1989	275,690.65	159,739.61	-	(159,739.61)	(57.94)	(175.23)	(45.33)	(37.92)		
1990	230,967.35	111,164.22	-	(111,164.22)	(48.13)	(183.25)	(45.48)	(33.30)		
1991	359,546.13	342,450.75	-	(342,450.75)	(95.25)	(191.45)	(49.23)	(37.58)		
1992	345,326.36	465,105.92	105.30	(465,000.62)	(134.66)	(201.48)	(55.01)	(85.23)		
1993	195,388.33	509,859.62	4,711.32	(505,148.30)	(258.54)	(208.93)	(62.50)	(112.55)		
1994	186,874.67	391,587.87	537.15	(391,050.72)	(209.26)	(205.59)	(67.50)	(137.68)		
1995	266,674.68	326,794.89	-	(326,794.89)	(122.54)	(205.34)	(70.05)	(149.98)		
1996	400,636.29	655,586.42	-	(655,586.42)	(163.64)	(214.34)	(76.14)	(168.01)		
1997	490,323.43	556,875.42	-	(556,875.42)	(113.57)	(224.25)	(78.90)	(158.16)		
1998	430,934.10	669,689.02	-	(669,689.02)	(155.40)	(259.01)	(83.55)	(146.44)		
1999	571,657.97	1,033,498.15	-	(1,033,498.15)	(180.79)	(298.53)	(90.82)	(150.10)		
2000	138,242.27	509,998.26	-	(509,998.26)	(368.92)	(419.10)	(95.75)	(168.60)		
2001	160,470.02	1,023,533.27	-	(1,023,533.27)	(637.83)	(435.62)	(106.69)	(211.74)		
2002	259,525.26	806,032.15	-	(806,032.15)	(310.58)	(310.58)	(113.14)	(259.01)		
TOTAL	8,209,947.85	9,303,430.69	14,744.74	(9,288,685.95)	(113.14)					

**CONSOLIDATED EDISON COMPANY OF NEW YORK, INC.
SUMMARY OF HISTORICAL NET SALVAGE**

ACCOUNT	9738	METERS	N E T S A L V A G E							
			BOOK COST OF PLANT RETIRED	COST OF REMOVAL	SALVAGE	AMOUNT	PERCENTAGE OF BOOK COST RETIRED			
							ONE YEAR BAND	SHRINKING BAND ENDING		5 YEAR BAND
								2002	1978	
YEAR	\$\$	\$\$	\$\$	\$\$	%	%	%	%		
1978	21,806.08	830.40	-	(830.40)	(3.81)	0.17	(3.81)			
1979	74,577.59	(123.40)	-	123.40	0.17	0.24	(0.73)			
1980	99,849.30	177.00	-	(177.00)	(0.18)	0.24	(0.45)			
1981	40,980.47	(133.42)	765.74	899.16	2.19	0.28	0.01			
1982	62,528.88	(0.02)	-	0.02	0.00	0.21	0.01	0.01		
1983	22,618.28	-	641.56	641.56	2.84	0.22	0.20	0.49		
1984	8,969.93	-	-	-	0.00	0.16	0.20	0.58		
1985	4,451.80	-	289.51	289.51	6.50	0.16	0.28	1.31		
1986	20,580.17	-	800.00	800.00	3.89	0.13	0.49	1.45		
1987	14,843.06	-	1,000.00	1,000.00	6.74	0.04	0.74	3.82		
1988	10,943.79	-	-	-	0.00	(0.07)	0.72	3.49		
1989	96,715.62	(587.00)	-	587.00	0.61	(0.07)	0.70	1.81		
1990	14,452.73	-	-	-	0.00	(0.15)	0.68	1.52		
1991	9,658.36	-	-	-	0.00	(0.15)	0.66	1.08		
1992	272,430.34	94.26	2,026.27	1,932.01	0.71	(0.16)	0.68	0.62		
1993	182.78	-	-	-	0.00	(0.64)	0.68	0.64		
1994	2,678.68	1,774.50	-	(1,774.50)	(66.25)	(0.64)	0.45	0.05		
1995	7,273.31	105.50	-	(105.50)	(1.45)	(0.28)	0.43	0.02		
1996	34,578.25	-	-	-	0.00	(0.26)	0.41	0.02		
1997	16,912.75	671.00	-	(671.00)	(3.97)	(0.28)	0.32	(4.14)		
1998	31,940.45	140.00	-	(140.00)	(0.44)	(0.13)	0.30	(2.88)		
1999	58,492.95	-	-	-	0.00	(0.11)	0.28	(0.61)		
2000	61,261.33	-	-	-	0.00	(0.13)	0.26	(0.40)		
2001	107,515.80	-	-	-	0.00	(0.15)	0.23	(0.29)		
2002	168,789.93	422.23	-	(422.23)	(0.25)	(0.25)	0.17	(0.13)		
TOTAL	1,265,032.63	3,371.05	5,523.08	2,152.03	0.17					

**CONSOLIDATED EDISON COMPANY OF NEW YORK, INC.
SUMMARY OF HISTORICAL NET SALVAGE**

ACCOUNT 9740 ACCESSORY EQUIPMENT ON CUSTOMERS PREMISES

YEAR	BOOK COST OF PLANT RETIRED	COST OF REMOVAL	SALVAGE	AMOUNT	N E T S A L V A G E			
					PERCENTAGE OF BOOK COST RETIRED			
					ONE YEAR BAND	SHRINKING BAND ENDING		5 YEAR BAND
	2002	1978						
	\$\$	\$\$	\$\$	\$\$	%	%	%	%
1978	54,526.02	-	-	-	0.00	(24.13)	0.00	
1979	41,906.39	-	-	-	0.00	(28.16)	0.00	
1980	21,478.85	-	-	-	0.00	(32.30)	0.00	
1981	10,678.68	24.75	-	(24.75)	(0.23)	(34.94)	(0.02)	
1982	17,274.22	(24.75)	42.69	67.44	0.39	(36.40)	0.03	0.03
1983	6,829.61	-	-	-	0.00	(39.10)	0.03	0.04
1984	7,610.73	-	-	-	0.00	(40.27)	0.03	0.07
1985	9,867.55	17,605.80	-	(17,605.80)	(178.42)	(41.66)	(10.32)	(33.61)
1986	12,882.00	5,191.20	-	(5,191.20)	(40.30)	(35.26)	(12.43)	(41.73)
1987	23,254.06	-	-	-	0.00	(34.94)	(11.03)	(37.72)
1988	16,989.29	-	-	-	0.00	(39.58)	(10.19)	(32.29)
1989	11,440.19	-	-	-	0.00	(43.84)	(9.69)	(30.63)
1990	24,369.04	-	-	-	0.00	(47.26)	(8.78)	(5.84)
1991	5,993.09	-	-	-	0.00	(56.69)	(8.58)	0.00
1992	-	-	878.37	878.37	**	(59.61)	(8.25)	1.49
1993	-	-	-	-	0.00	(60.37)	(8.25)	2.10
1994	27,728.91	-	-	-	0.00	(60.37)	(7.47)	1.51
1995	-	1,438.00	-	(1,438.00)	**	(79.30)	(7.96)	(1.66)
1996	12,567.49	17,886.35	-	(17,886.35)	(142.32)	(77.67)	(13.49)	(45.78)
1997	55,914.46	16,785.61	-	(16,785.61)	(30.02)	(66.96)	(16.05)	(37.53)
1998	-	24,158.14	-	(24,158.14)	**	(170.50)	(22.74)	(62.64)
1999	19,950.54	9,857.66	-	(9,857.66)	(49.41)	(49.41)	(24.13)	(79.30)
2000	-	-	-	-	0.00	0.00	(24.13)	(77.67)
2001	-	-	-	-	0.00	0.00	(24.13)	(66.96)
2002	-	-	-	-	0.00	0.00	(24.13)	(170.50)
TOTAL	381,261.12	92,922.76	921.06	(92,001.70)	(24.13)			

**CONSOLIDATED EDISON COMPANY OF NEW YORK, INC.
SUMMARY OF HISTORICAL NET SALVAGE**

ACCOUNT	9742	INSTALLATION OF METERS & ACCESSORY EQUIPMENT														
									N E T S A L V A G E							
									PERCENTAGE OF BOOK COST RETIRED							
									BOOK COST OF PLANT RETIRED	COST OF REMOVAL	SALVAGE	AMOUNT	ONE YEAR	SHRINKING BAND ENDING		5 YEAR
BAND	2002	1978	BAND													
YEAR	\$	\$	\$	\$	%	%	%	%								
1978	200,952.28	13,707.02	103.94	(13,603.08)	(6.77)	(35.31)	(6.77)									
1979	225,135.64	8,340.05	(103.94)	(8,443.99)	(3.75)	(39.36)	(5.17)									
1980	110,369.30	12,433.94	-	(12,433.94)	(11.27)	(46.10)	(6.43)									
1981	64,086.84	5,534.22	-	(5,534.22)	(8.64)	(49.66)	(6.66)									
1982	87,913.38	5,688.48	30.88	(5,657.60)	(6.44)	(52.26)	(6.63)	(6.63)								
1983	57,802.20	2,098.98	-	(2,098.98)	(3.63)	(56.60)	(6.40)	(6.27)								
1984	37,729.48	3,173.00	-	(3,173.00)	(8.41)	(60.12)	(6.50)	(8.07)								
1985	75,656.93	2,103.50	-	(2,103.50)	(2.78)	(62.47)	(6.17)	(5.75)								
1986	63,052.80	6,929.64	-	(6,929.64)	(10.99)	(68.44)	(6.50)	(6.20)								
1987	86,198.65	4,842.20	93.60	(4,748.60)	(5.51)	(73.67)	(6.42)	(5.95)								
1988	59,061.82	4,625.55	-	(4,625.55)	(7.83)	(83.35)	(6.49)	(6.71)								
1989	13,386.54	7,274.95	-	(7,274.95)	(54.35)	(91.50)	(7.09)	(8.64)								
1990	92,918.22	5,504.40	-	(5,504.40)	(5.92)	(92.43)	(6.99)	(9.24)								
1991	40,485.26	1,426.77	-	(1,426.77)	(3.52)	(110.64)	(6.88)	(8.07)								
1992	-	5,596.66	-	(5,596.66)	**	(121.46)	(7.34)	(11.87)								
1993	-	3,783.42	-	(3,783.42)	**	(120.07)	(7.65)	(16.07)								
1994	97,892.69	2,837.68	-	(2,837.68)	(2.90)	(119.12)	(7.30)	(8.28)								
1995	-	6,919.30	-	(6,919.30)	**	(156.68)	(7.82)	(14.86)								
1996	41,054.62	20,611.87	-	(20,611.87)	(50.21)	(154.40)	(9.11)	(28.61)								
1997	169,106.75	6,137.34	-	(6,137.34)	(3.63)	(170.73)	(8.50)	(13.08)								
1998	-	41,348.48	-	(41,348.48)	**	(475.30)	(11.22)	(25.27)								
1999	92,778.93	81,874.99	-	(81,874.99)	(88.25)	(430.73)	(15.64)	(51.79)								
2000	-	120,771.19	-	(120,771.19)	**	**	(23.11)	(89.37)								
2001	-	19,323.64	-	(19,323.64)	**	**	(24.31)	(102.89)								
2002	-	177,661.47	-	(177,661.47)	**	**	(35.31)	(475.30)								
TOTAL	1,615,582.33	570,548.74	124.48	(570,424.26)	(35.31)											

New York State Department of Public Service
Proposed Depreciation Rate Changes for Steam Plant

Company Account	Average Service Lives			Net Salvage			Depreciation Rate			h-curves		
	Current	Company	Staff	Current	Company	Staff	Current	Company	Staff	Current	Company	Staff
9714 -- Structures & Improvements	50	50	55	(25)	(35)	(25)	2.50	2.70	2.27	h 2.00	h 2.00	h 2.00
9716 -- Boiler Plant Equip	30	35	45	(30)	(40)	(30)	4.33	4.00	2.89	h 2.00	h 1.75	h 1.75
9718 -- Access. Power Equip	30	35	50	(10)	(10)	(10)	3.67	3.14	2.20	h 2.00	h 1.75	h 1.75
9720 -- Misc. Station Equip	30	35	50	-	-	-	3.33	2.86	2.00	h 2.00	h 2.50	h 2.00
9732 -- Structures & Improvements	50	50	50	-	-	-	2.00	2.00	2.00	h 5.00	h 5.00	h 5.00
9734 -- Mains	75	65	70	(30)	(60)	(30)	1.73	2.46	1.86	h 0.50	h 1.00	h 0.50
9735 -- Desuperheating Equip	30	35	45	(20)	(30)	(20)	4.00	3.71	2.67	h 2.00	h 1.75	h 1.50
9736 -- Services	35	45	45	(45)	(65)	(45)	4.14	3.67	3.22	h 0.25	h 0.25	h 0.25
9738 -- Meters	35	35	40	-	-	-	2.86	2.86	2.50	h 2.50	h 2.00	h 1.50
9740 -- Access. Equip. Cust. Prem.	35	45	45	-	-	-	2.86	2.22	2.22	h 0.75	h 0.75	h 0.75
9742 -- Inst. Meters & Acc. Equip.	40	50	50	(5)	(10)	(5)	2.63	2.20	2.10	h 0.25	h 0.50	h 0.25

Consolidated Edison Company of New York, Inc.
h-Curve Analysis based on 2002 Mortality - Steam

Account: 9714 – Structures and Improvements (Excl. Fully Recovered 74th St.)

Study No: 027141

Existing h-Curve: h 2.0
Proposed h-Curve: h 2.0

Rolling Bands:

1st Degree:

Not every band was fit. Overall range is h 0.25 to h 2.4. There is no apparent trend.

2nd Degree:

Only 14 of 51 bands have fit. Overall range is h 2.2 to h 4.3. No trend.

3rd Degree:

Only 27 of 51 bands have fit. None of the most recent bands fit. Overall range is h 3.3 to h 4.5. No trend.

Shrinking Bands:

1st Degree:

All bands except for 9 have fit. The widest bands are at h 1.2. The widest bands are flat trended. Overall trend is toward lower h values although the most recent few bands are indicating higher values. Narrowest band is h 1.7.

2nd Degree:

Only about half of the more recent bands were fit. They range from h 1.7 to h 2.3 and are relatively flat although a trend toward lower h values may be developing.

3rd Degree:

No bands fit.

Degree of Best Fit: Unable to determine

Observations:

No major differences since last study.

Consolidated Edison Company of New York, Inc.
h-Curve Analysis based on 2002 Mortality - Steam

Account: 9716 – Boiler Plant Equipment (Excl. Fully Recovered 74th St.)

Study No: 027161

Existing h-Curve:	h 2.0
Proposed h-Curve:	h 1.75

Rolling Bands:

1st Degree:

2nd Degree:

3rd Degree:

All Degrees:

There are limited bands fit in each degree and indications vary in trends developing although none of the degrees indicate a definitive trend. A preponderance of the bands that were fit indicates lives within a reasonable range of the existing h 2.0 curve in effect.

Shrinking Bands:

1st Degree:

Four bands were not fit. The widest band is h 1.6. The wider bands range between 1.4 and 1.6. The narrower bands demonstrate a trend toward higher dispersion, although the most recent bands do not support that trend. The most recent band is h 1.44. The narrower bands range from h 0.58 to h 1.4.

2nd Degree:

Only about half of the bands were fit (the wider bands). None of the narrower bands generated an h value. The widest bands have a flat trend with values between h 1.6 and h 1.7.

3rd Degree:

Only five bands have fit.

Degree of Best Fit: 1st degree (although close to degree 2)

Observations:

A slight overall shift toward higher dispersion noted in the current study although the recent trends in the current study toward lower dispersion in the degree 1 shrinking bands was not apparent in the prior study. The indications for degree 2 shrinking bands are similar to prior study.

Consolidated Edison Company of New York, Inc.
h-Curve Analysis based on 2002 Mortality - Steam

Account: 9718 – Accessory Power Equipment (Excl. Fully Recovered 74th St.)

Study No: 027181

Existing h-Curve:	h 2.0
Proposed h-Curve:	h 1.75

Rolling Bands:

1st Degree:

2nd Degree:

3rd Degree:

All Degrees:

A wide range of values indicated. No apparent trends. The 5 most recent bands generated for all degrees range from h 0.5 to h 3.7.

Shrinking Bands:

1st Degree:

All bands fit except the three narrowest. Widest bands yield h 1.7. The rest of the bands display a slight trend toward higher dispersion until the 1979 to 2002 band where the trend becomes more significant toward higher dispersion. The narrowest bands trend towards higher dispersion. Recent bands generate h values lower than the current h value of h 2.0.

2nd Degree:

All bands fit except the 9 most recent bands. There are similar indications as in degree 1 with trends toward higher dispersion. The widest bands yield an h 2.2. Most bands are between the h 1.5 to h 2.2 ranges. A trend toward higher dispersion is apparent, although the most recent bands were not fit as noted above. The three most recent bands are -h 2.6.

3rd Degree:

Only 23 of the most recent bands fit and those bands also trend toward higher dispersion.

Degree of Best Fit: 2nd degree

Observations:

There are lower values for the h curves than in previous study. There is a trend toward higher dispersion noted when the results of the current study are compared to those of the prior study.

Consolidated Edison Company of New York, Inc.
h-Curve Analysis based on 2002 Mortality - Steam

Account: 9720 – Miscellaneous Power Equipment (Excl. Fully Recovered 74th St.)

Study No: 027201

Existing h-Curve:	h 2.0
Proposed h-Curve:	h 2.5

Rolling Bands:

1st Degree:

All bands fit. There is no overall trend. The most recent years demonstrate a flat trend of h 2.3.

2nd Degree:

Limited bands fit. None of the oldest bands have fit. The most recent years demonstrate a flat trend of h 4.0.

3rd Degree:

Limited bands fit.

All degrees:

The 5 most recent bands with fit for all degrees range from h2.3 to h 4.9.

Shrinking Bands:

1st Degree:

All bands have fit except for the 7 most recent bands. All of the bands with fit range between h 2.1 to h 2.4. This relatively flat trend (although trending a bit toward higher h values) is slightly higher than the current curve of h 2.0.

2nd Degree:

All bands have fit except for the 7 most recent bands. The widest bands yield h 3.4. There is a slight overall trend towards lower dispersion. The overall range is h 3.4 to h 4.0.

3rd Degree:

None of the recent bands fit. The widest bands yield h 3.4. The overall range is h 3.4 to h 4.2 and the trend is toward higher h values.

Degree of Best Fit: 2nd degree

Observations:

Overall shift toward sharply lower dispersion noted in the wider shrinking bands when the current study is compared to the results of the prior study. In addition, the prior study had indicated trends toward lower dispersion, which are still apparent in the current study.

The degree of best fit has shifted to degree 2.

Consolidated Edison Company of New York, Inc.
h-Curve Analysis based on 2002 Mortality - Steam

Account: 9734 – Mains

Study No: 027340

Existing h-Curve:	h 0.5
Proposed h-Curve:	h 1.0

Rolling Bands:

1st Degree:

All bands fit. Range from -h 0.7 to h 1.5. The more recent bands yield h values lower than the older bands but the recent trend is toward higher values.

2nd Degree:

Only five bands fit.

3rd Degree:

Limited bands fit. The most recent band is h 0.75. Most recent years yield increasing trend.

Shrinking Bands:

1st Degree:

All bands fit. Widest band at h 0.36 and overall range of all bands is between h 0.03 to h 0.77 with a trend toward higher h values. The current h curve falls within this range.

2nd Degree:

No bands fit.

3rd Degree:

All bands fit. Widest band at h 1.2 and all bands range from h 0.61 to h 1.9 with an overall trend toward lower h values reversed by the most recent years. All of the h curves are higher than the current value of h 0.50.

Degree of Best Fit: 3rd degree

Observations:

No material variations in the wider shrinking bands when results are compared to the prior study although trends toward lower h values noted in the prior study have not continued to develop and have even reversed. The 1999 case had proposed an increase in the h value.

Consolidated Edison Company of New York, Inc.
h-Curve Analysis based on 2002 Mortality - Steam

Account: 9735 – Desuperheating Equipment

Study No: 027350

Existing h-Curve:	h 2.0
Proposed h-Curve:	h 1.75

Rolling Bands:

All degrees of rolling bands have limited bands have fit. Those with fit yield a wide range of values.

Shrinking Bands:

1st Degree:

All bands except 2 have fit. The widest bands yield h 0.9 and generally display a relatively flat trend until the 1975-2002 band. All bands are below h 2.0.

2nd Degree:

Only one band has fit.

3rd Degree:

All bands except 2 have fit. The widest bands yield h 0.9. Three of six of the narrowest bands yield h curves over h 2.0. All other bands are under h 2.0.

Degree of Best Fit: 1st Degree

Observations:

The h curves are slightly higher than previous study. Since most curves are under the current h 2.0, it appears that the curve should be lowered.

Because of the nature of the equipment in this account, and per long-standing policy, the life table for boiler plant equipment is used.

Consolidated Edison Company of New York, Inc.
h-Curve Analysis based on 2002 Mortality - Steam

Account: 9736 – Services

Study No: 027360

Existing h-Curve:	h 0.25
Proposed h-Curve:	h 0.25

Rolling Bands:

1st Degree:

All bands have fit. There is an overall range of values from -h 0.3 to h 0.7. Some of the more recent bands have negative h curves.

2nd Degree:

Limited bands fit.

3rd Degree:

Most bands are fit. The most recent bands yield values between h 0.8 and h 0.9. The recent bands are generally indicating a trend toward higher h values.

Shrinking Bands:

1st Degree:

All bands have fit except one. The widest bands yield h 0.1. Some of the narrower bands have negative values. None of the curves are above the current h curve of h 0.25.

2nd Degree:

Only two bands fit.

3rd Degree:

All bands fit except for two. The widest band is h 0.1. There is a trend towards lower dispersion. Most values are over the current h curve of h 0.25. The two most recent bands are over h 1.7.

Degree of Best Fit: 1st Degree

Observations:

The overall results of current study are similar when compared to those of the previous study.

Consolidated Edison Company of New York, Inc.
h-Curve Analysis based on 2002 Mortality - Steam

Account: 9738 – Meters

Study No: 027380

Existing h-Curve:	h 2.5
Proposed h-Curve:	h 2.0

Rolling Bands:

1st Degree:

All bands have fit. There is an overall range of values from -h 0.96 to h 2.7. There is no set trend but the recent years appear to be starting a trend toward higher dispersion and show higher dispersion than the older years.

2nd Degree:

Limited bands fit. The overall range is h 1.7 to h 3.5. Again, the more recent bands are indicating the start of a trend toward higher dispersion.

3rd Degree:

Limited bands fit. None of the older bands have fit. There is no set trend. The overall range is h 1.7 to h 3.0.

Shrinking Bands:

1st Degree:

All bands have fit. The widest bands yield h 1.6. There is a trend towards higher dispersion except for the most recent year. All curves are below the current h curve of h 2.50.

2nd Degree:

Only eight of the more recent bands fit. This small amount of bands fit trend toward higher dispersion.

3rd Degree:

All bands fit. The widest 7 bands yield h 1.6. There is a trend towards lower dispersion in the wider bands. The overall range is h 1.0 to h 2.3. Nine of the ten narrowest bands have a trend toward higher dispersion. Again, all curves are below the current h curve of h 2.50.

Degree of Best Fit: 3rd Degree for the more recent bands and 1st degree for the wider bands. The fit index differences in the wider bands are negligible. The indications from both bands are similar.

Observations:

The values for the h curves were higher in the previous study when the wider shrinking bands are compared to the results of the current study.

Consolidated Edison Company of New York, Inc.
h-Curve Analysis based on 2002 Mortality - Steam

Account: 9740 – Accessory Equipment on Customer Premises

Study No: 027400

Existing h-Curve:	h 0.75
Proposed h-Curve:	h 0.75

Rolling Bands:

1st Degree:

All bands have fit. There is an overall range of values from -h 0.43 to h 1.5. The vast majority of bands yield indications above the current h 0.75 in effect.

2nd Degree:

Only 11 bands fit.

3rd Degree:

Only 11 bands fit.

Shrinking Bands:

1st Degree:

All bands have fit except for the 3 most recent. The widest band is -h 0.53. The overall range is -h 0.53 to h 1.75. There is no set trend although the more recent bands are indicating higher h values than the wider bands.

2nd Degree:

Only four bands fit.

3rd Degree:

Only a few of the widest bands fit.

Degree of Best Fit: Unable to determine due to small amounts of fit.

Observations:

No material variations when current results are compared to prior study.

Consolidated Edison Company of New York, Inc.
h-Curve Analysis based on 2002 Mortality - Steam

Account: 9742 – Installation of Accessory Equipment on Customer Premises

Study No: 027420

Existing h-Curve:	h 0.25
Proposed h-Curve:	h 0.50

Rolling Bands:

1st Degree:

All bands have fit. All bands are positive except for the oldest. The overall range excluding the oldest is h 0.12 to h 1.3. The recent 10 years show a trend towards lower dispersion.

2nd Degree:

Only 3 bands fit.

3rd Degree:

Only 11 bands fit.

Shrinking Bands:

1st Degree:

All bands have fit except for the 3 most recent. The widest band is -h 1.47. The overall range is -h 1.47 to h 1.6. There is a clear trend towards lower dispersion.

2nd Degree:

No bands fit.

3rd Degree:

All bands have fit except for the 3 most recent. The overall range is -h 0.02 to h 2.1. Although it is not as clear as degree 1, the overall trend is towards lower dispersion although the most recent bands show a varying trend.

Degree of Best Fit: 3rd Degree

Observations:

The wider shrinking bands of degree 1 in the current study yield similar indications as those in the prior study (both are negative) and trends continue in the current study toward higher values of h. Current study has fits for most of the 3rd degree- (best fit) shrinking bands, which as noted, also trend toward higher h values (the degree 3 shrinking bands were not fit in the prior study).

CONSOLIDATED EDISON COMPANY OF NEW YORK, INC.
 RESPONSE TO INTERROGATORY S-412
 AT DECEMBER 31, 2002

BOOK BASIS											PSC STAFF - PROPOSED BASIS						
PSC ACCT	ACCOUNT TITLE	COMPANY ACCOUNT	BOOK COST	ACCUMULATED PROVISION FOR DEPRECIATION	LIFE TABLE	AVERAGE SERVICE LIFE	NET SALVAGE	ANNUAL DEPRECIATION RATE	ANNUAL DEPRECIATION EXPENSE	COMPUTED RESERVE FOR DEPRECIATION	LIFE TABLE	AVERAGE SERVICE LIFE	NET SALVAGE	ANNUAL DEPRECIATION RATE	ANNUAL DEPRECIATION EXPENSE	COMPUTED RESERVE FOR DEPRECIATION	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	
<u>STEAM PLANT IN SERVICE</u>																	
<u>PRODUCTION PLANT</u>																	
310	LAND AND LAND RIGHTS	9710	3,087,721.47	-													
310	LAND AND LAND RIGHTS - LEASEHOLDS	9712	6,348,051.15	5,151,488.65				(A)	181,756.32	5,151,488.65				(A)	181,756.32	5,151,488.65	
311	STRUCTURES AND IMPROVEMENTS	9714	46,810,875.78	24,332,947.31	h 2.00	50	(25)	2.50	815,866.39	28,577,471.64	h 2.00	55	(25)	2.27	740,806.68	27,661,014.51	
312	BOILER PLANT EQUIPMENT	9716	229,355,228.65	137,171,236.25	h 2.00	30	(30)	4.33	7,254,387.32	145,310,790.22	h 1.75	45	(30)	2.89	4,841,842.81	120,136,076.09	
315	ACCESSORY POWER EQUIPMENT	9718	27,655,082.78	18,848,172.39	h 2.00	30	(10)	3.67	598,731.06	20,482,040.69	h 1.75	50	(10)	2.20	358,912.35	17,482,486.64	
316	MISCELLANEOUS STATION EQUIPMENT	9720	7,608,206.37	4,698,560.54	h 2.00	30	-	3.33	152,339.94	4,722,436.48	h 2.00	50	-	2.00	91,495.46	4,217,493.60	
TOTAL PRODUCTION PLANT			<u>320,865,166.20</u>	<u>190,202,405.14</u>					<u>9,003,081.03</u>	<u>204,244,227.68</u>					<u>6,214,813.62</u>	<u>174,648,559.49</u>	
<u>DISTRIBUTION PLANT</u>																	
351	STRUCTURES AND IMPROVEMENTS	9732	793,884.72	185,039.11	h 5.00	50	-	2.00	15,877.69	211,397.33	h 5.00	50	-	2.00	15,877.69	211,397.33	
353	MAINS																
	MAINS	9734	356,384,411.12	13,934,077.61	h 0.50	75	(30)	1.73	6,165,450.31	45,227,356.38	h 0.50	70	(30)	1.86	6,628,750.05	48,046,963.21	
	DESUPERHEATING EQUIPMENT	9735	21,700,211.52	6,999,332.13	h 2.00	30	(20)	4.00	868,008.46	8,141,698.68	h 1.50	45	(20)	2.67	579,395.65	5,179,072.48	
TOTAL MAINS			<u>378,084,622.64</u>	<u>20,933,409.74</u>					<u>7,033,458.77</u>	<u>53,369,055.06</u>					<u>7,208,145.70</u>	<u>53,226,035.69</u>	
359	SERVICES	9736	43,744,683.76	7,068,137.76	h 0.25	35	(45)	4.14	1,811,029.91	8,888,725.95	h 0.25	45	(45)	3.22	1,408,578.82	7,197,799.72	
360	METERS	9738	8,198,804.91	2,478,794.20	h 2.50	35	-	2.86	234,485.82	2,836,750.14	h 1.50	40	-	2.50	204,970.12	2,023,074.56	
361	ACCESS. EQUIP. ON CUSTOMERS' PREMISES	9740	2,774,106.80	859,832.23	h 0.75	35	-	2.86	79,339.45	813,965.82	h 0.75	45	-	2.22	61,585.17	677,151.11	
362	INST. OF METERS AND ACCESSORY EQUIP.	9742	13,369,387.08	1,990,388.74	h 0.25	40	(5)	2.63	351,614.88	1,897,998.04	h 0.25	50	(5)	2.10	280,757.13	1,586,272.22	
TOTAL DISTRIBUTION PLANT			<u>446,965,489.91</u>	<u>33,515,601.78</u>					<u>9,525,806.52</u>	<u>68,017,892.34</u>					<u>9,179,914.63</u>	<u>64,921,730.63</u>	
TOTAL STEAM PLANT IN SERVICE			<u>767,830,656.11</u>	<u>223,718,006.92</u>					<u>18,528,887.55</u>	<u>272,262,120.02</u>					<u>15,394,728.25</u>	<u>239,570,290.12</u>	
RESERVE VARIATION										(48,544,113.10)							(15,852,283.20)
RESERVE VARIATION PERCENTAGE										-17.83%							-6.62%

Amounts reflect the full recovery of the 74th Street Station facilities

The Reserve per Books for Account 9714 reflects an adjustment of \$ 22,544,930.47, recorded in June 2003, applicable to net removal cost in connection with the ERRP

(A) Accumulated Depreciation per Books at December 31, 2002 used for Computed Reserve

BEFORE THE
STATE OF NEW YORK
PUBLIC SERVICE COMMISSION

In the Matter of
Consolidated Edison Company of New York, Inc.

Case 03-S-1672

MARCH 2004

Prepared Testimony of:

Michael J. Rieder
Utility Engineer 2
Office of Electricity and
Environment
State of New York
Department of Public Service
Three Empire State Plaza
Albany, New York 12223-1350

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MARCH 2004

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State of New York
Department of Public Service
Three Empire State Plaza
Albany, New York 12223-1350

- 1 Q. Please state your name and business address.
- 2 A. Michael J. Rieder. Three Empire State Plaza,
3 Albany, New York 12223.
- 4 Q. By whom are you employed and in what capacity?
- 5 A. I am employed by the New York State Department
6 of Public Service as a Utility Engineer 2 in the
7 Rates and Retail Choice Section of the Office of
8 Electricity and Environment.
- 9 Q. Please briefly state your educational background
10 and professional experience.
- 11 A. I graduated from Clarkson University with a
12 Bachelor of Science degree in Electrical
13 Engineering in 1990. I began my employment with
14 the Department of Public Service in November
15 1991. While with the Department, I have
16 prepared, analyzed, and reviewed reports and
17 studies involving operating revenues, sales
18 forecasts, operation and maintenance expenses,
19 marginal and embedded costs, mortality and net
20 salvage, revenue allocation, and rate design.
21 My current duties include engineering analyses
22 of utility rate, pricing, and tariff proposals.
- 23 Q. Have you previously provided testimony before
24 this Commission?

- 1 A. Yes. I have testified before this Commission in
2 numerous proceedings on issues related to
3 utility sales, revenues, expenses, cost studies,
4 revenue allocation, and rate design.
- 5 Q. What is the purpose of your testimony in this
6 proceeding?
- 7 A. I will address Consolidated Edison Company of
8 New York, Inc.'s proposed changes to the annual
9 depreciation rates for its steam plant.
- 10 Q. Please summarize your conclusions.
- 11 A. I am recommending that the annual depreciation
12 expense, on a book basis, be decreased by \$3.1
13 million from its current level of \$18.5 million.
14 With regard to the accumulated provision for
15 depreciation, I have concluded that the reserve
16 variation percentage is -6.62% rather than
17 -24.08% as proposed by the company. Because
18 this variation is within a plus or minus 10%
19 bandwidth, there is no need to recover the
20 deficiency as proposed by the company. In
21 addition, because the variance falls within a
22 10% bandwidth, there is no need to use the net
23 gain from the sale of the First Avenue
24 Properties to offset the deficiency, as allowed

1 by the Commission in Opinion No. 00-15 in
2 Case 99-S-1621.

3 Q. Please describe how you arrived at your
4 recommendations.

5 A. I began with the company's property mortality
6 and net salvage studies provided as workpapers
7 for company witness Hutcheson and attached as
8 Exhibit ____ (MJR-1). The studies, as described
9 by Mr. Hutcheson, compute the average service
10 lives, h-curves, and net salvage percentages
11 employing actuarial methods based on past
12 experience. The data is organized into various
13 groupings referred to as rolling or shrinking
14 bands. These retirement bands are periods of
15 years over which the retirement experience is
16 analyzed. Rolling bands used in this study are
17 retirement bands of constant 10-year width
18 (e.g., 1991-2000, 1992-2001, 1993-2002).
19 Shrinking bands are retirement bands which
20 aggregate all retirement years initially, and
21 then subtract one year at a time, beginning with
22 the earliest year, until a one-year retirement
23 band is developed. Normally, as the width of
24 the retirement band increases, the pattern

1 exhibited by the observed mortality data becomes
2 more uniform, i.e., the vintage variations are
3 smoothed out.

4 Q. What does your analysis of these studies lead
5 you to conclude?

6 A. The average service lives, net salvage values,
7 and h-curves proposed by the company are not the
8 most appropriate values to use when calculating
9 the depreciation rates and the depreciation
10 reserve.

11 Q. Do you recommend different average service
12 lives, net salvage values, and h-curves?

13 A. Yes, for most plant accounts.

14 Q. Have you prepared an exhibit for this proceeding
15 that summarizes your proposed changes?

16 A. Yes. I have prepared the attached exhibit
17 titled "New York State Department of Public
18 Service, Proposed Depreciation Rate Changes for
19 Steam Plant," Exhibit ____ (MJR-2). This exhibit
20 summarizes the average service lives, net
21 salvage values, resulting depreciation rates,
22 and h-curves for each steam plant account
23 currently employed by the company, proposed by
24 the company, and proposed by me.

1 Q. Please describe the changes you propose to make
2 to the average service lives.

3 A. I propose to change the service lives of ten of
4 the company's primary steam plant accounts. Of
5 these, nine reflect a change to a longer average
6 service life.

7 Q. On what do you base your recommendations?

8 A. The company's mortality study calculates average
9 service lives for each plant account. I
10 compared the computed average service lives,
11 using the shrinking band analysis, to the
12 average service lives currently in use and
13 proposed by the company. Doing so allows me to
14 use both historic data and company experience in
15 formulating my decision. I also reviewed and
16 considered the changes proposed by the company
17 in this proceeding. As a result this analysis
18 and based on my judgment, I chose average
19 service lives that I believe are more in line
20 with those calculated by the mortality study.

21 Q. How do your proposed changes compare to those
22 proposed by company witness Hutcheson?

23 A. Mr. Hutcheson proposed to extend the average
24 service lives for the majority of the steam

1 plant accounts. In addition, we both concluded
2 that the average service life of one account
3 should be shortened. However, I propose that it
4 only be shortened by five years instead of ten
5 years as proposed by Mr. Hutcheson.

6 Q. Are you proposing changes to the net salvage
7 values currently used by the company?

8 A. No. I have reviewed the company's workpapers
9 titled "Summary of Historical Net Salvage,"
10 attached in Exhibit ___ (MJR-1), and found that
11 the current net salvage values used by the
12 company are adequate.

13 Q. What is the basis for your conclusion?

14 A. I calculated the amount of the annual
15 depreciation expense attributed to the removal
16 and salvage of steam plant in each account. I
17 then compared this amount to the actual net
18 salvage amounts incurred by the company over the
19 last twenty-five years. The amount attributed
20 to net salvage included in the annual
21 depreciation expense is generally consistent
22 with the actual costs being incurred by the
23 company. Thus, I believe that the company is
24 adequately recovering net salvage costs using

1 its current net salvage values and propose no
2 change at this time.

3 Q. What effect do your proposed changes to the
4 average service lives have on the company's
5 annual depreciation expense?

6 A. My proposed changes decrease the company's
7 annual depreciation expense, on a book basis, by
8 \$3.1 million from its current level of \$18.5
9 million.

10 Q. Before describing your proposed changes to the
11 h-curves, please explain your use of the term.

12 A. H-curves are generalized life curves developed
13 by New York State Department of Public Service
14 Staff during the 1940's. The basis of the h-
15 curves was mortality studies of actual utility
16 properties and their behavior, meaning their
17 retirement and survivor patterns.

18 Q. Why are h-curves used?

19 A. They are used because for some property accounts
20 there is not enough actual data or experience to
21 predict with confidence what the average service
22 life and distribution (i.e., shape of life
23 curve) of the retirements will be. So curves,
24 such as h-curves, were developed to help predict

1 how the property will behave with time.

2 Q. How do h-curves affect the annual depreciation
3 expense?

4 A. H-curves do not affect the annual depreciation
5 expense. H-curves, along with average service
6 lives and net salvage values, are used to
7 calculate the depreciation reserve. This
8 computed, or theoretical, reserve is then
9 compared to the book reserve to determine if
10 existing depreciation rates are adequately
11 expensing the physical depreciation of the
12 plant.

13 Q. Please describe the changes you propose to make
14 to the h-curves.

15 A. I propose four changes to the h-curves currently
16 used by the company to calculate the computed
17 (or theoretical) reserve for depreciation. Each
18 change lowers the h-curve value which, in turn,
19 lowers the theoretical reserve for depreciation.

20 Q. How did you reach your conclusion to lower four
21 h-curve values?

22 A. Using the company's mortality study, I compared
23 the column entitled "Equivalent h-curve" for
24 each account with the h-curves currently

1 employed and proposed by the company. I also
2 reviewed the basis for the proposed changes made
3 by the company, as supplied in response to Staff
4 Information Request 402 and attached hereto as
5 Exhibit ____ (MJR-3). This analysis allowed me
6 to consider past trends and incorporate the
7 company's experience when determining which h-
8 curve to select. As a result, I have selected
9 h-curves that I believe more closely reflect the
10 distribution of retirements of the steam plant.

11 Q. Please describe the cumulative effect your
12 proposed changes have on the computed
13 accumulated provision for depreciation.

14 A. As shown in the company's response to Staff
15 Information Request 412, attached as Exhibit ____
16 (MJR-4), my proposed changes reduce the computed
17 accumulated provision for depreciation by \$32.7
18 million. The resulting reserve variation
19 percentage is within a plus or minus 10%
20 bandwidth. Thus, there is no need to recover
21 the deficiency as proposed by the company. In
22 addition, there is no need to use the net gain
23 from the sale of the First Avenue Properties to
24 offset the deficiency.

1 Q. Does this conclude your testimony?

2 A. Yes.

BEFORE THE
STATE OF NEW YORK
PUBLIC SERVICE COMMISSION

In the Matter of
CONSOLIDATED EDISON COMPANY of NEW YORK, INC.

Case 03-G-1671

MARCH 2004

Prepared Testimony of:

Daniel G. Downs
Utility Engineer 3
Office of Gas and Water
State of New York
Department of Public Service
Three Empire State Plaza
Albany, New York 12223-1350

Michael J. Scott
Utility Supervisor
Office of Gas and Water
State of New York
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Three Empire State Plaza
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Three Empire State Plaza
Albany, New York 12223-1350

- 1 Q. Mr. Downs, please state your full name and
2 business address.
- 3 A. Daniel G. Downs, New York State Department of
4 Public Service, Office of Gas & Water, Three
5 Empire State Plaza, Albany, New York 12223-1350.
- 6 Q. Mr. Downs, by whom are you employed and in what
7 capacity?
- 8 A. By the Department of Public Service of the State
9 of New York (DPS). I am a Utility Engineer 3 in
10 the Office of Gas and Water.
- 11 Q. Please state your educational background and
12 professional experience.
- 13 A. I received a Bachelor of Science Degree in Civil
14 and Environmental Engineering from Clarkson
15 University in 1973.
- 16 Q. Briefly describe the responsibilities of your
17 current position.
- 18 A. I am a member of the Policy Section of the
19 Office of Gas and Water. My current
20 responsibilities include assisting in the New
21 York State Public Service Commission's
22 intervention at the Federal Energy Regulatory
23 Commission (FERC) regarding interstate natural
24 gas matters, reviewing Article X applications

1 with respect to natural gas supply and capacity
2 issues, assessing gas supply and infrastructure
3 related to electric generation requirements, and
4 the review of gas supply, capacity, and demand
5 issues related to New York utilities.

6 Q. Have you previously testified in regulatory
7 proceedings?

8 A. Yes. I have testified before the New York State
9 Public Service Commission on sales and revenue
10 forecasting, the adequacy, reliability, and cost
11 of gas supply, rate design, and on the need for
12 new pipeline facilities in Article VII
13 proceedings. I have also prepared testimony
14 for FERC proceedings on interstate pipeline rate
15 issues, and for Article X proceedings before the
16 New York State Board on Electric Generation
17 Siting and the Environment on gas supply and
18 capacity matters.

19 Q. Mr. Scott, please state your full name and
20 business address.

21 A. My name is Michael J. Scott and my business
22 address is Three Empire State Plaza, Albany, New
23 York 12223-1350.

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

1 A. I am employed by the Department of Public
2 Service of the State of New York. I am a member
3 of the Rates Section of the Office of Gas and
4 Water. My title is Utility Supervisor.

5 Q. Please describe your educational background and
6 professional experience.

7 A. I received a Bachelor of Science degree in
8 Mechanical Engineering from Manhattan College in
9 1970. I was employed by the DPS from 1973 to
10 1979. From 1979 until the spring of 1995 I was
11 employed by the New York State Energy Office, in
12 the Division of Policy Analysis and Planning,
13 where I had primary responsibility for all
14 natural gas planning and policy activities. I
15 have been employed by DPS since June 1995. My
16 responsibilities have included monitoring and
17 investigating the adequacy of gas supply and
18 delivery capacity, natural gas reliability
19 issues, natural gas purchasing practices,
20 natural gas capacity issues, and advocating
21 positions on natural gas rates and ratemaking
22 issues. I am a licensed professional engineer
23 in New York State.

24 Q. Have you previously testified in regulatory

1 proceedings?

2 A. I have testified before the New York State
3 Energy Planning Board on natural gas planning
4 and policy issues, the New York State Board on
5 Electric Generation Siting on using gas for
6 electricity generation, the New York State
7 Public Service Commission on the need for new
8 gas pipeline capacity, reliability, balancing,
9 cash-out and various ratemaking issues, and the
10 Canadian National Energy Board on the need for a
11 new natural gas pipeline.

12 Q. Briefly describe the scope of your testimony.

13 A. Our testimony will address some of the
14 additional capital funding requirements for gas
15 operations discussed in the testimony of company
16 witness Frank J. Ciminiello. Specifically, our
17 testimony discusses the additional capital
18 projects identified as projects A through H, on
19 Exhibit FJC - 2, page 2 of 2. The remaining
20 additional capital funding projects identified
21 by Mr. Ciminiello, as well as the changes to
22 operation and maintenance (O&M) costs identified
23 in his testimony are addressed by Staff in the

1 panel testimony of Messers Munnelly, Raichel,
2 Evensen and Desai.

3 Q. Please summarize your recommendations.

4 A. Planned capital expenditures for most of these
5 projects fall outside the rate year and it is
6 not appropriate to address them in the context
7 of a one-year rate case. We recommend specific
8 ratemaking treatment for the projects with
9 planned capital expenditures within the rate
10 year.

11 Q. What additional capital funding projects does
12 Mr. Ciminiello address in his testimony?

13 A. Mr. Ciminiello presents a five-year capital
14 spending plan for the calendar years 2004
15 through 2008. The additional capital projects
16 in the plan relate to reinforcements and
17 upgrades of the gas distribution system. Some
18 of these projects involve system improvements to
19 serve new electricity generators and others are
20 intended to strengthen the system to enhance the
21 company's ability to reliably meet core load
22 requirements in the event of loss of one of its
23 traditional pipeline supply delivery points.
24 These additional items total \$7 million for

1 2004, \$35 million of 2005, \$42.4 million for
2 2006, \$47.1 million for 2007 and \$44.8 for 2008,
3 for a total of \$176.3 million over the five-year
4 period. Projects A through H account for \$105.6
5 million of the total over the five-year period.

6 Q. Which of these projects fall outside the rate
7 year?

8 A. For reference purposes, Exhibit __ (DGD-MJS 1)
9 shows proposed monthly capital expenditures
10 during the rate year for projects A through H.
11 There are no planned expenditures during the
12 rate year for projects C, D, F, G and H.

13 Q. Please address the remaining projects, A, B, and
14 E.

15 A. Projects A, B and E are needed primarily to
16 serve the needs of electric generation
17 customers.

18 Q. What electric generation customers will be
19 served by these projects?

20 A. These projects are being undertaken to serve the
21 needs of three generators, SCS Astoria, the NYPA
22 Poletti expansion and the East River Repowering
23 Project (ERRP).

24 Q. Please describe these projects?

- 1 A. Project A involves construction of 5,200 feet of
2 36" parallel looping of the existing gas main in
3 the Astoria Tunnel. Project B involves 4,200
4 feet of 30" parallel looping of the existing gas
5 main from a point called the St. Ann's Tee to
6 the Astoria Tunnel. Project E involves
7 construction of 2,000 feet of 20" main to
8 deliver gas to the SCS Astoria generation
9 station.
- 10 Q. How does the company propose to allocate the
11 costs of these projects between generation
12 customers and firm ratepayers?
- 13 A. The company proposes to allocate 91% of the
14 expenditures for projects A and B, and 100% of
15 the expenditures for project E, to generation
16 customers (see Exhibit__ (DGD - MJS 2)).
- 17 Q. Do you agree that it is reasonable to allocate
18 9% of the cost of Projects A and B to firm
19 customers?
- 20 A. Yes. According to the company's analysis, this
21 allocation is based on the installation of 850
22 feet of extra pipeline to be installed as a part
23 of the total 9,400 feet for these projects. In
24 other words, the needs of the generators could

1 be met with 8,550 feet of parallel looping. The
2 addition of the additional 850 of looping will
3 provide increased capacity that will benefit
4 firm ratepayers and it makes sense to completely
5 loop these mains at the same time that the
6 larger project is undertaken to provide service
7 to the generators.

8 Q. What options are available for generation
9 customers to obtain natural gas delivery service
10 from Con Edison and how will such customers pay
11 for their share of needed system reinforcements
12 under these options?

13 A. Two natural gas delivery service options are
14 potentially available for generation customers.
15 The first is Off-Peak Firm Transportation under
16 SC 9 for power generation customers with
17 equipment rated at 50 megawatts or higher. This
18 tariff requires that the prospective customer
19 pay the full cost of infrastructure improvements
20 needed to serve them, in advance. The second
21 option is a negotiated transportation rate under
22 SC 9, which is only available if the customer is
23 able to demonstrate to the company's
24 satisfaction that it has a lower cost

1 alternative available. This option is referred
2 to as "Bypass Transportation."

3 Q. Do you know under which of these service options
4 the three generators are planning on taking
5 service?

6 A. Yes. Con Edison has advised Staff that it
7 believes the proximity of the new Iroquois
8 Eastchester Extension pipeline provides a
9 potential alternative direct pipeline
10 interconnection for the generators. Because of
11 this alternative, the company has explained, it
12 is negotiating bypass transportation agreements
13 with these customers. We should note that Staff
14 typically does not get involved in the
15 individual contract negotiations between the
16 utility and the generation customers prior to
17 the execution of the agreements. Therefore, we
18 offer no opinion of the propriety of the
19 company's determination to offer bypass
20 transportation service.

21 Q. How does Con Edison plan to recover the cost of
22 the capital expenditures for projects A, B, and
23 E?

1 A. For the portion of costs allocated to
2 generators, Con Edison plans to impose
3 "increased demand charges" in addition to the
4 charges for gas delivery service to these
5 customers for a specified period of time (e.g.,
6 four years for ERRP and NYPA and ten years for
7 SCS Astoria) to recover the cost of these system
8 improvements. At this time Con Edison is still
9 in the process of negotiating with these
10 generation customers on the cost recovery terms
11 as well as other matters related to providing
12 them gas delivery service. For the portion of
13 the capital expenditures allocated to firm
14 ratepayers, it appears that these costs will
15 follow the standard treatment for such system
16 improvements and become part of rate base.

17 Q. Do you have concerns with Con Edison's proposed
18 approach to recover the costs of infrastructure
19 improvements needed to serve these three
20 generation customers?

21 A. Yes. We believe that there is a need to clarify
22 the ratemaking treatment for the costs of these
23 projects allocated to generators because Con
24 Edison did not specifically identify a proposed

1 rate treatment in its filing. In addition,
2 since the contracts with these generation
3 customers are still being negotiated, Staff is
4 unable to verify that the customers' payments
5 will actually cover the costs of the projects.
6 Further, Staff does not know if such
7 arrangements will be structured to recover the
8 estimated or actual costs of these projects.

9 Q. Has the company accounted for the revenues that
10 it will receive from these generators through
11 the proposed increased demand charges?

12 A. Yes, the company has included \$3.244 million in
13 other operating revenues based on preliminary
14 estimates of the increased demand charges (which
15 will be in addition to revenues from charges for
16 delivery service) for system improvements to
17 serve generators to be recovered during the rate
18 year. The intent appears to be that generators
19 will pay their full share of the cost of these
20 system improvements and by imputing the
21 revenues, firm ratepayers will not be at risk
22 for these expenses.

23 Q. Do you agree with this intent?

1 A. Yes, but we are concerned with how this intent
2 will be implemented.

3 Q. What do you recommend?

4 A. We recommend that the capital expenditures for
5 the portion of system improvement projects
6 allocated to generators be segregated and
7 tracked separately within rate base. These
8 expenditures should be subject to accelerated
9 depreciation so as to write down the entire cost
10 of these projects over the respective four or
11 ten year periods that the generation customers
12 are being charged for them. This will ensure
13 that these generation customers pay the full
14 cost of the system improvements installed to
15 serve them and that firm ratepayers will not
16 bear any of these costs. We also recommend that
17 Con Edison be required to obtain signed
18 contracts for providing delivery service to
19 these customers before it is allowed to commence
20 construction of these projects. This will
21 further ensure that firm ratepayers will not be
22 exposed to any risk associated with construction
23 of these system improvements.

- 1 Q. Has the company proposed a ratemaking treatment
2 for these system improvements in the event that
3 additional generation projects are constructed
4 during the four or ten year amortization period?
- 5 A. No, but the company advises that it would
6 reallocate the costs among the existing and new
7 generators if the new generators are able to use
8 a portion of the capacity provided by these
9 system improvements.
- 10 Q. Please comment.
- 11 A. We agree with the company's plan and recommend
12 that this ratemaking treatment be adopted. We
13 believe that a reallocation of costs among the
14 generators in such an event is consistent with
15 providing generators access to capacity on an
16 equal footing and will help promote development
17 of a competitive wholesale electric market.
- 18 Q. What ratemaking treatment do you recommend in
19 the event that additional generation projects
20 using these system improvements are constructed
21 beyond the four or ten year amortization period?
- 22 A. Since that is well into the future and various
23 factors which could change over time need to be
24 considered, we recommend that the ratemaking

1 treatment in such an event be reexamined at that
2 time.

3 Q. Does that conclude your testimony at this time?

4 A. Yes it does.

5

6

7

BEFORE THE
STATE OF NEW YORK
PUBLIC SERVICE COMMISSION

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Case 03-G-1671

MARCH 2004

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RATE YEAR CAPITAL EXPENDITURES
(\$x1000)

PROJECT	Oct-04	Nov-04	Dec-04	Jan-05	Feb-05	Mar-05	Apr-05	May-05	Jun-05	Jul-05	Aug-05	Sep-05	TOTAL
(A) Astoria Tunnel 36" Main	158	140	147	330	390	420	414	492	528	468	600	582	4669
(B) 30" St Ann's Tee to Hellgate Replacement	0	0	0	220	260	280	276	328	352	312	400	388	2816
(C) Hunts Point to St Ann's Tee	0	0	0	0	0	0	0	0	0	0	0	0	0
(D) Hunt's Point Gate Upgrade	0	0	0	0	0	0	0	0	0	0	0	0	0
(E) 20" SCS Main to POE	105	93	98	110	130	140	138	164	176	156	200	194	1704
(F) Astoria to Ravenswood Loop	0	0	0	0	0	0	0	0	0	0	0	0	0
(G) Westchester/Bronx Border to White Plains	0	0	0	0	0	0	0	0	0	0	0	0	0
(H) Harlem River to St Ann's Tee	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	263	233	245	660	780	840	828	984	1056	936	1200	1164	9189

380. Please identify how each of the projects labeled (A) through (H) under "Additional Items" in Exhibit FJC-2 is allocated between firm customers and generators.

Response:

380. The allocation of capital costs between generator and firm customers are:

- "A" Astoria Tunnel 36" Main – 91% generators, 9% firm
- "B" 30" St Ann's Tee to Hellgate Replacement – 91% generators, 9% firm
- "C" Hunts Point to St. Ann's Tee – 100% firm
- "D" Hunts Point Gate Upgrade – 100% firm
- "E" 20" SCS Main to POE – 100% generator
- "F" Astoria to Ravenswood Loop – 100% firm
- "G" Westchester/Bronx Border to White Plains – 100% firm
- "H" Harlem River to St. Ann's Tee – 100% firm

Projects "F", "G" and "H" are multi-year projects, planned for the end of or outside of the proposed three-year rate period, and are a critical part of our long-term plan to provide reliable service to our firm customers. These facilities will also accommodate incremental load from generators and the charges the generators will pay will be to the overall benefit of firm customers.

BEFORE THE
STATE OF NEW YORK
PUBLIC SERVICE COMMISSION

In the Matter of
CONSOLIDATED EDISON COMPANY OF NEW YORK, INC.

Case 03-S-1672

MARCH 2004

Prepared Testimony of:

Edith Allen
Associate Economist
Office of Regulatory Economics
State of New York
Department of Public Service
Three Empire State Plaza
Albany, New York 12223-1350

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Department of Public Service
Three Empire State Plaza
Albany, New York 12223-1350

1 Q. Please state your name and business address.

2 A. My name is Edith Allen. My business address is
3 Three Empire State Plaza, Albany, New York
4 12223-1350.

5 Q. Please describe your experience and educational
6 background.

7 A. I received a B.S. degree in physics from the
8 University of Rochester and a Ph.D. in economics
9 from the State University of New York at Stony
10 Brook (under the name of Edith Allen Schult) in
11 1978. I received, from the American Association
12 of University of Women, the Comstock Fellowship
13 for 1976-1977 to carry out my dissertation
14 research on "Exhaustible Resources in Isolated
15 and Trading Growth Economies."

16 Q. Please summarize your professional experience.

17 A. From September 1977 through June 1983, I taught
18 Social Science at Michigan State University,
19 especially policy-oriented courses for
20 undergraduates.

21 From January 1984 through August 1985, I
22 taught economics and statistics at the Northwest
23 campus of Indiana University in Gary, Indiana.
24 I worked there with Dr. Leslie Singer on

1 regional forecasting.

2 I joined the Department of Public Service
3 of the State of New York in September 1985. My
4 papers include "New Market Structures in New
5 York's Public Utilities," presented at the
6 January 2000 Conference of the American Economic
7 Association. I am a member of the Econometric
8 Society and the American Economic Association.
9 I have testified on marginal cost and issues of
10 sales and of load in more than 30 cases.

11 Q. What is the purpose of your testimony?

12 A. This testimony presents Staff's alternative to
13 the steam sales forecast of Consolidated Edison
14 Company of New York, Inc., (Con Edison). My
15 particular issue is the weather normalization of
16 steam sales.

17 Q. Why do you present an alternative?

18 A. The Con Edison testimony has three problems.
19 First, the Company found the relationship
20 between steam sales and weather using only ten
21 data points for each service class. Secondly,
22 Con Edison applied that information to months
23 with both heating and cooling activities.
24 Finally, the Company used an unconventional

1 definition of both heating degree days and
2 cooling degree days.

3 Q. Please explain the problems you have.

4 A. To explain the influence of weather on steam
5 sales, Con Edison used data from ten months of
6 the test year, ending June 2003. Six winter
7 months of average steam sales per billing day
8 were correlated with their monthly average
9 heating degree days per day to find their
10 numerical relationship. The four summer months
11 of the test year were correlated with their
12 corresponding cooling degree days. Having so
13 few data points to establish the relationship
14 between steam sales and weather is not
15 acceptable.

16 Q. What about the months with both heating and
17 cooling degree days?

18 A. These bridge months were the two months for
19 which the company did not use their data, with
20 its inherent information, to contribute to the
21 relationship found by the Company between steam
22 sales and weather. Such months should be
23 included, since the relationship of sales with
24 degree days may differ in some modest way during

1 moderate, compared with extreme, weather.

2 Q. Please explain the unconventional measures of
3 weather used by Con Edison.

4 A. I will contrast the Company's degree days with
5 the usual measurements. The Weather Service's
6 convention is to take the difference between the
7 day's average temperature and a base temperature
8 of 65° Fahrenheit. The Company used a base at
9 56° Fahrenheit of the conventional dry bulb
10 temperature for heating degree days, and used
11 57½° Fahrenheit of wet-dry bulb temperature for
12 cooling degree days, a temperature method that
13 includes an impact for humidity. Combined with
14 the very small amount of data, these
15 unconventional measures are not nearly as good
16 as Staff's model in which conventional weather
17 measurements have a statistically strong
18 relationship with steam sales.

19 Q. Please describe your alternative weather
20 normalization.

21 A. Both the Company and I used temperatures as
22 measured in Central Park of New York City.
23 There are three kinds of data: normal weather
24 degree days, actual weather degree days, and

1 steam sales.

2 For normal weather, I used the conventional
3 definition for normal degree days, which is the
4 average degree days by month, for a 30-year
5 period. I used the Weather Service's definition
6 of normal weather which is currently 1971
7 through 2000.

8 For actual data, I used the conventional
9 definition for degree days and obtained the
10 Weather Service's records for the Central Park
11 heating and cooling degree days, cumulated for
12 each month. My data for actual weather includes
13 48 months, ending December 2003. Using the
14 Company's monthly reports, I obtained steam
15 sales by service class for those same 48 months.

16 Q. What did you do with these data?

17 A. For each service class, I did a regression of
18 the 48 months of sales data on the 2 explanatory
19 variables of heating and cooling degree days.
20 This regression is not a full sales forecast and
21 will not explain the variability of steam sales
22 due to economic boom and bust, to terrorism, and
23 to price changes. It does, however, give a
24 robust relationship between the degree days and

1 steam sales. The exception, also found by the
2 Company, is that, in Service Class 1, the steam
3 use is not significantly related to cooling
4 degree days.

5 Using the conventional degree days, the
6 test year weather was 3.4% warmer than normal
7 (mostly in the summer) and 11.5% colder than
8 normal (mostly in the winter). Therefore, steam
9 sales in that year, ending June 2003, were
10 greater than if the weather had been normal, and
11 I found them to be 6.4% greater. These
12 procedures and their results are presented in
13 Exhibit __ (EA-1), Schedules 1-6.

14 The data in the monthly reports for actual
15 steam sales for the test year, ending June 2003,
16 is 27,208 MMLbs, compared with the Company's
17 data in testimony of 27,258 MMLbs. The
18 difference is in Service Class 2 for March 2003.

19 The Company's estimate of weather
20 normalized sales for the test year is 25,165
21 MMLbs. Staff obtains 25,561 MMLbs using the
22 normalization described above.

23 Q. What adjustments are needed to obtain a sales
24 forecast for the rate year, ending September

1 2005?

2 A. In order to go from the test year to the rate
3 year, one should adjust for New Business, Lost
4 Business to Onsite Generation/Electric/Gas,
5 Demolition and Other Lost Business, A/C Lost
6 Business (efficiency impact), and Employment.
7 Con Edison offers detailed changes for all of
8 these factors.

9 Staff is concerned that New Business is
10 understated, but does not have a detailed
11 alternative to the changes foreseen by the
12 Company. New Business should be sought by the
13 Company in order to reduce summer peak electric
14 load and winter peak gas usage. Cutting these
15 peaks will lower energy costs for the system.

16 Due to a lack of better alternatives, Staff
17 adopts the Company's changes from test year to
18 rate year. Applying them to normalized sales,
19 Staff obtains its sales forecast.

20 Q. What is your sales forecast and its revenue
21 consequences?

22 A. My sales forecast is 25,361 MMLbs, which is 396
23 MMLbs more than Con Edison's prediction.
24 The revenue impact, by service class, associated

1 with this forecast is furnished by Staff Witness

2 Steven Van Cook.

3 Q. Does this conclude your testimony?

4 A. Yes, at this time, it does.

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Edith Allen
Associate Economist
Office of Regulatory
Economics
State of New York
Department of Public Service
Three Empire State Plaza
Albany, New York 12223-1350

WEATHER NORMALIZATION DATA INPUTS

Date		Steam Sales Data				Weather Data	
		SC1	SC2	SC3	Total	Heating Degree Days (HDD)	Cooling Degree Days (CDD)
Dec-03	12	104.526	1726.257	972.593	2803.376	843	0
Nov-03	11	38.476	986.06	527.867	1552.403	445	7
Oct-03	10	13.387	858.853	364.772	1237.012	299	3
Sep-03	9	7.011	1317.302	337.004	1661.317	18	114
Aug-03	8	7.403	1548.741	357.194	1913.338	0	351
Jul-03	7	9.245	1561.49	402.606	1973.341	0	337
Jun-03	6	10.783	860.463	334.919	1206.165	155	47
May-03	5	23.059	800.576	388.893	1212.528	195	9
Apr-03	4	67.64	1235.16	713.991	2016.791	462	12
Mar-03	3	132.824	1977.477	1006.452	3116.753	668	0
Feb-03	2	161.15	2477.493	1188.596	3827.239	972	0
Jan-03	1	153.35	2324.117	1250.63	3728.097	1156	0
Dec-02	12	119.999	1963.333	1059.149	3142.481	891	0
Nov-02	11	53.906	1075.41	611.359	1740.675	562	0
Oct-02	10	12.986	1036.235	368.741	1417.962	327	31
Sep-02	9	10.729	1364.732	316.767	1692.228	11	167
Aug-02	8	6.815	1689.911	353.124	2049.85	2	380
Jul-02	7	8.083	1662.674	388.176	2058.933	0	436
Jun-02	6	10.352	1028.117	314.215	1352.684	20	207
May-02	5	19.896	879.157	414.263	1313.316	172	44
Apr-02	4	55.685	1191.667	568.186	1815.538	332	73
Mar-02	3	38.802	1467.476	783.453	2289.731	639	0
Feb-02	2	92.433	1546.052	800.185	2438.67	677	0
Jan-02	1	121.893	1895.078	1039.435	3056.406	769	0
Dec-01	12	53.364	1066.447	586.843	1706.654	639	0
Nov-01	11	35.008	975.644	522.754	1533.406	364	1
Oct-01	10	9.87	830.188	211.418	1051.476	224	32
Sep-01	9	7.464	1476.145	416.311	1899.92	47	137
Aug-01	8	6.696	1705.981	355.86	2068.537	0	378
Jul-01	7	7.09	1516.299	354.46	1877.849	0	252
Jun-01	6	8.975	1047.911	336.789	1393.675	6	238
May-01	5	17.002	935.085	360.983	1313.07	124	89
Apr-01	4	64.364	1277.822	658.226	2000.412	330	28
Mar-01	3	118.414	2008.999	985.221	3112.634	740	0
Feb-01	2	120.011	2032.94	966.027	3118.978	809	0
Jan-01	1	172.732	2783.36	1294.992	4251.084	965	0
Dec-00	12	116.738	2031.551	1024.873	3173.162	1008	0
Nov-00	11	43.863	1068.922	623.769	1736.554	586	0
Oct-00	10	15.013	1042.43	373.288	1430.731	256	12
Sep-00	9	7.322	1369.585	335.36	1712.267	81	117
Aug-00	8	6.787	1541.789	349.414	1897.99	0	209
Jul-00	7	7.482	1511.33	371.69	1890.502	0	234
Jun-00	6	9.647	1046.18	351.494	1407.321	31	227
May-00	5	24.448	1067.873	443.231	1535.552	118	81
Apr-00	4	44.578	1104.189	574.804	1723.571	411	0
Mar-00	3	88.99	1606.51	850.252	2545.752	531	0
Feb-00	2	165.285	2720.67	1198.21	4084.165	795	0
Jan-00	1	132.905	2329.308	1133.48	3595.693	1038	0

SUMMARY OUTPUT OF SC1 ON HEATING AND COOLING DEGREE DAYS

<i>Regression Statistics</i>	
Multiple R	0.92718
R Square	0.85967
Adjusted R Square	0.83488
Standard Error	20.138
Observations	48

Analysis of Variance

	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>
Regression	2	114279.28	57139.64	140.900	4.226E-20
Residual	46	18654.52	405.53		
Total	48	132933.80			

	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>
Intercept	0	N/A	N/A	N/A	N/A	N/A
X Variable 1	0.137	0.00553	24.811	2.8409E-28	0.126	0.148
X Variable 2	0.022	0.01898	1.161	2.5144E-01	-0.016	0.060

Note: intercept constrained to zero

SUMMARY OUTPUT OF SC2 ON HEATING AND COOLING DEGREE DAYS

<i>Regression Statistics</i>	
Multiple R	0.84414
R Square	0.71257
Adjusted R Square	0.69979
Standard Error	279.846
Observations	48

Analysis of Variance

	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>
Regression	2	8736508.20	4368254.10	55.779	6.562E-13
Residual	45	3524114.62	78313.66		
Total	47	12260622.82			

	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>
Intercept	503.918	106.21638	4.744	2.1445E-05	289.987	717.848
X Variable 1	1.737	0.16491	10.531	1.0042E-13	1.404	2.069
X Variable 2	3.263	0.46521	7.014	9.7249E-09	2.326	4.200

Note: intercept constrained to zero

SUMMARY OUTPUT OF SC3 ON HEATING AND COOLING DEGREE DAYS

<i>Regression Statistics</i>	
Multiple R	0.95278
R Square	0.90778
Adjusted R Square	0.90368
Standard Error	97.803
Observations	48

Analysis of Variance

	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>
Regression	2	4237242.42	2118621.21	221.489	5.108E-24
Residual	45	430440.22	9565.34		
Total	47	4667682.63			

	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>
Intercept	182.491	37.121	4.916	1.2158E-05	107.725	257.257
X Variable 1	0.978	0.05800	16.973	3.4913E-21	0.862	1.094
X Variable 2	0.581	0.16300	3.576	8.0000E-04	0.254	0.909

Note: intercept constrained to zero

CALCULATION OF WEATHER NORMALIZED SALES FOR THE TEST YEAR

	Percent Variation	Coeff.	Annual Total	Jul-02	Aug-02	Sep-02	Oct-02	Nov-02	Dec-02	Jan-03	Feb-03	Mar-03	Apr-03	May-03	Jun-03
Customers															
SC1				625	624	624	623	623	624	623	622	20	618	616	616
SC2				659	659	657	656	657	655	659	657	654	654	652	652
SC3				553	553	552	552	556	556	557	558	558	557	557	557
Cooling Adjustment															
normal CDD			1151	379	331	134	16	2	0	0	0	2	10	63	214
actual CDD			1190	436	380	167	31	0	0	0	0	0	12	9	155
variation	3.39%		39	57	49	33	15	-2	0	0	0	-2	2	-54	-59
SC1		0	0	0	0	0	0	0	0	0	0	0	0	0	0
SC2		3.25	-126.75	-185.25	-159.25	-107.25	-48.75	6.5	0	0	0	6.5	-6.5	175.5	191.75
SC3		0.6	-23.4	-34.2	-29.4	-19.8	-9	1.2	0	0	0	1.2	-1.2	32.4	35.4
Heating Adjustment															
normal HDD			4747	0	2	43	261	525	844	1009	853	695	372	127	16
actual HDD			5293	0	2	11	327	562	891	1156	972	668	462	195	47
variation	11.50%		546	0	0	-32	66	37	47	147	119	-27	90	68	0
SC1		0.15	-77.25	0	0	4.8	-9.9	-5.55	-7.05	-22.05	-17.85	4.05	-13.5	-10.2	0
SC2		1.75	-901.25	0	0	56	-115.5	-64.75	-82.25	-257.25	-208.25	47.25	-157.5	-119	0
SC3		1	-515	0	0	32	-66	-37	-47	-147	-119	27	-90	-68	0
Total Adjustment															
SC1			-77.25	0	0	4.8	-9.9	-5.55	-7.05	-22.05	-17.85	4.05	-13.5	-10.2	0
SC2			-1028	-185.25	-159.25	-51.25	-164.25	-58.25	-82.25	-257.25	-208.25	53.75	-164	56.5	191.75
SC3			-538.4	-34.2	-29.4	12.2	-75	-35.8	-47	-147	-119	28.2	-91.2	-35.6	35.4
Total MMib	6.43%		-1643.65	-219.45	-188.65	-34.25	-249.15	-99.6	-136.3	-426.3	-345.1	86	-268.7	10.7	227.15
Actual Sales															
SC1			762	8	7	11	13	54	120	153	161	133	68	23	11
SC2			18465	1663	1690	1364	1036	1075	1963	2324	2477	1977	1235	801	860
SC3			7981	388	353	317	369	611	1059	1251	1189	1006	714	389	335
Total MMib			27208	2059	2050	1692	1418	1740	3142	3728	3827	3116	2017	1213	1206
Staff's Normalized Sales															
SC1			681.65	8	7	15.8	0	48.45	112.95	130.95	143.15	137.05	54.5	12.8	11
SC2			17437	1477.75	1530.75	1312.75	871.75	1016.75	1880.75	2066.75	2268.75	2030.75	1071	857.5	1051.75
SC3			7442.6	353.8	323.6	329.2	294	575.2	1012	1104	1070	1034.2	622.8	353.4	370.4
Total MMib			25561	1839.55	1861.35	1657.75	1165.75	1640.4	3005.7	3301.7	3481.9	3202	1748.3	1223.7	1433.15

**SUMMARY OF WEATHER NORMALIZATION ADJUSTMENT
FOR THE TEST YEAR**

	<u>Coefficients</u>	<u>Annual Total</u>		<u>Annual Total</u>
<u>Cooling Adjustment</u>			<u>Staff's Normalized Sales</u>	
normal CDD		1151	SC1	681.65
actual CDD		1190	SC 2 - Winter	10334.75
variation - 3.39%		39	SC 2 - Summer	7102.25
			SC 3 - Winter	5418.2
SC1	0	0	SC 3 - Summer	2024.4
SC2	3.25	-126.75	Total MMlb	25561.25
SC3	0.6	-23.4		
 <u>Heating Adjustment</u>			 <u>Company's Normalized Sales</u>	
normal HDD		4747	SC 1	659
actual HDD		5293	SC 2 - Winter	9847
variation - 11.50%		546	SC 2 - Summer	7228
			SC 3 - Winter	5304
SC1	0.15	-77.25	SC 3 - Summer	2127
SC2	1.75	-901.25	Total MMlb	25165
SC3	1	-515		
 <u>Total Adjustment</u>			 <u>Staff Adjustment to Company's Normalized Sales</u>	
SC1		-77.25	SC 1	22.65
SC2		-1028	SC 2 - Winter	487.75
SC3		-538.4	SC 2 - Summer	-125.75
Total MMlb	6.43%	-1643.65	SC 3 - Winter	114.2
			SC 3 - Summer	-102.6
			Total MMlb	396.25
 <u>Actual Sales</u>				
SC1		762		
SC2		18465		
SC3		7981		
Total MMlb		27208		

BEFORE THE
STATE OF NEW YORK
PUBLIC SERVICE COMMISSION

In the Matter of
CONSOLIDATED EDISON COMPANY OF NEW YORK, INC.

Case 03-G-1671

MARCH 2004

Prepared Testimony of:

RETAIL ACCESS PANEL
Lea Ann Rosenthal
Utility Consumer Program
Specialist 4
Office of Retail Market
Development

Julie Niedzialkowski
Utility Consumer Program
Specialist 4
Office of Retail Market
Development

Christopher Corbett
Utility Engineer 3
Policy Section
Office of Gas & Water

Department of Public Service
Three Empire State Plaza
Albany, New York 12223-1350

1 Q. Please state your full names and addresses.

2 A. My name is Lea Ann Rosenthal. My business
3 address is Three Empire State Plaza, Albany, New
4 York, 12223-1350.

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

6 A. I am employed by the New York State Department
7 of Public Service as a Utility Consumer Program
8 Specialist 4 in the Office of Retail Market
9 Development.

10 Q. What is your education and background?

11 A. I received a Bachelor of Arts degree in
12 Chemistry from the College of New Rochelle in
13 1975 and a Master of Education degree with a
14 major in Counseling from Texas Christian
15 University in 1976. Before joining the
16 Department of Public Service, I held various
17 positions with the New York State Department of
18 Labor for nearly four years and subsequently
19 worked as a Senior Administrative Analyst for
20 the State Office of General Services for five
21 years. I have worked for the Department of
22 Public Service in numerous positions since 1986,
23 advancing to my current title. In this
24 position, I have advocated on behalf of

1 residential customers in rate and other
2 proceedings. My responsibilities now involve
3 developing agency policy on competition and
4 implementing competitive policies in proceedings
5 to encourage the development of competitive
6 markets in gas, electricity and
7 telecommunications.

8 Q. Have you previously testified before the Public
9 Service Commission?

10 A. Yes. I have testified in numerous gas,
11 electric, water and telephone rate proceedings
12 on a variety of issues related to service
13 quality performance and customer service
14 including low-income programs, aggregation
15 initiatives, collection practices and policies,
16 customer information systems, use of credit
17 cards, uncollectibles, and economic impacts in
18 specific utility service territories.

19 Q. Please state your full name and address.

20 A. My name is Julie Niedzialkowski and my business
21 address is Three Empire State Plaza, Albany, New
22 York, 12223-1350.

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

24 A. I am employed by the New York State Department

- 1 of Public Service as a Utility Consumer Program
2 Specialist 4 in the Office of Retail Market
3 Development.
- 4 Q. Please describe your education.
- 5 A. I received a Bachelor of Science Degree in
6 Biology from the State University of New York at
7 Oneonta in 1977 and a Masters in Business
8 Administration from Rensselaer Polytechnic
9 Institute in 1983.
- 10 Q. Please describe your experience.
- 11 A. I have been employed by the Department since
12 1985. From 1985 through January 1999, I worked
13 in the Office of Utility Efficiency and
14 Productivity as a Utility Management Analyst. I
15 have been a Utility Consumer Program Specialist
16 4 since January 1999.
- 17 Q. Please briefly describe your responsibilities
18 with the Department of Public Service.
- 19 A. My responsibilities include: evaluating utility
20 efforts to provide outreach and education
21 services to customers, designing and reviewing
22 plain language educational materials for the
23 purpose of educating customers on matters before
24 the Commission, and developing surveys to

1 measure customer awareness and understanding of
2 electric and gas retail access. I have worked
3 cooperatively with Niagara Mohawk Power
4 Corporation (Niagara Mohawk), New York State
5 Electric & Gas Corporation (NYSEG), National
6 Fuel Gas Distribution Corporation, Keyspan and
7 Consolidated Edison Company of New York, Inc.
8 (Consolidated Edison) on developing and
9 implementing outreach and education campaigns to
10 foster electric and gas retail choice.

11 Q. Have you previously testified?

12 A. Yes. I have testified in numerous rate cases
13 regarding the development and implementation of
14 outreach and education programs to foster
15 electric and gas retail choice.

16 Q. Please state your full name and address.

17 A. Christopher J. Corbett, Three Empire State
18 Plaza, Albany, New York 12223-1350.

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

20 A. I am employed by the New York State Department
21 of Public Service as a Utility Engineer 3 in the
22 Office of Gas & Water, Policy Section.

23 Q. Please state your educational background and
24 professional experience.

1 A. I hold a Bachelor of Science in Management and
2 Manufacturing Engineering, which I received from
3 the University of Vermont in 1973. I was
4 employed by the Department's Communication's
5 Division in 1974 and assigned to the Gas
6 Division as a Senior Valuation Engineer in 1978.
7 In February 1982, I was promoted to my present
8 position. In September 1993, I was assigned to
9 Division Operations of the Energy and Water
10 Division where I was responsible for special
11 projects and administrative matters pertaining
12 to electricity, gas, and water. In January
13 1996, I was assigned to the reorganized Gas
14 Rates Section and in October 1999, I moved to
15 the Policy Section of the Office of Gas and
16 Water. In recent years, my duties have focused
17 on developing retail access programs for gas
18 utilities and promoting competitive initiatives.
19 In particular, I was involved in the development
20 of Consolidated Edison's retail access program
21 in that company's last rate and restructuring
22 proceeding.

23 Q. Have you testified previously before the
24 Commission?

- 1 A. Yes, I have testified in various cases and made
2 recommendations in rate areas such as including
3 construction expenditures, expenses, revenue
4 allocation and rate design. I have also
5 testified on promoting the development of retail
6 access in Orange & Rockland Utilities, Inc.'s
7 (Orange & Rockland) last two rate and
8 restructuring proceedings.
- 9 Q. What is the purpose of the Staff Retail Access
10 Panel Testimony?
- 11 A. The Panel will address and make recommendations
12 regarding programs to foster and promote retail
13 access in Consolidated Edison's service
14 territory. The testimony makes recommendations
15 to continue and enhance existing programs that
16 foster and promote retail access: a migration
17 incentive, retail access promotional funding,
18 retail access outreach and education, and the
19 marketer satisfaction survey. In addition, we
20 recommend the implementation of several new
21 initiatives: the institution of Market Match and
22 Market Expo Programs, the establishment of an
23 ombudsman, and the reformatting of customer
24 bills. We also recommend that the Company work

1 closely with marketers to develop a purchase of
2 marketer accounts receivable without recourse
3 program, which has been found to be the most
4 effective tool for providing customers with
5 choice and for significantly increasing the rate
6 of customer migration.

7

8 **Continuation of Migration Incentive and Retail**
9 **Access Promotional Funding**

10 Q. Company witness Muzikar recommends the
11 discontinuation of funding for the promotion of
12 retail choice as well as the discontinuation of
13 the migration incentive provided for in the
14 Company's current rate plan. Does Staff agree
15 with these recommendations?

16 A. No. Staff recommends continuation of a migration
17 incentive and the funding for promoting retail
18 access.

19 Q. Does Staff propose any changes to the migration
20 incentive?

21 A. Yes. Staff recommends that it be substantially
22 modified.

23 Q. What migration incentive does Staff recommend?

24 A. Staff recommends a two-tiered migration

1 incentive. Under the first tier, the Company
2 would be allowed an incentive of up to \$400,000
3 in pre-tax dollars, if 10,000 customers commence
4 firm transportation service during the rate
5 year. The incentive should be provided
6 proportionally, rather than on an all or nothing
7 basis, as long as at least 7500 customers
8 migrate. Under the second tier, the Company
9 would be allowed an incentive of \$50 in pre-tax
10 dollars for every customer above 10,000 who
11 commences firm transportation service.

12 Q. How do you propose to fund this migration
13 incentive?

14 A. Staff recommends that the funding for the
15 migration incentive be structured, first, from
16 unspent retail access promotional funds, if any,
17 and second, from available customer credits. If
18 there is inadequate funding from these two
19 sources, the Company should be permitted to
20 defer the balance of the incentive amount.

21 Q. What retail access promotional funding does
22 Staff recommend?

23 A. Staff recommends a continuation of the retail
24 access promotional funding of \$1 million for a

1 program similar to that approved by the
2 Commission in Consolidated Edison's last rate
3 case (Case 00-G-1380). The plan provides
4 funding allocations by market (General,
5 Residential and Small Commercial) and by type of
6 expenditure (for example, Print, Radio, Direct
7 Mail, System Development, Billboards, Events,).
8 It also has various conditions, including pre-
9 and post-winter reporting requirements, and
10 collaboration and notification requirements so
11 that marketers may fully participate and
12 coordinate their own marketing efforts. Staff
13 also recommends that both the annual funding
14 level and program continue, unless and until
15 modified by the Commission.

16 Q. In the event that the retail access promotional
17 funds are not spent, what does Staff recommend
18 with regard to their disposition?

19 A. Staff recommends that, to the extent there are
20 any monies not spent during the rate year, such
21 funds should be used as the primary funding
22 source for the migration incentive previously
23 described, if needed. In the event any funds
24 remain, they should be deferred for customers'

1 benefit.

2

3 **Retail Access Outreach and Education**

4 Q. Do you support Consolidated Edison's request to
5 increase its outreach and education funding
6 regarding retail choice from \$1.26 million to
7 \$1.6 million?

8 A. No. The Company's request for increasing its
9 retail access outreach and education funding was
10 predicated on Company witness Tesu's
11 recommendation to discontinue the \$1.0 million
12 retail access promotional funding. The current
13 budget of \$1.26 million for retail access
14 outreach and education is sufficient for the
15 Company to conduct an effective gas retail
16 choice outreach and education program, including
17 the continuation of the customer awareness and
18 understanding survey, as described in
19 Consolidated Edison's current rate plan, and the
20 continuation of the marketer satisfaction
21 survey. The costs of an incremental effort to
22 promote retail choice are provided for through
23 the retail access promotional funding.

24 Q. Do you have concerns regarding Consolidated

- 1 Edison's outreach and education efforts dealing
2 with retail choice?
- 3 A. Yes. Consolidated Edison made a deliberate
4 effort not to associate the Company with its
5 retail access program, "Power Your Way." The
6 majority of the Company's outreach and education
7 efforts regarding retail choice are focused on
8 promoting the Power Your Way program, including
9 POWERYOURWAY.com and its toll free retail access
10 information lines, such as 1-800-33-SWITCH. The
11 materials associated with Power Your Way,
12 including direct mail pieces, newspaper ads,
13 brochures and promotional items, do not include
14 the Consolidated Edison insignia or any
15 information that would indicate that Power Your
16 Way is a Consolidated Edison program. The toll-
17 free numbers included on Power Your Way
18 materials for information regarding retail
19 choice make no attempt to inform the caller that
20 the information is being provided by
21 Consolidated Edison. Furthermore, the
22 POWERYOURWAY.com website is not identified as a
23 Consolidated Edison website.
- 24 Q. Do you believe that Consolidated Edison's lack

1 of association with the Power Your Way program
2 reduces the effectiveness of the Company's
3 efforts to educate customers and to foster and
4 promote retail choice?

5 A. Yes. Consolidated Edison's association with the
6 "Power Your Way" program would be seen by
7 customers as an endorsement of retail choice and
8 would add credibility to the educational
9 information distributed as part of the program.
10 Customers are often concerned that switching
11 suppliers will offend the utility and that
12 service from the utility may be reduced if they
13 purchase their commodity from marketers.
14 Consolidated Edison's endorsement of the program
15 would reduce these concerns.

16 In addition, customers are confused about
17 what "Power Your Way" is and who/what
18 organization is sponsoring the program. The
19 Department of Public Service has received
20 inquiries via phone, website and at events
21 inquiring, "What and who is Power Your Way?"
22 The promotional "give-a-ways" that the Company
23 distributes at events and exhibits only include
24 the "Power Your Way" logo and a toll free phone

1 number and/or website. Customers are confused
2 because the sponsor of the program has not been
3 identified. Consequently, they are less likely
4 to respond to the call to action the program
5 promotes. In sum, the lack of sponsorship
6 decreases the credibility of the program and
7 customers' response to the program.

8 Exhibit___ (RAPanel-1) shows samples of Power
9 Your Way promotional material and demonstrates
10 the concerns we are discussing.

11 Q. What do you propose the Company do to improve
12 the effectiveness of its outreach and education
13 regarding retail choice?

14 A. First, the Company should be required to enhance
15 its retail access outreach and education efforts
16 by demonstrating its explicit support for retail
17 choice. For example, the Company should be
18 required to identify "Power Your Way" as
19 Consolidated Edison's retail access program.
20 Both the effectiveness and acceptance of the
21 program would be considerably increased if the
22 Company's name were included on "Power Your Way"
23 materials. The Company should similarly be
24 directed to include its name and logo on, and

1 express its support for, other retail access-
2 related outreach, educational, and promotional
3 programs it undertakes. Third, the Company
4 should update its outreach and education plan
5 and budget for the rate year to reflect these
6 changes. The plan and budget should be sent to
7 the Director of the Office of Retail Market
8 Development within 30 days of the date of the
9 Commission's Order in this case.

10

11 **Marketer Satisfaction Survey**

12 Q. What other retail access provisions approved in
13 Case 00-G-1456 should Consolidated Edison
14 continue?

15 A. Consolidated Edison contracts with an
16 independent third party to conduct an annual
17 survey of the gas marketers operating in its
18 service territory. The survey is intended to
19 gauge marketers' satisfaction with and
20 understanding of the utility services available
21 to them.

22 Q. What is your recommendation regarding the
23 marketer satisfaction survey?

24 A. Staff recommends that Consolidated Edison

1 continue to conduct the marketer satisfaction
2 survey and provide interested parties with the
3 results. Consolidated Edison should continue
4 the current deadlines for the survey. That is,
5 by January 31, 2005, the Company, in
6 consultation with Staff, should finalize the
7 survey instrument. The survey should be
8 conducted by April 30, 2005. By May 21, 2005,
9 the Company should provide Staff with a
10 confidential report of the raw data obtained
11 during the survey process, including the names
12 of the participating gas marketers, without
13 attribution of raw data to individual marketers.
14 The Company should present the results of the
15 survey to interested parties at a forum, such as
16 one of its periodic marketers' meetings. By
17 June 30, 2005, the Company should provide Office
18 of Retail Market Development Staff with its
19 plans to address concerns identified by the
20 marketers during the survey process.

21

22 **Other Retail Access Programs and Initiatives**

23 Q. Are there any new retail access initiatives that
24 Consolidated Edison should undertake?

- 1 A. Yes. Staff recommends that Consolidated Edison
2 implement a Market Match program, sponsor Market
3 Expos, establish a marketer ombudsman, and
4 reformat customer bills to separately identify
5 delivery and supply on customer bills.
- 6 Q. Please explain the Market Match program.
- 7 A. The Market Match program would afford marketers
8 and business customers in Consolidated Edison's
9 service territory the opportunity to
10 electronically exchange information that will
11 help facilitate the development of the gas
12 commodity market. The marketers would review
13 the customers' data and, if interested, contact
14 them about offerings. Market Match programs
15 have been implemented by Niagara Mohawk and
16 NYSEG and is expected to be implemented on April
17 1, 2004 by Rochester Gas and Electric
18 Corporation.
- 19 Q. What is your recommendation regarding the Market
20 Match program?
- 21 A. Consolidated Edison should implement the Market
22 Match Program within 60 days of the date of the
23 Commission's Order in this proceeding.
- 24 Q. Please describe your proposed Market Expo

- 1 program.
- 2 A. Market Expos are meetings or forums conducted by
3 a utility that provide commercial and industrial
4 customers an opportunity to learn more about the
5 current status of retail access in Consolidated
6 Edison's service territory and to meet with
7 marketers and discuss the marketers' offerings.
- 8 Q. Have other utilities sponsored these Expos?
- 9 A. Market Expos have been successfully implemented
10 by Niagara Mohawk and NYSEG. Staff has attended
11 those Expos and heard much positive feedback
12 about them from both customers and marketers.
- 13 Q. What is your recommendation regarding Market
14 Expos?
- 15 A. Staff recommends that the Company be directed to
16 sponsor and conduct a minimum of three Market
17 Expos during the rate year, at representative
18 locations in its service territory. The target
19 audience for the Expos should be customers with
20 annual usage of 2500 dekatherms or more, with
21 the content of the Expos developed in
22 consultation with Staff.
- 23 Q. How would the Expos be funded?
- 24 A. This would be an appropriate use of dollars from

- 1 the retail access promotional funding.
- 2 Q. Should the Company implement any measures to
3 enhance its interaction with marketers?
- 4 A. Yes. Consolidated Edison should appoint a
5 marketer ombudsman or liaison. The ombudsman
6 should be a Company executive who will work with
7 the marketers to address any questions and/or
8 concerns they have. The ombudsman should make
9 himself or herself available directly to
10 marketers and should have a good working
11 relationship with them. The Company should
12 publicly identify the ombudsman and so notify
13 the marketers.
- 14 Q. Do you have any additional recommendations that
15 would facilitate and promote retail access?
- 16 A. Yes. Consolidated Edison currently provides
17 customers with a bundled bill which includes a
18 bill message listing the price to compare for
19 retail shopping purposes. The Company should be
20 required to reformat the gas portion of customer
21 bills to separate delivery from supply into
22 distinct sections of the bill. We recommend
23 that the Company be directed to work
24 collaboratively with Staff and interested

1 parties to address basic format and content
2 changes that would improve understandability,
3 and lay the foundation for future presentation
4 of unbundled bill components that are to be
5 determined in Case 00-M-0504. In the event that
6 Consolidated Edison contracts during the rate
7 year to outsource its bill generation and
8 mailing function, the Company should ensure that
9 the vendor is able to process bills with all
10 format modifications required by the Commission.
11 Staff further recommends that the Commission
12 require the parties to meet within 30 days of
13 the date of the Order in this proceeding to
14 address the details of this issue.

15

16 Purchase of Accounts Receivable

17 Q. Does Staff have any other recommendations to
18 improve and expand Consolidated Edison's retail
19 access program?

20 A. Yes. Consolidated Edison should more closely
21 align its retail access program with that of its
22 affiliate, Orange & Rockland, which was
23 developed in that utility's 1999 rate and
24 restructuring proceeding, Case 99-G-1695, and

1 discussed in the Orders issued November 20, 2000
2 and October 18, 2001 in that proceeding.

3 Q. Why should the Company move closer to the Orange
4 & Rockland model?

5 A. Orange & Rockland has the most successful gas
6 migration program in New York State. As of
7 January 2004, its residential migration rate was
8 approximately 34.1%, which is nearly five times
9 the statewide rate of 7%, as reported on the
10 Commission's website.

11 Q. Is there any other basis for concluding that
12 Orange & Rockland's retail access program is
13 worth replicating by Consolidated Edison?

14 A. Yes. Orange & Rockland's program was recently
15 identified as a national success story and model
16 by the American Gas Association, as reported in
17 the cover story of American Gas in September
18 2003. We have included the article as
19 Exhibit____(RAPanel-2). Furthermore, marketers
20 and energy service companies have consistently
21 reported to Staff that the Orange & Rockland
22 model is their preferred approach to retail
23 access.

24 Q. To what do you attribute this high rate of

- 1 migration and the national recognition from the
2 American Gas Association?
- 3 A. Staff believes that it is due to various factors
4 including: Orange & Rockland's corporate
5 commitment to make retail access work; the
6 resulting working relationships that the Company
7 has developed with the marketers; Orange &
8 Rockland's purchase of marketers' accounts
9 receivables without recourse; and the design of
10 the Switch and Save model.
- 11 Q. How does the purchase of accounts receivable
12 without recourse facilitate retail access and
13 benefit customers?
- 14 A. The purchase of accounts receivable without
15 recourse greatly reduces marketers' cost by
16 eliminating their uncollectible bills, improving
17 cash flow, reducing costs associated with the
18 implementation of Home Energy Fair Practices
19 Act, and eliminating the need to do a credit
20 check on new customers. This helps reduce the
21 acquisition costs for marketers and provides
22 access to competitive suppliers for some
23 customers that otherwise might not be solicited.
- 24 Q. In order to advance retail access in

- 1 Consolidated Edison's territory, how should the
2 purchase of accounts receivable be accomplished?
- 3 A. By Order dated December 5, 2003 in Case 03-M-
4 0117, the Commission concluded that the purchase
5 of accounts receivable should best be negotiated
6 by the utility and marketers (Order, p. 37).
7 The Commission concluded that the purchase of
8 accounts receivable, when coupled with other
9 aspects of an aggressive retail access program,
10 may help foster the development of residential
11 retail markets (Order, p. 37).
- 12 Q. Can you explain the Orange & Rockland Switch and
13 Save Program?
- 14 A. As part of the Switch and Save program,
15 customers calling Orange and Rockland's call
16 center are provided retail choice information
17 and the opportunity to switch to a marketer and
18 receive guaranteed savings of 7% on the
19 commodity for two months. If interested, the
20 customer will be switched to a participating
21 marketer; under the program, marketers agree to
22 take all customers they receive through these
23 referrals. The referrals are made on a rotating
24 basis. Customers who participate receive a

- 1 consolidated bill from the Company. Customers
2 are more likely to switch under this program
3 because of the utility's visible endorsement of
4 retail access, the guaranteed savings, the ease
5 of the enrollment process, and the availability
6 of a budget and consolidated bill.
- 7 Q. Considering this, and Staff's experience with
8 the success of the Orange & Rockland model, does
9 Staff have any recommendations regarding the
10 purchase of accounts receivable by Consolidated
11 Edison?
- 12 A. Yes. Staff believes the single most
13 constructive step Consolidated Edison could take
14 to advance retail access and increase customer
15 choice would be to purchase marketer
16 receivables, without recourse, as Orange &
17 Rockland does. This outcome would benefit
18 customers, shareholders, and marketers, it would
19 also significantly further the Commission's Gas
20 Policy Statement of November 1998, as well as
21 its other policies that favor the development of
22 competitive markets to benefit New York
23 consumers.
- 24 Q. Is there any ability for the Company to recover

1 computer system modification costs associated
2 with the implementation of the purchase of
3 accounts receivable?

4 A. Yes, in the Order approving Consolidated
5 Edison's current rate plan, the Commission
6 approved the Company's use of up to \$300,000
7 from the retail access promotional funding to
8 cover the costs of implementing the purchase of
9 accounts receivable. We recommend that the
10 Commission approve the continued use of the
11 promotional funding for this purpose.

12

13 **Conclusion**

14 Q. Please summarize Staff's recommendations:

15 A. Staff recommends that:

16 1. The Company retain its migration incentive
17 but in modified form. Specifically, the
18 Company should be allowed an incentive of up
19 to \$400,000 in pre-tax dollars for the first
20 10,000 customers who switch to firm
21 transportation service during the rate year,
22 once it achieves at least 7,500 migrated
23 customers, and \$50 per customer for every
24 customer above 10,000 that migrates.

- 1 2. The Company retain its retail access
2 promotional funding in the amount of \$1
3 million, as described previously.
- 4 3. Outreach and Education should continue to be
5 funded at the current level of \$1.26 million, and
6 the Company should be directed to file a detailed
7 outreach and education plan with the Director of
8 the Office of Retail Market Development within 30
9 days of the date of the Order in this proceeding.
- 10 4. Consolidated Edison be directed to enhance its
11 retail access outreach and education efforts with
12 a focus on increasing the Company's support for
13 retail access, and, in particular, attaching its
14 name to and explicit endorsement of its Power
15 Your Way program.
- 16 5. Consolidated Edison be directed to continue
17 to conduct marketer satisfaction surveys.
- 18 6. Consolidated Edison be directed to implement
19 Market Match and Market Expos programs, and
20 appoint a marketer ombudsman. The Market
21 Match program should be implemented within
22 60 days of the date of the Order in this
23 proceeding, and the Company should be
24 required to hold at least three Market Expos

- 1 and invite all customers with annual usage
2 of 2500 dekatherms or greater.
- 3 7. The Company be directed to implement bill
4 format modifications, using a collaborative
5 process involving interested parties, and
6 with the first meeting of the interested
7 parties occurring within 30 days of the date
8 of the Order in this proceeding.
- 9 8. Consolidated Edison should more closely
10 align its retail access program with that of
11 its affiliate, Orange & Rockland, including,
12 in particular, the purchase of marketers'
13 accounts receivable without recourse.
- 14 Q. Does this conclude your testimony?
- 15 A. Yes, it does.