Long
Island
Power
Authority

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Richard M. Kessel
Chairman

May 22, 1991

Dr. Thomas E. Murley, Director
Office of Nuclear Reactor Regulation
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Dear Dr. Murley:

I am enclosing, for your information, the testimony that the Long Island Power Authority (LIPA) and the Consumer Protection Board (CPB) are filing today with the New York Public Service Commission (PSC) in Long Island Lighting Company's (LILCO) pending rate proceeding.

Taken together, LIPA's and CPB's testimonies recommend a reduction in LILCO's proposed 5 percent ($114 million) rate increase to 2.8 percent ($64 million). As indicated in my enclosed testimony, the recommended 2.8 percent rate increase would still provide LILCO with more than sufficient revenues to fund the maintenance and decommissioning of Shoreham and allow for full recovery of the Rate Moderation Component within the 10 years contemplated by the rate agreement approved by the PSC.

If you have any questions, please let me know.

Sincerely,

Richard M. Kessel

Enclosure



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STATE OF NEW YORK

PUBLIC SERVICE COMMISSION

In The Matter Of

Proceeding on motion of the Commission as to the rates and charges of Long Island Lighting COmpany for electric and gas service

TESTIMONY AND EXHIBIT OF

RICHARD M. KESSEL

EXECUTIVE DIRECTOR OF THE

NEW YORK STATE CONSUMER PROTECTION BOARD

AND

CHAIRMAN OF THE

LONG ISLAND POWER AUTHORITY

DATED: Albany, New York
May 22, 1991

NYS CONSUMER PROTECTION BOARD
99 WASHINGTON AVENUE
SUITE 1020
ALBANY, NEW YORK 12210

RICHARD M. KESSEL

Q. Please state your name, title and business address.

A. My name is Richard M. Kessel. I am Executive Director of the New York State Consumer Protection Board (CPB), 250 Broadway, New York, New York 10007. I am also Chairman of the Long Island Power Authority (LIPA), 200 Garden City Plaza, Garden City, New York 11530. A summary of my credentials is presented in Exhibit____(RMK-1).

Q. What is the purpose of your testimony?

A. I am recommending (1) reduction of LILCO's proposed $114 million (5.0%) rate increase in December 1991 to $64 million (2.8%) and (2) rejection of LILCO's request for authorization to book $108 million in addition of charges in the December 1991 - November 1992 rate year that would be collected from ratepayers in future years. By eliminating new deferred charges, the two additional years of rate increases proposed by LILCO -- 1999 and 2000 -- would be averted.

Q. The Nuclear Regulatory Commission (NRC) has indicated concern that LILCO have sufficient revenues for maintaining and decommissioning Shoreham. Do the CPB and LIPA recommendations meet the NRC's concerns?

A. Yes. The reductions in LILCO's proposed rates recommended by the CPB and LIPA correct overestimates of certain costs and eliminate other non-essential items. After accounting

for our adjustment, LILCO will have adequate revenues for providing utility service, financing its operations at a reasonable cost, and satisfying its obligations to the NRC to maintain and decommission Shoreham.

Q. The CPB and LIPA testimonies focus only on the December 1991 - November 1992 rate year rather than the three year period (December 1991 - November 1994) discussed in LILCO's filing. Why are you taking this approach?

A. It is premature to set rates now through November 1994. A three year plan was appropriate in 1989, when LILCO faced a financial emergency. That is no longer the case. In 1989, LILCO's bond rating was below investment grade and the Company had not paid preferred or common stock dividends for five years. Since then, LILCO has regained its investment grade rating, paid both current and accrued preferred stock dividends, and resumed paying common stock dividends. Thus, the situation today is far different than in 1989.

Q. Are your recommendations consistent with the LILCO rate plan specified by the Commission in Opinion No. 89-8, issued April 13, 1989?

A. Yes. LILCO was not "guaranteed" any specific rate increase (following the first three years of the settlement) under the Commission's rate plan. In fact, LILCO must fully

justify any rate increase it requests. Clearly, LILCO has not justified its proposals in this case.

The adjustments presented by the CPB and LIPA cut LILCO's rate hike request from 5 percent to 2.8 percent, and demonstrate that LILCO's proposal for adding two more years of increases to the PSC's rate plan is unwarranted.

Q. Please summarize the adjustments recommended by the CPB and LIPA.

A. The CPB and LIPA adjustments total $157.3 million. They are summarized in the following table:

| | |
|---|---|
| Reduction in projected fuel costs | $50.3 million |
| Reduction in proposed profit allowance from 12.2 percent to 11.1 percent | $34.0 million |
| Reduction in projected property taxes | $19.2 million |
| Removal of charges related to unbilled revenues | $16.0 million |
| Reduction in research and development expenses and utility organization dues | $12.2 million |
| Reduction in insurance costs | $ 4.6 million |
| Other adjustments | $21.0 million |
| TOTAL | $157.3 million |

Q. How should these adjustments be applied?

A. The CPB and LIPA adjustments should be applied first to

offset the $108 million of new deferred charges LILCO seeks to book for the December 1991 - November 1992 rate years, with the remaining $49.3 million used to reduce LILCO's proposed $114 million rate hike request. Accordingly, LILCO's December 1991 rate increase would be held to $64.7 million (2.8 percent) and no new deferred ratepayer charges would be recorded in the December 1991 - November 1992 rate year.

Q. What would you propose in the event not all of the CPB and LIPA adjustment are adopted?

A. If that were to happen, I would recommend limiting the December 1991 rate increase to $69 million (3.0%) and using the remaining CPB and LIPA adjustments to offset new deferred charges projected by LILCO.

Q. Conversely, what you would propose if the total of adjustments adopted by the Commission, based on the presentations of the CPB and LIPA, the Department of Public Service Staff and the Commission's own findings, exceed the adjustments recommended by the CPB and LIPA?

A. In that event, I would recommend the same procedure I am proposing for the CPB and LIPA adjustments. Accordingly, the adjustments would be applied first to offset the new deferred charges LILCO seeks to book for the December 1991-

November 1992 rate year, with the remainder used to reduce the proposed December 1991 rate increase.

Q. Does this complete your testimony?

A. Yes.

EXHIBIT

Exhibit ___(RMK)

Richard M. Kessel

Mr. Kessel has been the CPB's Executive Director since January 1984. He also serves as Chairman of the Long Island Power Authority.

Mr. Kessel received a B.A. from New York University in 1971 and an M.A. in Political Science from Columbia University.

Mr. Kessel has been a consumer advocate for more than a decade. He has testified in several rate cases and was instrumental in convincing the Commission to issue a policy statement regarding the introduction of economic impact testimony in rate proceedings.

As the CPB's Executive Director, Mr. Kessel has participated in negotiations which resulted in 17 rate settlement agreements with New York State electric, gas and telephone companies.

STATE OF NEW YORK

PUBLIC SERVICE COMMISSION

| In the Matter of<br><br>Proceeding on the Motion of the Commission as to the Rates, Charges, Rules and Regulations of Long Island Lighting Company for Gas & Electric rates | Case<br>90-E-1185 |
|---|---|

DIRECT TESTIMONY AND EXHIBITS
OF
SEGI YOON, Ph.D.

Dated: Albany, New York
May 22, 1991

RICHARD M. KESSEL
EXECUTIVE DIRECTOR
NYS CONSUMER PROTECTION BOARD
99 WASHINGTON AVENUE
SUITE 1020
ALBANY, NEW YORK 12210

Q. Please state your name and business address.
A. Segi Yoon. My office is located at 250 Broadway, New York, New York 10007.

Q. What is your occupation?
A. I am an economist. I am the Chief Utility Rate Analyst for the New York State Consumer Protection Board.

Q. Will you describe briefly your educational and employment background?
A. I received my BBA from Yonsei University in Korea and my MA and Ph.D. in Economics from New York University. As an Adjunct Assistant Professor of Economics and Finance at Baruch College, City University of New York, I taught finance, statistics, operations research and microeconomics. Prior to joining the Board in March 1976, I had, since 1962, been employed by the Brooklyn Union Gas Company. Initially, as a research assistant, I was assigned to Brooklyn Union's Rate Department where I had various statistical responsibilities analyzing sales and revenue forecasts. I also evaluated the effects of rate changes on revenues. Subsequently, I was transferred to the Economic Research Department where I was a senior analyst. In this capacity, I prepared studies examining profitability, rate of return and other economic issues.

Q. Are you a member of any professional associations?
A. Yes, I am a member of the American Economic Association, the American Statistical Association, the American Finance Association and the Financial Management Association.

Q. Have you testified previously before this Commission?
A. Yes, I testified in numerous cases before this Commission. In these testimonies, I discussed various financial and rate design issues.

Q. What is the purpose of your testimony in this proceeding?
A. The purpose of my testimony is two fold. First, I will determine a reasonable rate of return for Long Island Lighting Company (LILCO). Second, I will discuss the cost of capital testimony by LILCO witness Mr. Patrick Piscitelli and indicate why his 12.5% equity return recommendation is excessive. I will also oppose Mr. Piscitelli's use of the "reverse" Capital Asset Pricing Model (CAPM) for determining LILCO's equity return.

Q. What common equity return do you recommend for LILCO?
A. The Company's equity return should be set at 11.1%.

Q. What approach did you use to determine the 11.1% equity return?

A. I used the traditional discounted cash flow (DCF) model as my primary methodology. I also applied the CAPM as a check on the reasonableness of my DCF derived equity cost. Finally, I used a statistically determined relationship between dividend yields and growth rates to further validate the reasonableness of my DCF derived equity cost.

Q. Please briefly describe the DCF methodology.

A. The underlying premise of the DCF methodology is that the market price of a common stock at any point in time reflects the present value of future dividends and market appreciation. The cost of equity is defined as the discount rate which produces the market price. For this reason, the DCF method is said to be market oriented. It is expressed by the formula $k = D/P + g$, where k is the cost of equity (or the discount rate), D is the expected dividend for the next period, P is the current price of the stock, and g represents the growth rate.

Q. Have you developed LILCO's cost of equity by examining the Company specific data?

A. No. In a normal case, a utility's cost of equity would be estimated directly based on a review of the firm's projected and historic financial data. The DCF method, however, cannot be applied to LILCO specific data, because the

stream of Company dividend payments has been too short to provide any meaningful data about investors' growth rate expectations.

For this reason, I selected a proxy gr up of utilities whose financial parameters and market data would be a reasonable surrogate for developing the equity cost for LILCO.

Q. Has this Commission ever relied on proxy group data in determining the cost of equity for a specific utility?

A. Yes. The Commission has used proxy group analyses in several rate cases for LILCO and the Nine Mile Point Two co-tenants. (Cases 29029 (LILCO), 29484 (LILCO), 89-G-030 (LILCO), 29426-28 (Rochester Gas & Electric Corporation), 29327-8 (Niagara Mohawk Power Corporation), 29433 (Central Hudson))

Q. How did you select your proxy companies?

A. Following the Commission's practice in several of the proceedings I discussed previously, I first examined the 29 Baa/BBB rated companies listed in Salomon Brothers' Electric Utility Monthly (April 1991). After eliminating those companies whose payout ratios were either below 40% or exceeded 90%, 16 companies remained in the proxy group. I also eliminated LILCO from the proxy group as well as

Montana Power, which derives more than 40% of its revenues from non-utility operations, and Kansas Gas and Electric, which is involved in a proposed merger with Kansas Power and Light. I was then left with the 13 companies listed in Exhibit (SY)_____, Sch. 1.

Q. How did you obtain the dividend yield for your proxy group?

A. I determined the dividend yields for each of the 13 companies by dividing their average closing prices for the 20 trading day period April 1 - April 26, 1991 into their current dividend. From this analysis, I derived an average 7.01% dividend yield for the proxy group. (Exh. (SY)____, Sch. 1)

Q. What is the forward-looking dividend yield for the proxy group?

A. Following the Commission's practice, I obtained a 7.2% dividend yield in the following manner:

$$7.01\%(1+1/2(.038))^{1} = 7.2\% \text{ (rounded up)}$$

Q. How did you determine the proxy group growth rate?

A. I used the retention growth rate, which the Commission has relied on for many years. I also examined Value Line's

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[1] The derivation of the 3.8% dividend growth rate is shown on page 7 of my testimony.

projections of the growth rates in earnings, dividends, and book value per share for the proxy group over the period 1988-90 to 1994-96. The average of these three growth projections is about 3.0%. (Exhibit SY_____, Sch. 2)

Q. How did you determine the retention growth rate for the proxy group?

A. To develop a retention growth rate, it is necessary to determine investors' expected return and retention ratio.

Exhibit SY____, Sch. 3 contains the actual earnings on common equity for each member of the proxy group for 1989, 1990, and projected earnings for 1991, 1992 and 1994-96. The average proxy group return for the entire period is 12.4% and is relatively stable throughout these years.

Salomon Brothers' Electric Utility Monthly, April 1991, indicates the average earned returns for the electric utility industry (11.7%) and for the BBB companies (11.1%). And the Federal Energy Regulatory Commission's benchmark return for the electric utility industry is currently 12.02%.

After reviewing these values, I selected a 12.5% expected return -- the average Value Line projection for the proxy group for 1992 and 1994-96. The 12.5% figure is close to 12.4%, the average of the proxy group's historic and projected earned returns, and is at the high end of the

range of all observed returns.

Using similar reasoning, I developed a retention ratio of 30.0%, the mid-point of the retention ratios projected by Value Line for 1992 and 1994-96. (Exh. 54___, Sch. 4) I note that Salomon Brothers reports that both the triple B rated companies and the electric utility industry currently have average retention ratios of 26.0%. (Electric Utility Monthly, April, 1991)

Q. What retention growth rate did you calculate for your proxy group?

A. I obtained a 3.8% retention growth rate by multiplying the 12.5% expected return by the 30.0% expected retention ratio.

Q. What is your equity return for your proxy group?

A. By adding the 7.2% dividend yield and 3.8% growth rate, I obtained an 11.0% cost of equity for the proxy group.

Q. Have you applied the CAPM to determine the investor required return for the proxy group?

A. Yes. The CAPM produces a 11.1% required return for the proxy group. That is,

$$r_c = r_f + \text{Beta}\ (r_m - r_f)$$

$$11.1\% = 8.2\% + .70\ (12.3\% - 8.2\%)$$

where

$r_c$ = 11.1% = Proxy group's equity cost

$r_f$ = 8.2% = Risk free return represented by the yield on 30 year US Treasury bonds. (Business Week), May 6, 1991, at 143)

$r_m$ = 12.3% = Market return represented by the S&P 500 as a market portfolio

Beta = .70 = Average Beta for the proxy group (Exh. SY____, Sch. 7)

Q. Would you discuss how you derived the 12.3% market return?

A. The 12.3% market return consists of an average dividend yield of 3.3% for the S&P 500 Industrials (Business Week, May 6, 1991) and a growth rate of 9.0% which I derived in Exhibit SY____, Sch. 7. To check the reasonableness of the 12.3% market return, I reviewed the May 1991 issue of Merrill Lynch's publication Quantitative Profiles, which estimates that the current market return (based on April 1991 data) ranges from 12.3% to 12.5%.

Q. Did you perform any other check to test the reasonableness of the 11.0% and 11.1% equity costs derived under the DCF and CAPM approach, respectively?

A. Yes. I performed a regression analysis based on the current dividend yields and growth rates estimated by Merrill Lynch for the electric companies listed in Electric Utility Monthly, April 1991. In the regression analysis, I

designated the growth rates as the dependent variable (Y), and the dividend yields as the independent variable (X).[2] To improve the predictability of the model, I excluded those companies whose total returns (dividend yield plus growth) estimated by Merrill Lynch were above 14.5% or below 10.0%. (Exh. SY____, Sch. 6). The regression output is shown in Exhibit SY____, Sch. 5, which indicates the following regression equation:

$$Y = 12.19095 - 1.18374(X)$$

where Y = Growth Rate and X = Dividend Yield

The .77 R squared is fairly high for this type of financial analysis, indicating that the inverse relationship between the growth rates and dividend yields is significant.

By substituting LILCO's 6.5% dividend yield into the above equation based on the average of the 20 trading day closing prices, I obtained a growth rate of 4.5%. The CAPM expected return for LILCO would be 11.0%.

Q. What equity return do you recommend for LILCO?

A. I am recommending the 11.1%, the highest of the three values I obtained above.

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2. Although causality indicates the dividend yield would be the dependent variable and the growth rate the independent variable, there is no loss in statistical quality by reversing that relationship.

Q. Do you propose an adjustment for the .90 Value Line Beta which exceeds the .70 average Beta for your proxy group?

A. No. Value Line Betas are calculated based on weekly price changes for a <u>five</u> year period. For this reason, Beta is commonly referred to as an indicator of <u>ex-post</u> information. The .90 Beta for LILCO reflects the large and frequent variations in LILCO's common stock prices during the last five years, which included several years when investors were uncertain about Shoreham's future and later about the implementation of the Shoreham settlement. This type of situation is unlikely to reoccur. Therefore, LILCO's .90 Beta does not measure the current or future risk associated with LILCO's common stock, and no adjustment should be made for the Company's .90 Beta.

Q. LILCO cost of capital witness Mr. Piscitelli states that:

> While most utility investments require investors to make both qualitative and quantitative assessments of a company's financial situation in expressing future earnings and payout ratios, LILCO's investors are pricing its securities based primarily upon a qualitative judgement of anticipated improvement in LILCO's financial parameters.
>
> (SM 541)

Please comment on Mr. Piscitelli's statement.

A. LILCO resumed its dividend payment in the third quarter of 1989. The initial dividend was $1.00 during the first year. In the third quarter of the second year (1990), the dividend

increased to $1.50, the current level, or a 50% increase. Given the limited historical information about LILCO's dividend increases, it is difficult, if not impossible, to perform a conventional quantitative analysis of growth in earnings, dividends, book value per share or retention growth.

This difficulty in estimating LILCO's dividend growth rate does not mean that the Company is perceived to be riskier than other typical electric utilities.

LILCO's dividend yield has stabilized at about 6.5%, compared with a 7.0% average for the proxy group. This indicates, relative to the proxy group's performance, that investors are optimistic about the prospect of a continuing stream of increasing LILCO dividend payments. Value Line, for example, projects the Company's dividend will be $2.06 in 1992 and $2.30 in 1994-96. (March 22, 1991) Standard and Poors reports LILCO's financial prospects to be "stable." (Credit Week, October 25, 1990, p. 103)

In all, I believe that these factors indicating investors' confidence in LILCO's financial future refute Mr. Piscitelli's claim that investors' are dissatisfied with the Rate Moderation Agreement. (SM 540)

Q. Would you now discuss Mr. Piscitelli's recommended 12.5% return for LILCO?

A. Yes. Mr. Piscitelli calculated two DCF returns -- 12.0% and 11.7%.[3] (SM 536) He then increased these returns to 12.65% and 12.30% to reflect LILCO's high Beta. I previously stated that the high Beta value associated with LILCO does not reflect the Company's current and/or future risk. Therefore, Mr. Piscitelli's 12.5% recommended return is excessive and should be rejected by the Commission.

Q. Please discuss exactly how Mr. Piscitelli applied his risk adjustment.

A. Mr. Piscitelli's 12.65% market return is based on a "reverse CAPM" calculation. The market return in the CAPM is defined as the sum of the risk-free return and the risk premium. According to Mr. Piscitelli, the market return corresponding to the 12.65% investor required return is 13.40% (8.4% + 5.00%). (Exh. 4, Sch. 3)

There are two serious problems with this approach. First, a market return of 13.40% is clearly overstated. The dividend yield for the S&P 500 is about 3.3%. Thus, the implied growth rate corresponding to a 13.40% market return would be 10.1% (13.4% - 3.3%). Given the 60% target retention ratio for the market portfolio represented by the S&P 500 (Exh. SY____, Sch. 7), a 10.1% growth rate implies

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[3] The average DCF unadjusted return for these values would be 11.85% (1/2(12.0% + 11.75%)).

an investor expected return of 16.83% (10.1%/.60). The realized returns on the book values of the S&P 400[4] clearly do not support an investor expected return approximating 17%. (Exh, SY____, Sch. 7)

The second problem is the way in which the market return is derived in the "reverse CAPM." Under this approach, the market return is derived from the individual returns. That is, the direction of the estimating process is from the individual to the aggregate value. In the real world, however, the estimate for an aggregate value is less prone to error since it tends to remains fairly stable or changes very slowly. Thus, the standard error of the mean is always smaller than the sample's standard deviation.[5] For example, the average weight of male college freshmen students or the market return or the normal temperature in the month of May remains fairly constant or changes very slowly.

According to Mr. Piscitelli's Exhibit 4, Sch. 3, the market return is 13.40% when the DCF return for one of his sample groups is 12.0%. When the individual return for

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4. The S&P 400 is used as a surrogate for S&P 500, because the book value returns are not available for the S&P 500. The Beta for the S&P 400 is virtually identical to unity, indicting the two portfolios have virtually identical risk characteristics.

5. Standard error of the mean is defined as the quotient obtained by dividing the sample standard deviation by the square-root of the sample size.

that sample declines to 11.7%, the market return becomes 12.98%. The change (or error) in the market return is 42 basis points (i.e. 0.42% = 13.40% - 12.98%) when a relatively small 30 basis points change (or error) occurs in the individual returns (i.e., .30% = 12.0% - 11.7%). This phenomenon occurs mathematically because the utility Beta is less than one. It seems to indicate that a relatively small error in estimating individual utility return results in a large error in estimating the market return. As I noted above, the market return should fluctuate only minimally, and certainly not more than the individual changes in the individual returns. This can be seen from the following example.

Assume the Commission allowed a 12.0% return for a utility whose Beta is .60. Mr. Piscitelli's market return for this firm would be 14.4%.[6] (Exh. 4, Sch. 3) These widely fluctuating market returns indicate the inappropriateness of using the "reverse CAPM."

There can be only one <u>expected</u> market return at any point in time. The estimating errors in the market return should be smaller than for the individual returns. But, according to the "reverse" CAPM, each of the individual utility returns has its own market return whose dispersions are greater than the dispersions associated with the

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[6]. 14.4% = 8.4% + 6.0%, where 6.0% = 3.6%/.6

individual utility returns. For these reasons, I recommend that the Commission reject the use of the "reverse CAPM."

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

EXHIBIT

Exhibit SY___
Schedule 1

# LONG ISLAND LIGHTING COMPANY

## Dividend Yields

| | | Average Price | Current Dividend | Dividend Yield |
|---|---|---|---|---|
| 1. | Centerior Energy | 19.113 | $ 1.60 | 8.37% |
| 2. | Central Hudson | 24.644 | 1.84 | 7.47 |
| 3. | Central Vermot P.S. | 26.531 | 2.08 | 7.84 |
| 4. | Cincinnati G&E | 32.713 | 2.48 | 7.58 |
| 5. | DQE | 25.806 | 1.44 | 5.58 |
| 6. | Detroit Edison | 29.138 | 1.88 | 6.45 |
| 7. | Entergy Corporation | 24.169 | 1.20 | 4.97 |
| 8. | NYSEG | 26.075 | 2.08 | 7.98 |
| 9. | NIPSCO Ind. | 20.500 | 1.16 | 5.66 |
| 10. | Ohio Edison | 18.750 | 1.50 | 8.00 |
| 11. | Philadelphia Electric | 20.138 | 1.20 | 5.96 |
| 12. | Texas Utilities | 37.113 | 3.00 | 8.08 |
| 13 | United Illum. | 34.242 | 2.44 | 7.13 |
| | Average | | | 7.01% |
| | LILCO | 23.069 | 1.50 | 6.50% |

Exhibit SY___
Schedule 2

# LONG ISLAND LIGHTING COMPANY

## Estimated Growth Rates[1]

| | | Estimated Growth For | | |
|---|---|---|---|---|
| | | EPS | DPS | BVPS |
| 1. | Centerior Energy | 3.5% | .5% | 2.0% |
| 2. | Central Hudson | 3.5 | 3.0 | 3.0 |
| 3. | Central Vermot P.S. | 1.0 | 2.0 | 2.5 |
| 4. | Cincinnati G&E | 1.0 | 4.0 | 4.0 |
| 5. | DQE | 4.5 | 5.5 | 2.0 |
| 6. | Detroit Edison | 6.5 | 6.0 | 8.0 |
| 7. | Entergy Corporation | NMF | NMF | 3.0 |
| 8. | NYSEG | 2.5 | 2.0 | 2.0 |
| 9. | NIPSCO Ind. | 12.0 | 12.5 | 4.5 |
| 10. | Ohio Edison | 2.0 | -2.5 | 1.0 |
| 11. | Philadelphia Electric | 1.0 | -3.0 | 3.0 |
| 12. | Texas Utilities | 1.5 | 2.0 | 1.0 |
| 13 | United Illum. | -1.5 | 4.0 | 4.5 |
| | Avg: | 3.1 | 3.0 | 3.1 |
| | LILCO | 8.0 | 3.0 | 3.1 |
| | | | NMF | 4.5 |

Source: (1) Value Line

Exhibit SY___
Schedule 3

# LONG ISLAND LIGHTING COMPANY

## % Earned On Commong Equity
(in %)

| | | 1989 | 1990 | 1991 | 1992 | 1994-1996 | Avg. |
|---|---|---|---|---|---|---|---|
| 1. | Centerior Energy | 9.6 | 9.4 | 9.0 | 9.5 | 10.5 | 9.6 |
| 2. | Central Hudson | 10.4 | 10.6 | 10.5 | 11.0 | 11.5 | 10.8 |
| 3. | Central Vermot P.S. | 12.8 | 11.5 | 11.5 | 12.0 | 11.5 | 11.9 |
| 4. | Cincinnati G&E | 17.1 | 15.2 | 14.5 | 15.0 | 16.0 | 15.6 |
| 5. | DQE | 10.6 | 11.3 | 11.0 | 10.5 | 12.0 | 11.1 |
| 6. | Detroit Edison | 16.4 | 18.5 | 17.5 | 17.5 | 16.0 | 17.2 |
| 7. | Entergy Corp. | 9.3 | 11.6 | 10.5 | 10.5 | 12.0 | 10.8 |
| 8. | NYSEG | 11.3 | 10.7 | 11.0 | 11.5 | 12.0 | 11.3 |
| 9. | NIPSCO Ind. | 7.5 | 12.4 | 13.0 | 14.0 | 14.5 | 12.3 |
| 10. | Ohio Edison | 13.0 | 10.0 | 10.0 | 10.0 | 11.0 | 10.8 |
| 11. | Philadelphia Elec. | 14.0 | 12.7 | 11.0 | 11.5 | 12.0 | 12.2 |
| 12. | Texas Utilities | 12.3 | 12.5 | 12.0 | 13.0 | 12.5 | 12.5 |
| 13 | United Illum. | 20.2 | 12.9 | 13.0 | 13.5 | 13.0 | 14.5 |
| | Avg: | 12.7 | 12.3 | 11.9 | 12.3 | 12.7 | 12.4 |
| | LILCO | NMF | 12.2 | 12.5 | 13.5 | 13.5 | 12.9 |

Exhibit SY___
Schedule 4

LONG ISLAND LIGHTING COMPANY

Retention Ratio (%)

| | | 1989 | 1990 | 1991 | 1992 | 1994-1996 | Avg. |
|---|---|---|---|---|---|---|---|
| 1. | Centerior Energy | 15.8 | 15.8 | 15.8 | 20.0 | 22.2 | 17.9 |
| 2. | Central Hudson | 22.8 | 23.5 | 25.2 | 26.4 | 30.0 | 25.6 |
| 3. | Central Vermot P.S. | 22.4 | 15.2 | 12.5 | 19.2 | 16.3 | 17.1 |
| 4. | Cincinnati G&E | 47.0 | 41.7 | 29.1 | 31.7 | 37.8 | 37.5 |
| 5. | DQE | 36.0 | 38.4 | 37.9 | 34.5 | 32.1 | 35.8 |
| 6. | Detroit Edison | 36.6 | 45.4 | 43.9 | 44.4 | 40.0 | 42.1 |
| 7. | Entergy Corp. | 49.2 | 57.0 | 49.0 | 42.3 | 33.8 | 46.3 |
| 8. | NYSEG | 16.9 | 16.9 | 12.5 | 16.1 | 22.4 | 17.0 |
| 9. | NIPSCO Ind. | 11.0 | 40.9 | 39.0 | 40.0 | 36.4 | 33.5 |
| 10. | Ohio Edison | 10.1 | [-3.6] | [9.1] | 11.8 | 15.8 | 12.5 |
| 11. | Philadelphia Elec. | 11.6 | 32.9 | 35.9 | 34.9 | 34.7 | 30.0 |
| 12. | Texas Utilities | 33.6 | 32.7 | 20.0 | 26.7 | 30.2 | 28.6 |
| 13 | United Illum. | 56.3 | 34.6 | 35.8 | 36.0 | 42.0 | 40.9 |
| | Avg: | 28.4 | 32.9 | 29.7 | 29.5 | 30.3 | 29.6 |
| | LILCO | 73.1 | 44.4 | 28.6 | 22.3 | 28.1 | |

Exhibit SY___
Schedule 5

Y=Growth X=Yield

Regression Output:

| | |
|---|---|
| Constant | 12.19095 |
| Std Err of Y Est | 0.653308 |
| R Squared | 0.766199 |
| No. of Observations | 48 |
| Degrees of Freedom | 46 |

| | |
|---|---|
| X Coefficient(s) | -1.18374 |
| Std Err of Coef. | 0.096411 |

Exhibit SY___
Schedule 6

Growth vs Yield

| Item | Yield | Growth |
|---|---|---|
| 1 | 7.00 | 4.0 |
| 2 | 7.91 | 2.1 |
| 3 | 7.30 | 2.8 |
| 4 | 6.61 | 3.5 |
| 5 | 5.70 | 4.8 |
| 6 | 7.22 | 4.1 |
| 7 | 8.09 | 2.3 |
| 8 | 7.79 | [illegible] |
| 9 | 6.71 | 4.5 |
| 10 | 6.54 | 4.2 |
| 11 | 4.85 | 5.9 |
| 12 | 5.14 | 5.5 |
| 13 | 6.47 | 5.5 |
| 14 | 7.22 | 4.1 |
| 15 | 8.19 | 2.5 |
| 16 | 6.71 | 4.5 |
| 17 | 6.58 | 5.7 |
| 18 | 7.15 | 3.5 |
| 19 | 7.77 | 2.9 |
| 20 | 6.40 | 3.7 |
| 21 | 6.97 | 3.4 |
| 22 | 5.05 | 6.4 |
| 23 | 6.28 | 6.5 |
| 24 | 7.47 | 3.9 |
| 25 | 6.93 | 3.9 |
| 26 | 6.55 | 4.0 |
| 27 | 7.17 | 3.7 |
| 28 | 8.24 | 2.0 |
| 29 | 7.81 | 2.2 |
| 30 | 8.10 | 2.9 |
| 31 | 5.70 | 5.6 |
| 32 | 7.89 | 2.8 |
| 33 | 9.09 | 2.4 |
| 34 | 8.26 | 2.5 |
| 35 | 7.75 | 3.7 |
| 36 | 7.40 | 3.1 |
| 37 | 7.69 | 3.4 |
| 38 | 5.84 | 6.1 |
| 39 | 6.23 | 4.8 |
| 40 | 8.05 | 2.2 |
| 41 | 6.77 | 3.5 |
| 42 | 7.96 | 2.6 |
| 43 | 7.44 | 2.5 |
| 44 | 6.48 | 4.6 |
| 45 | 4.92 | 7.3 |
| 46 | 8.42 | 3.7 |
| 47 | 7.12 | 3.2 |
| 48 | 8.22 | 2.5 |

Source: Salomon Brothers, Electric Utility Monthly, April 1991

Exhibit SY___
Schedule 7

LONG ISLAND LIGHTING COMPANY

S&P 400 Industrials

| | Retention Ratio (1) | Return On B.V. (1) | Price/Book Ratio (2) |
|---|---|---|---|
| 1974 | 61% | 14.17% | 1.34 |
| 1975 | 57 | 12.11 | 1.31 |
| 1976 | 61 | 14.02 | 1.46 |
| 1977 | 57 | 13.93 | 1.33 |
| 1978 | 59 | 14.60 | 1.20 |
| 1979 | 64 | 16.50 | 1.17 |
| 1980 | 60 | 14.88 | 1.26 |
| 1981 | 58 | 14.42 | 1.22 |
| 1982 | 46 | 11.13 | 1.15 |
| 1983 | 50 | 12.07 | 1.43 |
| 1984 | 59 | 14.61 | 1.45 |
| 1985 | 48 | 12.14 | 1.66 |
| 1986 | 44 | 11.64 | 2.03 |
| 1987 | 57 | 15.11 | 2.42 |
| 1988 | 63 | 19.06 | 2.17 |
| 1989 (P) | 57 | 18.19 | 2.50 |
| Projected: | 60% | 15.0% | |

Retention Growth: 9.0% = (15.0)(.60)

Source: (1) S&P Analysts Handbook, 1990
(2) 1/2 (High & Low)/B.V.

STATE OF NEW YORK

PUBLIC SERVICE COMMISSION

| | |
|---|---|
| In the Matter of<br><br>Proceeding on the Motion of the Commission as to the Rates, Charges, Rules and Regulations of Long Island Lighting Company for Gas & Electric rates | Case<br>90-E-1185 |

DIRECT TESTIMONY
OF
TARIQ N. NIAZI

Dated: Albany, New York
May 22, 1991

RICHARD M. KESSEL
EXECUTIVE DIRECTOR
NYS CONSUMER PROTECTION BOARD
99 WASHINGTON AVENUE
SUITE 1020
ALBANY, NEW YORK 12210

TARIQ N. NIAZI

Q. Please state your name and address.

A. My name is Tariq N. Niazi. My business address is 99 Washington Avenue, Albany, New York 12210.

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

A. I am the Chief Economist for the New York State Consumer Protection Board (CPB).

Q. Briefly describe your background.

A. I am currently enrolled in the Doctoral Program in Managerial Economics at Rensselaer Polytechnic Institute. I have completed all required course work and passed all comprehensive examinations at that institution. I have a Master's Degree in Economics from the State University of New York at Albany. I also received a Master's Degree in Public Administration from Punjab University in Pakistan and a Bachelor's Degree in Economics and Political Science at Forman Christian College in Pakistan.

I have been employed by the CPB since March 1981, first as an economic consultant and then as a rate analyst. Later, I was promoted to the position of Principal Economist. I was appointed to my present position in October 1990. I have worked on numerous issues in electric, gas and telephone proceedings. My responsibilities are in the areas of economic and financial analysis, rate design, cost of service, tariff analysis and cost of capital.

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

A. Yes. I have testified in Case Nos. 28036, 28053/54/55, 28105/06, 28107, 28176/77, 27741, 28225/26/27, 28278/79, 28252, 28380, 28550/51/52, 28069/10/11, 28425-I, 28601, 28715, 28838/39, 28896/97/98, 28961 (1985 Rate Case), 29069/70, 28978 (Generic Rate Design-Phase I), 28425-II, 29195, 28961 (1986 Moratorium Rate Request), 29327/28, 29426/27/28, 29432, 28961 (1987 Moratorium Extension), 29551, 28978/28961 (1987 Regional Call Plan Implementation), 29484 & 88-E-084 (LILCO Settlement), 88-G-011, 88-G-062, 88-G-226, 88-E-088, 89-G-030, 29674/5/6 (Time of Use Rates), 88-E-107, 28961 (Fourth Stage), 89-E-166/7 and 28961 (Fifth Stage, Phase I), 89-G-1050, 89-E-175, 89-E-176, 90-E-139 & 90-G-140, 90-C-0191, 29327, et al., 90-E-0647/9 & 90-G-0469 and 90-G-0981.

Q. What is the purpose of your testimony?

A. I will address the following two issues:

1. LILCO's proposed ratemaking changes to the Rate Moderation Agreement (RMA). These changes would shift risk from the Company's stockholders to its ratepayers, reduce LILCO's incentive to achieve operational efficiency and produce suboptimal resource allocations.

2. Should the Commission allow the Company to include additional reconciliation items in the RMA, the Company's equity return should be reduced by 20 basis points to reflect the reduction in risk to LILCO's shareholders.

PROPOSED RATEMAKING CHANGES

1. Fringe Benefits

Q. Briefly describe LILCO's proposed ratemaking changes.

A. LILCO proposes the reconciliation of forecasted to actual expenses for fringe benefits, including medical, dental, workman's compensation, pension, disability and life insurance costs. It also requests a "Net Margin" sales mechanism to protect itself from any sales shortfall. Finally, the Company objects to any modification of its Fuel Adjustment Clause (FAC).

Q. Why are you opposed to the Company's proposal to reconcile forecasted expenses for fringe benefits with actual levels?

A. The Company claims that the costs incurred for fringe benefits are largely beyond its control and should be fully recoverable. I disagree.

In negotiating with its unions, LILCO can accept or reject various fringe benefit options. Under current practice, the rate year level of fringe benefits would be forecasted based on the Company's recent experience, expected changes in the rate year and the experience of similar firms in the industry. This is a reasonable basis for establishing rate year estimates for such costs. LILCO should operate within the constraints of a rate case allowance for fringe benefits.

Q. Would the reconciliation proposal be a disincentive for LILCO to reduce unnecessary costs?

A. Yes. Under traditional ratemaking, the Commission approves expense levels after considering the testimony and arguments of a utility, Staff, the CPB and other intervenors. Since normal cost changes are not reconciled, cost overruns are absorbed by a utility's shareholders and unanticipated cost savings enure to the benefit of shareholders. Once rates have been set, the regulated firm has the same type of incentives as a non-regulated firm to boost profitability by reducing expenses.

Under the RMA, several expense items are reconciled with actual expenditures, with the difference charged or credited to the RMC. In negotiating the RMA, the parties agreed to allow for the reconciliation of certain items.

These included inflation, property taxes, asbestos removal costs, enhanced electric reliability expenses, interest expense and Demand Side Management costs. As a general matter, the CPB opposes such expense reconciliations. However, since the Commission has already included those items in the RMA, we will not seek to change their treatment. On the other hand, expanding the RMA to include fringe benefits, would unreasonably further reduce the Company's risk and act as a disincentive to efficient operations by allowing cost-plus ratemaking.

For unregulated firms, competition ensures that costs are controlled. For regulated utilities, "regulatory lag" performs the same function. Auditing the additional expenses <u>ex post</u>, before reconciling estimated and actual expenses, would not provide the same incentive for reducing costs as setting a rate year level of expense for those items.

2. Net Margin Sales Mechanism

Q. Briefly describe the Company's proposal regarding the Net Margin sales mechanism?

A. The Company describes the Net Margin sales mechanism as follows:

> LILCO has calculated the minimum level of sales revenue, net of fuel and gross receipts

> taxes, that the Company must receive to fully amortize the RMC within 12 years (hereinafter, the "Net Margin"). LILCO proposes to designate a "band" around the Net Margin for the purposes of sharing between the Company and its ratepayers of the risks and benefits, on a reciprocal basis, of sales which are higher or lower than forecasted.
>
> The Company proposes that if electric sales are higher than forecasted, resulting in a Net Margin higher than the forecasted amount, LILCO will credit the RMC for the first $10 million of excess and will flow any amounts above this level directly back to ratepayers through the FAC.
>
> If electric sales are lower than forecasted, producing a net margin lower than the forecasted amount, LILCO will increase the RMC by the first $10 million of shortfall and will recover the amount of any additional reduced revenues through the FAC, up to a cap of $10 million.
>
> (SM 203, 204)

Q. Do you support LILCO's proposal?

A. No. The Company is again attempting to shift risk from itself to its ratepayers by removing a basic incentive for operational efficiency. Under LILCO's Net Margin proposal, the Company's sales forecast risk would be largely eliminated. If actual sales fall below forecast levels, the Company would be made whole up to a net margin cap of $20 million. The first $10 million of the shortfall would increase ratepayers' future obligations through an increase in the RMC. The next $10 million would be recovered through the FAC. Conversely, if actual sales are higher than

forecast, the Company would credit the RMC for the first $10 million, and any amounts above that level would be refunded to customers through the FAC.

Current regulatory practice requires that rates reflect the most reasonable rate year sales forecast. As a result, a utility has a clear and powerful incentive to protect its earnings. This incentive is the most important economic protection consumers have against unnecessary costs. It would be discarded, however, if the Commission were to adopt LILCO's Net Margin sales mechanism.

Q. Please summarize your testimony regarding the need for incentives under price regulation.

A. Rate decisions reflect the Commission's analysis of the parties' rate year forecasts of revenues and costs. When the Commission errs in a utilities' favor, the mistake can be corrected by reducing or freezing rates after the rate year. When a forecast is understated -- e.g., a utility fails to live within an expense level adopted by the Commission -- traditional regulation protects the consumer by forcing shareholders to absorb any revenue deficiency. This causes the utility to enhance operating efficiency and to be wary of incurring unnecessary and avoidable costs.

3. Partial Pass-Through FAC

Q. Has LILCO addressed the need for a partial pass-through FAC as required by the Commission?

A. Yes. The Company's filing contains a brief discussion of this issue. It essentially recommends that its current FAC not be changed. (SM 185)

Q. Why does LILCO oppose the adoption of a partial pass-through FAC?

A. LILCO gives three reasons for opposing the partial pass-through FAC:

1. It was not contemplated in the premises and assumptions of the RMA.
2. It will increase LILCO's risk, thereby increasing borrowing costs that are ultimately paid by the ratepayers.
3. Shareholders will require higher returns as a result of increased risk.

Q. Should LILCO's FAC continue in its present form?

A. No. CPB witness Elfner discusses the FAC in connection with the RMA. He indicates that the adoption of a partial pass-through FAC is not precluded by the RMA. I recommend that a partial pass-through FAC, with fuel price indexing, be

adopted for LILCO. The Commission has ordered similar partial pass-through FAC's with fuel price indexing for all electric utilities in rate proceedings decided after April 1, 1991 in which fuel targets are set.[1]

Q. Will the adoption of a partial pass-through FAC increase LILCO's risk as the Company claims? (SM 204, 205)

A. A partial pass-through FAC, with fuel price indexing, such as those adopted by the Commission for all of the electric utilities except LILCO, would not increase the Company's risk. The Commission in its order adopting the partial pass-through FAC, with full price indexing, said the following:

> The Commission designed the [partial pass-through FAC] mechanism to provide an incentive to keep fuel costs down as well as to share the cost of fuel cost variations between shareholders and ratepayers instead of imposing them entirely on ratepayers. But while risk-sharing has been accomplished, the incentive has been limited because variances between targeted and actual fuel costs have stemmed overwhelming from instability in the market price of fuel, especially oil. The events in the Persian Gulf, for example, have led oil prices to deviate far from expected levels.
>
> This preponderance of factors over which the Company lacks control has kept the partial pass-through FAC from continuing to provide the expected incentive. Worse, the

---

[1] For Con Edison, the Commission ordered the implementation of a partial pass-through FAC, with fuel price indexing by July 1, 1991. (Order at 8)

> future operation of the incentive even in areas where management does have control is frustrated, for companies will quickly incur the maximum allowable penalties for savings and reach the point at which the sharing of variances ends.
>
> (Case Nos. 90-E-0954; 29722 and 88-E-43, Order, issued November 7, 1990, at 4)

The Commission's Order establishes two very important points. First, the fuel prices, especially oil, are the principal cause of the variance in fuel costs. Second, the volatility in fuel prices is the reason why companies incur penalties or savings under the partial pass-through FAC. If the impact of fuel price volatility is eliminated through indexing, as the Commission order indicates, the Company's risk should not change.

RISK REDUCTION

Q. How do the Company's risk reducing proposals affect LILCO's shareholders?

A. Investors always assume the risk that earnings would be below expectations. This variability or uncertainty of earnings is described as "business risk" and is affected by various characteristics of a firm's operation. The two major determinants of business risk are sales volatility and operating cost fluctuations.

Under current ratemaking practice, a utility abso.bs

any shortfall if actual sales are below forecast lev Thus, investors would bear the risk that the targeted s level are not achieved. The Company's Net Margin s mechanism would change that traditional regulatory com by allowing the Company to recover its entire rev shortfall up to a cap of $20 million. By eliminating real possibility that LILCO would ever suffer a shortfal the net margin, the Company's risk would be reduced.

Business risk is determined not only by s volatility but also by uncertainty concerning costs. again, the Company's proposals to continue reconc several expense items and to begin reconciling f benefits will reduce uncertainty. Under tradit treatment, the company bears the risk of costs that e test year projections approved by the Commissio reasonable. The Company's proposal eliminates this ri under-recovery with respect to several categories of the risk for which should be borne by the Company.

Q. Should the Company's equity return be adjusted for reductions in risk if the Commission were to adopt L Net Margin and expense reconciliation proposals?

A. Yes. Although my primary recommendation is tha Commission should reject the Company's Net Margin mechanism and expense reconciliation proposal

recomm
return
basis

Q. Does t

A. Yes.

any shortfall if actual sales are below forecast levels. Thus, investors would bear the risk that the targeted sales level are not achieved. The Company's Net Margin sales mechanism would change that traditional regulatory compact by allowing the Company to recover its entire revenue shortfall up to a cap of $20 million. By eliminating any real possibility that LILCO would ever suffer a shortfall in the net margin, the Company's risk would be reduced.

Business risk is determined not only by sales volatility but also by uncertainty concerning costs. Here again, the Company's proposals to continue reconciling several expense items and to begin reconciling fringe benefits will reduce uncertainty. Under traditional treatment, the company bears the risk of costs that exceed test year projections approved by the Commission as reasonable. The Company's proposal eliminates this risk of under-recovery with respect to several categories of cost the risk for which should be borne by the Company.

Q. Should the Company's equity return be adjusted for those reductions in risk if the Commission were to adopt LILCO's Net Margin and expense reconciliation proposals?

A. Yes. Although my primary recommendation is that the Commission should reject the Company's Net Margin sales mechanism and expense reconciliation proposals, I

recommend that the Commission reduce the 11.1% equity return proposed by CPB witness Dr. Yoon by a minimum of 20 basis points if it adopts LILCO's risk reducing proposals.

Q. Does this conclude your testimony?

A. Yes.

STATE OF NEW YORK

PUBLIC SERVICE COMMISSION

| | |
|---|---|
| In the Matter of<br><br>Proceeding on the Motion of the Commission as to the Rates, Charges, Rules and Regulations of Long Island Lighting Company for Gas & Electric rates | Case<br>90-E-1185 |

DIRECT TESTIMONY AND EXHIBITS
OF
DOUGLAS W. ELFNER, Ph.D.

Dated: Albany, New York
May 22, 1991


RICHARD M. KESSEL
EXECUTIVE DIRECTOR
NYS CONSUMER PROTECTION BOARD
99 WASHINGTON AVENUE
SUITE 1020
ALBANY, NEW YORK 12210

Q. Please state your name and business address.

A. Douglas W. Elfner, Ph.D., Suite 1020, 99 Washington Avenue, Albany New York, 12210.

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

A. I am employed by the New York State Consumer Protection Board (CPB) as Principal Econometrician.

Q. Please describe briefly your educational and employment experience.

A. I received a B.A. with honors and distinction in economics and mathematics from the University of Delaware in 1976, and a Ph.D. degree in Economics from the University of Michigan in 1982. I was an Assistant Professor of Economics at the University of Vermont from 1982 through 1984, where I taught courses in econometrics and microeconomics. From December 1984 to January 1989, I was employed by AT&T in Bedminster, New Jersey, where I held positions of increasing responsibility as an Economist in the Market Analysis and Forecasting organization. My responsibilities included developing revenue and quantity forecasts for existing telecommunications services; analyzing opportunities for new services and the effects of changing the price and rate structures of existing services; and producing forecasts and market analyses for regulatory purposes. In January 1989 I assumed the position of the

CPB's Principal Econometrician.

Q. Are you a member of any professional organizations?

A. I am a member of the American Economic Association, the National Association of Business Economists and the International Institute of Forecasters. I have presented original papers at conferences sponsored by the American Economic Association and the Econometrics Society.

Q. Have you previously testified before the Commission?

A. Yes, I have testified in Case 88-G-226, Brooklyn Union Gas; Case 89-G-030, Long Island Lighting Company; Case 89-C-022, Rochester Telephone Corporation; Case 28961 (Fifth Stage), New York Telephone Company; Case 89-G-1050, Brooklyn Union Gas; Case 89-G-126, Brooklyn Union Gas; Case 90-C-0191, New York Telephone Company; Case 28959, Rochester Telephone Corporation; Case 90-G-1001, Consolidated Edison Company; and Case 90-G-0981, Brooklyn Union Gas.

Q. Are there any exhibits associated with your testimony?

A. Yes. I prepared an exhibit consisting of two schedules--Exhibit___(DWE), Schs. 1 and 2.

Q. What is the purpose of your testimony?

A. I recommend that Long Island Lighting Company's (LILCO's)

fuel cost projections be revised to accurately reflect fuel prices expected in the December 1991 - November 1992 rate year. I estimate that this would reduce LILCO's rate year revenue requirement projections by \$50.3 million. I also recommend that LILCO's current fuel adjustment clause (FAC) be replaced with a partial pass through FAC similar to those established by the Commission for other major electric utilities.

Q. Please discuss LILCO's fuel price projections.

A. LILCO's oil price projections are generally determined by calculating the price of oil in a base period and adjusting that value by a uniform percentage to reflect inflation. The Company's projection of the price of oil in the base period was developed in October 1990, when the spot price of Saudi Light crude oil -- commonly used as a benchmark oil price -- was over \$34 dollars a barrel, more than twice its price in mid-May. Based on information available at that time, LILCO projected a base price of \$21.00 per barrel for Saudi Light crude oil in the second half of 1991. It also projected oil price annual increases of approximately 5% and total rate year fuel oil expense of \$353.7 million. To determine the level of fuel expense to be included in base rates and FAC fuel price targets, LILCO's fuel price forecasts should be updated immediately before the end of

the suspension period to reflect anticipated rate year fuel costs.

Q. Have you estimated rate year oil prices based on current information?

A. Yes. I estimate that the price of Saudi Light crude oil in the rate year will be $17.80 per barrel, 19% less than the price projected by LILCO. This lower price would reduce LILCO's rate year fuel oil expense by approximately $50.3 million. (Exh.____DWE, Sch. 1)

Q. Please explain the derivation of your oil price estimate.

A. As shown in Exhibit___(DWE), Sch. 2, the monthly spot price of Saudi Light crude oil averaged $16.15 per barrel in the most recent 24 months excluding the August 1990 - February 1991 period during the Persian Gulf crisis.[1] Further, the futures market in mid-May 1991 indicates that little change in oil prices is expected through December 1992. From these data, I estimate an average rate year spot price for Saudi Light crude oil of $17.80 -- the average price in the most recent 24 months excluding the six month period of the Persian Gulf crisis, increased by 5% per year in accordance

[1] The average price since February 1991 is not significantly different from the average for the 15 months ending August 1990.

with LILCO's inflation projections.

Q. Why did you exclude the six month period of the Persian Gulf crisis from your calculation of the recent average price of oil?

A. The August 1990 - February 1991 period was characterized by unusual uncertainty and volatility in the world's oil market -- a phenomena which is not expected in the rate year. Inclusion of prices for this anomalous period in the base cost of fuel would provide an unwarranted cushion around LILCO's rate year fuel prices. Accordingly, data from this period should be excluded from any calculation used to set future fuel oil price targets.

Q. Please discuss LILCO's current fuel adjustment clause.

A. LILCO's current FAC mandates that 100% of any deviation of actual from projected fuel costs be assigned to ratepayers. Since 1983, however, the Commission has modified the FACs of the State's major electric utilities to require that utilities absorb a portion of fuel costs exceeding the forecast level and enjoy a portion of the benefits of fuel costs below the forecast. The Commission has recently modified these partial pass-through FACs by indexing fuel prices over which the utility lacks control so that the partial pass-through FAC continues to provide the utility

with expected incentives to eliminate unnecessary costs.

In Case 90-E-0954, a proceeding devoted to FAC issues, the Commission stated:

> We propose that for the five companies that now have partial pass-through FACs, indexing be introduced in the first proceeding decided after April 1, 1991 in which fuel cost targets are set. For Con Edison, a partial pass-through FAC with fuel price indexing should be instituted by July 1, 1991. (footnote omitted) For LILCO, the timing of a partial pass-through FAC will be decided in the rate case the company is scheduled to file when its current rate agreement expires; the company should address itself to the matter in its direct filing there.
>
> (Case 90-E-0954, Order Instituting Proceeding, Issued November 7, 1990, at 8)

In its testimony in this case, LILCO opposes a partial pass-through FAC. (SM 204-5)

Q. Please summarize and evaluate LILCO's arguments for maintaining its current FAC.

A. LILCO cites two reasons why a partial pass-through FAC should not be adopted. First, the Company claims that it was not contemplated in the Rate Moderation Agreement (RMA). The RMA, however, does not preclude the adoption of a partial pass-through FAC. Second, LILCO argues that a partial pass-through FAC would increase investors' risk and, therefore, increase borrowing costs and the required rate of return. This argument is addressed in the testimony of CPB

witness Niazi.

Q. Does this conclude your testimony?
A. Yes.

EXHIBIT

CALCULATION OF IMPACT OF LOWER CRUDE OIL PRICES ON LILCO's FUEL COST

LILCO FORECAST

| | 2H90 | 1H91 | 2H91 | 1H92 | 2H92 |
|---|---|---|---|---|---|
| SAUDI LIGHT | $27.00 | $27.00 | $21.00 | $22.00 | $22.00 |
| FREIGHT GULF TO CARI | $1.29 | $1.33 | $1.37 | $1.41 | $1.45 |
| FREIGHT CARIB TO NY | $0.94 | $0.97 | $1.00 | $1.03 | $1.06 |
| RESID AS % OF CRUDE + FREIGHT | 78% | 81% | 81% | 80% | 80% |
| PRICE BEFORE NYPB TA | $22.80 | $23.73 | $18.93 | $19.55 | $19.61 |
| NYPB TAX | $0.43 | $0.44 | $0.45 | $0.46 | $0.47 |
| 2.8% RESID PRICE | $23.23 | $24.17 | $19.38 | $20.01 | $20.08 |

CPB

| | 2H 90 | 1H 91 | 2H 91 | 1H 92 | 2H 92 |
|---|---|---|---|---|---|
| SAUDI LIGHT | $27.00 | $18.00 | $16.95 | $17.80 | $17.80 |
| FREIGHT GULF TO CARI | $1.29 | $1.33 | $1.37 | $1.41 | $1.45 |
| FREIGHT CARIB TO NY | $0.94 | $0.97 | $1.00 | $1.03 | $1.06 |
| CRUDE PLUS FREIGHT | $29.23 | $20.30 | $19.32 | $20.24 | $20.31 |
| RESID AS % OF CRUDE + FREIGHT | 78% | 81% | 81% | 80% | 80% |
| PRICE BEFORE NYPB TA | $22.80 | $16.44 | $15.65 | $16.19 | $16.25 |
| NYPB TAX | $0.43 | $0.44 | $0.45 | $0.46 | $0.47 |
| 2.8% RESID PRICE | $23.23 | $16.88 | $16.10 | $16.65 | $16.72 |
| DIFFERENCE | $0.00 | $7.29 | $3.28 | $3.36 | $3.36 |
| % DIFFERENCE | 0 | 30.16% | 16.93% | 16.79% | 16.73% |

APPROX. $/BARREL INCREMENT FOR DESULFURIZATION AND FINAL DELIVERY
(Calculated as 2H90 actuals with inflationary growth)

| | | | | | |
|---|---|---|---|---|---|
| 2.8 NORTHPORT/STN | $0.02 | $0.02 | $0.02 | $0.02 | $0.02 |
| 2.3 NORTHPORT/STN | $0.97 | $0.99 | $1.02 | $1.05 | $1.07 |
| 2.0 NORTHPORT/STN | $1.57 | $1.61 | $1.65 | $1.69 | $1.73 |
| 1.0 NORTHPORT/STN | $3.52 | $3.61 | $3.70 | $3.79 | $3.89 |
| 2.8 PJ/STN | $0.42 | $0.43 | $0.44 | $0.45 | $0.46 |
| 2.3 PJ/STN | $1.37 | $1.40 | $1.44 | $1.48 | $1.51 |
| 2.0 PJ/STN | $1.97 | $2.02 | $2.07 | $2.12 | $2.18 |
| 1.0 PJ.STN | $3.92 | $4.02 | $4.12 | $4.22 | $4.33 |
| 1.5 BAR/STN | $2.92 | $2.99 | $3.07 | $3.15 | $3.22 |
| .37 BAR/STN | $6.72 | $6.89 | $7.06 | $7.24 | $7.42 |
| 1.0 GLENWOOD/STN | $3.92 | $4.02 | $4.12 | $4.22 | $4.33 |
| .37 GLENWOOD/STN | $6.72 | $6.89 | $7.06 | $7.24 | $7.42 |
| .7 NORTHPORT/STN | $5.07 | $5.20 | $5.33 | $5.46 | $5.60 |
| .3 FAR ROK/STN | $7.02 | $7.20 | $7.38 | $7.56 | $7.75 |
| ARITHMETIC AVERAGE | $3.30 | $3.38 | $3.46 | $3.55 | $3.64 |

ESTIMATED DELIVERED PRICE (CPB)
(SUM OF RESIDUAL PRICE AND DELIVERY/DESULFURIZATION)

| 2H 90 | 1H 91 | 2H 91 | 1H 92 | 2H 92 |
|---|---|---|---|---|
| $26.53 | $20.26 | $19.56 | $20.20 | $20.36 |

ESTIMATED DELIVERED PRICE (LILCO)
(SUM OF RESIDUAL PRICE AND DELIVERY/DESULFURIZATION)

| 2H 90 | 1H 91 | 2H 91 | 1H 92 | 2H 92 |
|---|---|---|---|---|
| $26.53 | $27.55 | $22.84 | $23.56 | $23.72 |

LILCO MINUS CPB

| | 2H 90 | 1H 91 | 2H 91 | 1H 92 | 2H 92 |
|---|---|---|---|---|---|
| | $0.00 | $7.29 | $3.28 | $3.36 | $3.36 |
| % DIFFERENCE OVER LILCO | 0.00% | 26.46% | 14.36% | 14.26% | 14.17% |
| annual averages | | | 20.41% | | 14.21% |

RATE CASE FUEL EXPENDITURES
(IN THOUSANDS OF DOLLARS)

| | OIL |
|---|---|
| RATE YEAR ENDING 11/92 | 353673 |
| RATE YEAR REDUCED BY 14.21% | 303416 |
| DIFFERENCE | $50,257 |

MAJOR ASSUMPTIONS

1. LILCO FORECASTS OF THE FOLLOWING ARE NOT AFFECTED BY THE CHANGE IN OIL PRICES

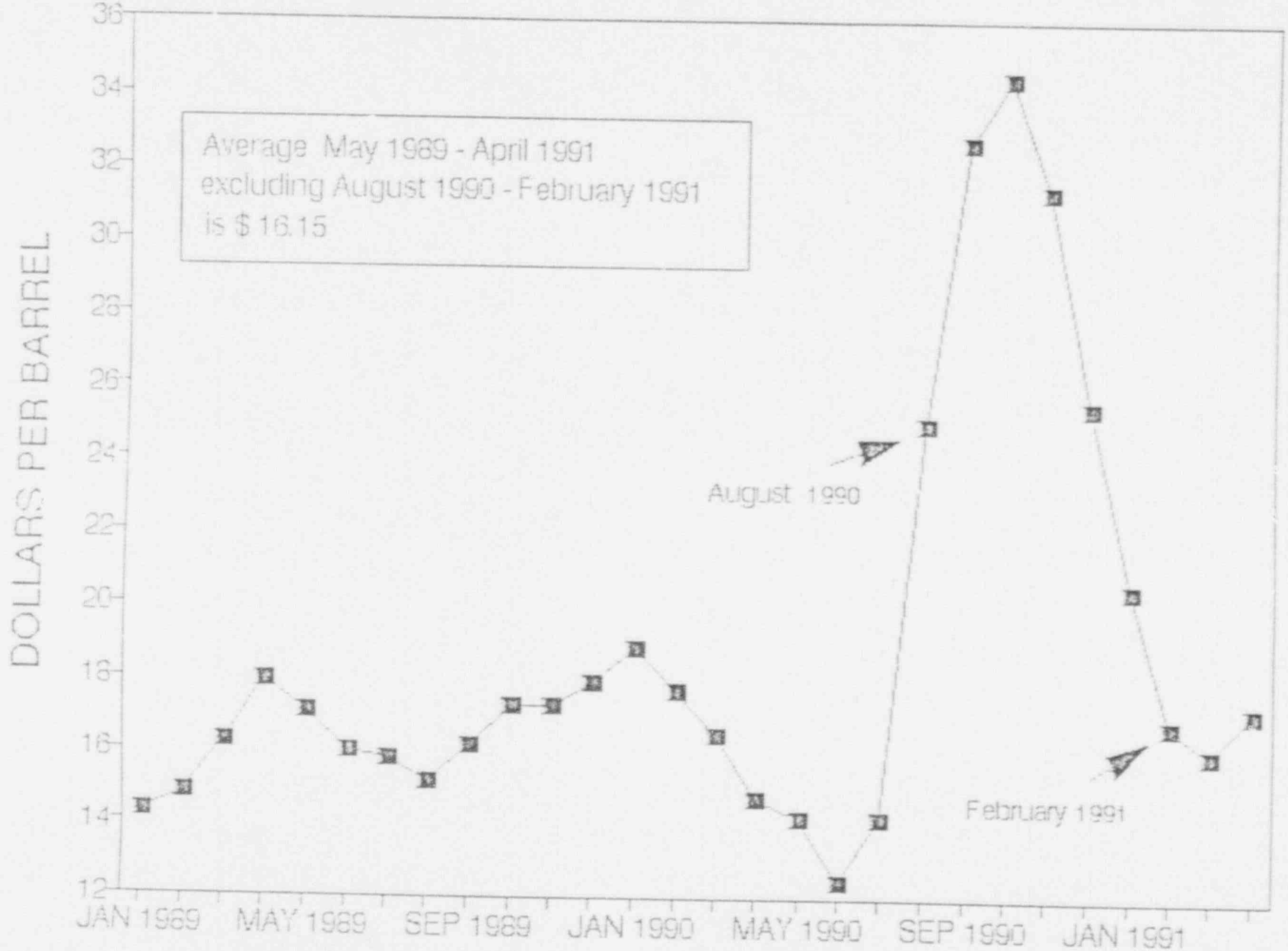
   FREIGHT/TRANSPORTATION COSTS
   NYPB TAX
   PRICE OF RESID FUEL RELATIVE TO CRUDE
   DESULFURIZATION AND FINAL DELIVERY COSTS
   LILCO's FUEL MIX

2. USE OF ARITHMETIC AVERAGE OF DESULFURIZATION AND DELIVERY COSTS FOR ALL OF LILCO'S OIL BURNING PLANTS APPROXIMATES LILCO'S ACTUAL DESULFURIZATION AND DELIVERY COSTS.

Exhibit____(DWE)
Schedule 2

# OIL PRICES -- SAUDI LIGHT CRUDE

DOLLARS PER BARREL



STATE OF NEW YORK

PUBLIC SERVICE COMMISSION

| In the Matter of<br>Proceeding on the Motion of the Commission as to the Rates, Charges, Rules and Regulations of Long Island Lighting Company for Gas & Electric rates | Case<br>90-E-1185 |
|---|---|

DIRECT TESTIMONY

OF

RALPH C. SMITH

Appearing on Behalf of

The New York State Consumer Protection Board

Larkin & Associates
15728 Farmington Road
Livonia, Michigan 48154

Dated: Albany, New York
May 22, 1991

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RALPH C. SMITH

I. INTRODUCTION

Q. PLEASE STATE YOUR NAME, OCCUPATION, AND BUSINESS ADDRESS.

A. My name is Ralph C. Smith. I am a certified public accountant and a senior regulatory utility consultant with the firm of Larkin & Associates, a firm of certified public accountants and regulatory consultants. My business address is 15728 Farmington Road, Livonia, Michigan 48154. I have been with Larkin & Associates since July 1979.

Q. WHAT IS YOUR EDUCATIONAL BACKGROUND?

A. I received a Bacholor of Science degree in Business Administration (Accounting Major) with distinction from the University of Michigan - Dearborn, in April 1979. I passed all parts of the C.P.A. examination in my first sitting in 1979, received my CPA license in 1981, and received a certified financial planning certificate in 1983. I also have a Master of Science in Taxation from Walsh College, 1981, and a law degree (J.D.) cum laude from Wayne State University. In addition, I have attended a variety of continuing education courses in conjunction with maintaining my accountancy license. I am a licensed Certified Public Accountant and attorney in the State of Michigan. For the past five years I have been a member of the Michigan Association of Certified Public Accountants. I am also a member of the Michigan Bar Association and the American Bar Association (ABA). In the ABA I am a member of the sections

of Public Utility Law and Federal Income Taxation.

Q. PLEASE SUMMARIZE YOUR PROFESSIONAL EXPERIENCE.

A. Subsequent to graduation from the University of Michigan, and after a short period of installing a computerized accounting system for a Southfield, Michigan realty management firm, I accepted a position as an auditor with the predecessor CPA firm to Larkin & Associates in July 1979. Before becoming involved in utility regulation where the majority of my time for the past seven years has been spent, I performed audit, accounting, and tax work on a wide variety of businesses that were clients of the firm.

During my service in the regulatory section of our firm I have been involved in rate cases and other regulatory matters concerning numerous electric, gas, telephone, water, and sewer utility companies. My present work consists primarily of analyzing rate case filings of public utility companies before various regulatory commissions, and, where appropriate, preparing testimony and schedules relating to the issues for presentation before these regulatory agencies.

I have performed work in the field of utility regulation on behalf of industry, state attorney generals, consumer groups, municipalities, and public service commission staffs concerning regulatory matters before

regulatory agencies in Alabama, Alaska, Arizona, Connecticut, Delaware, Florida, Georgia, Kentucky, Louisiana, Maine, Michigan, Minnesota, Mississippi, Missouri, New Jersey, New York, Nevada, Ohio, Pennsylvania, South Carolina, Texas, and Canada as well as the Federal Energy Regulatory Commission and various state and federal courts of law.

Q. HAVE YOU PRESENTED ANY TRAINING SEMINARS ON PUBLIC UTILITY ACCOUNTING?

A. Yes, along with two other members of the firm I presented a one-day seminar on utility accounting for the Legal Services Regional Utilities Task Force in Atlanta, Georgia. We also presented a two-day seminar on utility accounting for the Utility and Rate Intervention Division of the Kentucky Attorney General. Individuals from that division as well as industry and consumer groups attended the seminar. In September 1988, we presented a two-day seminar on utility accounting for the Office of Consumer Advocate, Attorney General's Office, State of Pennsylvania. Individuals from that Division as well as Pennsylvania Commission Staff members attended. Additionally, with Hugh Larkin, I presented a one-day seminar on the impact of the Tax Reform Act of 1986 on public utilities. This seminar was presented to personnel of the Maine Public Advocate and

Maine Public Utilities Commission Staff.

Q. HAVE YOU PREPARED AN APPENDIX LISTING YOUR REGULATORY EXPERIENCE?

A. Yes. I have attached Appendix I which provides additional details concerning my experience and qualifications.

Q. BY WHOM WERE YOU EMPLOYED IN THIS CASE AND FOR WHAT PURPOSE?

A. Larkin and Associates was employed by the New York Consumer Protection Board ("CPB") to review the electric rate filing of Long Island Lighting Company ("LILCO" or "Company") before the New York Public Service Commission ("Commission" or "PSC").

Q. PLEASE DESCRIBE THE TASKS YOU PERFORMED RELATED TO YOUR WORK EFFORT ON THIS PROJECT.

A. I obtained and reviewed data and performed other procedures as necessary to (1) obtain an understanding of the Company's rate filing package as it relates to rate base, operating income and revenue requirement in this case and (2) formulate an opinion concerning the reasonableness of amounts included within the Company's rate filing.

These procedures included requesting and reviewing extensive discovery, issuing follow-up information requests

in many instances, telephone discussions with Company representatives and discussions with counsel and CPB Staff assigned to the project.

Q. HAVE YOU PREPARED AN EXHIBIT TO PRESENT IN SUPPORT OF THE CPB'S REVENUE REQUIREMENT AND ACCOUNTING TESTIMONY?

A. Yes. I have prepared CPB Exhibit ___(RCS-1) comprised of 21 schedules.

Q. WAS THIS EXHIBIT PREPARED BY YOU?

A. Yes, this exhibit was prepared by me or under my direct supervision and is correct to the best of my knowledge and belief.

Q. WHAT SPECIFIC ISSUES WILL YOU BE ADDRESSING IN YOUR TESTIMONY?

A. My direct testimony discusses the development of the CPB's recommended adjustments to rate base and net operating income.

## II. REVENUE REQUIREMENT IMPACT SUMMARY

Q. HAVE YOU PREPARED A SCHEDULE WHICH SUMMARIZES YOUR RECOMMENDED ADJUSTMENTS AND SHOWS THE REVENUE REQUIREMENT IMPACT OF EACH?

A. Yes. Exhibit ___(RCS-1), Schedule 1 presents this summary,

and shows the approximate revenue requirement impact for the rate year associated with each of the adjustments I am proposing adjustments totalling ~~$29~~ $34.5 million.

## III. RATE BASE

### A. Summary

Q. HAVE YOU PREPARED A SCHEDULE SUMMARIZING YOUR RECOMMENDED ADJUSTMENTS TO RATE BASE?

A. Yes. My recommended rate base adjustments are summarized on Exhibit ___(RCS-1), Schedule 2.

### B. Plant in Service

Q. HAVE YOU REVIEWED THE COMPANY'S PROJECTION OF NET UTILITY PLANT FOR THE RATE YEAR ENDING NOVEMBER 30, 1992?

A. Yes. The Company's projection is shown at LILCO Exhibit No. 17, Schedule Nos. 1 and 2. For the rate year, LILCO projects average Net Electric Plant of $2,342,948,000, including $85,404,000 for the electric portion of net common plant.

Q. DO YOU BELIEVE THE COMPANY'S PROJECTION IS ACCURATE?

A. No, I do not.

Q. WHY DO YOU DOUBT THE ACCURACY OF THE COMPANY'S RATE-YEAR PLANT-IN-SERVICE PROJECTION?

A. The Company's projection of plant in service is affected by its projected capital expenditures. Information provided by the Company in response to CPB-50 indicates that in each year during the period 1987 through 1990, the Company's electric construction budget overstated actual construction expenditures by substantial amounts, as summarized in the following table:

LILCO's Historical Overprojection of Electric Capital Expenditures (Amount LILCO Budget Exceeds Actual)

| | Overprojection Amount (Millions) | Overprojection Percent |
|---|---|---|
| Year | | |
| 1987 | $ 39.969 | 7.64% |
| 1988 | 48.398 | 9.71% |
| 1989 (note) | 29.880 | 14.44% |
| 1990 | 32.261 | 11.35% |

(Note: Excludes impact of actual $109.413 million Shoreham AFC credit. Without this exclusion, LILCO's 1989 construction budget is overstated by $139.293 million, or 67.33%).

Exhibit ___(RCS-1), Schedule 3 summarizes the comparison of LILCO's actual construction expenditures with its budgeted amounts. Exhibit ___ (RCS-1), Schedule 4 reproduces LILCO's response to interrogatory CPB-50.

Q. DO YOU EXPECT THAT LILCO'S HISTORICAL EXPERIENCE OF OVER-ESTIMATING ITS ACTUAL CAPITAL EXPENDITURES WILL CONTINUE?

A. Yes. I would expect that LILCO's actual capital

expenditures will continue to be less than the amounts indicated in the Company's capital budgets for 1991 through 1995, since LILCO has stated explicitly as one of its corporate goals that it intends to maintain spending levels targeted at 3% below its approved 1991 expense and capital budgets. LILCO's "Service Objectives for 1991" booklet shows this corporate goal of holding capital spending to at least 3% under LILCO's budgets will continue through 1995.

Q. HAVE YOU COMPARED ACTUAL PLANT IN SERVICE BALANCES WITH THOSE CONTAINED IN LILCO'S PROJECTION FOR SPECIFIC TIMES DURING THE PROJECTION PERIOD?

A. Yes. Exhibit ___(RCS-1), Schedule 5 shows that LILCO's projection, as presented in Company Exhibit No. 17, overstates electric plant in service at December 31, 1990 by $42.301 million and overstates the electric portion of common plant in service by $5.202 million, for a total overstatement of plant in service at December 31, 1990 of $47.503 million. Similarly, LILCO's projection overstates accumulated depreciation on electric plant in service and the electric portion of common plant in service at December 31, 1990 by $18.747 million. As shown on Schedule 5, page 1 of 3, LILCO's overstatement of net plant amounts to $28.756 million.

Page 2 of 3 shows the calculation of LILCO's

overstatement of net electric plant in service at December 31, 1990. Schedule 5, page 3 of 3, shows LILCO's overstatement of the electric portion of common plant in service at December 31, 1990.

Q. HAVE YOU REQUESTED INFORMATION FROM LILCO CONCERNING CONSTRUCTION SCHEDULE SLIPPAGE, SLIPPAGE OF PROJECTED IN-SERVICE DATES, AND THE POTENTIAL IMPACT ON THE COMPANY'S PROJECTED PLANT IN SERVICE BALANCES?

A. Yes. Interrogatory CPB-232 requested additional information from the Company concerning slippage of Company-projected in-service dates for construction projects and comparison of actual with Company-projected plant in service balances. LILCO's response admits slippage for construction projects other than Shoreham and Nine Mile Point 2, and claims the extent of such slippage and the specific reasons for such slippage are not readily determinable. LILCO's response claims further that its "project records would not indicate reasons for any delays."

Slippage in the Company's projected construction schedule, coupled with the fact that the Company has a corporate goal to spend at least 3% less than the amounts contained in its capital budget, may indicate that the Company's projected net plant in service balances for the rate year are overstated by even more than the difference

existing at December 31, 1990.

Q. WHAT ADJUSTMENT ARE YOU RECOMMENDING?

A. At this time, I am recommending that the Company's projected net plant in service be reduced by $28.756 million, based on the overstatement contained in the Company's projections as of December 31, 1990. The Company's Exhibit 17 shows that the Company's rate base amount for the rate year is computed using a 12-month average for the period ending November 1992. An overstatement at December 31, 1990 would tend to fluctuate from month to month; however, the Company's calculations start with a June 1990 amount and project forward fluctuations in the Plant in Service (Account 101) and the Completed Construction not Classified (Account 106) accounts through the end of the rate year period. Starting with a December 31, 1990 balance and using the Company's projected activity for January 1991 through November 1992 would produce, on average, the same amount of rate-year overstatement that existed at December 31, 1990.

Q. WHAT IS THE AMOUNT OF YOUR PROPOSED ADJUSTMENT?

A. Rate year net plant should be reduced by $28.756 million as shown on Schedule 5, page 1 of 3.

C. Accumulated Depreciation

Q. PLEASE EXPLAIN YOUR PROPOSED ADJUSTMENT FOR RATE YEAR ACCUMULATED DEPRECIATION.

A. The adjustment for rate-year plant in service also impacts the amount of rate year depreciation expense. A lower plant in service amount is associated with a lower depreciation expense. Since rate year depreciation expense is reduced, the average balance of rate year accumulated depreciation is also reduced. This adjustment reduces the average rate year balance of accumulated depreciation for one-half of the reduction in rate year depreciation expense.

D. Fuel Inventory

Q. WHAT AMOUNT HAS THE COMPANY PROPOSED FOR RATE YEAR FUEL INVENTORY?

A. LILCO has proposed a rate year fuel inventory of 1,983,000 barrels of oil, valued at $50.918 million, as shown on Company Exhibit 9, Schedule 2. This assumes an average price per barrel of $25.68.

Q. WHAT IS THE BASIS FOR THE COMPANY'S RATE YEAR OIL INVENTORY QUANTITY?

A. The oil inventory quantity used by the Company for the rate year of 1.983 million barrels is based on LILCO's actual inventory at June 30, 1990. LILCO's response to CPB-138

indicates that this inventory was comprised of 1,752,363 barrels of No. 6 oil and 231,033 barrels of No. 2 oil, which is used at the Company's internal combustion plants.

Q. HAVE YOU ANALYZED THE COMPANY'S FUEL OIL INVENTORY QUANTITIES BASED ON THE NUMBER OF DAYS BURNED THEY REPRESENT?

A. Yes. This analysis is summarized on Schedule 6. In 1988 and 1989, LILCO's No. 6 fuel oil inventory, on average, represented about 36 days burned. This increased to 44.6 days burned in 1990, corresponding with lower consumption and Iraq's invasion of Kuwait. LILCO's 1991 projection reflects 29.6 days burned on average inventory; however, as LILCO projects its fuel oil consumption to decline significantly, presumably associated with LILCO's lower sales forecast, the number of days burn on LILCO's average inventory for the rate year increases to over 44 days.

As also shown on Schedule 6, LILCO has projected consumption of No. 2 oil, which it burns at its internal combustion generating units, to drop off dramatically, from 1.8 million barrels in 1989, to under 640,000 barrels in 1990, and still further to about 195,400 barrels for the rate year. Despite this drastic decline in actual, and projected, consumption of No. 2 oil, LILCO's rate year inventory assumption is high compared to other years in

terms of the 12-month average inventory level itself, and represents a more than ten-fold increase over the 37.4-days' burn in average inventory experienced by the Company in 1989. Reviewed from another perspective, for the rate year, LILCO's projected average inventory for No. 2 fuel oil of 231,033 projected barrels is more than 1.18 times the Company's annual consumption of such oil -- 195,399 barrels.

Q. SHOULD THE QUANTITY OF FUEL OIL INVENTORY LILCO USED TO PROJECT THE RATE YEAR AMOUNT TO BE INCLUDED IN RATE BASE BE ADJUSTED?

A. Yes, it should. LILCO's assumed quantities represent a number of days burn in average inventory that is substantially higher than historical experience would indicate. Additionally, the No. 2 oil quantities assumed by LILCO for the rate year exceed historical quantities. Moreover, LILCO has projected significantly reduced consumption of both No. 6 oil and No. 2 oil for the rate year; this reduced oil consumption should also equate to reduced average fuel inventory quantities.

Q. WHAT IS YOUR RECOMMENDATION?

A. I believe LILCO's average rate year inventory quantity for No. 6 oil could be based on 36 days' burn. This is the number of days burn in LILCO's average inventory for the

years 1988 and 1989. This would equate to a rate year inventory quantity of 1.422 million barrels, computed as follows: rate year consumption of 14,458,000 barrels times 36/366 days. At maximum, LILCO should be allowed an average rate year inventory for No. 5 fuel oil of 1,738,120 barrels, based upon 44 days' consumption level.

For No. 2 oil, I recommend the rate year inventory quantity be set at one-half of LILCO's projected rate year consumption. This produces an average inventory level of 97,700 barrels. I should point out that the maximum No. 2 oil consumption LILCO projects for the rate year is 45,333 barrels in July and 53,377 barrels in August 1992. The average inventory of 97,700, therefore, represents enough inventory to cover LILCO's maximum rate year projected consumption of this fuel in any 60-day period.

Q. HAS LILCO STATED ITS EXPECTED OIL INVENTORY LEVELS FOR THE RATE YEAR PERIOD?

A. Yes. In response to Shoreham Wading River interrogatory 30, LILCO stated that it has the following expectations for oil inventory levels:

> LILCO's normal inventory target, which represents seventy five percent of maximum consumption during a ninety day period, is 1.93 million barrels. LILCO's expected oil inventory levels for 1991, 1992, and 1993 are 1.835 million barrels, 1.791 million barrels, and 1.779 million barrels, respectively. No projections have been made beyond 1993.

In response to CPB-221(a), LILCO stated:

> The Company's target inventory of 1.93 million barrels was established in late 1987 and only includes steam unit storage facilities. The oil inventory that was utilized in the rate year was 1.983 million barrels reflects the actual inventory at the end of June, 1990, and reflects inventory for steam and internal combustion units.

In response to Shoreham Wading River interrogatory 21, LILCO stated:

> LILCO's oil inventory target during this time period was 1.93 million barrels. The target was increased by 250,000 barrels on October 1, 1990 in response to the Mid East crisis and will be returned to 1.93 million barrels by May 1, 1991.

Q. WHAT WAS LILCO'S TARGET FUEL INVENTORY BEFORE ESTABLISHING IT AT 1.93 MILLION BARRELS?

A. LILCO established its 1.93 million barrel target fuel inventory on October 27, 1987. Prior to this, in order to conserve cash, LILCO had a target inventory of 1.329 million barrels. Note that this inventory level would equate to, on average, 33.6 days' burn, based on LILCO's projected rate year consumption. (1.329 x 365/14.458 million barrels rate year consumption = 33.64 days' burn on average inventory. LILCO's response to CPB-221(c) indicates that this "austerity" target of 1.329 million barrels remained in effect for the period March 22, 1984 through October 26, 1987. LILCO's current 1.93 million barrel target represents

a 45% increase over its previous target of 1.329 million barrels.

Q. WHAT ARE THE COMPANY'S LATEST ACTUAL OIL PRICES?

A. LILCO's response to CPB-214 indicates that, in March 1991, the Company purchased 1,182,165 gallons of No. 2 oil at a cost of $834,326, for a per-gallon price of $0.7058. Additionally, in March 1991, LILCO purchased 1,618,170 barrels of No. 6 oil at a cost of $24,580.322, for a received unit cost of $15.19 per barrel.

Q. HAVE YOU RECEIVED THE COMPANY'S <u>CURRENT</u> EXPECTATIONS OF OIL PRICES FOR THE RATE YEAR?

A. Yes. In response to interrogatory CPB-222, LILCO provided Mr. Lancaric's current projection (containing an "issued" date of May 2, 1991) of prices for residual oil, No. 2 oil, and gasoline.

Q. COULD YOU BRIEFLY SUMMARIZE WHAT THIS FORECAST INDICATES?

A. Yes. The following table summarizes LILCO's forecast for the first and second half of 1991 (the periods which most closely correspond with the rate year ending November 30, 1992):

| Fuel | 1H/92 | 2H/92 |
|---|---|---|
| 1.0% Residual oil, per BBL | $ 17.39 | $ 17.92 |
| 1.0% Res. oil @ Northport | 17.40 | 17.90 |
| 1.0% Res. oil @ Port Jefferson | 17.80 | 18.30 |
| No. 2 oil, per gallon | 0.59 | 0.59 |
| No. 2 oil, barge delivery | 0.61 | 0.61 |
| No. 2 oil, truck delivery | 0.64 | 0.64 |

Q. WHAT FUEL PRICES DID YOU UTILIZE FOR VALUING LILCO'S RATE YEAR FUEL INVENTORY?

A. I used the average delivered prices for No. 6 and No. 2 oil indicated in LILCO's current forecast.

Q. IS IT YOUR UNDERSTANDING THAT LILCO IS GOING TO UPDATE ITS FUEL PRICE PROJECTION BEFORE A DECISION IS ISSUED IN THIS CASE?

A. Yes. Counsel has informed me that LILCO intends such an update, and that such updates are common in rate proceedings before the Commission.

Q. HOW SHOULD SUCH AN UPDATE BE USED IN VALUING FUEL INVENTORY FOR THE RATE YEAR?

A. The inventory quantities determined to be appropriate by the Commission should be re-priced using the updated forecast, providing that forecast appears reasonable.

Q. BASED ON THE INFORMATION AVAILABLE TO YOU AT THIS POINT, WHAT ADJUSTMENT ARE YOU RECOMMENDING FOR LILCO'S PROJECTED

AVERAGE FUEL OIL INVENTORY FOR THE RATE YEAR?

A. As shown on Exhibit ___(RCS-1), Schedule 7, the projected fuel inventory amount contained in the Company's rate filing of $50.918 million should be reduced by at least $17.402 million. If LILCO's average rate year inventory for No. 6 oil is determined using 36 days' burn (LILCO's average inventory for 1988 and 1989), then this reduction would need to be $23.018 million.

E. Accumulated Deferred Income Taxes

Q. HAS THE COMPANY REFLECTED ACCUMULATED DEFERRED INCOME TAXES IN ITS DETERMINATION OF RATE BASE FOR THE RATE YEAR ENDING NOVEMBER 30, 1992?

A. Yes. LILCO Exhibit No. 5, Schedule 12, page 1 of 7, shows accumulated deferred Federal income taxes being deducted from rate base for the rate year ended November 30, 1992 in the amount of $512.852 million.

LILCO Exhibit 22, Schedule 2, purports to list the specific items included in the Company's average balance of electric rate base deferred taxes for the 12 months ended November 30, 1992. These items total $510.588 million. This is $2.264 million less than the amount the Company has reflected in its rate base calculation. The Company's testimony offers no explanation of this; nor do the Company's workpapers explain why this discrepancy exists.

In fact, we were provided with no workpapers for LILCO Exhibit 22, Schedule 2, although these were requested.

Q. DO ANY OF THE ITEMS LISTED ON COMPANY EXHIBIT 22, SCHEDULE 2 APPEAR QUESTIONABLE FOR RATE BASE TREATMENT?

A. Yes. LILCO has listed certain debit balances of Accumulated Deferred Income Taxes recorded in Account 190 which may be inappropriate for inclusion in rate base. Specifically, LILCO has included a debit balance of $3.689 million for Interest Expense Accrual; a debit balance of $352,000 relating to a settlement with Westinghouse; and a $154,000 debit balance associated with the gain the Company realized on the sale of Mitchell Gardens.

Q. WHY HAS THE COMPANY BEEN RECORDING ACCUMULATED DEFERRED INCOME TAXES IN ACCOUNT 190 FOR THIS "INTEREST EXPENSE ACCRUAL" ITEM?

A. In response to interrogatory CPB-143, LILCO provided the following explanation:

> Interest Expense Accrual
>
> Accrued Interest Expense relating to various tax audits is currently being expensed on the Company's books but excluded from taxable income. The deferred taxes associated with Accrued Interest Expense are recorded in Account 190.

Q. LILCO STATES THAT THIS ACCRUED INTEREST EXPENSE IS BEING

RECORDED ON ITS BOOKS. IN WHAT ACCOUNT HAS THE COMPANY BEEN RECORDING SUCH INTEREST?

A. Page 63-2 of LILCO's 1990 annual report to the PSC indicates that during 1990 the Company recorded $6,174,058 interest on tax assessments in Account 431, Other Interest Expense.

Q. HAS THE COMPANY REFLECTED THIS INTEREST EXPENSE AS A DEDUCTION IN DETERMINING ITS INCOME TAX EXPENSE FOR RATEMAKING PURPOSES?

A. That is unclear at this point. LILCO's calculation of Federal income tax expense for purposes of the rate case appears at Company Exhibit 22, Schedule 1. There, LILCO shows a deduction for interest charges of $488.406 million; however, the components of this interest deduction are not clearly delineated in the Company's income tax workpapers that were provided to us. Interrogatory CPB-244 attempts to obtain from the Company the information necessary to understand which specific interest charges have been included in the $488.406 million amount.

Q. IF THE INTEREST EXPENSE ACCRUAL HAS NOT BEEN USED TO REDUCE INCOME TAX EXPENSE FOR RATEMAKING PURPOSES, WOULD IT BE APPROPRIATE FOR RATEPAYERS TO PAY THE COMPANY A RATE OF RETURN ON THE DEFERRED INCOME TAX AMOUNT FOR THIS ITEM WHICH THE COMPANY HAS RECORDED IN ACCOUNT 190?

A. No, it would not. Unless ratepayers have received the benefit of this tax deduction, they should not be required to pay the Company a return on the accumulated deferred income tax debit which the Company has recorded in Account 190 for this item. Because the Company recorded such interest in a "below-the-line" account, it is doubtful that ratepayers have received the benefit of the deduction.

Q. DID THE COMPANY SUPPLY INFORMATION CONCERNING THE SPECIFICS OF ITS VARIOUS TAX AUDITS UPON WHICH THE COMPANY HAS BEEN ACCRUING THIS INTEREST?

A. No. Interrogatory CPB-147 requested the following information:

> Provide a detailed description of any IRS audit, settlements with the Internal Revenue Service, or audit adjustments made during the five years ending December 31, 1990.

The Company refused to describe the IRS audits, the adjustments proposed in those IRS audits, or to provide calculations of the Company's accrued interest relating to those proposed audit adjustments, stating as follows:

> Because IRS audits of the tax years in which the test period falls have not been completed, the requested information for 1989 and 1990 does not exist. The requested information for tax years prior to the test period is irrelevant to the Company's rate filing and is not being provided.

Q. WHAT IS YOUR RECOMMENDATION?

A. The debit balance of Accumulated Deferred Income Taxes of $3.689 million relating to this "Interest Expense Accrual" should be removed from rate base.

Q. WHY HAS THE COMPANY RECORDED A DEFERRED INCOME TAX DEBIT AMOUNT IN ACCOUNT 190 FOR THE WESTINGHOUSE SETTLEMENT?

A. In response to interrogatory CPB-143, the Company provided the following explanation:

> Westinghouse Settlement
>
> The proceeds from the settlement of the Westinghouse breach of contract lawsuit have been recorded as income for tax purposes. The Public Service Commission in Case 9187 authorized deferred tax accounting.

Q. WHY HAS THE COMPANY RECORDED AN ACCUMULATED DEFERRED INCOME TAX DEBIT IN ACCOUNT 190 WITH RESPECT TO THE GAIN ON THE SALE OF MITCHELL GARDENS?

A. The Company's response to interrogatory CPB-143 contains the following explanation, which appears to apply to this gain:

> Gain from Disposition of Utility Property
>
> To record deferred taxes associated with the gain from disposition of utility property pursuant to Public Service Commission in Case #29484.

Q. SHOULD THE COMPANY'S ACCUMULATED DEFERRED INCOME TAX DEBIT AMOUNTS ASSOCIATED WITH THE WESTINGHOUSE SETTLEMENT AND THE GAIN FROM DISPOSITION OF UTILITY PROPERTY BE INCLUDED IN

RATE BASE SO THAT RATEPAYERS ARE REQUIRED TO PAY THE COMPANY A RETURN ON THESE ITEMS?

A. These items should be included in rate base only if (1) the associated benefits are being credited to ratepayers and (2) any deferred credits associated with these items are simultaneously reflected as reductions to rate base. If they are not, the accumulated deferred income tax debit amount should be removed from rate base. This adjustment would reduce revenue requirements by about $90,000.

F. Other Deferred Credits

Q. WHAT ARE "OTHER DEFERRED CREDITS"?

A. Other Deferred Credits are credit-balance deferred items, which LILCO has recorded in Account 253, an account of the same name which appears on the credit side of the Company's balance sheet. Examples of Other Deferred Credits include advance rentals collected by the Company, Excess Pension Expense under FASB 87, lawsuit settlement collections and litigation recoveries, property tax refunds, etc.

Q. WHY SHOULD OTHER DEFERRED CREDITS BE CONSIDERED IN CONJUNCTION WITH THE DETERMINATION OF RATE BASE?

A. A number of the items in this account represent sources of cost-free capital which should be reflected in the ratemaking process; the best way to do this is to

incorporate such balances as reductions to rate base.

Q. WHICH SPECIFIC ITEMS HAVE YOU IDENTIFIED AS POTENTIALLY BEING APPROPRIATE FOR USE AS RATE BASE CREDITS?

A. Exhibit ___(RCS-1), Schedule 10, lists the items which should be considered as cost-free capital to be reflected as credits to rate base. These amounts have been compiled from LILCO's 1990 Annual Report to the NY PSC. Estimated amounts for the Electric operations are shown in column 2. Concise reasons why each item deserves rate base treatment are stated in column 3.

Q. THE AMOUNTS YOU HAVE LISTED ARE AS OF DECEMBER 31, 1990. WOULD IT BE APPROPRIATE TO UPDATE THESE AMOUNTS FOR USE IN THE RATE YEAR?

A. Providing that the Company can produce an accurate forecast of the balances for the individual items recorded in Account 253, Other Deferred Credits, for the rate year, an update of these items could be appropriate.

Q. WHAT IS YOUR TOTAL RECOMMENDED RATE BASE ADJUSTMENT?

A. As shown on Schedule 10, my recommended adjustment reduces LILCO's electric rate base by $41.573 million.

G. Operating Reserves

Q. WHAT ARE "OPERATING RESERVES"?

A. Operating reserves are accruals recorded by the Company in Accounts 261 through 265 for items such as injuries and damages or pensions and benefits. These Operating Reserves appear on the liabilities and credits side of the Company's balance sheet. To establish these reserves, the Company would debit an expense account and credit the reserve account, similar to how the Company debits Depreciation for that expense and credits the Depreciation Reserve Account, as the other side of the journal entry.

Q. WHY SHOULD OPERATING RESERVES BE CONSIDERED IN THE DETERMINATION OF RATE BASE?

A. Operating reserves should be considered in conjunction with the determination of rate base, because the associated expenses have, at some point, been reflected in the cost of service and the reserve balance represents a source of cost-free capital to the Company.

Q. WHICH OPERATING RESERVES HAVE YOU IDENTIFIED AS BEING APPROPRIATE RATE BASE REDUCTIONS?

A. These are identified on Exhibit ___(RCS-1), Schedule 11, and include Account 262, Injuries and Damages Reserve, and Account 263, Pension and Benefit Reserve. I omitted Account

265, a Storm Cost Reserve, for these reasons: (1) it is unusual for this account to carry a debit balance; therefore, the December 31, 1990 balance did not represent normal experience, and (2) the Company has already reflected a $25.7 million deferred debit item in rate base for Emergency Storm Cost. The sum of these items amounts to $11.013 million, of which $8.982 million is the estimated electric portion. Rate base should be reduced by this amount.

IV. OPERATING EXPENSES

Summary

Q. HAVE YOU PREPARED A SCHEDULE WHICH SUMMARIZES YOUR RECOMMENDED ADJUSTMENTS TO OPERATING EXPENSES?

A. Yes. Exhibit ___(RCS-1), Schedule 12, summarizes my recommended adjustments to operating expenses.

Research and Development

Q. HOW MUCH IS LILCO PROJECTING TO SPEND ON RESEARCH AND DEVELOPMENT FOR THE RATE YEAR ENDING NOVEMBER 30, 1992?

A. According to workpapers LILCO supplied in support of its Exhibit 5, the Company is projecting Research and Development ("R&D") expenditures of $16.815 million for the rate year.

Q. HAVE YOU COMPARED THE LEVEL OF R&D EXPENSE PROJECTED BY THE COMPANY WITH ITS ACTUAL R&D EXPENDITURES OVER A RECENT HISTORICAL PERIOD?

A. Yes, I have. The following table compares LILCO's projected electric R&D expense with the amounts actually spent.

Electric Research & Development Expense
(Millions of Dollars)

| Year | Projected | Actually Spent | Not Spent |
|---|---|---|---|
| 1988 | $ 9.0 | $ 4.037 | $ 4.963 |
| 1989 | 15.0 | 4.089 | 10.911 |
| 1990 | 15.8 | 11.434 | 4.366 |

For each year, 1988 through 1990, LILCO failed to spend substantial portions of its projected R&D expenditures.

Q. HAVE YOU EXAMINED THE GROWTH FOR THE INDIVIDUAL COMPONENTS OF LILCO'S R&D PROGRAM?

A. Yes. CPB Exhibit ___ (RCS-1), Schedule 13, presents additional comparative information concerning the Company's actual and projected R&D expenditures. LILCO's proposed Electric Research and Development Program consists of an internal R&D Program and an external program. LILCO's proposed external program includes expenditures for membership in the Electric Power Research Institute ("EPRI"), the Empire State Electric Energy Research Corporation ("ESEERCO"), and the New York State Energy

Research & Development Authority ("NYSERDA").

As shown on Schedule 13, Page 1 of 2, the Company's internal R&D program expenditures averaged $2.706 million during the 3-year period 1987 through 1989. The Company's expense for this jumped by almost $6.2 million, or over 250% in 1990. LILCO has projected its 1991 expenditures to increase by an additional $1.4 million, more than 16% above the 1990 level. LILCO's projected 1992 internal R&D expenditures of $10.05 million exceed the Company's average R&D expenditures for the 1987 through 1989 period by $7.344 million, or 271%.

LILCO had no expenditures for EPRI during 1987 or 1988. Apparently, the Company found that its participation in EPRI was not necessary or was not cost-justified. In this regard, I note that a significant number of other electric utilities have also discontinued their EPRI Membership, with some eventually rejoining, and others not.

LILCO's R&D expenditures for ESEERCO have escalated from $54,000 in 1990 to $750,000, which LILCO has projected for 1991, a year-over-year increase of 1,289%. LILCO projects that its ESEERCO expenditures for 1992 at $1.6 million, which is more than double the Company's projected amount for 1991.

LILCO's NYSERDA expenditures have grown, and are projected to grow, at a more modest rate, as depicted on

Schedule 13.

LILCO's total electric R&D expenditures have grown, and LILCO projects these to continue to grow, substantially. LILCO's total electric R&D expenditures averaged about $4 million per year during the 3-year period, 1987 through 1989. LILCO's projected 1992 amount of $17.4 million exceeds this average level by $13.4 million, or over 335%.

Page 2 of Schedule 13, shows, graphically, LILCO's actual annual R&D expenditures, by program, and in total, for 1987 through 1990, and the Company's projections for 1991 and 1992.

Q. HOW MUCH OF THE EXPENDITURES OF EPRI, ESEERCO AND NYSERDA ARE DEVOTED TO NUCLEAR-RELATED PROJECTS?

A. In response to a CPB request for information made during cross-examination (Tr. at 845), the Company indicated that approximately 12% to 13% of EPRI research and 16% to 17% of ESEERCO research is devoted to a nuclear-related projects, as indicated in the following table. None of the NYSERDA research expenditures are for nuclear projects.

Percentage of Expenditures Devoted to
Nuclear Related Research

| Organization | 1991 | 1992 |
|---|---|---|
| EPRI | 13% | 12% |
| ESEERCO | 17% | 16% |
| NYSERDA | 0% | 0% |

Q. TO YOUR KNOWLEDGE, DO EACH OF THESE ELECTRIC UTILITY INDUSTRY RESEARCH AND DEVELOPMENT ORGANIZATIONS ALSO DEVOTE SIGNIFICANT PORTIONS OF THEIR RESEARCH BUDGETS TO FOSSIL FUEL GENERATION, AND SPECIFICALLY TO COAL-FIRED GENERATION?

A. Yes. A review of recent R&D program descriptions for these organizations reveals that EPRI, ESEERCO, and NYSERDA each devote what appears to be significant portions of their funding to fossil fuel generation, with significant portions of that devoted to coal-fired generation.

Q. DOES LILCO HAVE ANY COAL-FIRED GENERATION?

A. No, LILCO has no coal-fired generation. Moreover, through the year 2002, LILCO has no realistic probability of acquiring or constructing a coal-fired base load generating plant.

Q. DOES LILCO'S RATE FILING PACKAGE PRESENT A COST-BENEFIT ANALYSIS WHICH PURPORTS TO JUSTIFY THE COMPANY'S SUBSTANTIALLY INCREASED R&D SPENDING?

A. No, it does not. The testimony of LILCO witness Driscoll briefly describes the Company's R&D program, and LILCO Exhibit 14 summarizes its projected cost by program area; however, the Company's filing presents no cost-benefit analysis for any of the programs, nor does it present cost justification for its propored increases.

Q. ARE YOU FAMILIAR WITH LILCO'S PROCEDURE OF RECONCILING ITS ACTUAL R&D EXPENDITURES WITH ITS COLLECTIONS FROM RATEPAYERS FOR THESE R&D PROGRAMS?

A. Yes. I am aware that LILCO has used, and is proposing to continue, such R&D reconciliation procedures.

Q. DOES THE PROCEDURE OF RECONCILING THE AMOUNTS COLLECTED FROM RATEPAYERS FOR R&D WITH THE COMPANY'S ACTUAL R&D EXPENDITURES PROVIDE ADEQUATE SAFEGUARDS TO RATEPAYERS?

A. In my opinion it does not. Such procedures attempt to assure that amounts which are projected but not spent by the Company are returned to ratepayers; they do not, however, serve to provide any assurance that the Company's substantially increased expenditure levels are producing a commensurate benefit to ratepayers. Indeed, such "true-up" procedures, by providing assurance to the utility that whatever it spends would be recoverable from ratepayers, could provide an inappropriate incentive that would encourage the utility to spend money on borderline projects or research having dubious cost-benefit payback characteristics that it would not otherwise have funded.

Q. WHAT R&D REVENUE FACTOR IS CONTAINED IN THE CALCULATIONS UNDERLYING LILCO'S RATE FILING?

A. The calculations underlying LILCO's rate filing Exhibit 5

contained a R&D revenue factor of $0.496722 per Kwh as of September 1990. This compares to LILCO's calculated rate year R&D revenue factor of $0.990642. LILCO's computed rate year factor represents almost a 100% increase. Additionally, the Company's R&D revenue factor as of September 1990 was associated with an overcollection by the Company of R&D expenditures as of September 30, 1990 of $5.117 million. In other words, the existing R&D revenue factor of $0.496722 was allowing LILCO to significantly over-collect its actual R&D expenditures for that period.

Q. WHAT IS YOUR RECOMMENDATION?

A. I recommend that LILCO be allowed to pursue and recover the cost of its necessary R&D programs which have a favorable cost-benefit payoff, computed from the perspective of LILCO's ratepayors; moreover, the burden of demonstrating that the benefit of such R&D efforts outweigh the costs should be placed upon the utility requesting rate recovery of such expenditures. LILCO has shown during the 1987 through 1989 period that it can operate with an annual internal R&D program funding level of under $3 million, and that EPRI funding is non-essential. Moreover, a significant portion of EPRI's and ESEERCO's R&D funding is devoted to nuclear research, an area of questionable benefit to LILCO, since LILCO will not be able to operate Shoreham as a

nuclear unit. Moreover, R&D devoted to research concerning coal-fired generation is of doubtful benefit to LILCO's ratepayers; LILCO has no coal-fired generating capacity, nor is LILCO expected to operate or own any through the end of this century. Therefore, burdening LILCO's ratepayers with the cost of such R&D seems unreasonable. Accordingly, I recommend capping the rate year allowance for LILCO's internal R&D at $3 million, disallowing LILCO's proposed EPRI amount, and utilizing LILCO's proposed rate year projections for ESEERCO and NYSERDA, after removal of the nuclear portion of ESEERCO's research.

Q. WHAT ADJUSTMENT DOES THIS PRODUCE?

A. This reduces LILCO's proposed rate year R&D expense of $16.815 million, by $11.220 million, to $5.595 million, as shown on Schedule 14.

Office of Training

Q. HAS THE COMPANY INCLUDED AN AMOUNT FOR PROJECTED EMPLOYEE TRAINING COSTS IN ITS RATE REQUEST?

A. Yes. LILCO's witness Skorupski identifies $7,075,400 in projected employee training costs, for the rate year, as shown on Company Exhibit 12, Schedule 1. These costs are associated with LILCO's proposal to significantly expand its Office of Training.

Q. DO THE FIGURES LISTED ON LILCO'S EXHIBIT 12, SCHEDULE 1, INCLUDE INFLATION ON THE TEST-YEAR AMOUNTS, WHICH LILCO APPLIED IN DETERMINING ITS RATE YEAR EXPENSES?

A. No. It appears that the rate year amounts LILCO presents on its Exhibit 12, Schedule 1 fail to reflect the fact that LILCO applied inflation of 7.962% on test year labor expense to project rate year labor expense, or that LILCO applied a 10.07% inflation on test year non-payroll expenses to derive corresponding rate year expenses. In short, it appears that LILCO's Exhibit 12, Schedule 1 only reflects the impact of "normalization" adjustments, but fails to include the impact of the inflation from the test year to the rate year imbedded in LILCO's rate year expense request.

Q. WHAT WOULD THE RATE YEAR AMOUNT FOR LILCO'S OFFICE OF TRAINING COST BE, IF THE TEST-YEAR TO RATE-YEAR INFLATION WERE INCLUDED?

A. Instead of the $7,075,400 reported on LILCO's Exhibit 12, Schedule 1, the rate year amount, including LILCO's inflation assumptions, would be about $7.729 million.

Q. WHY DID LILCO ESTABLISH ITS OFFICE OF TRAINING?

A. LILCO originally formed its Office of Training to provide accredited training for its Shoreham nuclear plant operators, while pursuing a full power operating license.

As LILCO stated in response to interrogatory CPB-40:

> The Office of Training was established in the fall of 1986. At that time, its primary function was to support the Shoreham nuclear power plant training requirements and to get those training programs accredited by the Institute of Nuclear Power Operations while pursuing a full power operating license for Shoreham. Consequently, the majority of the Office of Training operating expenditures were charged to the Shoreham Capital project.

Q. AS A RESULT OF THE SETTLEMENT AGREEMENT, LILCO WILL NOT BE PUTTING THE SHOREHAM NUCLEAR PLANT IN TO SERVICE. WHY IS THE COMPANY STILL REQUESTING OVER $7,000,000 FOR RATE YEAR TRAINING COSTS?

A. Rather than dissolve this department, whose originally-intended function no longer exists, the Company has decided to shift the Training Department's focus and request additional money to perpetuate and expand it.

Q. WHAT FUNCTION WILL THE OFFICE OF TRAINING NOW SERVE?

A. It appears the Office of Training will become a training center for virtually all Company functions. In response to interrogatory CPB-40, LILCO states that:

> As the Shoreham Settlement Agreement (February 1989) is implemented, the Office of Training is able to shift its training efforts and focus on fossil electric generation, electric distribution lines, and management training.

According to Company witness Skorupski's testimony (at pages 7-9), it will provide for everything from training linemen

to management skills.

Q. HOW DOES THE COMPANY'S PROPOSAL TO EXPAND ITS IN-HOUSE TRAINING PROGRAMS IMPACT ITS COST FOR OUTSIDE SERVICES?

A. The Company claims an in-house training center will reduce the need for outside contractors and consultants, albeit at higher cost. LILCO Exhibit 12, Schedule 1 shows that the increased cost of LILCO's in-house payroll of $993,000 exceeds the $847,000 reduction LILCO expects for consultants and contractors.

Q. IS THE COMPANY'S REQUEST FOR OFFICE OF TRAINING COSTS REASONABLE?

A. No, it is not.

Q. PLEASE EXPLAIN.

A. In reviewing this rate filing and the Company's rate request, it becomes increasingly evident that LILCO has transmuted from the "austerity mode" experienced during 1985-1988 to a mode of expansive spending, as evidenced by the Company's requests for additional money to substantially expand its computer operations, training center, work force, maintenance program, R&D programs, demand side management programs, and a number of other O&M expense areas -- all of which have contributed to LILCO

exceeding the annual rate increases envisioned in the Rate Moderation Agreement ("RMA").

Prior to the Shoreham Settlement, LILCO was on the verge of collapse. The Settlement was intended to enable LILCO to survive. It was understood that this would require sacrifices by the Company as well as higher rates for its consumers. Consequently, it would be untenable for LILCO to spend freely on programs such as this expanded training center, which do not appear to be essential for the Company's continued operations, as envisioned in the RMA.

Q. DID THE RMA MAKE ANY PROVISION FOR TRAINING COSTS?

A. Yes. The RMA provided for $5.8 million in training costs for 1992. The Company, however, is now requesting substantially more. Under the circumstances, LILCO should be exerting substantial efforts to contain its discretionary costs for programs like this Training Office within the levels provided for in the RMA.

Q. ARE YOU PROPOSING AN ADJUSTMENT FOR LILCO'S PROPOSED TRAINING CENTER COSTS?

A. Yes. As shown on Exhibit ___(RCS-1), Schedule 15, I propose to reduce LILCO's recoverable cost of service by $1,780,100. This adjustment allows the Company to recover the $5.8 million in training costs for 1992 provided for in the RMA.

Information Systems Expense

Q. HAS LILCO PROJECTED SUBSTANTIAL INCREASES FOR INFORMATION SYSTEMS COSTS?

A. Yes. LILCO Exhibit No. 11, Schedule 1 projects costs associated with its Office of Information Systems and Technology to increase by $8,082,500, from $21,128,858 in the test year ending June 30, 1990 to $29,211,358 in the rate year ending November 30, 1992. (It appears these amounts do not include the inflation adjustments on test-year expense, which LILCO has incorporated in its rate year expense claim, presented on its Exhibit 16; that is, the amounts shown on LILCO Exhibit 11, omit the "inflation" column impact from LILCO Exhibit 16, and only reflect the "Normalization and Rate-Year Conditions" adjustment column from LILCO Exhibit 16.)

Q. HAS LILCO EXPLAINED WHY IT NEEDS SUCH A LARGE INCREASE?

A. The testimony of LILCO witness Dimoulas, at page 4, states that financial constraints experienced in the period 1984 through 1989 required LILCO to remain in a "maintenance mode" for its information systems and hardware. The Company claims, as a result of this, that its information systems and hardware fell behind, and its technology has become antiquated.

Q. HAS THE COMPANY PROPOSED SUBSTANTIAL INCREASES IN ITS WORKFORCE ASSOCIATED WITH THE EXPANSION OF ITS OFFICE OF INFORMATION SYSTEMS AND TECHNOLOGY?

A. Yes, it has. LILCO's response to interrogatory CPB-38 shows that the Company is projecting the following increases in employees for its Office of Information Systems and Technology:

| Year | No. of Employees | Salaries |
|---|---|---|
| 1989 | 164 | $ 6,582,402 |
| 1990 | 221 | 9,422,891 |
| 1991 | 250 | 10,739,191 |
| 1992 | 266 | 11,513,191 |

This shows that LILCO proposes to add over 100 employees over three years and to increase salaries by almost 75% ($4.931 million).

Q. SHOULD LILCO'S PROPOSED EXPANSION OF ITS INFORMATION SYSTEMS COSTS BE ALLOWED TO BE RECOVERED FROM RATEPAYERS IN FULL?

A. No, it should not.

Q. WHY SHOULD LILCO'S PROPOSED COST INCREASES FOR INFORMATION SYSTEMS NOT BE ALLOWED IN FULL?

A. There are several reasons why these substantial increased costs should not be allowed to be recovered from LILCO's

ratepayers during the rate year.

First, LILCO stated that the financial constraints that it experienced during 1984 through 1989 influenced the Company to remain in a "maintenance mode" concerning its Informations Systems and hardware. It should be recognized that LILCO's financial constraints have not disappeared. The Rate Moderation Agreement does provide LILCO with a series of rate increases; however, even with the RMA, LILCO should be required to limit its operating expense growth. Dramatically expanding programs such as this, at a cost which far exceeds the inflation rates envisioned in the RMA, should not be permitted.

Second, it is unreasonable for ratepayers to pay for the significant expansion of LILCO's Information Systems and Hardware without receiving commensurate benefits. LILCO's rate year includes substantially increased costs; however, the benefits to ratepayers from these dramatic expansions appear to be non-existent, or not reflected.

Third, it is obvious that some data processing projects are more important than others. See, e.g., LILCO's responses to Staff Interrogatories CS-13-1 and CS-13-3. It would seem more appropriate for only the high priority projects to be funded at this time. Then, based on the outcome of implementing these "priority" projects, including an evaluation of any cost savings and efficiency

improvements produced, the other less important projects could be reassessed in terms of whether they are likely to be cost-beneficial from the perspective of LILCO's ratepayers.

Fourth, it appears that LILCO has begun implementing some of these projects. However, others will not be commenced until 1992. Some projects are forecasted by the Company to be completed until beyond the end of the rate year. For example, LILCO's "Customer" project is not expected to be completed until December 1996 and its "Employee" system until February 1994. See response to Staff Interrogatory CIS-13-3. It would be unreasonable to charge ratepayers currently for projects which are not expected to be completed until after the rate year.

Fifth, it appears that LILCO has projected that some portion of its total Information Systems Department payroll adjustment should be capitalized. See LILCO Exhibit 16, Schedule 3, page 5. The labor requirement in the development and implementation phases of these projects is apparently substantial, however, which raises doubts as to whether a sufficient amount of start-up costs have been capitalized. Additionally, doubts exist as to whether the expenses projected by LILCO will be on-going, or whether these are one-time developmental costs. The testimony of LILCO witness Dimoulas, at page 19, states that LILCO has

completed one information systems project, and has commenced eight others, out of a total of twelve. It would seem, therefor_, that there would be costs in the test year relating to those activities, which would be non-recurring.

Sixth, it appears that LILCO's level of test-year expenditures for Information Systems have been carried forward into LILCO's rate-year projections intact; that is, there appears to be no net expense reduction for removing the cost associated with contractors and consultants who would no longer be needed. No reductions are reflected on LILCO Exhibit 16, Schedule 9 (Contractors) associated with the Company's Information Processing Department, and LILCO Exhibit 16, Schedule 10 (Consultants) projects rate-year electric expense to show a net increase of $305,000 for the Information Processing Department, primarily related to a $275,300 annual increase in Consultant Programming Services. Despite all of the new employees LILCO wants to hire for its Information Systems Department, the Company projects the use of outside contractors to continue expanding.

Q. PLEASE DISCUSS LILCO'S PROPOSED OFFICE AUTOMATION PROJECT.

A. LILCO's Office Automation Project involves the interconnection of personal computers and LILCO's mainframe, for an integrated computer environment. The Company is

currently in Phase I of the plan. Mr. Dimoulas' testimony, at pages 20-22, indicates that there are four phases to the Company's plan. LILCO projects that its system will be fully implemented in late 1993.

Q. HAS THE COMPANY PROPOSED A PRODUCTIVITY ADJUSTMENT FOR THIS PROJECT?

A. Yes, supposedly, LILCO's productivity adjustment relates to this project. Mr. Dimoulas' testimony, at page 22, claims that the Company's 1% productivity savings adjustment relates to this Information Systems project.

Q. DOES THE REFLECTION OF A 1% PRODUCTIVITY FACTOR APPLIED TO PAYROLL EXPENSES TO DETERMINE A RATEMAKING ADJUSTMENT APPEAR TO BE ASSOCIATED WITH IMPLEMENTING COMPUTER PROJECTS OR SPECIFICALLY TO LILCO IMPLEMENTING ITS OFFICE AUTOMATION PROJECT?

A. No, it does not. The application of a 1% productivity adjustment, i.e., the exclusion of 1% of payroll expense associated with improved productivity, appears to be consistent with established Commission precedent. See, e.g., the Commission's Decision in Case 89-G-179 (National Fuel Gas Distribution Corporation), Case 28798 (Niagara Mohawk Power Corporation), and Case 29088 (National Fuel Gas Distribution Corporation). Additionally, the recommended

decision in Cases 90-G-0734 and 91-G-0019 (National Fuel Gas Distribution Corporation), issued May 1, 1991 states as follows:

> <u>Productivity</u>
>
> Typically, the Commission applies a 1% productivity factor to a utility's payroll expenses to account for all savings opportunities which might arise in the course of the rate year, which have not been specifically accounted for in the calculation of the company's cost of service. In this proceeding, Staff proposed to make this standard adjustment.
>
> * * *
>
> The Company's productivity study has failed to identify all sources of productivity opportunities in the rate year, and so must be rejected. Staff's proposed adjustment should be adopted.

Thus, it appears that a 1% productivity adjustment would be made as a matter of course, regardless of LILCO's Office Automation project. If there is additional productivity associated with LILCO's Office Automation project, then an additional productivity adjustment should be reflected in the rate year.

Q. HAS LILCO PERFORMED ANY LABOR PRODUCTIVITY ANALYSIS?

A. No. According to LILCO's response to interrogatory CPB-170, no Company-wide labor productivity analysis has been done during the past three years.

Q. SHOULD THE COMPANY'S PROPOSED COSTS ASSOCIATED WITH OFFICE

AUTOMATION BE INCLUDED IN FULL IN RATE YEAR OPERATING EXPENSES?

A. No.

Q. WHY NOT?

A. First, this project, according to the Company, will not be completed until late 1993, substantially beyond the end of the rate year.

Second, this project appears to be primarily capital in nature. It involves the acquisition of computer hardware, and the implementation of computer systems over a period of time exceeding one year. LILCO's costs for Office Automation are included in the amount shown on Company Exhibit 11, Schedule 2; however, such costs are not segregated from the other information systems costs also included on that schedule. It is possible that a larger proportion of the costs associated with LILCO's Office Automation project than those reflected by the Company in the rate year should be capitalized.

Q. HAVE THE PRICES OF THE TYPES OF COMPUTER SYSTEMS BEING PURCHASED BY LILCO BEEN REDUCED SINCE THE COMPANY FILED ITS RATE CASE?

A. Yes. Such costs have been slashed dramatically. LILCO has contracted with Digital Equipment Corporation ("DEC") to

provide computer systems and services which are anticipated to link twenty of LILCO's offices and power plants during the next two years. DEC will supply its All-in-1 software, which includes document processing, electronic messaging, teleconferencing, graphics, and a spreadsheet. Also included in the $7 million contract are DEC-supplied VAX 6000 and VAX 4000 computers, and MicroVAX 3100 systems.

In the week of May 6, 1991 DEC slashed prices for its VAX 6000 minicomputer line by as much as 37%, and cut prices on upgrades by between 30% to 69%. A DEC users advisory service has also announced that users can soon expect to see price cuts on DEC's VAX 4000 computer product lines as well.

It is possible that the prices reflected in the Company's rate year projections for Information Systems hardware do not reflect this latest amount of DEC price cuts. Additionally, it would be unwise for LILCO to spend significant amounts of money on VAX 4000 computers currently, when price cuts on that line are expected to be announced in the near future.

Q. ARE YOU AWARE OF ANY PRECEDENT IN NEW YORK RELATING TO THE DEFERRAL OF RATE RECOVERY OF UTILITY INFORMATION SYSTEMS COSTS TO CORRESPOND WITH THE PERIOD OF BENEFIT?

A. Yes. I am aware of the Commission's Opinion No. 90-8, which approved a stipulation between Staff and Rochester Telephone

Corporation ("RTC"). This Opinion, at pages 44-45, provided as follows concerning the appropriate ratemaking treatment of RTC's development of its new Information Management systems:

> Expense Deferrals
>
> RTC originally sought to recover projected rate year costs related to the development of its new Information Management Process System (IMP) ....
>
> The IMP system is made up of several computer systems aimed at replacing RTC's present system, which was designed in the 1970s using currently outdated technology. RTC states that this system will meet its needs through the 1990s and has estimated total costs through 1998 of $46[.5 million] .... The company has justified the expenditure by estimating $59[.7 million] ... in labor savings during this same period.
>
> A great deal of uncertainty surrounds the company's implementation timetable, overall cost projections, and use of the system by subsidiaries. Therefore, staff and the company have agreed that, except for $787,000 of rate year costs for systems already implemented, costs for new systems should be deferred until implementation, and amortized when labor savings are projected to begin.

Like RTC, LILCO is attempting to update its computer systems for use in the 1990s, and to replace currently outdated technology. Like RTC, a number of LILCO's major information systems projects will be completed in periods beyond the rate year. Like RTC, uncertainties exist with respect to LILCO's cost projections and implementation timetable. Like RTC, the benefits to be produced by LILCO's information system upgrades are anticipated to occur over a future

period. The Commission determined that the deferral of rate recovery for RTC's information system costs was reasonable. Deferral of LILCO's substantially increased information system costs is also reasonable, and would best match the period of cost recovery with the period benefitted.

Q. WHAT IS YOUR RECOMMENDATION CONCERNING THE COMPANY'S INCREASES IN INFORMATION SYSTEMS COSTS?

A. I recommend that the increase in such costs associated with LILCO's requested expansion of its Information Processing Department not be passed on to ratepayers, but rather that it be deferred so that it may be recoverable by LILCO through rates during the period in which the benefit associated with such costs occur. Additionally, LILCO should be required to show the cost-savings benefits resulting from its substantial expenditures in this area.

Q. WHAT AMOUNT OF DEFERRAL ARE YOU RECOMMENDING?

A. Office of Information Systems and Technology growth costs allocated to electric O&M expense in the amount of $3,999,300, as identified in LILCO's response to CPB-37, should be disallowed from current rate recovery, and recorded in a deferral account.

Q. WHAT IMPACT DOES THIS ADJUSTMENT HAVE ON LILCO'S RATE YEAR

REVENUE REQUIREMENT?

A. This adjustment reduces the revenue requirement by about $4 million.

Employee Associations and Miscellaneous Items

Q. HAS THE COMPANY INCLUDED EXPENSES IN THE TEST YEAR FOR ITEMS SUCH AS EMPLOYEE ASSOCIATIONS, CHAUFFEURS FOR COMPANY OFFICERS, PERSONAL USE OF COMPANY AUTOMOBILES, EMPLOYEE CAFETERIAS, AND EMPLOYEE ACCIDENT INSURANCE?

A. Yes. The test year includes expenses for these items.

Q. SHOULD THE COMPANY'S EXPENSE FOR THESE ITEMS BE CHARGED TO RATEPAYERS?

A. No. These expenses are not necessary to accomplish the Company's primary purpose of providing safe, reliable, and reasonably priced electric service. Such expenses do not benefit customers.

Q. PLEASE DISCUSS THE AMOUNTS INCLUDED IN THE TEST YEAR AND THE APPROPRIATE RATEMAKING TREATMENT FOR EACH ITEM.

A. Interrogatory CPB-120 asked the Company to:

> List each athletic and employee association to which the company contributes and the associated amounts for each test year and preceding year.

The Company's response stated:

> The Company contributes to the LILCO Employee Association. For the test year the annualized

amount was $11,000.

Thus, the test year includes $11,000 for employee associations. I am recommending that the electric expense portion of this amount be disallowed.

Interrogatory CPB-122 asked LILCO:

> For each of the following benefits indicate whether the Company offers such benefit; which classes of employees are eligible for it; the annual cost of such benefit in each year 1987-1990, the test year and the rate year, the Electric expense amount; and provide a copy of Company policies concerning eligibility.

The Company's response stated as follows concerning Chauffeurs:

> Chauffeurs are not provided to any employee as a benefit. There are 3 union employees who are both chauffeurs and mechanics who transport Company officers, when necessary, on business functions. The three work as mechanics when not providing chauffeur services. The annualized cost of this test year was $146,809.60.

The Company's response does not identify the Electric expense portion of the $146,810 associated with Chauffeur service, as distinguished from Mechanic service. I am recommending that ratepayers not be charged with the cost of providing Chauffeur service to Company officers, and have reflected an exclusion of one-tenth of the $146,810 as the adjustment on Schedule 16.

CPB-122 had requested the Electric expense amount of

each listed item. The Company's response stated that it subsidizes employee cafeterias to a maximum of $60,000. Ratepayers should not subsidize LILCO's employee cafeterias, and I am recommending the disallowance of this expense.

Q. WHAT ADJUSTMENT TO RATE YEAR EXPENSE ARE YOU RECOMMENDING AT THIS TIME FOR THESE ITEMS?

A. As shown on Schedule 16, $94,300 of rate year expense should be disallowed. The estimated electric portion of this is $87,200.

Personal Security for Chief Executive

Q. HAS LILCO INCLUDED IN TEST YEAR EXPENSE THE COST OF ANY OF THE SPECIAL BENEFITS IT PROVIDES TO ITS CHIEF EXECUTIVE?

A. Yes. Interrogatory CPB-219(c) asked:

> Has any amount been included in test year or rate year electric expense for the $10,000 per year LILCO is paying for Dr. Catacosinos' personal security and separate disability benefits? If so, please identify the amount, state how much has been included in electric expenses, and identify where this is recorded.

LILCO's response indicated that $9,000 has been included in test year electric expense:

> The test year included $10,000 of which approximately $9,000 has been allocated to the electric business and $1,000 to the gas business. The cost is recorded in account 921-Administrative and General Expenses.

Q. SHOULD THIS COST BE RECOVERED IN RATES?

A. No, it should not. LILCO's response to interrogatory CPB-219(b) and (d) indicates that the Company has appropriately excluded from rate recovery the costs associated with its special executive contracts and Dr. Catacosino's consulting contract. LILCO recognizes that such costs are appropriately borne by its shareholders:

> The Agreements with executives noted on pages 12-13 of the 1991 Proxy Statement are recorded "below-the-line" as shareowner costs and, therefore, are not included in the test year. (LILCO's response to CPB-219(b).
>
> Dr. Catacosinos" consulting contract is being funded by LILCO shareowners and, therefore, no costs have been included in the test year. (LILCO's response to CPB-219(d).

Similarly, the special personal security and separate disability benefit costs disclosed in LILCO's proxy statement should also be excluded from rates, and borne by shareholders.

Q. WHAT ADJUSTMENT TO RATE YEAR ELECTRIC EXPENSE IS NECESSARY?

A. Rate year expense of $10,000 should be disallowed. This is the test year electric expense amount of $9,000, increased for LILCO's assumed inflation from the test year to the rate year of 10.07%.

Other Employee Compensation

Q. HAS LILCO PROJECTED EXPANSION OF ITS EMPLOYEE COMPENSATION PROGRAMS?

A. Yes. LILCO Exhibit 16, Schedule 26 projects an expansion of other employee compensation for Educational Assistance, and has added $145,100 to test year and $159,700 to rate year electric operating expense for this.

Q. IS THIS APPROPRIATE?

A. No. The Company's requested expansion of its employee benefit programs should be rejected. Or, if the Company desires to have its employees trained by furthering their education at outside institutions, then a corresponding amount of expense should be removed from the Company's internal training center cost.

Q. WHAT ADJUSTMENT WOULD YOU RECOMMEND?

A. I recommend that the rate year expense be reduced by $159,700 to remove this increased expense.

Insurance Expense

Q. WHAT AMOUNT OF INSURANCE EXPENSE HAS LILCO REFLECTED IN THE TEST YEAR ENDING JUNE 30, 1990?

A. As shown on LILCO's Exhibit 16, Schedule 7, pages 1 and 4 of 5, the Company has reflected electric operations and

maintenance insurance in the test year of $8.321 million.

Q. WHAT ADJUSTMENT DOES LILCO PROPOSE TO THIS TEST YEAR ELECTRIC EXPENSE AMOUNT?

A. As shown on LILCO Exhibit 16, Schedule 7, page 1, the Company proposes to increase the test year amount by $838,000 or 10.07% for inflation through the rate year. Additionally, LILCO shifts $410,000 of rate year expense from its electric operations to its gas operations, as shown on Company Exhibit 16, Schedule 7, page 3 of 5.

Q. DO LILCO'S WORKPAPERS SHOW HOW THIS ALLOCATION SHIFT ADJUSTMENT WAS DERIVED?

A. It appears that LILCO's workpapers do <u>not</u> show how this adjustment was calculated. The workpapers supplied to us by LILCO for its insurance expense amounts appearing on Company Exhibit 16, Schedule 7, detail how LILCO derived the $8.321 million test year amount of electric insurance but do not appear to contain the Company's calculations of this allocation adjustment. Interrogatory CPB-245 requests LILCO to provide the calculation of its $372,600 test year adjustment shown on LILCO Exhibit 16, Schedule 7, page 3 of 5. LILCO inflated this $372,600 amount by $10.07% to derive its rate year adjustment amount of $410,100.

Q. DOES LILCO'S PROPOSED ELECTRIC INSURANCE EXPENSE APPEAR TO BE REPRESENTATIVE OF CURRENT EXPERIENCE?

A. No, it does not. LILCO's 1990 electric insurance expense is substantially less than LILCO's test year, and proposed rate year amounts. Additionally, LILCO's insurance expense has shown a declining trend over the past four years; therefore, LILCO's application of an inflation factor to this expense does not appear to be justified.

Q. SHOULD LILCO'S PROPOSED ELECTRIC INSURANCE EXPENSE BE ADJUSTED?

A. Yes. An adjustment is necessary to remove the apparent overstatement contained in the Company's proposed rate year amount for this expense.

Q. PLEASE EXPLAIN YOUR PROPOSED ADJUSTMENT FOR INSURANCE EXPENSE.

A. The calculation of this adjustment is shown on Schedule 17. Interrogatory CPB-151, among other things, requested the Company to:

> Itemize each component of the insurance expense included in the test year, and provide comparative information for the preceding five years. Also state the actual expense in 1990.

The Company's response indicates test year electric insurance expense amounted to $8,321,000. In comparison,

the Company's response shows that its actual 1990 electric insurance expense was $6,942,800. The information supplied by the Company in response to CPB-151 thus indicates that LILCO's test year electric insurance amount would overstate this expense by $1,378,200 in comparison with the actual 1990 expense.

The Company inflated its test year non-payroll expenses, including insurance expense, by approximately 10.07% to derive the corresponding rate year amounts. Because the actual 1990 amounts already include the impact of inflation or deflation for the period July through December 1990, the corresponding inflation factor to restate the actual 1990 amounts for the rate year is 7.813%. The decrease in insurance expense for the rate year ending November 30, 1992 is $1,673,700, as shown on Schedule 17. I should note that this adjustment will be revised, if necessary, pending receipt of LILCO's calculations of its allocation shift amount (requested in interrogatory CPB-245.)

Q. HAVE YOU EXAMINED THE TREND OF THE COMPANY'S INSURANCE EXPENSE IN RECENT YEARS?

A. Yes. As shown quantitatively and graphically on CPB Exhibit ___ (RCS-1), Schedule 18, the Company's electric expense for directors' and officers' liability insurance and other

liability insurance peaked in 1987 and has declined each year since then, as has the cost of the Company's total liability and property insurance.

Additionally, exclusive of the Company's new property insurance coverage for Transmission and Distribution which commenced in 1989, LILCO's cost of property insurance peaked in 1986 and has declined each year, as shown graphically on Schedule 18.

Q. WHAT IMPLICATION DOES THE DECLINING TREND OF LILCO'S INSURANCE COST HAVE WITH RESPECT TO PROJECTING THE RATE YEAR AMOUNT FOR THIS EXPENSE?

A. The declining cost for insurance coverage that has been experienced by LILCO in recent years causes me to question whether an inflation factor should be applied to this expense in order to project the rate year amount. If no inflation is applied to LILCO's actual 1990 amount of insurance expense of $6,942,800, then the amount of the rate year adjustment as shown on Schedule 17 would be $1,806,000. (This is computed by subtracting the actual 1990 amount of $6,942,800 from LILCO's rate year insurance expense amount of $8,748,800.) After reflecting the test year (i.e., non-inflated) impact of LILCO's allocation shift, the adjustment would be $2,718,600 (computed $1,806,000 plus allocation shift impact, which reduces electric expense by $372,600).

Payroll Inflation

Q. WHAT AMOUNT OF INFLATION HAS LILCO PROPOSED?

A. LILCO's Exhibit 16, Schedule 3, page 1 of 14, shows that LILCO has added labor expense inflation of $11.126 million to the test year.

Q. WHAT AMOUNT OF INFLATION IS SUPPORTED BY LILCO'S WORKPAPERS?

A. LILCO's workpapers for electric labor expense calculate inflation of $11,074,880. This is comprised of the following: Officer inflation of $161,731; Non-officer inflation of $9,119,067; Overtime inflation for collective bargaining contract employees of $1,409,671; and Overtime inflation for management employees of $384,411.

Q. IS LILCO'S PROPOSED INFLATION AMOUNT FOR LABOR EXPENSE OVERSTATED?

A. Yes. Based upon the calculations provided in LILCO's supporting workpapers, the $11.126 million appearing on LILCO's Exhibit 16, Schedule 3, page 1 of 14, is overstated by $51,120.

Q. SHOULD AN ADJUSTMENT BE MADE?

A. Yes. Electric labor expense inflation should be limited to the $11.075 million amount contained in LILCO's workpapers.

LILCO's rate year labor expense should be reduced by $51,000 to correct for this Company expense overstatement.

Workforce

Q. HAS LILCO'S WORKFORCE INCREASED SUBSTANTIALLY IN RECENT YEARS?

A. Yes, it has. LILCO's workforce has increased by 391 employees, from 6,239 at December 31, 1989 to a level of 6,630 at December 31, 1990. This represents about a 6.3% increase in the number of employees constituting LILCO's workforce during 1990.

Q HAVE OTHER UTILITIES BEEN DECREASING THEIR WORKFORCE?

A. Yes. As an example, LILCO's neighboring utility, Consolidated Edison, has placed an ongoing emphasis the efficiency and productivity improvements; accordingly, Con Ed reduced its workforce by more than 14% since 1981, from 22,800 to about 19,500 at December 1990.

Q. DOES LILCO'S PROPOSED EXPENSE LEVEL FOR THE RATE YEAR REFLECT EVEN MORE POSITIONS?

A. Yes, it does. The Company's exhibits show extensive increases for the addition of new positions.

Q. IS LILCO'S RAPIDLY INCREASING WORKFORCE A CAUSE FOR CONCERN?

A. Yes, it is. LILCO's substantially increased workforce is adding costs, which LILCO, in turn, is requesting be recovered from ratepayers. Additionally, LILCO's substantial workforce additions appear to be contrary to the trend in the utility industry to downsize workforce by emphasizing efficiency and productivity improvements. LILCO, itself, was able to decrease its workforce from 1987 to 1988, and from 1988 to 1989. Dramatic increases in the Company's workforce level would seem to be inconsistent with the rate moderation agreement, which assumed implicitly that LILCO would attempt to continue diligent efforts to control its operating costs within the parameters specified in the RMA.

Finally, one must be concerned about whether ratepayers are receiving a commensurate benefit, in the form of improved service, improved productivity, or other cost reductions, which would justify LILCO's drastic increases in its employee levels.

Q. HAVE YOU COMPARED THE CHANGES IN LILCO'S WORKFORCE WITH THOSE OF ITS NEIGHBORING UTILITY, CONSOLIDATED EDISON?

A. Yes. This comparison is shown on Exhibit ___(RCS-1), Schedule 20. This schedule shows, while Consolidated Edison has been able to achieve improved efficiencies through workforce reductions each year, in contrast, LILCO was able

to achieve modest workforce reductions during 1988 and 1989; however, LILCO's substantial hirings during 1990 have produced LILCO's largest year-end workforce in the past five years, and possibly over a longer period as well.

Q. ARE YOU PROPOSING ANY ADJUSTMENT WITH RESPECT TO LILCO'S ACTUAL AND ADDITIONAL PROJECTED WORKFORCE INCREASES?

A. Yes. LILCO's rate year labor expense should be reduced for all currently unfilled positions. Interrogatory CPB-171 and CPB-240 have requested information from LILCO concerning unfilled positions. We are awaiting the receipt of the requested information from the Company.

Property Tax Expense

Q. HOW MUCH ELECTRIC PROPERTY TAX EXPENSE HAS LILCO INCLUDED IN ITS RATE YEAR EXPENSE CLAIM?

A. As indicated on Exhibit 22, Schedule 3, page 1 of 2, LILCO's filing includes property tax expense in the amount of $220 million.

Q. HOW DID LILCO DERIVE THIS AMOUNT?

A. LILCO's workpapers indicate that this amount was derived by taking its electric property tax expense for the test year ending June 30, 1990 of $203.189 million and escalating this amount by 1.0827. The escalation includes inflation for 2

full years, the first year at 4%, and the second at 4.1%.

Q. DOES IT APPEAR THAT THE COMPANY'S RATE YEAR PROPERTY TAX EXPENSE IS OVERSTATED?

A. Yes, it does. LILCO's electric property tax for 1990, as stated on page 57B of its annual report to the PSC, amounted to $192.675 million. This is about $10.5 million less than LILCO's test year electric property tax of $203.189 million, from which LILCO applied escalation factors to derive its forecasted rate-year amount. Additionally, in a letter dated April 19, 1991, LILCO stated that its property tax expense in its electric rate case filing, Exhibit 22, Schedule 3, "should be changed from $220 million to $201,764,000 to reflect the latest known taxes."

Q. WHAT ADJUSTMENT HAVE YOU REFLECTED?

A. I have reflected an adjustment to reduce the Company's property tax amount by $18.236 million, which reflects the latest known taxes, as identified by the Company.

Depreciation Expense

Q. ARE YOU PROPOSING AN ADJUSTMENT FOR RATE YEAR DEPRECIATION EXPENSE?

A. Yes. As the result of my recommended adjustment to remove LILCO's apparent overstatement of projected rate-year plant

in service, depreciation for the rate year must also be reduced.

Q. HOW DID YOU CALCULATE THE RECOMMENDED ADJUSTMENT?

A. I applied LILCO's composite depreciation rate to the amounts of electric and common plant adjustments. This calculation is shown on Schedule 21, and reduces rate year depreciation expense by $1.428 million.

Q. DOES THIS ALSO HAVE AN IMPACT ON THE AVERAGE RATE YEAR BALANCE OF ACCUMULATED DEPRECIATION?

A. Yes. The average rate year balance of accumulated depreciation is reduced by $714,000. Rate base increases by an identical amount.

Q. DOES THAT CONCLUDE YOUR TESTIMONY?

A. Yes. With the exception of items that must be updated and for issues relating to outstanding interrogatories.

EXHIBITS

# 1

## IMAGE EVALUATION TEST TARGET (MT-3)

1.0 1.1 1.25 1.4 1.6 1.8 2.0 2.2 2.5 2.8 3.2 3.6 4.0

150mm

6"

# 1

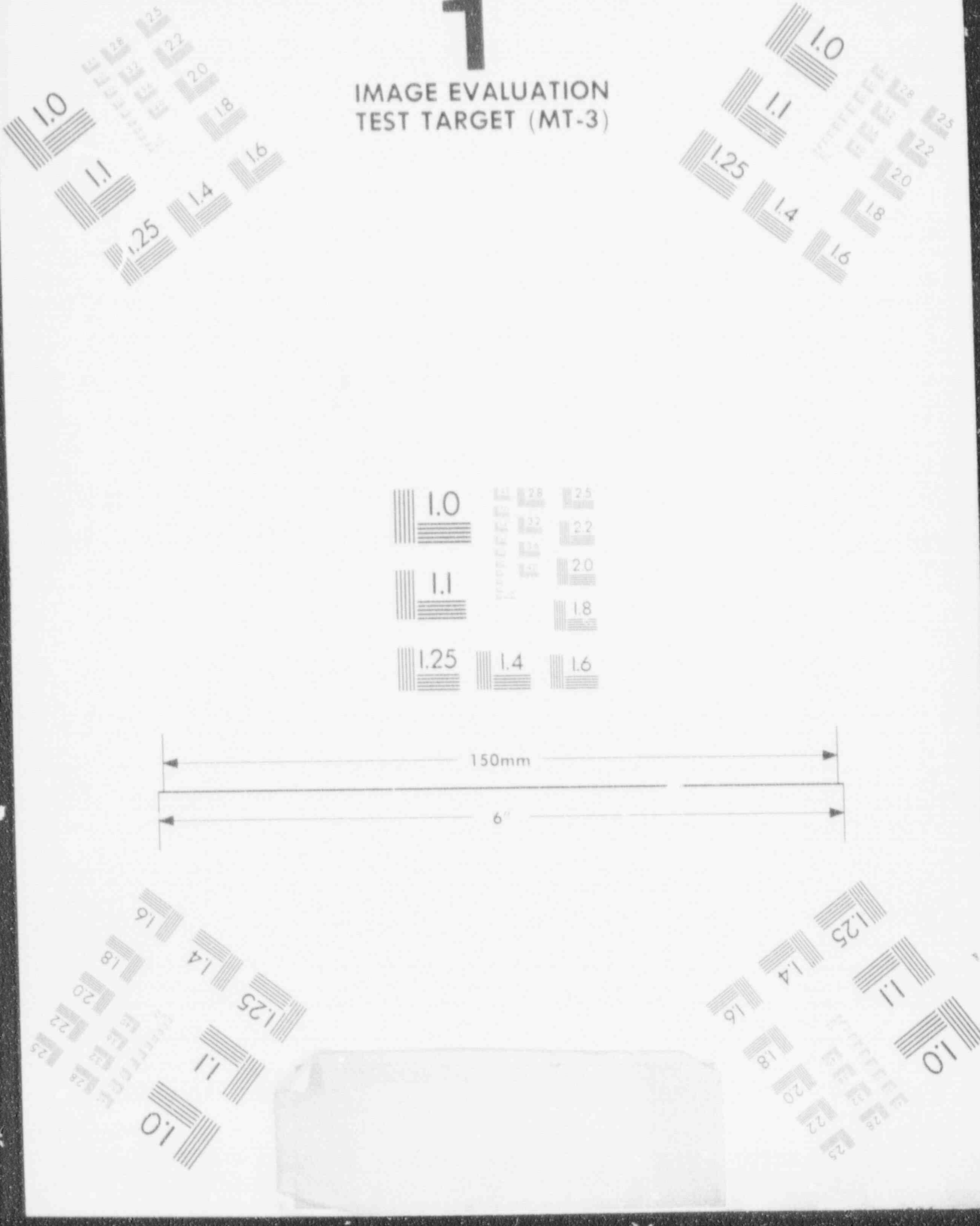
IMAGE EVALUATION
TEST TARGET (MT-3)

150mm

6"

# 1

## IMAGE EVALUATION TEST TARGET (MT-3)



APPENDIX I

RALPH C. SMITH

QUALIFICATIONS

Accomplishments

- Mr. Smith's professional credentials include being a certified financial planner, a licensed certified public accountant and attorney. He functions as project manager on consulting projects involving utility regulation, regulatory policy and ratemaking and utility management. His involvement in public utility regulation has included project management and in-depth analyses of numerous issues involving telephone, electric, gas, and water and sewer utilities.

- Mr. Smith has performed work in the field of utility regulation on behalf of industry, public service commission staffs, state attorney generals, municipalities, and consumer groups concerning regulatory matters before regulatory agencies in Michigan, Missouri, Maine, Mississippi, Minnesota, Florida, Georgia, Ohio, Pennsylvania, Arizona, Alabama, Louisiana, South Carolina, North Carolina, Connecticut, New Jersey, New York, Texas, Nevada, Kentucky, Alaska, FERC, and Canada, as well as various state and federal courts of law. He has presented expert testimony in regulatory hearings on behalf of utility commission staffs and intervenors on several occasions.

- Project manager in Larkin & Associates' review, on behalf of the Georgia Commission Staff, of the budget and planning activities of Georgia Power Company; supervised 13 professionals; coordinated over 200 interviews with Company budget center managers and executives; organized and edited voluminous audit report; presented testimony before the Commission. Functional areas covered included fossil plant O&M, headquarters and district operations, internal audit, legal, affiliated transactions, and responsibility reporting. All of our findings and recommendations were accepted by the Commission.

- Key team member in the firm's management audit of the Anchorage Water and Wastewater Utility on behalf of the Alaska Commission Staff, which assessed the effectiveness of the Utility's operations in several areas; responsible for in-depth investigation and report writing in areas involving information systems, finance and accounting, affiliated relationships and

transactions, and use of outside contractors. Testified before the Alaska Commission concerning certain areas of the audit report. AWWU concurred with each of Mr. Smith's 40 plus recommendations for improvement.

- Co-consultant in the analysis of the issues surrounding gas transportation performed for the law firm of Cravath, Swaine & Moore in conjunction with the case of Reynolds Metals Co. vs. the Columbia Gas System, Inc.; drafted in-depth report concerning the regulatory treatment at both state and federal levels of issues such as flexible pricing and mandatory gas transportation.

- Lead consultant and expert witness in the analysis of the rate increase request of the City of Austin - Electric Utility on behalf of the residential consumers. Among the numerous ratemaking issues addressed was the economics of the Utility's employment of outside services; provided both written and oral testimony outlining recommendations and their bases. Most of Mr. Smith's recommendations were adopted by the City Council and Utility in a settlement.

- Key team member performing an analysis of the rate stabilization plan submitted by the Southern Bell Telephone & Telegraph Company to the Florida Public Service Commission; performed comprehensive analysis of the Company's projections and budgets which were used as the basis for establishing rates.

- Lead consultant in analyzing Southwestern Bell Telephone separations in Missouri; sponsored the complex technical analysis and calculations upon which the firm's testimony in that case was based. He has also assisted in analyzing changes in depreciation methodology for setting telephone rates.

- Lead consultant in the review of gas cost recovery reconciliation applications of Michigan Gas Utilities Company, Michigan Consolidated Gas Company, and Consumers Power Company. Drafted recommendations regarding the appropriate rate of interest to be applied to any over or under collections and the proper procedures and allocation methodology to be used to distribute any refunds to customer classes.

- Lead consultant in the review of Consumers Power Company's gas cost recovery refund plan. Addressed appropriate interest rate and compounding procedures and proper allocation methodology.

- Project manager in the review of the request by Central Maine Power Company for an increase in rates. The major area addressed was the propriety of the Company's ratemaking attrition adjustment in relation to its corporate budgets and projections.

- Project manager in an engagement designed to address the impacts of the Tax Reform Act of 1986 on gas distribution utility operations of the Northern States Power Company. Analyzed the reduction in the corporate tax rate, uncollectibles reserve, ACRS, unbilled revenues, customer advances, CIAC, and timing of TRA-related impacts associated with the Company's tax liability.

- Project manager and expert witness in the determination of the impacts of the Tax Reform Act of 1986 on the operations of Connecticut Natural Gas Company on behalf of the Connecticut Department of Public Utility Control - Prosecutorial Division, Connecticut Attorney General, and Connecticut Department of Consumer Counsel.

- Lead Consultant for The Minnesota Department of Public Service ("DPS") to review the Minnesota Incentive Plan ("Incentive Plan") proposal presented by Northwestern Bell Telephone Company ("NWB") doing business as U S West Communications ("USWC"). Objective was to express an opinion as to whether current rates addressed by the plan were appropriate from a Minnesota intrastate revenue requirements and accounting perspective, and to assist in developing recommended modifications to NWB's proposed Plan.

  Performed a variety of analytical and review tasks related to our work effort on this project. Obtained and reviewed data and performed other procedures as necessary (1) to obtain an understanding of the Company's Incentive Plan filing package as it relates to rate base, operating income, revenue requirements, and plan operation, and (2) to formulate an opinion concerning the reasonableness of current rates and of amounts included within the Company's Incentive Plan filing. These procedures included requesting and reviewing extensive discovery, visiting the Company's offices to review data, issuing follow-up information requests in many instances, telephone and on-site discussions with Company representatives, and frequent discussions with counsel and DPS Staff assigned to the project.

- Lead Consultant in the regulatory analysis of Jersey Central Power & Light Company for the Department of the Public Advocate, Division of Rate Counsel. Tasks performed included on-site review and audit of Company,

identification and analysis of specific issues, preparation of data requests, testimony, and cross examination questions. Testified in Hearings.

- Assisted the NARUC Committee on Management Analysis with drafting the Consultant Standards for Management Audits.

- Presented training seminars covering public utility accounting, tax reform, ratemaking, affiliated transaction auditing, rate case management, and regulatory policy in Maine, Georgia, Kentucky, and Pennsylvania. Seminars were presented to commission staffs and consumer interest groups.

Previous Positions

- With Larkin, Chapski and Co., the predecessor firm to Larkin & Associates, was involved primarily in utility regulatory consulting, and also in tax planning and tax research for businesses and individuals, tax return preparation and review, and independent audit, review and preparation of financial statements.

- Installed computerized accounting system for a realty management firm.

Education

- Bachelor of Science in Administration in Accounting, with distinction, University of Michigan, Dearborn, 1979.

- Master of Science in Taxation, Walsh College, Michigan, 1981. Master's thesis dealt with investment tax credit and property tax on various assets.

- Juris Doctor, cum laude, Wayne State University Law School, Detroit, Michigan, 1986. Recipient of American Jurisprudence Award for academic excellence.

- Continuing education required to maintain CPA license and CFP certificate.

- Passed all parts of CPA examination in first sitting, 1979. Received CPA certificate in 1981 and certified Financial Planning certificate in 1983. Admitted to Michigan and Federal bars in 1986.

- Michigan Association of Certified Public Accountants, Committee on Management Consulting Services.

- Michigan Bar Association.
- American Bar Association, sections on public utility law and taxation.
- Southeastern Michigan Computer Organization

Partial list of utility cases participated in:

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|---|---|
| 79-228-EL-FAC | Cincinnati Gas & Electric Company (Public Utilities Commission of Ohio) |
| 79-231-EL-FAC | Cleveland Electric Illuminating Company (Public Utilities Commission of Ohio) |
| 79-535-EL-AIR | East Ohio Gas Company (Public Utilities Commission of Ohio) |
| 80-235-EL-FAC | Ohio Edison Company (Public Utilities Commission of Ohio) |
| 80-240-EL-FAC | Cleveland Electric Illuminating Company (Public Utilities Commission of Ohio) |
| U-1933* | Tucson Electric Power Company (Report prepared for the Arizona Corporation Commission) |
| U-6794 | Michigan Consolidated Gas Company - 16 Refunds (Michigan Public Service Commission) |
| Docket No. 81-0035TP | Southern Bell Telephone Company (Florida Public Service Commission) |
| Docket No. 81-0095TP | General Telephone Company of Florida (Florida Public Service Commission) |
| 81-308-EL-EFC | Dayton Power & Light Co.- Fuel Adjustment Clause (Public Utilities Commission of Ohio) |
| Docket No. 810136-EU | Gulf Power Company (Florida Public Service Commission) |

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| Docket No. GR-81-342 | Northern States Power Company -- E-002/Minnesota (Minnesota Public Utilities Commission) |
| Tr-81-208 | Southwestern Bell Telephone Company (Missouri Public Service Commission) |
| U-6949 | Detroit Edison Company (Michigan Public Service Commission) |
| 8400 | East Kentucky Power Cooperative, Inc. (Kentucky Public Service Commission) |
| Docket No. 18328 | Alabama Gas Corporation (Public Service Commission of Alabama) |
| Docket No. 18416 | Alabama Power Company (Public Service Commission of Alabama) |
| 820100-EU | Florida Power Corporation (Florida Public Service Commission) |
| 8624 | Kentucky Utilities (Kentucky Public Service Commission) |
| 8648 | East Kentucky Power Cooperative, Inc. (Kentucky Public Service Commission) |
| U-7236 | Detroit Edison - Burlington Northern Refund (Michigan Public Service Commission) |
| U-6633-R | Detroit Edison - MRCS Program (Michigan Public Service Commission) |
| U-6797-R | Consumers Power Company - MRCS Program (Michigan Public Service Commission) |
| U-5510-R | Consumers Power Company - Energy Conservation Finance Program (Michigan Public Service Commission) |
| 82-240E | South Carolina Electric & Gas Company (South Carolina Public Service Commission) |

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| 7350 | Generic Working Capital Hearing<br>(Michigan Public Service Commission) |
| Order<br>RH-1-83 | Westcoast Transmission Company, Ltd.<br>(National Energy Board of Canada) |
| 820294-TP | Southern Bell Telephone & Telegraph Company<br>(Florida Public Service Commission) |
| 82-165-EL-EFC<br>(Subfile A) | Toledo Edison Company<br>(Public Utilities Commission of Ohio) |
| 82-168-EL-EFC | Cleveland Electric Illuminating Company<br>(Public Utilities Commission of Ohio) |
| 830012-EU | Tampa Electric Company<br>(Florida Public Service Commission) |
| U-7065 | The Detroit Edison Company - Fermi II<br>(Michigan Public Service Commission) |
| 8738 | Columbia Gas of Kentucky, Inc.<br>(Kentucky Public Service Commission) |
| ER-83-206 | Arkansas Power & Light Company<br>(Missouri Public Service Commission) |
| U-4758 | The Detroit Edison Company - Refunds<br>(Michigan Public Service Commission) |
| 8836 | Kentucky American Water Company<br>(Kentucky Public Service Commission) |
| 8839 | Western Kentucky Gas Company<br>(Kentucky Public Service Commission) |
| 83-07-15 | Connecticut Light & Power Company<br>(Department of Utility Control State of Connecticut) |
| 81-0485-WS | Palm Coast Utility Corporation<br>(Florida Public Service Commission) |

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|---|---|
| U-7650 | Consumers Power Company - Partial and Immediate<br>(Michigan Public Service Commission) |
| 83-662 | Continental Telephone Company of California<br>(Nevada Public Service Commission) |
| U-7650 | Consumers Power Company - Final<br>(Michigan Public Service Commission) |
| U-6488-R | Detroit Edison Company - FAC & PIPAC Reconciliation<br>(Michigan Public Service Commission) |
| U-15684 | Louisiana Power & Light Company<br>(Public Service Commission of the State of Louisiana) |
| 7395 &<br>U-7397 | Campaign Ballot Proposals<br>(Michigan Public Service Commission) |
| 820013-WS | Seacoast Utilities<br>(Florida Public Service Commission) |
| U-7660 | Detroit Edison Company<br>(Michigan Public Service Commission) |
| 83-1039 | CP National Corporation<br>(Nevada Public Service Commission) |
| U-7802 | Michigan Gas Utilities Company<br>(Michigan Public Service Commission) |
| 83-1226 | Sierra Pacific Power Company<br>(Nevada Public Service Commission) |
| 830465-EI | Florida Power & Light Company<br>(Florida Public Service Commission) |
| U-7777 | Michigan Consolidated Gas Company<br>(Michigan Public Service Commission) |
| U-7779 | Consumers Power Company<br>(Michigan Public Service Commission) |

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| U-7480-R | Michigan Consolidated Gas Company)<br>(Michigan Public Service Commission) |
| U-7488-R | Consumers Power Company - Gas<br>(Michigan Public Service Commission) |
| U-7484-R | Michigan Gas Utilities Company<br>(Michigan Public Service Commission) |
| U-7550-R | Detroit Edison Company<br>(Michigan Public Service Commission) |
| U-7477-R** | Indiana & Michigan Electric Company<br>(Michigan Public Service Commission) |
| U-7512-R | Consumers Power Company - Electric<br>(Michigan Public Service Commission) |
| 18978 | Continental Telephone Company of the South<br>- Alabama<br>(Alabama Public Service Commission) |
| R-842583 | Duquesne Light Company<br>(Pennsylvania Public Utility Commission) |
| R-842740 | Pennsylvania Power Company<br>(Pennsylvania Public Utility Commission) |
| 850050-EI | Tampa Electric Company<br>(Florida Public Service Commission) |
| 16091 | Louisiana Power & Light Company<br>(Louisiana Public Service Commission) |
| 19297 | Continental Telephone Company of the South - Alabama<br>(Alabama Public Service Commission) |
| 76-18788AA &<br>76-18793AA | Detroit Edison - Refund - Appeal of U-4807<br>(Ingham County, Michigan Circuit Court) |
| 85-53476-AA &<br>85-534785-AA | Detroit Edison Refund - Appeal of U-4758<br>(Ingham County, Michigan, Circuit Court) |

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| U-8091/U-8239 | Consumers Power Company - Gas Refunds<br>(Michigan Public Service Commission) |
| TR-85-179** | United Telephone Company of Missouri<br>(Missouri Public Service Commission) |
| 85-212 | Central Maine Power Company<br>(Maine Public Service Commission) |
| ER-85646001<br>&<br>ER-85647001 | New England Power Company<br>(Federal Energy Regulatory Commission) |
| 850782-EI<br>&<br>850783-EI | Florida Power & Light Company<br>(Florida Public Service Commission) |
| R-860378 | Duquesne Light Company<br>(Pennsylvania Public Utility Commission) |
| R-850267 | Pennsylvania Power Company<br>(Pennsylvania Public Utility Commission) |
| 851007-WU<br>&<br>840419-SU | Florida Cities Water Company<br>Florida Cities Sewer Company<br>(Florida Public Service Commission) |
| G-002/GR-86-160 | Northern States Power Company<br>(Minnesota Public Utilities Commission) |
| Docket No.<br>7195 (Interim) | Gulf States Utilities Company<br>(Public Utility Commission of Texas) |
| 87-01-03 | Connecticut Natural Gas Company<br>(Connecticut Department of Public Utility Control) |
| 87-01-02 | Southern New England Telephone Company<br>(Connecticut Department of Public<br>Utility Control) |
| R-860378<br>Surrebuttal | Duquesne Light Company<br>(Pennsylvania Public Utility Commission) |

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|---|---|
| 3673-U | Georgia Power Company<br>(Georgia Public Service Commission) |
| Docket No.<br>29484 | Long Island Lighting Company<br>(New York Department of Public Service) |
| Docket No.<br>U-8747 | Anchorage Water and Wastewater Utility<br>(Alaska Public Utilities Commission) |
| U-8924 | Consumers Power Company - Gas<br>(Michigan Public Service Commission) |
| Docket No. 1 | Austin Electric Utility<br>(City of Austin, Texas) |
| Docket E-2,<br>Sub 527 | Carolina Power & Light Company<br>(North Carolina Utilities Commission) |
| Docket No.<br>870853 | Pennsylvania Gas and Water Company<br>(Pennsylvania Public Utility Commission) |
| Docket No.<br>880069** | Southern Bell Telephone Company<br>(Florida Public Service Commission) |
| Docket Nos.<br>U-1954-88-102<br>E-1032-88-102<br>&<br>Docket Nos.<br>1954-88-184<br>E-1032-88-184 | Citizens Utilities Rural Company, Inc. &<br>Citizens Utilities Telephone Company,<br>Kingman Telephone Division<br>(Before the Arizona Corporation Commission) |
| Docket No.<br>89-0033 | Illinois Bell Telephone Company<br>(Illinois Commerce Commission) |
| Cause No.<br>U-89-2688-T | Puget Sound Power & Light Company<br>(Washington Utilities & Transportation Committee) |
| Docket No.<br>R-891364 | Philadelphia Electric Company<br>(Pennsylvania Public Utility Commission) |

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|---|---|
| F.C. 889 | Potomac Electric Power Company (Public Service Commission District of Columbia) |
| Case No. 88/546* | Niagara Mohawk Power Corporation, et al Plaintiffs, v. Gulf+Western, Inc. et al, defendants (In the Supreme Court County of Onondaga, State of New York) |
| Case No. 87-11628* | Duquesne Light Company, et al, plaintiffs, against Gulf + Western, Inc. et al, defendants (In the Court of the Common Pleas of Allegheny County, Pennsylvania Civil Division) |
| Docket No. 890319-EI | Florida Power & Light Company Florida Public Service Commission |
| Docket No. 891345-EI | Gulf Power Company Florida Public Service Commission |
| BPU Docket No. ER 8811 0912J | Jersey Central Power & Light Company Board of Public Utilities Commissioners |
| Docket No. 6531 | Hawaiian Electric Company Hawaii Public Utilities Commissioners |
| Docket No. R-901595 | Equitable Gas Company Pennsylvania Consumer Counsel |
| Docket No. 90-10 | Artesian Water Company Delaware Public Service Commission |
| Docket No. 89-12-05 | Southern New England Telephone Company Connecticut Department of Public Utility Control |
| Docket No. 900329-WS | Southern States Utilities, Inc. Florida Public Service Commission |
| Application No. 90-12-018 | Southern California Edison Company California Public Utilities Commission |

*Testimony filed, examination not completed.
**Issues stipulated

LONG ISLAND LIGHTING COMPANY
Electric Rate Case No. 90-E-1185
Contents of CPB Exhibit ___(RCS-1)

Long Island Lighting Company
Revenue Requirement Impact Summary
Rate Year Ending November 31, 1992
(Thousands of Dollars)

CPB Exhibit___(RCS-1)
Schedule 1
PSC Case No. 90-E-1185
Witness: Smith

| Line No. | Description | Revenue Requirement Impact |
|---|---|---|
| 1 | Plant in Service | 5,080 |
| 2 | Accumulated Depreciation | (126) |
| 3 | Fuel Inventory | 3,074 |
| 4 | Accumulated Deferred Income Taxes | 652 |
| 5 | Other Deferred Credits | 2,573 |
| 6 | Operating Reserves | 1,587 |
| 7 | Research & Development Expense | 11,904 |
| 8 | Office of Training | 1,889 |
| 9 | Office of Information Systems | 4,243 |
| 10 | Employee Associations & Miscellaneous | 92 |
| 11 | CEO Personal Security | 11 |
| 12 | Other Employee Compensation | 169 |
| 13 | Insurance Expense | 1,776 |
| 14 | Payroll Inflation | 55 |
| 15 | Work Force (not available at this time) | 0 |
| 16 | Depreciation | 1,515 |
| 17 | Total Decrease | $34,494 |

Long Island Lighting Company
Adjustments to Rate Base
Rate Year Ending November 31, 1992
(Thousands of Dollars)

CPB Exhibit___(RCS-1)
Schedule 2
PSC Case No. 90-E-1185
Witness: Smith

| Line No. | Description | Reference | (1) Rate Base Adjustment Amount | (2) Revenue Requirement Impact Amount |
|---|---|---|---|---|
| 1 | Plant in Service | Schedule 5 | (28,756) | (5,080) |
| 2 | Accumulated Depreciation | Schedule 20 | 714 | 126 |
| 3 | Fuel Inventory | Schedule 7 | (17,402) | (3,074) |
| 4 | Accumulated Deferred Income Taxes | | (3,689) | (652) |
| 5 | Other Deferred Credits | Schedule 10 | (14,564) | (2,573) |
| 6 | Operating Reserves | Schedule 1 | (8,982) | (1,587) |
| 7 | Totals | | (72,679) | (12,840) |

Notes
Column 2 amounts are determined by applying LILCO's requested rate of return and Gross Revenue Conversion Factor of 10.96% and 1.611977, respectively.

Long Island Lighting Company
Comparisons of LILCO's Budget and Actual Construction Costs
1987 - 1990

CPB Exhibit___(RCS-1)
Schedule 3
PSC Case No. 90-E-1185
Witness: Smith

| | | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) | (11) | (12) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 1987 | | | 1988 | | | 1989 | | | 1990 | |
| Line No. | Description | Actual | Budget | Budget Over (Under) Actual | Actual | Budg. | Budget Over (Under) Actual | Actual | Budget | Budget Over (Under) Actual | Actual | Budget | Budget Over (Under) Actual |
| | PRODUCTION | | | | | | | | | | | | |
| 1 | Shoreham 1-820MW Nuclear-Construction | 215,843 | 247,550 | 14.69% | 203,527 | 236,8 | 16.35% | 110,128 | 129,607 | 17.69% | 0 | 0 | |
| 2 | -AFC | 167,141 | 165,491 | -0.99% | 128,119 | 121,615 | -5.08% | (109,413) | | | 0 | 0 | |
| 3 | -Pre-Op Credit | (2) | 0 | | 0 | 0 | | | | | 0 | 0 | |
| 4 | Shoreham 1-820MW Nuclear-Post Settlement | | | | | | | 75,044 | 80,170 | 6.83% | 153,361 | 178,404 | 16.33% |
| 5 | -Total | 382,982 | 413,041 | 7.85% | 331,646 | 358,425 | 8.07% | 75,757 | 209,777 | 176.91% | 153,361 | 178,404 | 16.33% |
| 6 | Nine Mile Point 2-198MW Nuclear (LILCO Portion) | 46,637 | 52,869 | 13.36% | 15,922 | 10,505 | -34.02% | 1,547 | 1,987 | 28.44% | (727) | (1,880) | 158.60% |
| 7 | Shoreham Nuclear Simulator | 3,943 | 4,540 | 15.14% | 1,056 | 1,283 | 21.50% | (1) | 276 | -27700.00% | | | |
| 8 | Shoreham-Related Capital Projects | 88 | 119 | 35.23% | 0 | 0 | | 0 | | | | | |
| 9 | Nine Mile Point 2-Related Capital Projects | 0 | 0 | | 3,078 | 11,580 | 276.22% | 4,331 | 7,707 | 77.95% | 9,742 | 9,920 | 1.83% |
| 10 | Other Production | 23,780 | 17,536 | -26.26% | 10,356 | 15,074 | 45.56% | 25,531 | 17,183 | -32.70% | 1,474 | 2,054 | 39.35% |
| 11 | Brookhaven Turbines | | | | 56,970 | 60,123 | 5.53% | 27,759 | 29,346 | 5.72% | | | |
| 12 | E.F. Barrett | | | | | | | | | | 3,124 | 4,478 | 43.34% |
| 13 | Far Rockaway | | | | | | | | | | 319 | 620 | 94.36% |
| 14 | Glenwood | | | | | | | | | | 3,562 | 3,946 | 10.78% |
| 15 | Northport | | | | | | | | | | 7,730 | 6,900 | -10.74% |
| 16 | Port Jefferson | | | | | | | | | | 4,117 | 3,675 | -10.74% |
| 17 | Internal Combustion Units | | | | | | | | | | 7,059 | 6,505 | -7.85% |
| 18 | Total Production | 457,430 | 488,105 | 6.71% | 419,028 | 456,990 | 9.06% | 134,924 | 266,276 | 97.35% | 189,761 | 214,622 | 13.10% |
| | TRANSMISSION | | | | | | | | | | | | |
| 19 | Nuclear Related Substations & Lines | (208) | 11 | -105.29% | | | | | | | | | |
| 20 | Interconnections | 137 | 342 | 149.64% | 192 | 51 | -73.44% | 441 | 677 | 53.51% | 3,033 | 2,443 | -19.45% |
| 21 | Resource Recovery Substations & Lines | (30) | (29) | -3.33% | (879) | 0 | | | | | | | |
| 22 | Nassau Substations & Lines | 1,229 | 1,216 | -1.06% | 1,110 | 632 | -43.06% | 619 | 820 | 32.47% | 145 | 1,361 | 838.62% |
| 23 | Western Suffolk Substations & Lines | 1,840 | 2,497 | 35.71% | 2,796 | 2,743 | -1.90% | 587 | [illegible] | 39.18% | (109) | 635 | -682.57% |
| 24 | Eastern Suffolk Substations & Lines | 7,872 | 15,132 | 92.23% | 6,222 | 15,559 | 150.06% | 2,956 | 5,834 | 97.36% | 15,301 | 6,160 | -59.74% |
| 25 | Associated Turbine Requirements | | | | 805 | 3,113 | 286.71% | | | | | | |
| 26 | Non-Utility Generation | | | | | | | (786) | 0 | | 1,827 | 0 | |
| 27 | Brookhaven Turbine | | | | | | | 2,318 | 2,786 | 20.19% | | | |
| 28 | Public Works | | | | | | | 183 | 1,609 | 779.23% | 514 | 2,279 | 343.39% |
| 29 | Other Transmission | 1,359 | 2,562 | 88.52% | 3,133 | 4,475 | 42.83% | 2,704 | 1,695 | -37.32% | 2,707 | 2,657 | -1.85% |
| 30 | Total Transmission | 12,199 | 21,731 | 78.14% | 13,379 | 26,573 | 98.62% | 9,022 | 14,238 | 57.81% | 23,418 | 15,535 | -33.66% |
| | DISTRIBUTION | | | | | | | | | | | | |
| 31 | Substations | 6,112 | 8,414 | 37.66% | 10,922 | 13,911 | 27.37% | 9,893 | 9,799 | -0.95% | 18,178 | 17,940 | -1.31% |
| 32 | Electric Lines-Facilities Planning Dept. | 8,742 | 7,387 | -15.50% | 9,965 | 10,211 | 2.47% | 12,337 | 11,376 | -7.79% | 21,189 | 22,776 | 7.49% |
| 33 | Electric Lines-Operating Depts. | 7,120 | 8,537 | 19.90% | 6,679 | 6,172 | -7.59% | 5,077 | 5,606 | 10.42% | 7,498 | 6,614 | -11.79% |
| 34 | Electric Lines-New Business Depts. | [illegible] | [illegible] | -17.69% | 23,314 | 20,429 | -12.37% | 18,946 | 18,044 | -4.76% | 16,169 | 19,811 | 22.52% |
| 35 | Purchase & Install Transformers & Meters | 12,114 | 12,890 | 6.41% | 13,773 | 12,760 | -7.35% | 17,221 | 17,153 | -0.39% | 16,013 | 18,386 | 14.82% |
| 36 | Public Works | | | | | | | 3,205 | 3,678 | 14.76% | 3,826 | 4,192 | 9.57% |
| 37 | Other Distribution | | | | | | | | | | 102 | 390 | 282.35% |
| 38 | Total Distribution | 53,684 | 53,357 | -0.61% | 64,653 | 63,483 | -1.81% | 66,679 | 65,656 | -1.53% | 82,975 | 90,109 | 8.60% |
| 39 | Unassigned Charges & Adjustments | (89) | 0 | | 1,588 | 0 | | (3,748) | 0 | | (8,549) | 0 | |
| 40 | Total Electric | 523,224 | 563,193 | 7.64% | 498,648 | 547,046 | 9.71% | 206,877 | 346,170 | 67.33% | 287,605 | 320,266 | 11.36% |
| 41 | Budget over actual ($) | | $39,969 | | | $48,398 | | | $139,293 | | | $32,661 | |

Source: LILCO response to CPB-50

LONG ISLAND LIGHTING COMPANY

RESPONSE TO CONSUMER PROTECTION BOARD INTERROGATORY NO. 50

Q. Exhibit 19, Schedule 1, pages 1 and 2. In the same format used for this exhibit, show actual construction expenditures for 1987, 1988, 1989 and 1990. Provide the estimated amounts for these years as developed for budget purposes.

A. The documents annexed contain year to date capital expenditures versus budgeted amounts for December 1987, 1988, 1989, and 1990.

LONG ISLAND LIGHTING COMPANY
CAPITAL BUDGET REPORT
DECEMBER 1987

BUDGET REVIEW DIVISION

| | Thousands of Dollars | | | | |
|---|---|---|---|---|---|
| | Month | | Year to Date | | 1987 |
| | ACTUAL | BUDGET | ACTUAL | BUDGET | BUDGET |
| **ELECTRIC OPERATIONS** | | | | | |
| **PRODUCTION** | | | | | |
| # Shoreham 1-820MW Nuclear - Construction | 32,869 | 22,357 | 215,843 | 247,550 | 247,550 |
| - AFC | 15,830 | 15,649 | 167,141 | 165,491 | 165,491 |
| - Pre-Op Credit | 0 | 0 | -2 | 0 | 0 |
| - Total | 48,699 | 38,006 | 382,982 | 413,041 | 413,041 |
| # Nine Mile 2-198MW Nuclear (LILCO Portion Only) | 4,475 | 2,911 | 46,637 | 52,869 | 52,869 |
| Shoreham Nuclear Simulator | 503 | 0 | 3,943 | 4,540 | 4,540 |
| # Shoreham - Related Capital Projects | 0 | 0 | 88 | 119 | 119 |
| # Nine Mile 2 - Related Capital Projects | 0 | 0 | 0 | 0 | 0 |
| Other Production | 8,939 | 2,208 | 23,780 | 17,536 | 17,536 |
| Total Production | 62,616 | 43,125 | 457,430 | 488,105 | 488,105 |
| **TRANSMISSION** | | | | | |
| Nuclear Related Substations & Lines | 5 | 2 | -208 | 11 | 11 |
| Interconnections | -39 | 10 | 137 | 342 | 342 |
| Resource Recovery Substations & Lines | 64 | -148 | -30 | -29 | -29 |
| Nassau Substations & Lines | 253 | 5 | 1,229 | 1,216 | 1,216 |
| Western Suffolk Substations & Lines | 704 | 514 | 1,840 | 2,497 | 2,497 |
| Eastern Suffolk Substations & Lines | 1,291 | 1,680 | 7,372 | 15,132 | 15,132 |
| Other Transmission | 147 | 225 | 1,359 | 2,562 | 2,562 |
| Total Transmission | 2,425 | 2,288 | 12,199 | 21,731 | 21,731 |
| **DISTRIBUTION** | | | | | |
| Substations | 1,777 | 1,304 | 6,112 | 8,414 | 8,414 |
| Electric Lines - Facilities Planning Dept. | 1,154 | 618 | 8,742 | 7,387 | 7,387 |
| Electric Lines - Operating Depts. | 889 | 824 | 7,120 | 8,537 | 8,537 |
| Electric Lines - New Business Dept. | 1,668 | 1,492 | 19,596 | 16,129 | 16,129 |
| Purchase & Install Transformers & Meters | 1,283 | 1,328 | 12,114 | 12,890 | 12,890 |
| Total Distribution | 6,771 | 5,566 | 53,684 | 53,357 | 53,357 |
| Unassigned Charges & Adjustments | -936 | 0 | -89 | 0 | 0 |
| Total Electric Operations | 70,876 | 50,979 | 523,224 | 563,193 | 563,193 |

LONG ISLAND LIGHTING COMPANY
CAPITAL BUDGET REPORT
DECEMBER 1987

BUDGET REVIEW DIVISION

| | Thousands of Dollars | | | | |
|---|---|---|---|---|---|
| | Month | | Year to Date | | |
| | ACTUAL | BUDGET | ACTUAL | BUDGET | 1987 BUDGET |
| **GAS OPERATIONS** | | | | | |
| Production and Storage | 604 | 289 | 3,039 | 3,809 | 3,809 |
| New Customer Load | 1,936 | 1,011 | 15,435 | 9,875 | 9,875 |
| Public Works | 251 | 186 | 3,015 | 2,041 | 2,041 |
| Government Mandated Safety Programs | 1,054 | 334 | 5,531 | 4,416 | 4,416 |
| Purchase & Install Meters & Regulators | 211 | 189 | 2,307 | 2,121 | 2,121 |
| Other Gas Projects | 300 | 240 | 3,532 | 2,789 | 2,789 |
| Unassigned Charges & Adjustments | -21 | 0 | 409 | 0 | 0 |
| Total Gas Operations | 4,335 | 2,251 | 33,268 | 25,051 | 25,051 |
| **COMMON OPERATIONS** | | | | | |
| Transportation | -658 | 267 | 4,361 | 7,313 | 7,313 |
| Improvements to Properties | 170 | 14 | 765 | 868 | 868 |
| Major Projects - Engineering Dept. | 676 | 257 | 2,843 | 4,836 | 4,836 |
| Office Furniture & Equipment | 262 | 34 | 731 | 828 | 828 |
| Tools & Equipment | 496 | 246 | 1,796 | 2,236 | 2,236 |
| Other Common Projects | 95 | 0 | 476 | 127 | 127 |
| Unassigned Charges & Adjustments | -39 | 0 | 4 | 0 | 0 |
| Total Common Projects | 1,002 | 818 | 10,976 | 16,208 | 16,208 |
| TOTAL CONSTRUCTION | 76,213 | 54,048 | 567,468 | 604,452 | 604,452 |
| **NUCLEAR FUEL** | 1,106 | 883 | 13,219 | 10,624 | 10,624 |
| TOTAL EXPENDITURES | 77,319 | 54,931 | 580,687 | 615,076 | 615,076 |

* The 1987 Budget has been amended to change the assumed in-service dates for the Nine Mile 2 and Shoreham plants from 6/1/87 and 9/1/87, to 4/1/88 and 7/1/88.

LONG ISLAND LIGHTING COMPANY
CAPITAL BUDGET REPORT
DECEMBER 1988

CPB Exhibit___(RCS-1)
Schedule 4
PSC Case No. 90-E-1185
Witness: Smith


BUDGET REVIEW DIVISION

Thousands of Dollars

| | Month | | Year to Date | | | 1988 |
|---|---|---|---|---|---|---|
| | ACTUAL | BUDGET | ACTUAL | BUDGET | VARIANCE | BUDGET |
| **ELECTRIC OPERATIONS** | | | | | | |
| **PRODUCTION** | | | | | | |
| Shoreham 1-820MW Nuclear - Construction | 24,501 | 21,072 | 203,527 | 236,810 | -33,283 | 236,810 |
| - AFC | 11,818 | 10,941 | 128,119 | 121,615 | 6,504 | 121,615 |
| - Pre-Op Credit | 0 | 0 | 0 | 0 | 0 | 0 |
| - Total | 36,319 | 32,013 | 331,646 (A) | 358,425 | -26,779 | 358,425 |
| Nine Mile 2-198MW Nuclear (LILCO Portion Only) | 4,921 | 0 | 15,922 (B) | 10,505 | 5,417 | 10,505 |
| Shoreham Nuclear Simulator | 427 | 13 | 1,056 | 1,283 | -227 | 1,283 |
| Nine Mile 2 - Related Capital Projects | 360 | 739 | 3,078 | 11,580 | -8,502 | 11,580 |
| Total Nuclear | 42,027 | 32,765 | 351,702 | 381,793 | -30,091 | 381,793 |
| West Babylon/Brookhaven/Port Jefferson Turbines | 12,483 | 3,517 | 56,970 | 60,123 | -3,153 | 60,123 |
| Other Production | 4,514 | 1,872 | 10,356 (C) | 15,074 | -4,718 | 15,074 |
| Total Non-Nuclear | 16,997 | 5,389 | 67,326 | 75,197 | -7,871 | 75,197 |
| Total Production | 57,024 | 38,154 | 419,028 | 456,990 | -37,962 | 456,990 |
| **TRANSMISSION** | | | | | | |
| Interconnections | 16 | 5 | 192 | 51 | 141 | 51 |
| Resource Recovery Substations & Lines | -17 | 0 | -879 | 0 | -879 | 0 |
| Nassau Substations & Lines | 321 | 73 | 1,110 | 632 | 478 | 632 |
| Western Suffolk Substations & Lines | 581 | 61 | 2,796 | 2,743 | 53 | 2,743 |
| Associated Turbine Requirements | 482 | 739 | 805 | 3113 | -2,308 | 3113 |
| Eastern Suffolk Substations & Lines | 1,285 | 2,946 | 6,222 | 15,559 | -9,337 | 15,559 |
| Other Transmission | 235 | 419 | 3,133 | 4,475 | -1,342 | 4,475 |
| Total Transmission | 2,903 | 4,243 | 13,379 | 26,573 | -13,194 | 26,573 |
| **DISTRIBUTION** | | | | | | |
| Substations | 1,603 | 1,303 | 10,922 | 13,911 | -2,989 | 13,911 |
| Electric Lines - Facilities Planning Dept. | 649 | 850 | 9,965 | 10,211 | -246 | 10,211 |
| Electric Lines - Operating Depts. | 547 | 611 | 6,679 | 6,172 | 507 | 6,172 |
| Electric Lines - New Business Dept. | 3,021 | 1,802 | 23,314 | 20,429 | 2,885 | 20,429 |
| Purchase & Install Transformers & Meters | 2,278 | 1,188 | 13,773 | 12,760 | 1,013 | 12,760 |
| Total Distribution | 8,098 | 5,754 | 64,653 | 63,483 | 1,170 | 63,483 |
| Unassigned Charges & Adjustments | 1,567 | 0 | 1,588 | 0 | 1,588 | 0 |
| Total Electric Operations | 71,592 | 48,151 | 498,648 | 547,046 | -48,398 | 547,046 |

LONG ISLAND LIGHTING COMPANY
CAPITAL BUDGET REPORT
DECEMBER 1988

BUDGET REVIEW DIVISION

| | Thousands of Dollars | | | | | |
|---|---|---|---|---|---|---|
| | Month | | Year to Date | | | 1988 |
| | ACTUAL | BUDGET | ACTUAL | BUDGET | VARIANCE | BUDGET |
| **GAS OPERATIONS** | | | | | | |
| Production and Storage | 289 | 18 | 875 | 1,248 | -373 | 1,248 |
| New Customer Load | 3,252 | 1,181 | 18,320 | 14,770 | 3,550 | 14,770 |
| Public Works | 751 | 365 | 6,936 | 4,713 | 2,223 | 4,713 |
| Government Mandated Safety Programs | 1,570 | 562 | 5,834 | 6,743 | -909 | 6,743 |
| Purchase & Install Meters & Regulators | 126 | 229 | 2,356 | 2,399 | -43 | 2,399 |
| Other Gas Projects | 304 | 171 | 2,721 | 2,838 | -117 | 2,838 |
| Unassigned Charges & Adjustments | 18 | 0 | 476 | 0 | 476 | 0 |
| Total Gas Operations | 8,310 | 2,526 | 37,518 | 32,711 | 4,807 | 32,711 |
| **COMMON OPERATIONS** | | | | | | |
| Transportation | -32 | 192 | 433 | 620 | -187 | 620 |
| Improvements to Properties | 367 | 105 | 1,453 | 1,189 | 264 | 1,189 |
| Major Projects - Engineering Dept. | 232 | 727 | 3,548 | 7,480 | -3,932 | 7,480 |
| Office Furniture & Equipment | 684 | 98 | 1,523 | 1,315 | 208 | 1,315 |
| Tools & Equipment | 791 | 176 | 2,172 | 2,390 | -218 | 2,390 |
| Other Common Projects | 97 | 12 | 509 | 427 | 82 | 427 |
| Unassigned Charges & Adjustments | -308 | 0 | -282 | 0 | -282 | 0 |
| Total Common Projects | 1,831 | 1,310 | 9,356 | 13,421 | -4,065 | 13,421 |
| TOTAL CONSTRUCTION | 79,733 | 51,987 | 545,522 | 593,178 | -47,656 | 593,178 |
| NUCLEAR FUEL | 1,196 | 3,572 | [illegible],639 | 16,793 | -1,154 | 16,793 |
| TOTAL EXPENDITURES | 80,929 | 55,559 | 561,161 | 609,971 | -48,810 | 609,971 |

(A) Excludes write off of $1,395,800 for the disallowed portion of Shoreham.
(B) Excludes write off of $403,888 for the disallowed portion of Nine Mile 2 and includes Pre-Op Credit of $(1,508).
(C) Excludes transfer of $3,791 to miscellaneous deferred debits per PSC Opinion No.87-26 for the Port Jefferson Coal Conversion project.

LONG ISLAND LIGHTING COMPANY
CAPITAL BUDGET REPORT
DECEMBER 1989

BUDGET REVIEW DIVISION

Thousands of Dollars

| | Month ACTUAL | Month BUDGET | Year to Date ACTUAL | Year to Date BUDGET | Year to Date VARIANCE | 1989 OFFICIAL BUDGET |
|---|---|---|---|---|---|---|
| **ELECTRIC OPERATIONS** | | | | | | |
| **PRODUCTION** | | | | | | |
| Shoreham 1-820MW Nuclear - Construction | -3 | 0 | 110,126 | 129,607 | -19,481 | 129,607 |
| - AFC | 0 | 0 | -109,413 | (B) | | (B) |
| - Post Settlement | 15,410 | 13,948 | 75,044 | 80,170 | -5,126 | 80,170 |
| - Total | 15,407 (A) | 13,948 | 75,757 (C) | 209,777 | -134,020 | 209,777 (B) |
| Nine Mile 2-198MW Nuclear (LILCO Portion Only) | 180 | 190 | 1,547 | 1,987 | -440 | 1,997 |
| Shoreham Nuclear Simulator | 0 | 0 | -1 | 276 | -277 | 276 |
| Nine Mile 2 - Related Capital Projects | 389 | 651 | 4,331 | 7,707 | -3,376 | 7,707 |
| Total Nuclear Projects | 15,976 | 14,789 | 81,634 | 219,747 | -138,113 | 219,747 |
| Brookhaven Turbines | 2,116 | 0 | 27,759 | 29,346 | -1,587 | 29,346 |
| Other Production | 12,217 | 1,675 | 25,531 | 17,183 | 8,348 | 17,183 |
| Total Non-Nuclear | 14,333 | 1,675 | 53,290 | 46,529 | 6,761 | 46,529 |
| Total Production | 30,309 | 16,464 | 134,924 | 266,276 | -131,352 | 266,276 |
| **TRANSMISSION** | | | | | | |
| Interconnections | 192 | 108 | 441 | 677 | -236 | 677 |
| Non-Utility Generation-Subs/Lines(T&D) | -1,243 | 0 | -786 | 0 | -766 | 0 |
| Nassau Substations & Lines | 68 | 79 | 619 | 820 | -201 | 820 |
| Western Suffolk Substations & Lines | 54 | 76 | 587 | 817 | -230 | 817 |
| Brookhaven Turbine Requirements | 117 | 0 | 2,318 | 2,786 | -468 | 2,786 |
| Eastern Suffolk Substations & Lines | 182 | 694 | 2,956 | 5,834 | -2,878 | 5,834 |
| Public Works | 10 | 155 | 183 | 1,609 | -1,426 | 1,609 |
| Other Transmission | 138 | 176 | 2,704 | 1,695 | 1,009 | 1,695 |
| Total Transmission | -482 | 1,288 | 9,022 | 14,238 | -5,216 | 14,238 |
| **DISTRIBUTION** | | | | | | |
| Substations | 1,528 | 594 | 9,893 | 9,799 | 94 | 9,799 |
| Electric Lines - Facilities Planning Dept. | 1,958 | 1,076 | 12,337 | 11,376 | 961 | 11,376 |
| Electric Lines - Operating Depts. | 928 | 549 | 5,077 | 5,606 | -529 | 5,606 |
| Electric Lines - New Business Dept. | 2,306 | 1,572 | 18,946 | 18,044 | 902 | 18,044 |
| Purchase & Install Transformers & Meters | 1,462 | 1,310 | 17,221 | 17,153 | 68 | 17,153 |
| Public Works | 294 | 354 | 3,205 | 3,678 | -473 | 3,678 |
| Total Distribution | 8,476 | 5,455 | 66,679 | 65,656 | 1,023 | 65,656 |
| Unassigned Charges & Adjustments | -1,975 | 0 | -3,748 | 0 | -3,748 | 0 |
| Total Electric Operations | 36,328 | 23,207 | 206,877 | 346,170 | -139,293 | 346,170 |

Schedule 4
PSC Case No. 90-E-1185
Witness: Smith
Page 7 of 9

LONG ISLAND LIGHTING COMPANY
CAPITAL BUDGET REPORT
DECEMBER 1989

BUDGET REVIEW DIVISION

Thousands of Dollars

| | Month | | Year to Date | | | 1989 OFFICIAL |
|---|---|---|---|---|---|---|
| | ACTUAL | BUDGET | ACTUAL | BUDGET | VARIANCE | BUDGET |
| **GAS OPERATIONS** | | | | | | |
| Production and Storage | 117 | 15 | 1,163 | 962 | 201 | 962 |
| New Customer Load | 4,947 | 2,712 | 27,681 | 25,929 | 1,752 | 25,929 |
| Public Works | 422 | 679 | 6,139 | 7,104 | -965 | 7,104 |
| Government Mandated Safety Programs | 2,634 | 725 | 8,267 | 7,288 | 979 | 7,288 |
| Purchase & Install Meters & Regulators | 353 | 307 | 2,957 | 3,106 | -149 | 3,106 |
| Associated with Non-Utility Generation | 98 | 0 | 295 | 0 | 295 | 0 |
| Other Gas Projects | 439 | 188 | 1,006 | 3,187 | -2,181 | 3,187 |
| Unassigned Charges & Adjustments | 80 | 0 | 682 | 0 | 682 | 0 |
| Total Gas Operations | 9,090 | 4,626 | 48,190 | 47,576 | 614 | 47,576 |
| **COMMON OPERATIONS** | | | | | | |
| Transportation | 105 | 0 | 335 | 730 | -395 | 730 |
| Improvements to Properties | 1,939 | 114 | 2,746 | 1,452 | 1,294 | 1,452 |
| Major Projects - Engineering Dept. | 2,313 | 815 | 4,719 | 6,601 | -1,882 | 6,601 |
| Office Furniture & Equipment | 75 | 36 | 258 | 424 | -166 | 424 |
| Tools & Equipment | 819 | 153 | 2,173 | 2,204 | -31 | 2,204 |
| Other Common Projects | -953 | 78 | 1,199 | 1,241 | -42 | 1,241 |
| Unassigned Charges & Adjustments | 162 | 0 | 223 | 0 | 223 | 0 |
| Total Common Projects | 4,460 | 1,196 | 11,653 | 12,652 | -999 | 12,652 |
| TOTAL CONSTRUCTION | 49,878 | 29,029 | 266,720 | 406,398 | -139,678 | 406,398 |
| **NUCLEAR FUEL** | 484 | 133 | 8,292 | (B) | | (B) |
| TOTAL EXPENDITURES | 50,362 | 29,162 | 275,012 | 406,398 | -139,678 | 406,398 |
| **SHOREHAM AFC** | | | | | | |
| Accrued AFC | 0 | 0 | 199,981 | 196,607 | 3,374 | |
| Financial Stability Adjustment | 0 | 0 | -94,969 | -96,066 | 1,097 | |
| Negative AFC | 0 | 0 | -14,444 | -14,446 | 2 | |
| Regulatory basis total | 0 | 0 | 90,568 | 86,095 | 4,473 | |
| GAAP Treatment | 0 | 0 | -199,981 | -196,607 | -3,374 | |
| GAAP Basis Total | 0 | 0 | -109,413 | -110,512 | 1,099 | |

(A) Shoreham actual figures for the month and year-to-date exclude the New York State settlement, but include the S.E.C. Mandate for AFC.

(B) The Official Shoreham annual budget, excluding the S.E.C. mandate relating to AFC, reflects the year-to-date June budget plus a revised second half spending plan for post settlement.

LONG ISLAND LIGHTING COMPANY
CAPITAL BUDGET REPORT
DECEMBER 1990

BUDGET REVIEW DIVISION

Thousands of Dollars

| | Month ACTUAL | Month BUDGET | Year To Date ACTUAL | Year To Date BUDGET | Year To Date VARIANCE | 1990 OFFICIAL BUDGET |
|---|---|---|---|---|---|---|
| **ELECTRIC OPERATIONS** | | | | | | |
| **PRODUCTION** | | | | | | |
| Shoreham 1-820MW Nuclear - Post Settlement | 16,994 | 17,367 | 153,361 | 178,404 | (25,043) | 178,4 |
| Nine Mile 2-198MW Nuclear (LILCO Portion Only) | 886 | (156) | (727) | (1,880) | 1,153 | (1,8 |
| Nine Mile 2 - Related Capital Projects | 1,043 | 867 | 9,742 | 9,920 | (178) | 9,9 |
| Total Nuclear Projects | 18,923 | 18,078 | 162,376 | 186,444 | (24,068) | 186,4 |
| E. F. Barrett | 349 | 7 | * 3,124 | 4,478 | (1,354) | 4,4 |
| Far Rockaway | 12 | 31 | 319 | 620 | (301) | 6 |
| Glenwood | 949 | 136 | 3,562 | 3,946 | (384) | 3,9 |
| Northport | 1,408 | 448 | 7,730 | 6,900 | 830 | 6,9 |
| Port Jefferson | 243 | 297 | 4,117 | 3,675 | 442 | 3,6 |
| I. C. Units | 3,574 | 1,837 | 7,059 | 6,505 | 554 | 6,5 |
| Other Production | 360 | 202 | * 1,474 | 2,054 | (580) | 2,0 |
| Total Non-Nuclear Projects | 6,895 | 2,958 | 27,385 | 28,178 | (793) | 28,1 |
| Total Production | 25,818 | 21,036 | 189,761 | 214,622 | (24,861) | 214,6 |
| **TRANSMISSION** | | | | | | |
| Interconnections | 156 | 244 | 3,033 | 2,443 | 590 | 2,4 |
| Non-Utility Generation-Subs/Lines(T&D) | 70 | 0 | 1,827 | 0 | 1,827 | |
| Nassau Substations & Lines | 6 | 162 | 145 | 1,361 | (1,216) | 1, |
| Western Suffolk Substations & Lines | (1) | 46 | (109) | 635 | (744) | ( |
| Eastern Suffolk Substations & Lines | 6,891 | 1,948 | 15,301 | 6,160 | 9,141 | 6, |
| Public Works | 73 | 211 | 514 | 2,279 | (1,765) | 2, |
| Other Transmission | 1,780 | 133 | 2,707 | 2,657 | 50 | 2, |
| Total Transmission | 8,975 | 2,744 | 23,418 | 15,535 | 7,883 | 15, |
| **DISTRIBUTION** | | | | | | |
| Substations | 2,446 | 797 | 18,178 | 17,940 | 238 | 17, |
| Electric Lines - Facilities Planning Dept. | 3,402 | 1,650 | 21,189 | 22,776 | (1,587) | 22, |
| Electric Lines - Operating Depts. | 947 | 655 | 7,498 | 6,614 | 884 | 6, |
| Electric Lines - New Business Dept. | 2,464 | 1,892 | 16,169 | 19,811 | (3,642) | 19, |
| Purchase & Install Transformers & Meters | 1,014 | 1,380 | 16,013 | 18,386 | (2,373) | 18, |
| Public Works | 503 | 398 | 3,826 | 4,192 | (366) | 4, |
| Other Distribution | 30 | 2 | 102 | 390 | (288) | |
| Total Distribution | 10,806 | 6,774 | 82,975 | 90,109 | (7,134) | 90, |
| Unassigned Charges & Adustments | (8,220) | 0 | (8,549) | 0 | (8,549) | |
| Total Electric Operations | 37,379 | 30,554 | 287,605 | 320,266 | (32,661) | 320, |

LONG ISLAND LIGHTING COMPANY
CAPITAL BUDGET REPORT
DECEMBER 1990 'AMY

CPB Exhibit___(RCS-1)
Schedule 4
PSC Case No. 90-E-1185
Witness: Smith


BUDGET REVIEW DIVISION

Thousands of Dollars

| | Month | | Year To Date | | | 1990 OFFICIA |
|---|---|---|---|---|---|---|
| | ACTUAL | BUDGET | ACTUAL | BUDGET | VARIANCE | BUDGET |
| **GAS OPERATIONS** | | | | | | |
| Production and Storage | 390 | 20 | 1,535 | 1,125 | 410 | 9 |
| New Customer Load | 10,888 | 2,378 | 47,689 | 40,811 | 6,878 | 40,8 |
| Public Works | 1,105 | 668 | 7,449 | 7,190 | 259 | 7,1 |
| Government Mandated Safety Programs | 1,444 | 507 | 9,792 | 9,864 | (72) | 9,8 |
| Purchase & Install Meters & Regulators | 380 | 323 | 4,753 | 4,320 | 433 | 4,3 |
| Associated with Non-Utility Generation | (45) | 0 | (389) | 0 | (389) | |
| Other Gas Projects | 1,446 | 432 | 7,966 | 5,325 | 2,641 | 5,5 |
| Unassigned Charges & Adjustments | 69 | 0 | 626 | 0 | 626 | |
| Total Gas Operations | 15,677 | 4,328 | 79,421 | 68,635 | 10,786 | 68,( |
| **COMMON OPERATIONS** | | | | | | |
| Transportation | 6 | 0 | 177 | 845 | (668) | ( |
| Improvements to Properties | 3,228 | 1,599 | 10,144 | 14,219 | (4,075) | 13, |
| Office Furniture & Equipment | 38 | 25 | 320 | 300 | 20 | |
| Tools & Equipment | 284 | 169 | 2,225 | 2,373 | (148) | 2, |
| Other Common Projects | 72 | 13 | 646 | 276 | 370 | |
| Unassigned Charges & Adjustments | 40 | 0 | 2 | 0 | 2 | |
| Total Common Operations | 3,668 | 1,806 | 13,514 | 18,013 | (4,499) | 18,( |
| TOTAL CONSTRUCTION | 56,724 | 36,688 | 380,540 | 406,914 | (26,374) | 406, |
| NUCLEAR FUEL | 752 | 1,274 | 4,738 | 3,543 | 1,195 | 3, |
| TOTAL EXPENDITURES | 57,476 | 37,962 | 385,278 | 410,457 | (25,179) | 410, |

Long Island Lighting Company
Adjustments to Electric and Common Plant in Service
For LILCO's Overstatement at December 31, 1990
(Thousands of Dollars)



| Line No. | Description | (1) Plant in Service | (2) Accumulated Depreciation | (3) Net Plant |
|---|---|---|---|---|
| 1 | Electric | $42,301 | $17,872 | $24,429 |
| 2 | Electric Portion of Common | 5,202 | 875 | 4,327 |
| 3 | Total | $47,503 | $18,747 | $28,756 |

Source:
Line 1: Page 2 of 3
Line 2: Page 3 of 3

Long Island Lighting Company
Adjustment for Overstatement of Net Electric Plant in Service
Based on Balance at December 31, 1990
(Thousands of Dollars)

CPB Exhibit___(RCS-1)
Schedule 5
PSC Case No. 90-E-1185
Witness: Smith


| Line No. | Description | (1) Amount | (2) Reference |
|---|---|---|---|
| | **I. Electric Plant in Service at December 31, 1990** | | |
| 1 | Per Annual Report | $3,205,377 | 1990 Annual Report to PSC, Page E-3 & 19 (Accounts 101 & 106) |
| | **Per LILCO Projection:** | | |
| 2 | Plant in Service | $3,080,357 | LILCO Exh. 17, Schedule 1, Page 1 (Account 101) |
| 3 | Completed Construction Not Classified | 167,321 | LILCO Exh. 17, Schedule 1, Page 1 (Account 106) |
| 4 | Per LILCO Projection | $3,247,678 | |
| 5 | Overstatement in LILCO's Projection | $42,301 | Line 4 - Line 1 |
| | **II. Accumulated Depreciation** | | |
| 6 | Annual Report | $1,016,089 | 1990 Annual Report to PSC, Page E-6 & 19 |
| 7 | LILCO Projection | 1,033,961 | LILCO Exh. 17 |
| 8 | LILCO Overstatement | $17,872 | Line 7 - Line 6 |
| | **III. Net Plant** | | |
| 9 | Overstatement of Net Electric Plant in Service | $24,429 | Line 5 - Line 8 |

Long Island Lighting Company
Adjustment For Overstatement of Net Common Plant in Service
Based on Balance at December 31, 1990
(Thousands of Dollars)

CPB Exhibit___(RCS-1)
Schedule 5
PSC Case No. 90-E-1185
Witness: Smith


| Line No. | Description | (1) Common Plant in Service | (2) Accumulated Depreciation on Common Plant | (3) Net Common Plant in Service |
|---|---|---|---|---|
| | **Common Plant in Service at December 31, 1990:** | | | |
| 1 | Per Annual Report to PSC | $140,988 | $60,529 | |
| 2 | Per LILCO's Projection | 147,328 | 61,596 | |
| 3 | LILCO Overstatement | $6,340 | $1,067 | $5,273 |
| 4 | Allocated to Electric 82.05% [A] | $5,202 | $875 | $4,327 |

Source:

Line 1: 1990 Annual Report to PSC, Pages 9 & 20
Line 2: LILCO Exh. 17, Schedule 2, Page 1

Notes
[A] LILCO Exh. 17, Schedule 2, Page 1

Long Island Lighting Company
Analysis of Fuel Oil Inventory Quantity
Based on Number of Days Burn
Rate Year Ending November 30, 1992

Exhibit ____(RCS-1)
Schedule 6
PSC Case No. 90-E-1185
Witness: Smith

| Line No. | Year | (1) Oil Fuel Consumed BBLs | (2) Plant Time In-Service Days | (3) Average Daily Burn BBLs | (4) 12-Month Average Inventory | (5) No. of Days Burn in Average Inventory |
|---|---|---|---|---|---|---|
| | No. 6 Oil | | | | | |
| 1 | 1988 | 18,658,594 | 366 | 50,980 | 1,856,945 | 36.4 |
| 2 | 1989 | 18,718,323 | 365 | 51,283 | 1,842,387 | 35.9 |
| 3 | 1990 | 15,733,644 | 365 | 43,106 | 1,923,163 | 44.6 |
| 4 | 1991 p | 16,149,000 | 365 | 44,244 | 1,752,363 | 39.6 |
| 5 | 1992 p | 14,427,000 | 366 | 39,418 | 1,752,363 | 44.5 |
| 6 | Rate Yr. p | 14,458,000 | 366 | 39,503 | 1,752,363 | 44.4 |
| | No. 2 Oil | | | | | |
| 7 | 1988 | 1,099,168 | 366 | 3,003 | 183,115 | 61.0 |
| 8 | 1989 | 1,843,441 | 365 | 5,051 | 189,048 | 37.4 |
| 9 | 1990 | 638,887 | 365 | 1,750 | 221,509 | 126.6 |
| 10 | 1991 p | 387,238 | 365 | 1,061 | 231,033 | 217.8 |
| 11 | 1992 p | 189,131 | 366 | 517 | 231,033 | 446.9 |
| 12 | Rate Yr. p | 195,399 | 366 | 534 | 231,033 | 432.6 |

Source: LILCO response to CPB-138

Long Island Lighting Company
Valuation of Fuel Oil Inventory Included in Rate Base

Rate Year Ending November 30, 1992

Exhibit ___ (RCS-1)
Schedule 7
PSC Case No. 90-E-1185
Witness: Smith

| Line No. | Description | (1) Quantity (BBL) | (2) Unit Cost | (3) Valuation |
|---|---|---|---|---|
| | Per CPB: | | | |
| 1 | No. 6 Oil | 1,738,120 A | $17.77 C | $30,890,216 |
| 2 | No. 2 Oil | 97,700 B | $26.88 C | 2,626,176 |
| 3 | | 1,835,820 | | 33,516,392 |
| 4 | Per LILCO Rate Filing | 1,983,000 D | $25.68 | $50,918,000 |
| 5 | Reduction to rate base amount | | | ($17,401,608) |

[A] No. 6 Oil Quantity

| | | | |
|---|---|---|---|
| A.1 | LILCO projected rate year consumption | | 14,458,000 |
| A.2 | No. of days burn for avg. inventory | | 44 |
| A.3 | No. 6 Oil Quantity | | 1,738,120 |

[B] No. 2 Oil Quantity

| | | | |
|---|---|---|---|
| B.1 | LILCO projected rate year consumption | | 195,399 |
| B.2 | Quantity (based on 1/2) | | 97,700 |
| | Compare: | | |
| B.3 | LILCO's maximum two-month burn for rate year | July & August 1992 | 98,710 |
| B.4 | LILCO's maximum 60-day burn for rate year | | 95,526 |

[C] Derived from LILCO's response to CPB-222

[D] LILCO Exhibit 9, Schedule 2

CPB Exhibit___(RCS-1)
Schedule 8
PSC Case No. 90-E-1185
Witness: Smith

Schedule 8-Intentionally omitted

Schedule 9-Intentionally omitted

Long Island Lighting Company
Other Deferred Credits
Rate Year Ending November 31, 1992

CPB Exhibit___(RCS-1)
Schedule 10
PSC Case No. 90-E-1185
Witness: Smith

| Line No. | Description | (1) December 30, 1990 Balance | (2) Estimated Electric Amount | (3) Reason for Rate Base Treatment |
|---|---|---|---|---|
| 1 | Westinghouse Settlement | 1,014,616 | 1,015,000 | A, B, D |
| 2 | NMP2 Litigation Recoveries | 13,417,477 | 13,417,000 | A, B, D |
| 3 | Scrap Deposit - Copper, Iron, Steel, Aluminum, Paper & Electric Meters | 130,567 | 125,000 | A, E |
| 4 | Security Deposit - Mineola Office Bldg. | 7,761 | 7,000 | A,C |
| 5 | Total | $14,570,421 | $14,564,000 | |

Source
LILCO's 1990 Annual Report to the New York Public Service Commission

Reasons for Rate Base Treatment

A Represents cost-free capital not reflected elsewhere in the ratemaking process
B Amount being held by Company for refund
C Relates to Mineloa property which has been in rates
D Relates to expense paid by ratepayers
E Offset to Material & Supplies included in rate base

Long Island Lighting Company
Operating Reserves
Rate Year Ending November 31, 1992

CPB Exhibit___(RCS-1)
Schedule 11
PSC Case No. 90-E-1185
Witness: Smith

| Line No. | Description | (1) December 30, 1990 Balance | (2) Estimated Electric Amount |
|---|---|---|---|
| | Injuries and Damages Reserve (Account 262): | | |
| 1 | Property Damage and Personal Injuries | $7,480,000 | $6,276,000 |
| 2 | Automobile Liability Reserve | $595,000 | 499,000 |
| 3 | Total Account 262 | $8,075,000 | |
| 4 | Pension and Benefit Reserve (Account 263) | $2,938,542 | 2,207,000 |
| 5 | Total | $11,013,542 | $8,982,000 |

Long Island Lighting Company
Summary of Adjustment to Net Operating Income
Rate Year Ending November 31, 1992
(Thousands of Dollars)

CPB Exhibit___(RCS-1)
Schedule 12
PSC Case No. 90-E-1185
Witness: Smith

| Line No. | Description | Reference | (1) Revenue or Expense Adjustment Amount | (2) Net Operating Income Amount | (3) Revenue Requirement Impact Amount |
|---|---|---|---|---|---|
| 1 | Research & Development Expense | Schedule 14 | $11,220 | $7,385 | $11,904 |
| 2 | Office of Training | Schedule 15 | 1,780 | 1,172 | 1,889 |
| 3 | Office of Information Systems | CPB-37 | 3,999 | 2,632 | 4,243 |
| 4 | Employee Associations & Miscellaneous | Schedule 16 | 87.2 | 57 | 92 |
| 5 | CEO Personal Security | | 10 | 7 | 11 |
| 6 | Other Employee Compensation | | 160 | 105 | 169 |
| 7 | Insurance Expense | Schedule 17 | 1,674 | 1,102 | 1,776 |
| 8 | Payroll Inflation | | 51 | 34 | 55 |
| 9 | Work Force | Unknown, awaiting information | | | |
| 10 | Depreciation | Schedule 20 | 1,428 | 940 | 1,515 |
| 11 | Totals | | $20,409 | $13,434 | $21,654 |

Notes
Column 2 is Column 1 multiplied by 0.65822. This is the inverse of LILCO's effective tax rate of 34.178% as reflected in the relationship of Federal Income Tax to Operating Income Before Federal Income Tax on LILCO's Exhibit 5, Schedule 2.
Column 3 is Column 2 multiplied by LILCO's Gross Revenue Conversion Factor of 1.611977.

Long Island Lighting Company
Electric Research and Development Expenses
(Thousands of Dollars)

CPB Exhibit ___ (RCS-1)
Schedule 13
Page 1 of 2
PSC Case No. 90-E-1185
Witness: Smith

| Line No. | Year | (1) Internal | (2) External EPRI | (3) External ESEERCO | (4) External NYSERDA | (5) Total Electric R&D |
|---|---|---|---|---|---|---|
| | I. Annual Expenditure Amount | | | | | |
| 1 | 1987 | 2,747 | | 108 | 1,007 | 3,862 |
| 2 | 1988 | 2,913 | | 73 | 1,051 | 4,037 |
| 3 | 1989 | 2,457 | 328 | 55 | 1,249 | 4,089 |
| 4 | 1990 | 8,650 | 1,390 | 54 | 1,340 | 11,434 |
| 5 | 1991 p | 10,050 | 2,900 | 750 | 1,400 | 15,100 |
| 6 | 1992 p | 10,050 | 4,300 | 1,600 | 1,450 | 17,400 |
| 7 | Avg. 87-89 | 2,706 | 109 | 79 | 1,102 | 3,996 |
| | II. Expenditure Growth Over Prior Year ($) | | | | | |
| 8 | 1988 | 166 | | (35) | 44 | 175 |
| 9 | 1989 | (456) | 328 | (18) | 198 | 52 |
| 10 | 1990 | 6,193 | 1,062 | (1) | 91 | 7,345 |
| 11 | 1991 p | 1,400 | 1,510 | 696 | 60 | 3,666 |
| 12 | 1992 p | | 1,400 | 850 | 50 | 2,300 |
| | III. Expenditure Growth Over 1987-89 Average ($) | | | | | |
| 13 | 1990 | 5,944 | 1,281 | (25) | 238 | 7,438 |
| 14 | 1991 p | 7,344 | 2,791 | 671 | 298 | 11,104 |
| 15 | 1992 p | 7,344 | 4,191 | 1,521 | 348 | 13,404 |
| | IV. Percentage Increases Over Prior Year | | | | | |
| 16 | 1988 | 6.04% | NA | -32.41% | 4.37% | 4.53% |
| 17 | 1989 | -15.65% | NA | -24.66% | 18.84% | 1.29% |
| 18 | 1990 | 252.06% | 323.78% | -1.82% | 7.29% | 179.63% |
| 19 | 1991 p | 16.18% | 108.63% | 1288.89% | 4.48% | 32.06% |
| 20 | 1992 p | | 48.28% | 113.33% | 3.57% | 15.23% |
| | V. Percentage Increases Over 1987-89 Average | | | | | |
| 21 | 1990 | 219.70% | 1171.34% | -31.36% | 21.56% | 186.14% |
| 22 | 1991 p | 271.44% | 2552.44% | 853.39% | 27.00% | 277.88% |
| 23 | 1992 p | 271.44% | 3832.93% | 1933.90% | 31.54% | 335.44% |

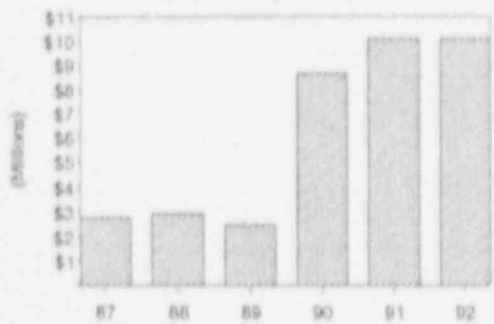
Source
1987 - 1990 Actual expenditures: LILCO response to interrogatory CPB-66
1991 - 1992 Projected: LILCO Exhibit 14, Schedule 1 (Driscoll)

Note
p = LILCO projection

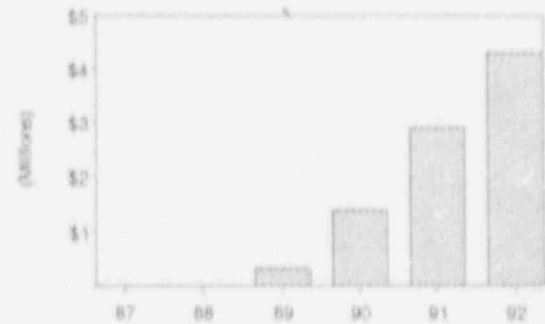
Long Island Lighting Company
Electric Research and Development Expenditures
Growth Shown Graphically

CPB Exhibit ___ (RCS-1)
Schedule 13
Page 2 of 2
PSC Case No. 90-E-1185
Witness: Smith

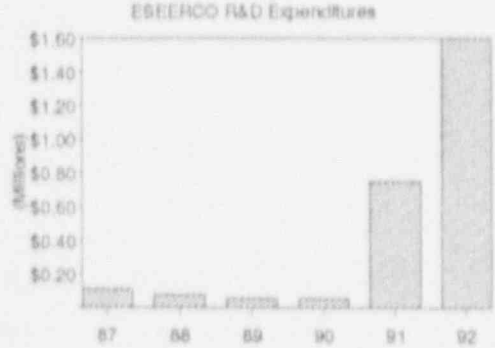
ernal R&D Expenditures



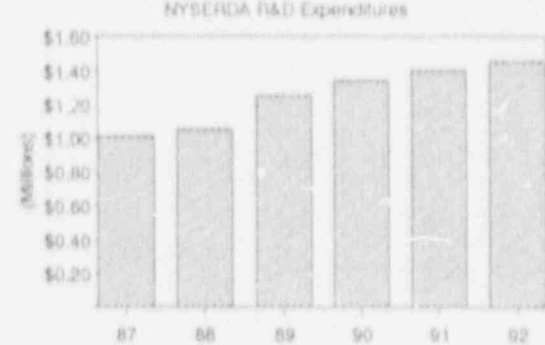

EPRI R&D Expenditures



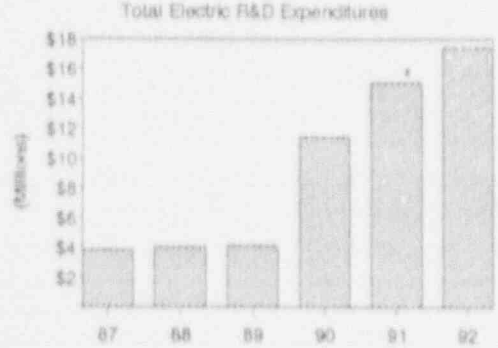

ESEERCO R&D Expenditures




NYSERDA R&D Expenditures




Total Electric R&D Expenditures




Source

1987 - 1990 Actual expenditures: LILCO response to interrogatory CPB-66

1991 - 1992 Projected: LILCO Exhibit 14, Schedule 1 (Driscoll)

Long Island Lighting Company
Adjustment to Proposed Research & Development Program
Rate Year Ending November 31, 1992
(Thousands of Dollars)

CPB Exhibit___(RCS-1)
Schedule 14
PSC Case No. 90-E-1185
Witness: Smith

| | | (1) | (2) | (3) |
|---|---|---|---|---|
| Line No. | Description | LILCO Proposal | Adjustment | CPB Proposal |
| 1 | Internal | $10,050 | (7,050) | 3,000 |
| 2 | EPRI | 3,950 | (3,950) | 0 |
| 3 | ESEERCO | 1,390 | (220) [A] | 1,170 |
| 4 | NYSERDA | 1,425 | | 1,425 |
| 5 | Total R&D | $16,815 | (11,220) | $5,595 |

Source
Col. 1: LILCO workpapers and LILCO Exhibit 14, Schedule 1

Notes
A Exclusion of 16% nuclear

Long Island Lighting Company
Adjustment for Office of Training Expense Increase
Rate Year Ending November 31, 1992
(Thousands of Dollars)

CPB Exhibit___(RCS-1)
Schedule 15
PSC Case No. 90-E-1185
Witness: Smith

| Line No. | Description | Amount | Reference |
|---|---|---|---|
| 1 | Rate year costs per LILCO's Office of Training Director | $7,075.4 | LILCO Ex. 12, Schedule 1 |
| | Inflation: | | |
| 2 | On test-year pay roll | 223.7 | Note A |
| 3 | On other test-year expenses | 429.5 | Note B |
| 4 | Total Company-proposed rate year costs | $7,728.6 | |
| 5 | Maximun amount to be allowed | 5,800.0 | RMA amount for 1992 |
| 6 | Disallowance | $1,928.6 | |
| 7 | Electric portion | 92.3% | Note C |
| 8 | Disallowance of rate-year electric expense | $1,780.1 | |

| | | | |
|---|---|---|---|
| | Note A, Inflation on Test-Year Payroll | | |
| A.1 | Office of Training Test Year Payroll | $2,810.2 | LILCO Exh. 12, Sch. 1 |
| A.2 | LILCO's composite payroll inflation rate | 7.962% | LILCO Exh. 16, Sch. 3 |
| A.3 | Inflation on test-year payroll | $223.7 | Lines A.1 x A.2 |
| | Note B, Inflation and Other Test-Year Expenses | | |
| B.1 | Office of Training other test-year expenses | $4,265.2 | Line 1 - Line A.1 |
| B.2 | LILCO's inflation factor to rate year | 10.07% | LILCO Exh. 16, Sch's. 8, 9, 10, etc. |
| B.3 | Inflation on non-payroll test-year expenses | $429.5 | Lines B.1 x B.2 |

C Based on Company labor allocation per LILCO Exh. 16, Schedule 3.

Long Island Lighting Company
Disallowance of Expense for Employee Association, Chauffeurs, Personal Use of Vehicles, Employee Cafeterias, and Travel Insurance
Rate Year Ending November 30, 1992
(Thousands of Dollars)

CPB Exhibit__(RCS-1)
Schedule 16
PSC Case No. 90-E-1185
Witness: Smith

| Line No. | Description | Reference | (1) Test Year Amount | (2) Rate Year Amount (Note A) |
|---|---|---|---|---|
| 1 | Employee Association Contribution | CPB-120 | $11.0 | 12.1 |
| 2 | Chauffeurs for Company Officers | Note B | 14.7 | 16.2 |
| 3 | Subsidization of Employee Cafeterias | CPB-122D | 60.0 | 66.0 |
| 4 | Totals | | 85.7 | 94.3 |
| 5 | Electric Expense Portion | | | 92.5% |
| 6 | Electric Expense Disallowance | | | $87.2 |

Notes

A Rate year amounts are based on test year amounts escalated by LILCO's assumed inflation of 10.07%.

B Based on 1/10th of $146,810 expense per LILCO's response to CPB-122A.

Long Island Lighting Company
Adjustment to Test Year Electric Insurance Expense
Rate Year Ended November 30, 1992
(Thousands of Dollars)

CPB Exhibit___(RCS-1)
Schedule 17
PSC Case No. 90-E-1185
Witness: Smith

| | | Elect... Expense | | |
|---|---|---|---|---|
| | | (1) | (2) | (3) |
| Line No. | Type of Insurance | LILCO Test Year Amount | Actual 1990 Amount | Difference |
| | **Propert** | | | |
| 1 | Boiler | $401.0 | $441.5 | (40.5) |
| 2 | Fire | 1,079.0 | 1,137.9 | (58.9) |
| 3 | Cable | 184.0 | 194.8 | (10.8) |
| 4 | T & D | 1,040.0 | 733.9 | 306.1 |
| 5 | Crime | 35.0 | 34.6 | 0.4 |
| 6 | Total Property | $2,739.0 | $2,542.7 | $196.3 |
| | **Liability** | | | |
| 7 | Directors and Officers | $3,372.0 | $2,449.8 | 922.2 |
| 8 | Other | 2,210.0 | 1,950.3 | 259.7 |
| 9 | Total Liability | $5,582.0 | $4,400.1 | $1,181.9 |
| 10 | Total Insurance, Test Year | $8,321.0 | $6,942.8 | $1,378.2 |
| 11 | Inflation to Rate Year | 10.07% | 7.813% [A] | |
| 12 | Total Insurance, Rate Year | $9,158.9 | $7,485.2 | $1,673.7 |
| 13 | Shift of expense from electric to gas operations | (410.1) | (410.1) [B] | |
| 14 | Proposed rate year expense | $8,748.8 | $7,075.1 | $1,673.7 |

Source: LILCO response to Interrogatory CPB-151, LILCO Exhibit 16, Schedule 7, and LILCO's supporting workpapers.

Notes

[A] Per LILCO Exhibit No. 5, Schedule 10 (Wackett)
1990 inflation of 4.0% and 11/12ths of 1991 inflation of 4.0%

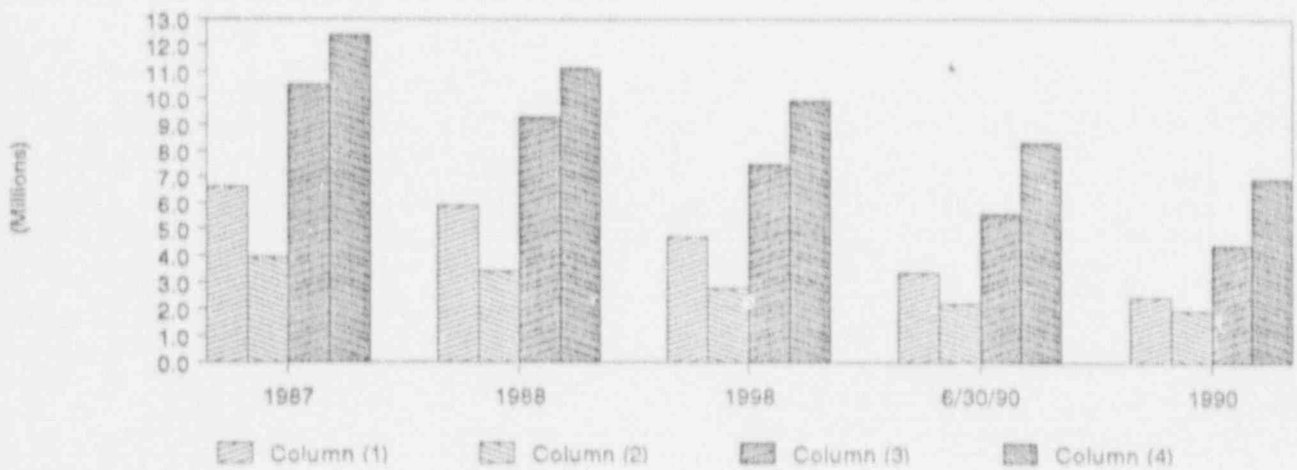
[B] LILCO's rate year adjustment used pending receipt of LILCO's calculation detail for this adjustment. (CPB-245)

Long Island Lighting Company
Decreasing Trend in Cost of Company's Liability Insurance
Rate Year Ending November 30, 1992
(Thousands of Dollars)

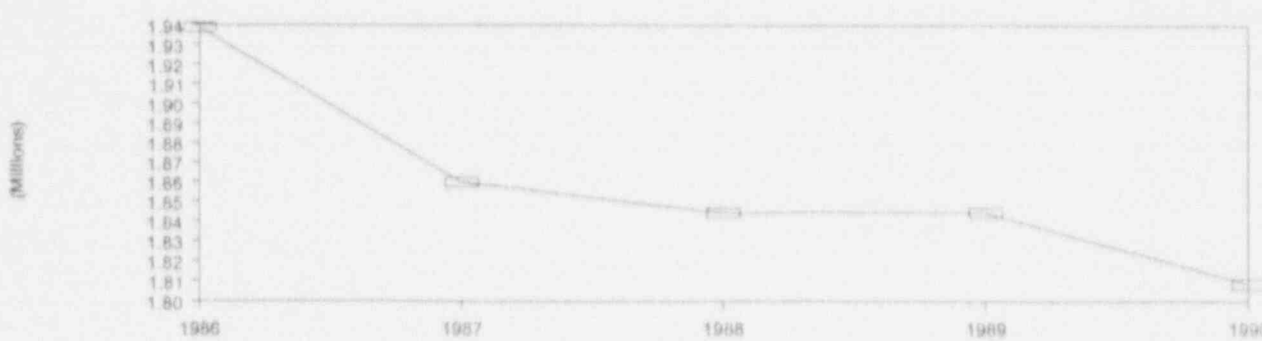
CPB Exhibit___(RCS-1)
Schedule 18
PSC Case No. 90-E-1185
Witness: Smith

| | | TYPE OF INSURANCE | | | |
|---|---|---|---|---|---|
| | | (1) | (2) | (3) | (4) |
| Line No. | Year | Directors' & Officers' Liability | Other Liability | Total Liability | Total Liability & Property |
| 1 | 1987 | 6,603.3 | 3,918.5 | 10,521.8 | 12,382.1 |
| 2 | 1988 | 5,896.9 | 3,413.2 | 9,310.1 | 11,154.8 |
| 3 | 1998 | 4,701.9 | 2,769.3 | 7,471.2 | 9,922.5 |
| 4 | Test Year Ended 6/30/90 | 3,372.0 | 2,210.0 | 5,582.0 | 8,321.0 |
| 5 | 1990 | 2,449.8 | 1,950.3 | 4,400.1 | 6,942.8 |

TREND OF INSURANCE




PROPERTY INSURANCE COST EXCLUSIVE OF NEW T&D COVERAGE



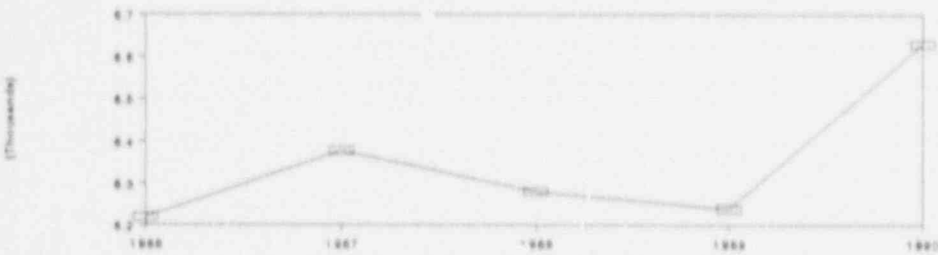

Source: LILCO's response to Interrogatory CPB-151.

Long Island Lighting Company
Work Force Trend
And Comparison With Consolidated Edison

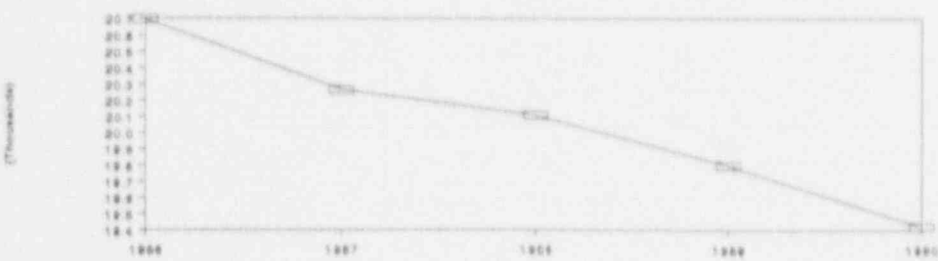
CPB Exhibit___(RCS-1)
Schedule 19
PSC Case No. 90-E-1185
Witness: Smith

| Line No. | Year | LILCO | Con. Edison |
|---|---|---|---|
| | I. Employees at December 31 | | |
| 1 | 1986 | 6,219 | 20,698 |
| 2 | 1987 | 6,378 | 20,266 |
| 3 | 1988 | 6,281 | 20,108 |
| 4 | 1989 | 6,239 | 19,798 |
| 5 | 1990 | 6,630 D | 19,422 B |
| 6 | Rate Year | A | 18,981 B |
| 7 | 2/28/91 | 6,598 C | |

LILCO WORK FORCE TREND THROUGH 1990



CONSOLIDATED EDISON WORK FORCE TREND THROUGH 1990



| Line No. | Year | LILCO | Con. Edison |
|---|---|---|---|
| | II. Year Over Year Change | | |
| 8 | 1987 | 159 | -432 |
| 9 | 1988 | -97 | -158 |
| 10 | 1989 | -42 | -310 |
| 11 | 1990 | 391 | -376 |
| | III. Year Over Year Percentage Change | | |
| 11 | 1987 | 2.56% | -2.09% |
| 12 | 1988 | -1.52% | -0.78% |
| 13 | 1989 | -0.67% | -1.54% |
| 14 | 1990 | 6.27% | -1.90% |

Source: 1990 Annual Reports to Shareholders

Notes:

A. LILCO Exhibit , Schedule

B. Consolidated Edison Exhibit No. 39, Schedule 4, Page 2 of 7
(Consolidated Edison 1990 Annual Report listed 19,483 employees at 12/31/90)

C. LILCO Comparative Statement Operations & Budget, February 1991
(Includes 72 part-time employees) Personnel Activity page

D. Includes 85 part-time employees, per LILCO's December 1990 Personnel Activity Report

Long Island Lighting Company
Adjustment to Reduce Rate Year Depreciation Expense
Associated with Removal of Plant in Service Overstatements
Rate Year Ending November 31, 1992
(Thousands of Dollars)

CPB Exhibit___(RCS-1)
Schedule 20
PSC Case No. 90-E-1185
Witness: Smith

| Line No. | Description | (1) Electric Plant | (2) Electric Portion of Common | (3) Total | Reference |
|---|---|---|---|---|---|
| 1 | Estimated Rate Year Overstatement | $42,301 | $5,202 | $47,503 | Sch. 3, p. 1 |
| 2 | Composite deprection rate used by LILCO for rate year | 2.97% | 3.31% | | Note A |
| 3 | Adjustment to depreciation expense | $1,256 | $172 | $1,429 | |
| 4 | Adjustment to accumulated depreciation | $628 | $86 | $714 | |

Note A: Composite Depreciation Rates

| | | Electric | Electric Portion of Common | Reference |
|---|---|---|---|---|
| A.1 | Rate year depreciation accrual | $101,201 | $4,637 | LILCO Exh. 15, Sch. 21 |
| A.2 | LILCO's average rate year plant in service | $3,411,426 | $139,945 | LILCO Exh. 17, Sch. 1 |
| A.3 | Composite depreciation rates | 2.97% | 3.31% | Lines A.1/A.2 |

STATE OF NEW YORK

PUBLIC SERVICE COMMISSION

| In the Matter of<br><br>Proceeding on the Motion of the Commission as to the Rates, Charges, Rules and Regulations of Long Island Lighting Company for Gas & Electric rates | Case<br>90-E-1185 |
|---|---|

DIRECT TESTIMONY AND EXHIBITS
OF
JOSEPH P. THORNE, SR.

Dated: Albany, New York
May 22, 1991

RICHARD M. KESSEL
EXECUTIVE DIRECTOR
NYS CONSUMER PROTECTION BOARD
99 WASHINGTON AVENUE
SUITE 1020
ALBANY, NEW YORK 12210

JOSEPH F. THORNE, SR.

Q. State your name, present position, and business address.

A. My name is Joseph F. Thorne, Sr. I am the Chief Utility Accounting Analyst of the Consumer Protection Board (CPB). The CPB is located at 99 Washington Avenue, Albany, New York 12210.

Q. State your education and work experience.

A. I graduated from Murray State University, Murray, Kentucky, in 1970, receiving a Bachelor of Science Degree in Business with a major in Accounting. Upon graduation, I accepted a position with the New York State Department of Public Service, in the Audit Section of the Office of Accounting and Utility Finance. I transferred to the Accounting Systems Section in October 1973, and remained there until November 1979.

I was promoted to Senior Accountant in 1973 and to Associate Accountant in 1975. In November 1979, I transferred to the CPB, accepting a position as a Principal Accountant. These promotions were based on the passing of competitive statewide examinations. In April 1982, I was appointed Chief of Utility Accounting Analysis for the CPB.

Q. Have you testified before this Commission?

A. Yes. I previously testified in 38 different rate, financing, extraordinary property loss and rate settlement proceedings. I last testified in the Niagara Mohawk Power

Corporation electric, streetlighting and gas rate proceedings. (Cases 29327, et. al)

Q. What is the purpose of your testimony?

A. I will summarize the various revenue adjustments developed by CPB witnesses Dr. Segi Yoon, Dr. Douglas Elfner, Mr. Tariq Niazi, Mr. Ralph Smith, and myself, as well as the adjustments presented by Dr. John Wilson, who is testifying on behalf of the Long Island Power Authority (LIPA).

I will then discuss a reduction of about $18.2 million in Long Island Lighting Company's (LILCO's) rate year property taxes which has not been reflected in the cost of service for the 12 months ended November 30, 1992.

I will also increase the level of ratepayer accumulated deferred credits by $3.0 million and recommended that such credits be applied to reduce the Rate Moderation Component (RMC).

In addition, I will describe several long-term credits and cost reductions, such as property tax refunds in litigation, salvage value of Shoreham equipment and recoveries from contractors now in litigation which may be available in the future to reduce the RMC balance.

Finally, I will discuss LILCO's financial condition and show that a cash interest coverage target of 1.36 times, reflecting the 11.1% equity return recommended by CPB

witness Yoon, will maintain the Company's current BBB-/Baa3 bond ratings. Lowering the equity return to 11.1% from the 12.2% sought by LILCO reduces the Company's revenue requirement by about $34 million.

Q. Please describe the CPB and LIPA adjustments and their revenue impacts.

A. These adjustments are summarized in the following table:

Summary Of Adjustments

| | |
|---|---|
| Reduction in projected fuel costs | $50.3 million |
| Reduction in proposed profit allowance from 12.2 percent to 11.1 percent | $34.0 million |
| Reduction in projected property taxes | $19.2 million |
| Removal of charges related to unbilled revenues | $16.0 million |
| Reduction in research and development expenses and utility organization dues | $12.2 million |
| Reduction in insurance costs | $ 4.6 million |
| Other adjustments | $21.0 million |
| TOTAL | $157.3 million |

The application of these adjustments to LILCO's rate

proposals is discussed in Mr. Kessel's testimony. CPB witness Mr. Niazi will testify in opposition to LILCO's request for additional automatic rate adjustment mechanisms.

## RATE YEAR COST OF SERVICE

Q. Has LILCO projected the rate year level of property taxes for the electric department?

A. Yes. Property taxes of $220 million were forecast by LILCO witness Ehrler and reflected as a rate year expense. (Exhibit 22, Schedule 3) This expense was included in the original cost of service calculations and in the rate year revenue requirement of $114.6 million. (Exh. 5, Sch. 1) However, when the $220 million was revised downward to about $201.8 million, LILCO did not indicate that the rate year cost of service and the required revenues would be reduced. (SM 429) It appears that LILCO would credit this amount to the RMC, as it has proposed to do for other property tax changes.

Q. What ratemaking treatment do you recommend for this item?

A. I recommend that the $18.2 million ($19.2 million in revenue requirement terms) be applied to reduce the rate year revenue requirement. This properly reflects projected rate year expenses.

## DEFERRED RATEPAYER CREDITS

Q. Please discuss the various deferred ratepayer credits.

A. LILCO's filing includes several ratepayer benefits which the Company uses to reduce the RMC. The credits include:

| | |
|---|---|
| Forecasted excess earnings | $20.5 million |
| Fuel Moderation Component (FMC) | 19.8 million |
| Net Rental Income from the Mineola Bldg. | 1.0 million |
| Over-recovery of Pension Expenses | 4.8 million |
| Brookhaven Property Tax refunds | 8.0 million |
| (2nd installment) | 3.6 million |
| (3rd installment) | 2.9 million |
| Total | $60.6 million |

Source: Exhibit _____ (JT-1), response to Interrogatory 18.

In regard to the Brookhaven property tax refunds, the Company has proposed to retain 25% of the amount for its stockholders. LILCO has assumed the same 25%/75% sharing for another Brookhaven property tax refund of $8.7 million which was received in 1988, crediting $6.5 million to the RMC. (LILCO Petition dated October 2, 1990, at 4) The ratemaking treatment for all of these Brookhaven property tax refunds is pending before the Commission and should be

resolved in the context of this proceeding.

Q. What is the basis for the Company's proposal to retain 25% of the property tax refunds for stockholders.

A. In a petition dated October 2, 1990, the Company states that its proposed 75%/25% sharing would provide a "fair incentive to continue its successful tax reduction program". (LILCO petition of October 2, 1990, at 1) While the Commission has approved the sharing of property tax refunds as an incentive mechanism, the historic stockholder retention levels have ranged between 10% and 25%. The most recent cases mentioned by LILCO resulted in an average retention of about 14%, including 10% in Case 29672, Niagara Mohawk Power Corporation - Gas Rates, Opinion No. 88-04, 18% in Case 88-G-121, Brooklyn Union Gas Co., Opinion No. 88-26, and 13.9% in Case 89-M-061, Consolidated Edison of New York, Inc., Opinion No. 90-1.

LILCO claims it is entitled to retain 25% because it obtained large property tax refunds. However, when one considers the rate increases facing LILCO's electric ratepayers, a lower incentive sharing amount is clearly appropriate. The more recent 14% average retention level is reasonable and should be the basis for sharing the property tax savings in this case. This would increase the property tax refunds included in the ratepayer credits by $3.0

million. As revised, the $60.6 million shown in the table above is increased by about $2 million, while the amount of $6.5 million amount for the 1988 refund is increased to $7.5 million.

Q. How should the deferred ratepayer credits be treated for ratemaking purposes in this proceeding?

A. As corrected above, the deferred ratepayer credits should be used to reduce the RMC balance, as LILCO proposes.

## LONG-TERM CREDITS AND COST REDUCTIONS

Q. Please discuss any long-term credits and cost reductions which may be available to reduce the RMC in the future.

A. There are many contingent items which may reduce the build-up of the RMC over the long-term and could result in a reduction of the RMC's amortization period. While LILCO now suggests that its updated forecasts and assumptions require the RMC to be amortized over 12 years, the Company recognizes there are many factors that may impact the long-term rate picture. (SM 191-2) It is generally recognized that long-term forecasts are subject to change. In the Opinion establishing its LILCO rate plan, the Commission stated that projections over a period of 10 or more years are inherently uncertain. (Opinion 89-8, issued April 13, 1989, at 75) Nevertheless, there is a potential for

improvement in several of LILCO's long-term cost projections. I will summarize several of these items here:

1. Further property tax reductions -- .ie Company is seeking to reduce the Shoreham assessment imposed by the Town of Brookhaven which, if successful, would lead to tax refunds exceeding $500 million. (LILCO compliance filing dated July 28, 1989) In addition, the Company is litigating property tax issues in Nassau County (Mineola office building and the E. F. Barrett Power Plant), and in New York City (Far Rockaway Power Plant). (LILCO Petition dated October 2, 1990, at 2, 3)

2. Other litigation relating to Shoreham and Nine Mile Point 2 -- LILCO is seeking to recover costs and/or damages from several contractors involved with the two nuclear construction projects. In one case involving IMO Delaval, Inc., LILCO seeks damages for defects in three diesel generators. (LILCO compliance letter dated July 28, 1989) On April 12, 1991, Newsday reported that a Federal jury concluded the generators were under warranty when they failed, thereby permitting LILCO to seek up to $30 million in damages. Another suit involves General Electric and the suppression containment system for Shoreham. Two other cases involve the design and construction of Nine Mile Point

2. LILCO has indicated that the outcome of these cases cannot be predicted, but the possibility of significant recovery exists in each case. (LILCO Compliance letter dated July 28, 1989)

3. Shoreham salvage -- LILCO continues to hold Shoreham property and equipment pending disposition. The salvage value is dependent on the potential use of this equipment in LILCO's system, a possible market sale or liquidation. LILCO is currently to evaluating these options.

4. "Emission credits" -- LILCO is considering the sale of allowances resulting from the Clean Air Act amendments of 1990, but these amounts have not been reflected in any rate plan. (SM 242) During cross-examination by Staff, LILCO witness Madsen indicated that the Company may have 50,000 excess allowances. A value of $1,500 for each unit was mentioned as the possible value for these emission credits. (SM 243)

Favorable resolution of these cases can result in, for example, substantial cost reductions or refunds of property taxes and improve the Company's long-term forecasts.

## INTEREST COVERAGE

Q. Will the CPB equity return recommendation affect LILCO's cash interest coverage?

A. Yes. CPB proposed that LILCO be allowed an 11.1% return on equity. This traditional cost of service adjustment would reduce LILCO's $114.6 million (5%) revenue request by about $34.0 million. With an equity return of 11.1%, rate year cash interest coverage will be about 1.36 times. (Exh. ___(JT-2) The Company projected that its pre-tax interest coverage for the December 1991 - November 1992 rate year would only be slightly higher -- 1.43 times. (SM 250, Exh. 3, Sch. 6)

Q. What are LILCO's current bond ratings?

A. The Company has achieved minimum investment grade ratings of Baa3 from Moody's and BBB- from Standard and Poor's (S&P's). These improvements were achieved after the Shoreham Settlement and the RMA were approved. LILCO points out, and I agree, that attainment of minimum investment grade ratings reflects an improved qualitative assessment of LILCO. (SM 199).

Q. Is the projected coverage level of 1.36 times an improvement over LILCO's recent coverage?

A. Yes. Recent actual cash coverage levels for LILCO were:

| | | |
|---|---|---|
| (a) | June 30, 1990 | 1.13 times |
| (b) | December 31, 1990 | 1.20 " |

Source: (a) Exh.__JT-3
(b) SM 199

In addition, the Company projects that its coverage for the 12 months ended December 31, 1991 would again be 1.2 times. (Exh.____ JT-4) The improvement in cash coverage to 1.36 times for the December 1991 - November 1992 rate year will be viewed positively by the various rating agencies. Consequently, LILCO's investment grade ratings will be maintained since this quantitative aspect --cash interest coverage -- will improve.

Q. Will the rating agencies qualitative assessment of LILCO continue on a positive basis if the rate proposals presented by the CPB and LIPA are adopted?

A. Yes. Under the CPB and LIPA recommendations, a rate increase of $64.7 million (2.8%) would be authorized and no new deferred ratepayer charges would be booked in the December 1991 - November 1992 rate year. This will support LILCO's return to financial health. It reduces the projected increase in the long-term RMC liability and

reflects support of the RMA's basic concepts. Rating agencies will view such a position favorably.

The improved qualitative assessment of LILCO will continue, as will the most important quantitative element, cash interest coverage. Considering these factors, LILCO's investment grade ratings will be maintained.

Q. Does this conclude your testimony?
A. Yes.

EXHIBIT

LONG ISLAND LIGHTING COMPANY
RESPONSES TO FIRST SET OF CPB INTERROGATORIES

18. Q. Provide full details and rate year amounts for each of the deferred ratepayer credits listed on page 17, lines 1-8. Please provide a rate case reference for each item in the rate filing and discuss any restrictions on current rate use of each credit. For any item not previously quantified and included in this list of "examples" provide a projection for the rate year and detail the basis for this amount.

A. The deferred electric ratepayer credits referenced in the testimony on page 17, lines 1-8 which were applied to reduce the RMC balance are as follows:

| Description | Amount ($M) | Credited to RMC On |
|---|---|---|
| Forecasted Excess Earnings for the 12/1/90-11/30/91 Rate Year: | 20.5 | 12/1/91 |
| Projected FMC Balance as of 11/30/91: | 19.8 | 12/1/91 |
| Net Rental Income from the Mineola Office Building as of 11/30/91: | 1.0 | 12/1/91 |
| Over-Recovery of Pension Expenses as of 11/30/91: | 4.8 | 12/1/91 |
| Brookhaven Property Tax Refund Installment Payments: | 8.0 | 12/1/90 |
| | 3.6 | 8/1/91 |
| | 2.9 | 8/1/92 |
| Estimated Over-Recovery of 1990 DSM Program Costs: | 7.5 | 1/1/91 |

The RMA provides for a deferral of any excess earnings and FMC credits for future disposition by the PSC. In Opinion and Order No. 86-1 issued January 24, 1986 in connection with LILCO's Electric Case No. 29029, the PSC ordered the Company to begin deferring rental income from its Mineola office building(net of certain expenses) for recognition in a future rate proceeding. In a PSC order received on September 22, 1987 the Commission required all New York State utilities to defer any over-recoveries of pension costs resulting from the

implementation of SFAS-87 until such time as the effects of the accounting rule change promulgated by this statement could be reflected in the context of a rate proceeding. Under a settlement negotiated with the Town of Brookhaven, the Company is to receive a property tax refund totaling $20 M, payable in three installments. LILCO received the first installment of $11.0 M plus $63,288 in interest for late payment on August 29, 1990. The second and third installments of $5.0 M and $4.0 M are scheduled to be received on August 1, 1991 and August 1, 1992, respectively. The ratemaking treatment of this refund which is reflected in the Company's filing is in accordance with its petition filed with the Commission on October 2, 1990 which proposes that 75% of the electric portion(96%) of the refund be credited to ratepayers via a reduction to the RMC. A PSC order related to the Company's 1990 DSM program issued August 31, 1990 specifies that any over-recoveries of DSM costs are to be returned to ratepayers by crediting the RMC.

Long Island Lighting Company
Cases 90-E-1185 and 91-G-0112

| | Electric Department Forecast Rate Year (Exh.5, Sch. 1, Col.3) | Gas Department Forecast Rate Year (Exh.5, Sch. 14, Col.3) | Electric & Gas Combined Forecast Rate Year (Exh.3, Sch. 3, page 2) | LILCO Proposed Increase (Exh.5, Col.4, Sch.1 + .14) | Rate Year With Proposed Increase (Exh. 3, Sch. 3, page 1) | Effect of CPB ROE | Rate Year With CPB ROE |
|---|---|---|---|---|---|---|---|
| Total Operating Revenues | 2,276,558 | 456,771 | 2,733,329 | 149,831 | 2,883,160 | (36,541) | 2,846,619 |
| Operating Expenses | | | | | | | |
| O&M Expense | 1,131,849 | 351,056 | 1,482,905 | 1,408 | 1,484,313 | (330) | 1,483,983 |
| Depreciation & Depletion | 107,530 | 14,619 | 122,149 | | 122,149 | | 122,149 |
| Taxes Other than Income Tax | 340,070 | 58,774 | 398,844 | 7,358 | 406,202 | (1,794) | 404,408 |
| Rate Moderation Component | (108,024) | 0 | (108,024) | | (108,024) | | (108,024 |
| Amortizations | 111,151 | (2,327) | 108,824 | | 108,824 | | 108,824 |
| Total Operating Expenses | 1,582,576 | 422,122 | 2,004,698 | 8,766 | 2,013,464 | (2,124) | 2,011,340 |
| Operating Income | 693,982 | 34,649 | 728,631 | 141,065 | 869,696 | (34,417) | 835,279 |
| Federal Income Taxes | 116,820 | (418) | 116,402 | 48,152 | 164,554 | (11,702) | 152,852 |
| Adj. to Conform to Settlement | (88,572) | 0 | (88,572) | | (88,572) | | (88,572 |
| Net Operating Income | 665,734 | 35,067 | 700,801 | 92,913 | 793,714 | (22,715) | 770,999 |
| Rate Base | 6,715,776 | 519,654 | 7,235,430 | 10,726 | 7,246,156 | | 7,246,156 |
| Return on Rate Base | 9.91% | 6.75% | 9.69% | | 10.95% | | 10.64 |
| Return on Common Equity | 3.57% | -2.46% | 7.78% | | 12.19% | | 11.10 |
| Net Operating Income | 665,734 | 35,067 | 700,801 | | 793,714 | | 770,999 |
| Other Income | | | | | | | |
| Other AFDC | 2,026 | 1,094 | 3,120 | | 3,120 | | 3,120 |
| Other Income/Deductions | 45,949 | 490 | 46,439 | | 51,064 | | 51,064 |
| Total FIT Expense | (13,271) | (245) | (13,516) | | (15,088) | | (15,088 |
| Total Other Income | 34,704 | 1,339 | 36,043 | | 39,096 | | 39,096 |
| Income Before Interest Charges | 700,438 | 36,406 | 736,844 | | 832,810 | | 810,095 |
| Interest Charges & Credits | | | | | | | |
| Interest on Long Term Debt | 458,768 | 35,488 | 494,256 | | 494,256 | | 494,256 |
| Other Interest | 29,640 | 2,293 | 31,933 | | 31,933 | | 31,933 |
| Borrowed AFDC | (3,084) | (1,664) | (4,748) | | (4,748) | | (4,748 |
| Total Interest | 485,324 | 36,117 | 521,441 | | 521,441 | | 521,441 |
| Net Income | 215,114 | 289 | 215,403 | | 311,369 | | 288,654 |

Long Island Lighting Company
Cases 90-E-1185 and 91-G-0112

| | Electric Department Forecast Rate Year (Exh.5, Sch. 1, Col.3) | Gas Department Forecast Rate Year (Exh.5, Sch. 14, Col.3) | Electric & Gas Combined Forecast Rate Year (Exh.3, Sch. 3, page 2) | LILCO Proposed Increase (Exh.5, Col.4, Sch.1 + Sch.14) | Rate Year With Proposed Increase (Exn. 3, Sch. 3, page 1) | Effect of CPB ROE | Rate Year With CPB ROE |
|---|---|---|---|---|---|---|---|
| Interest Coverage Exclude AFDC | | | | | | | |
| Net Income | 215,114 | 289 | 215,403 | | 311,369 | | 288,654 |
| Add: Net Fit | 130,091 | (173) | 129,918 | | 179,642 | | 167,940 |
| Interest Charges | 485,324 | 36,117 | 521,441 | | 521,441 | | 521,441 |
| Borrowed AFDC | 3,084 | 1,664 | 4,748 | | 4,748 | | 4,748 |
| Adj. to Conform to Settlemen | (88,572) | 0 | (88,572) | | (88,572) | | (88,572 |
| Less: Total AFDC | (5,110) | (2,758) | (7,868) | | (7,868) | | (7,868 |
| RMA Credit + Return | (161,117) | 0 | (161,117) | | (161,117) | | (161,117 |
| Shoreham decom cost Return | (9,386) | 0 | (9,386) | | (9,386) | | (9,386 |
| Earnings Available | 569,428 | 35,139 | 604,567 | | 750,257 | | 715,840 |
| Interest Charges & Credits | | | | | | | |
| Interest on Long Term Debt | 458,768 | 35,488 | 494,256 | | 494,256 | | 494,256 |
| Other Interest | 29,640 | 2,293 | 31,933 | | 31,933 | | 31,933 |
| Total Interest | 488,408 | 37,781 | 526,189 | | 526,189 | | 526,189 |
| Coverage | 1.166 | 0.930 | 1.149 | | 1.426 | | 1.360 |

LONG ISLAND LIGHTING COMPANY
RESPONSES TO CPB FOLLOW-UP INTERROGATORIES

81. Q. See Response to CPB Q28. Please reconcile all differences between the coverage calculations of 1.05 times for the twelve months ending June 30, 1990 with coverage of 1.72 times reported by S&P on See S&P's Creditweek with Response No. 21.

A. S&P has revised its calculation of pre-tax interest coverage excluding non-cash income for the 12 month period ending June 30, 1990 from 1.72, as reported on October 25, 1990, to 1.13. Attached is a copy of their updated analysis received April 3, 1991. The difference between S&P's and LILCO's coverage of 1.13 and 1.05, respectively is that LILCO excludes all non-cash income from the calculation whereas S&P excludes only those amounts which are separately identifiable(such as AFDC) in the Company's published financial reports.

LONG ISLAND LIGHTING CO

04-03-91

| Income analysis | 1990<br>2 | 1989<br>0 | 1988<br>0 | 1987<br>0 | 1986<br>0 |
|---|---|---|---|---|---|
| (Mil. $) | | | | | |
| Funds from operations (FFO)............ | 471.5 | 470.3 | 365.0 | 354.8 | 439.9 |
| Dividends............................ | 535.9 | 446.2 | 0.0 | 0.0 | 0.0 |
| Net cash flow (NCF).................. | -64.4 | 24.2 | 365.0 | 354.8 | 439.9 |
| Capital expenditures (Capex).......... | 333.0 | 395.7 | 436.5 | 326.4 | 444.2 |
| Total capital (mil. $)................ | 7332.4 | 7190.6 | 6917.8 | 8061.1 | 7828.3 |
| Short-term debt (%)................... | 0.2 | 0.3 | 4.3 | 1.2 | 0.4 |
| Long-term debt (%).................... | 63.2 | 63.0 | 49.5 | 45.9 | 48.3 |
| Preferred stock (%)................... | 9.5 | 9.7 | 14.7 | 12.0 | 9.2 |
| Common equity (%)..................... | 27.2 | 27.0 | 31.5 | 41.0 | 42.1 |
| Pretax interest cov. (x)............... | 1.13 | 1.15 | 1.64 | 1.63 | 1.61 |
| Preferred dividend cov. (x)........... | 0.48 | 0.50 | 1.64 | 1.63 | 1.61 |
| Ret. on avg. equity (%)............... | -27.8 | 13.2 | 5.7 | 2.9 | 2.1 |
| AFDC / common earnings (%)............ | -151.6 | 10.8 | 48.8 | 65.5 | 80.5 |
| Common div. payout (%)................ | -39.3 | -5.4 | 0.0 | 0.0 | 0.0 |
| Capex / avg. total capital (%)........ | 4.7 | 5.6 | 5.8 | 4.1 | 5.9 |
| FFO interest coverage (x).............. | 1.90 | 1.95 | 1.83 | 1.81 | 2.02 |
| FFO / avg total debt (%)............... | 11.1 | 11.4 | 9.7 | 9.3 | 12.2 |
| NCF / Capex (%)....................... | -19.3 | 6.1 | 83.6 | 108.7 | 99.0 |

LONG ISLAND LIGHTING COMPANY
RESPONSES TO FIRST SET OF CPB INTERROGATORIES

22. Q. Testimony Page 23. Provide the same financial statistics shown as projected for 1991.

A. The financial statistics for twelve months ending December 1991 are as follows:

| | LILCO (1991) |
|---|---|
| Pre-tax Cash Interest Coverage: | 1.2x |
| Debt Ratio: | 62% |
| Net Cash Flow as a % of Capital Expenditures: | 26% |
| Funds from Operations Interest Coverage | .71x |
| Funds from Operations to Total Debt: | 8% |

27. Q. List the type and the rate treatment of the annual income from the short term investments shown on Exhibit 3, Schedule 5. If applicable, explain why these amounts are not included in the rate filing.

A. The short term investments shown on Exhibit 3, Schedule 5 are assumed to be investments in commercial paper, earning 7.5% annually. In general, for ratemaking purposes any short fall or surplus of cash is assumed to be temporary in nature and part of the Company's working capital allowance, accordingly, it's not included in the calculation of the rate year cost of capital. Any interest expense or income generated from short term debt or investment balances is reflected in the rate filing in the "Other Interest" or "Other Income" lines of the Income Statements presented in Exhibit 3, Schedule 3 and 4.

28. Q. Using the same methodology shown on Exhibit 3, Schedule 6, provide Coverage Excluding AFC for the twelve months ended June 30, 1990. Please explain any difference between the calculation of 1.43 times coverage and coverage using S&P's method.

The pre-tax interest coverage excluding AFC and all other non-cash income for twelve months ending June 30, 1990 is 1.05 times. LILCO follows the same methodology used by Standard & Poor's when calculating pre-tax interest coverage.

STATE OF NEW YORK

BEFORE THE

PUBLIC SERVICE COMMISSION

| | | |
|---|---|---|
| Long Island Lighting Company | ) | Cases 90-E-1185<br>90-G-0112 |

TESTIMONY

OF

DR. JOHN W. WILSON

on behalf of

The Long Island Power Authority

Dated: May 22, 1991


RICHARD M. KESSEL
CHAIRMAN
LONG ISLAND POWER AUTHORITY
200 GARDEN CITY PLAZA
SUITE 201
GARDEN CITY, NEW YORK 11530

STATE OF NEW YORK

BEFORE THE

PUBLIC SERVICE COMMISSION

| | | |
|---|---|---|
| Long Island Lighting Company | ) | Cases 90-E-1185<br>90-G-0112 |

# TESTIMONY

OF

DR. JOHN W. WILSON

on behalf of

The Long Island Power Authority

May, 1991

J. W. WILSON & ASSOCIATES, INC.

ECONOMIC COUNSEL

THIRD FLOOR • WATERGATE OFFICE BUILDING

2600 VIRGINIA AVENUE, N.W. • WASHINGTON, D.C. 20037

STATE OF NEW YORK

BEFORE THE

PUBLIC SERVICE COMMISSION

Long Island Lighting Company ) Cases 90-E-1185
90-G-0112

Testimony of Dr. John W. Wilson

## I. Qualifications and Summary

Q. PLEASE STATE YOUR NAME, OCCUPATION, AND ADDRESS.

A. My name is John W. Wilson. I am President of J.W. Wilson & Associates, Inc. Our offices are at 2600 Virginia Avenue, N.W., Washington, D.C. 20037.

Q. ON WHOSE BEHALF ARE YOU TESTIFYING IN THIS CASE?

A. I am testifying on behalf of the Long Island Power Authority (LIPA).

Q. PLEASE OUTLINE YOUR EDUCATIONAL BACKGROUND.

A. I hold a B.S. degree with senior honors and a Masters Degree in Economics from the University of Wisconsin. I have also received a Ph.D. in Economics from Cornell University. My major fields of study were industrial organization and public regulation of business, and my doctoral dissertation was a study of utility pricing and regulation.

Q. HOW HAVE YOU BEEN EMPLOYED SINCE THAT TIME?

A. After completing my graduate education I was an assistant professor of economics at the United States Military Academy, West Point, New York. In that capacity, I taught a wide range of courses in economics at the introductory and intermediate levels. While at West Point, I also served as an economic consultant to the Antitrust Division of the United States Department of Justice.

After leaving West Point, I was employed by the Federal Power Commission, first as a staff economist and then as Chief of FPC's Division of Economic Studies. In that capacity, I was involved in a wide range of regulatory matters involving most phases of FPC regulation

of electric utilities and the natural gas industry. Since 1973 I have been employed as an economic consultant by various clients including federal, state and local governments, private enterprise and nonprofit organizations. This work has pertained to a wide range of issues concerning regulatory and matters as well as economic and financial analysis.

Q. WOULD YOU PLEASE DESCRIBE SOME OF YOUR ADDITIONAL PROFESSIONAL ACTIVITIES?

A. I have authored a variety of articles and monographs, including a number of studies dealing with regulation and studies dealing with the economic structure and performance of competitive markets. I have consulted on regulatory matters with the Federal Communications Commission, the National Academy of Sciences, the Ford Foundation, the National Regulatory Research Institute, the Electric Power Research Institute, the U.S. Department of Justice, the Commerce Department, the Department of the Interior, the Federal Trade Commission, the Department of Energy, the Small Business Administration, the Department of Defense, the Tennessee Valley Authority, the Federal Energy Administration, the

American Public Power Association, the National Association of Rural Electric Utility Cooperatives, and numerous state and provincial agencies and legislative bodies in the United States and Canada. I have also served on the Advisory Committee to the National Association of Insurance Commissioners (NAIC) Task Force on Profitability and Investment income, and the NAIC's Advisory Committee on Nuclear Risks.

Previously, I was a member of the Economics Committee of the U.S. Water Resources Council, and I was the FPC Coordinating Representative for the Task Force on Future Financial Requirements for the National Power Survey.

In addition, I have testified on numerous occasions as an expert financial and accounting witness, and I have participated as a speaker, panelist, or moderator in many professional conferences and programs dealing with business regulation, financial issues, economic policy and antitrust matters. I am a member of the American Economic Association and an associate member of the American Bar Association and the ABA's Antitrust, Insurance and Regulatory Law Sections.

Q. HAVE YOU TESTIFIED PREVIOUSLY IN REGULATORY PROCEEDINGS DEALING WITH RATE REQUIREMENT AND REGULATORY POLICY ISSUES?

A. Yes. I have presented testimony on rate requirements and regulatory policy on many occasions. I have testified in regulatory proceedings before this Commission and in most other states as well as before federal agencies and in court proceedings. I have also testified before the U.S. Senate and House of Representatives on numerous occasions.

Q. WHAT IS THE SUBJECT OF YOUR TESTIMONY IN THIS CASE?

A. I have been asked by the Long Island Power Authority (LIPA) to address ratemaking issues in this case concerning LILCO's (1) proposed "sales adjustment mechanism", (2) insurance costs, (3) advertising expenditures, (4) unbilled revenues and (5) Edison Electric Institute (EEI) dues.

Q. PLEASE SUMMARIZE YOUR RECOMMENDATION WITH RESPECT TO EACH OF THESE ISSUES.

A. Based on the considerations discussed below, I recommend that:

(1) The Commission should reject LILCO's proposed "sales adjustment mechanism";

(2) The Commission should disallow the recovery of LILCO's Director's and Officer's Liability Insurance expenses. These expenses involve payments to an affiliate which earns extraordinarily high rates of profit and which rebates premium payments to its owner/insureds. Moreover, the insurance coverage in question is purchased for the benefit of the Company's shareholders. In the alternative, the Commission should order a detailed regulatory audit of LILCO's liability insurance transactions with its affiliated offshore insurer, "Associated Electric & Gas Insurance Services Limited (AEGIS)" and require refunds to ratepayers for any premiums that AEGIS has refunded to LILCO and for any additional excessive premium amounts that the Commission determines LILCO has paid to this affiliate;

(3) The Commission should disallow the recovery of $300,000 of advertising expenses that LILCO has included in its "DSM advertising" expenses in this case, which are, in fact, related to corporate image building;

(4) The Commission should exclude $115.4 million of "unbilled revenues" that LILCO has proposed to include in its rate base. This will have the effect of reducing the Company's revenue requirement by approximately $16 million; and

(5) The Commission should disallow LILCO's recovery of EEI dues from ratepayers.

## II. Sales Adjustment Mechanism

Q. WHAT IS LILCO'S PROPOSED "SALES ADJUSTMENT MECHANISM"?

A. LILCO has proposed a sales adjustment mechanism which, the Company claims, would reduce the uncertainty of experiencing electric sales below the Company's sales forecast. Under LILCO's proposal, if net sales revenues (i.e., revenues less fuel and gross receipts

taxes) are below the Company's forecast, LILCO will add the first $10 million of any shortfall to the RMC (Rate Moderation Component) balance to be amortized over the RMC recovery period. Any additional shortfall (up to $10 million) would be recovered currently through the fuel adjustment clause.

If net sales revenues exceed LILCO's forecast, LILCO will deduct the first $10 million of any excess from the RMC balance and credit ratepayers currently for any additional excess through the fuel adjustment clause.

Q. WHY DO YOU RECOMMEND THAT THE COMMISSION SHOULD REJECT LILCO'S PROPOSED SALES ADJUSTMENT MECHANISM?

A. There is no financial need that justifies this proposal to shift business risks from stockholders to ratepayers. LILCO has already achieved investment grade on its securities due to the positive reaction of rating agencies to LILCO's financial recovery. That recovery has occurred without the benefit of a sales adjustment mechanism. LILCO now has access to capital markets. There is simply no evidence that a new sales adjustment mechanism is needed for capital market access, LILCO's

continued financial health, or in order for LILCO to achieve its plan for meeting capital needs. Indeed, all observable market reactions indicate that investors are well-pleased with LILCO's prevailing regulatory circumstances, and that no further "sweetening" is either required or warranted. Moreover, with this filing, LILCO substantially reduced its sales forecast (prepared testimony of Madsen, Brandifino, and Nozzolillo at page 16), which, other things being equal, reduces the probability of a revenue under-recovery and thus further reduces investor risks.

Q. IS THE PROPOSED SALES ADJUSTMENT MECHANISM REQUIRED IN ORDER TO GUARD AGAINST ANY INCENTIVE FOR LILCO TO PROMOTE EXCESSIVE SALES TO GAIN SHORT-RUN PROFITS?

A. No. LILCO already has a DSM (demand side management) incentive program that presumably is designed not only to protect profits, but to allow the company to keep a portion of the net benefit when sales decline due to its DSM efforts. A properly working DSM incentive program will tend to blunt any potential incentive to maximize sales as a way to increase short-term earnings. A more extensive discussion of LILCO's DSM pro-

gram is included in the testimony of LIPA witness Nichols. In any event, LILCO has not contended that it needs the requested sales adjustment mechanism for DSM purposes.

Q. WOULD THE PROPOSED SALES ADJUSTMENT MECHANISM INCREASE LILCO'S INCENTIVES TO MINIMIZE ITS COST OF SERVICE?

A. No. In fact, just the opposite would occur. The proposed sales adjustment mechanism would partially sever the link between profits and performance. Conservation and load management are not the only reasons sales may decline. Lost sales, particularly to industrial customers may also signal a lack of competitiveness due to excessive costs. Since the sales adjustment mechanism protects profits against sales declines without regard to reason, LILCO would have less reason to care about cost overruns. Further, it may be particularly unwise to allow a company such as LILCO, with massive and imprudent cost overruns so recently a problem, enhanced protection from further inefficient behavior.

Q. ARE THERE FURTHER REASONS FOR REJECTING THE PROPOSED SALES ADJUSTMENT MECHANISM?

A. Yes. LILCO's generous return allowance on equity capital provides a substantial cushion against any losses due to sales shortfalls. Moreover, to the extent that passthrough mechanisms such as this one, or LILCO's automatic adjustment procedures for costs "beyond management's control" proliferate and replace traditional regulatory practices, the conventional efficiency incentives associated with regulatory lag (although certainly far from perfect) will be further undermined as risks are shifted from business owners to ratepayers. In that case, traditional equity return allowance levels will be unwarranted and should be replaced by risk-attenuated capital cost measures.

Q. IS LILCO'S PROPOSED SALES ADJUSTMENT MECHANISM CONSISTENT WITH THE REVENUE DECOUPLING MECHANISM (RDM) THAT THE COMMISSION INSTITUTED ON A PROVISIONAL BASIS FOR ORANGE AND ROCKLAND IN OPINION 90-24?

A. No; it is not. LILCO's proposal does not contain countervailing measures to reduce the damage to efficiency incentives that would result from a reduction in earnings uncertainty. Under LILCO's proposal, profit-

ability is protected regardless of cost levels, but there are no incentives to control costs.

Under the RDM experiment ordered in Opinion 90-24, earnings incentives and penalties would reflect how well O&R provides basic company services (e.g., installations, answering complaints, repairs) and the quality of its demand side management. In this case, none of those safeguards are contemplated and there remains an incentive to increase sales above the forecasted amount in order to expedite recovery of the RMA balance from the last year of the recovery period to the current year. Moreover, O&R's RDM arrangement was designed in conjunction with the institution of its own DSM program, whereas LILCO already has a DSM program designed to maintain revenue adequacy. In short, LILCO's sales adjustment mechanism would undermine the efficiency incentives of regulatory lag without the provisions for monitoring and mid-course corrections contemplated in Opinion 90-24.

III. LILCO's Liability Insurance Costs

Q. WHAT LIABILITY INSURANCE COSTS HAS LILCO INCLUDED IN ITS PROPOSED REVENUE ALLOWANCE?

A. As shown in Exhibit 16, Schedule 7, page 4, LILCO has included \$2.21 million of general liability insurance premiums plus another \$3.37 million of Directors and Officers Liability insurance premiums in its test-year costs.

Q. WHAT IS QUESTIONABLE ABOUT THESE AMOUNTS?

A. LILCO apparently purchases a significant portion of its liability insurance coverage from Associated Electric & Gas Insurance Services Limited (AEGIS), a non-assessible mutual offshore (Bermuda) insurance company that is wholly-owned by U.S. utility companies, including LILCO, which are its only policyholders. AEGIS was established by these U.S. utilities in 1975 and domiciled in Bermuda, beyond the reach of U.S. insurance rate regulators. During the past four years (1986-1989), AEGIS has collected \$963 million (net) from its sale of liability insurance to its utility owners and,

in addition, realized $295 million of investment income (derived from investment of retained earnings and reserves). During these same years, AEGIS paid out $202 million of losses. Over the same period, AEGIS's net worth increased by nearly ten fold as retained earnings rose by $294 million and reserves for potential future losses increased by $656 million. From 1985 to 1989, the book value of AEGIS' assets (largely high grade government and corporate bonds) rose from $353.6 million to $1,378.7 million.

To say that this industry-owned insurance company has been a financially successful venture is obviously an understatement. From retained earnings alone, the net worth of this enterprise increased at a remarkable compound rate 80.91 percent <u>per year</u> from 1985 to 1989 -- dramatically in excess of a fair rate of return under any reasonable profits to affiliates regulatory standard.

Between the two types of liability insurance that AEGIS writes (general liability and D&O liability), Directors and Officers Liability has clearly been the most profitable -- accounting for 26.7 percent of the Company's

total net premium written in 1988 and 1989, but 77.6 percent of its before tax profit. In partial recognition of this extraordinary profitability, AEGIS refunded 32 percent of Directors and Officers Liability net premiums written in 1988 and 1989 (22 percent of gross).

Q. WHAT IS YOUR RECOMMENDATION WITH RESPECT TO LILCO'S TEST-YEAR LIABILITY INSURANCE COSTS IN THIS CASE?

A. Fundamentally, Directors and Officers Liability insurance is purchased largely to protect the Company's investors. When D&O suits occur they are often brought by investors, and the insurance protection afforded is for the benefit of the Company's owners.

If the Commission nevertheless determines to allow for the recovery of reasonable D&O liability insurance costs from ratepayers, special care should be taken in this case to assure that refunded premiums (as well as excess profits) are credited against the stated test-year premium. It is not clear that LILCO has made an adjustment for refunds in this case, and it is clear that the Company has not adjusted for excess profits.

In view of AEGIS's remarkable profitability and the affiliated relationship that exists between AEGIS and LILCO (and, likewise, with other New York utilities -- i.e., Central Hudson, Con Ed, NYSE&G, Niagara Mohawk, Orange and Rockland, as well as others are all insured owners of AEGIS), greater scrutiny of excess profits to affiliates appears to be warranted.

In addition to focussing on excessive affiliate profits through unregulated insurance transactions, the Commission should also direct its attention to whether LILCO seeks out alternative coverages at more reasonable costs; do they negotiate for favorable terms and prices; do they exert proper control to see that safety standards are met or exceeded so that insurance costs are minimized?

AEGIS is based offshore and is not subject to rate regulation that is generally applicable to U.S. insurance Companies. There is no indication by LILCO of inspections for safety by AEGIS, albeit private underwriters normally undertaken numerous inspections.

There is no indication of any recent D&O market research or of pricing comparisons with AEGIS. Because AEGIS is not subject to any regulatory testing of price vs. cost, reasonableness of price remains obscure. AEGIS may provide a necessary market, but the lack of any price control by insurance regulators and the Company's apparently very high level of profits, derived exclusively from transactions with its utility-owners, should be a regulatory concern.

In summary, the Commission should disallow the recovery of LILCO's Director's and Officer's Liability Insurance expenses. These expenses involve payments to an affiliate which earns extraordinarily high rates of profit and which rebates premium payments to its owner/insureds. Moreover, the insurance coverage in question is purchased for the benefit of the Company's shareholders. In the alternative, the Commission should order a detailed regulatory audit of LILCO's liability insurance transactions with its affiliated offshore insurer, AEGIS and require refunds to ratepayers for any premiums that AEGIS has refunded to LILCO and for any additional excessive premium amounts that the Commission determines LILCO has paid to this affiliate.

## IV. <u>Unbilled Revenues</u>

Q. DESCRIBE LILCO'S ATTEMPT TO INCLUDE UNBILLED REVENUES IN RATE BASE.

A. LILCO proposes to include $106.5 million of unbilled revenues in its rate year rate base. LILCO also requests an additional $8.8 million rate base allowance related to the rate increase itself. The total requested unbilled revenue rate base adjustment is, therefore, $115.4 million. At the Company's requested rate of return, this rate base addition will cost the ratepayers about $16 million annually, or about 14 percent of the requested rate increase in this case.

Q. WHAT RATIONALE DO LILCO'S WITNESSES OFFER FOR THIS ADJUSTMENT?

A. None. Mr. Wackett barely mentions it.

Q. HAS THE COMMISSION AUTHORIZED UNBILLED REVENUES AS A COMPONENT OF RATE BASE IN ANY PREVIOUS LILCO ORDER?

A. No. Neither LILCO's last litigated rate order (Case No. 29484, Opinion No. 87-26) nor any other LILCO order of which I am aware has authorized unbilled revenues as a rate base element.

Q. WHAT ARE "UNBILLED REVENUES"?

A. Unbilled revenues are revenues that are "earned" through provision of service, but have not been billed to customers as of the financial statement date. At any given time, a certain volume of an electric utility's service has been provided to customers who have not yet been billed because of the periodic nature of meter reading. These unbilled revenues can, however, be estimated with reasonable accuracy and accrued as revenues on the income statement and as an asset on the balance sheet. That is the accounting practice followed by LILCO. Thus, LILCO's total booked revenues for a given accounting period consist of revenues for service rendered during that period for which bills have been submitted, plus an additional revenue accrual for the estimated amount of service rendered but not yet billed.

Q. WHAT HAS BEEN THE COMMISSION'S POLICY REGARDING UNBILLED REVENUES IN THE RATEMAKING PROCESS?

A. Until 1988, LILCO did not record unbilled revenues on its books of account except for customers that were billed bimonthly. When the Tax Reform Act of 1986 required unbilled revenues to be included in taxable income, the Commission decided that unbilled revenues not already being accrued by LILCO should also be included in test year revenues for ratemaking purposes and has apparently followed that policy since. In response to the Commission's 1987 order, LILCO made a $63.2 million one-time accrual for unbilled revenues not previously recognized, and amortized this accrual as an increase in revenues over 4 years. Since 1988, LILCO has accrued estimated unbilled revenues on its income statement and reflected the related balance sheet asset as a matter of standard accounting practice. It is this asset that LILCO proposes to include in rate base.

Q. WHAT'S WRONG WITH LILCO'S PROPOSAL?

A. LILCO already has a cash working capital allowance, based on the Federal Power Commission formula method,

that is intended to fully reflect investor capital required to finance LILCO's outlay of cash for costs in advance of collecting revenues. This includes unbilled revenues. Stated simply, to include unbilled revenues as an additional rate base item is to double-count an asset that is already in LILCO's rate base.

Q. HAS THE COMMISSION EXPRESSLY STATED THAT THE FPC FORMULA METHOD PROVIDES FOR CASH WORKING CAPITAL RELATED TO UNBILLED REVENUES?

A. Yes. In a Niagara Mohawk case (11 PSC 1475 (1971)) the Commission explained the rationale for adopting the Federal Power Commission's (FPC) cash working capital formula. This formula method consisted of applying a ratio to operating expenses. The following is the Commission's reasoning for accepting the FPC's 1/8 ratio for application to monthly billing companies:

> The FPC method comprehends a working capital cash allowance of 1/8 of annual operating expenses based on service being billed on a monthly basis. Specifically, working capital to provide service for 30 days is required for an average of 15 days. Companies normally bill their customers within 6 to 10 days after the end of the 30-day service period. Depending on terms of payment, bills are paid an average of 12 to 20 days after they are rendered. As a general rule, and on an average basis, bills for service rendered are

> paid within 30 days from the end of the service period for which the bill is rendered. Considering the average time for which working capital is required during the service period, i.e., 15 days, and the 30 days allowed for the collection of bills, a period of 45 days is ample to measure the working capital required for operating expenses... and in all subsequent proceedings involving such companies we will allow 1/8 of annual operating expenses...

It is crystal clear from this language that the Commission expressly considered the period during which revenues are "unbilled"--i.e., the 6-10 day period from the end of the service period until the bill is rendered--in determining the amount of cash working capital allowable. Specifically, for monthly billing utilities, the Commission determined the 45 day period (1/8 year) as follows:

| | |
|---|---|
| 1/2 service period | 15 days |
| Unbilled revenue period | 10 days |
| Bill-to-collect | 20 days |
| Total | 45 days (1/8 year) |

The Commission also recognized that some companies, such as LILCO, do not bill monthly for all service. The Commission in that same order specified a 1/7 ratio (used by LILCO in the present case) for utilities that bill between 30 and 70 percent of their revenues on a bimonthly basis. Obviously, the rationale for allowing

LILCO the more favorable 1/7 ratio was to reflect its longer unbilled revenue period owing to its bimonthly billing cycle.

Q. BUT IF UNBILLED REVENUES ARE NOW BEING INCLUDED IN TEST YEAR REVENUES UNDER THE COMMISSION'S 1987 POLICY, SHOULDN'T THE RATE BASE ALSO BE INCREASED TO REFLECT THE RELATED UNBILLED REVENUE ASSET?

A. No. Obviously, a utility has no entitlement to be compensated for the correction of an imprecise accounting method that had previously caused its revenues to be understated. The omission of unbilled revenues prior to 1988 was an accounting convention that mismatched expenses and revenues, because it excluded earned but unbilled revenues without excluding the costs of earning those revenues. The Commission's 1987 Decision corrected this mismatch, and imposed a "catch-up" adjustment by requiring the four-year amortization of the accumulated balance of (unrecognized) unbilled revenues existing at that time. This correction does not require any increase in the Company's cash working capital allowance. The cash working capital element of rate base <u>already</u> <u>reflected</u> unbilled revenues.

Q. PLEASE EXPLAIN FURTHER.

A. The Commission's order to accrue unbilled revenues would imply a corresponding adjustment to increase rate base <u>only if</u> there would otherwise be an error in calculating cash working capital corresponding to the previous mismatch between revenue and cost. But no such error exists. The FPC formula method is a ratio applied to <u>operating expenses</u> intended to compensate for the lag between the time a utility incurs the cost of service until it collects cash from ratepayers. Since accruing unbilled revenues merely corrects the previous error in the booking of revenues, it changes neither the timing of cash receipts nor the timing of cash disbursements. Its actual effect on the cash working capital requirement is, therefore, zero.

## V. <u>Advertising Expenses</u>

Q. HAVE YOU REVIEWED LILCO'S PROPOSED ALLOWANCE FOR ADVERTISING EXPENSES IN THIS CASE?

A. Yes. At LIPA's request, I have reviewed LILCO's advertisements and related expenses institutional/informational and DSM categories.

Q. WHAT ARE THE RESULTS OF YOUR ANALYSIS?

A. Many of LILCO's advertisements in the "conservation" or "demand side management" category, contain a significant--and in some cases, predominant--element of public relations flackery, obviously designed to "puff" LILCO's corporate image rather than convey necessary or useful information to the public. Regulators have generally recognized that such corporate-image related advertising, while permissible as an exercise of a utility's free speech rights, is not necessary for the provision of utility service and should not be paid for by ratepayers through utility rates.

Q. WHAT IS THE AMOUNT OF ADVERTISING EXPENSES THAT LILCO PROPOSES TO INCLUDE IN THE COST OF SERVICE IN THIS CASE?

A. According to LILCO's response to LIPA's Interrogatory No. 58, LILCO proposes to charge ratepayers $3 million

of conservation (DSM) advertising in the rate year, approximately a 50 percent increase from the $1.977 million incurred in the test year.

LILCO also projects that it will incur $3.2 million for "consumer", i.e., informational/institutional advertisements, down slightly from the $3.4 million incurred in the test-year. Of this amount, LILCO requests that $1.7 million, or .075 percent of its revenues, be included in the cost of service in purported compliance with the Commission's policy of allowing that amount of informational/institutional advertising costs.

Q. COULD YOU BE SPECIFIC ABOUT THE CORPORATE IMAGE EMPHASIS YOU HAVE FOUND IN SOME OF THE DSM ADVERTISEMENTS?

A. Yes. The following paragraphs set forth some examples of the "image puffing" language found in the DSM advertisements. Each paragraph corresponds to a single advertisement (which may have been run more than once).

- "During the Persian Gulf crisis, we saved our customers millions of dollars by purchasing oil on the spot market at discounted prices and by generating

electricity from natural gas instead of oil wherever possible."

- "LILCO's installed these generators, ahead of schedule and under budget. And our employees have kept our older plants operating more reliably than any in the state."

- "The people at LILCO, Long Island's gas and electric company. We're listening. We care. We're working harder to serve you better."

- "Our employees have kept our aging facilities operating more reliably than any others' in the state. We've even got our 40 year old plants operating well above industry standards."

Clearly this material has nothing to do with conservation or DSM, but is designed to burnish LILCO's image with the public.

Q. WHAT IS YOUR RECOMMENDATION REGARDING THE AMOUNT OF DSM ADVERTISING EXPENSE THAT SHOULD BE DISALLOWED?

A. I recommend that 10 percent of LILCO's purported DSM advertising be disallowed. That translates into a dis-

allowance of $300,000. That is an estimate rather than a calculated figure because of the inherent judgment factor involved in isolating the corporate image related portion of many advertisements' cost from the cost related to the legitimate DSM-related function of the same advertisement.

Q. DESCRIBE HOW YOU ESTIMATED THE DISALLOWANCE YOU RECOMMEND.

A. I have reviewed approximately 54 advertisements that LILCO has provided in response to requests for advertising copy. Of these, 33 advertisements have at least some corporate image promoting material, such as a corporate slogan unrelated to conservation, with 9 having an estimated image related content of between 25 to 100 percent. I therefore conclude that 10 percent is a conservative estimate of the appropriate disallowance.

Q. FOR WHAT OTHER REASON IS THIS DISALLOWANCE ESPECIALLY APPROPRIATE?

A. Under the Commission's policies, LILCO already has an allowance of .00075 of gross revenues for "institu-

tional" and "informational" advertisements, many of which are corporate image promoting. Indeed, my review of this material suggests that as much as half is of questionable benefit to ratepayers. Since LILCO's use of the allowance roughly equates to fifty percent of the total, I have not recommended an adjustment to this category. LILCO should not be allowed to exploit its DSM program to circumvent the limit on this type of advertisement. For this reason, purported "DSM" advertising costs should be subject to especially strict scrutiny.

## VI. EEI Dues

Q. WHAT IS YOUR RECOMMENDATION REGARDING LILCO'S EEI DUES?

A. At least as long as LILCO continues to receive the extraordinary ratepayer-provided relief that is being afforded under the RMA, it would be reasonable to disallow this trade association. EEI dues are not for the primary and direct benefit of the Company's customers. Under LILCO's "austerity program," which began in 1984, LILCO dropped its payments to this organization. Apparently, given the enhanced rate relief that its

customers have been called upon to provide, the Company now feels that circumstances are no longer so austere as to preclude the incurrence of these costs. Thus, LILCO proposes to charge ratepayers $487,145 for costs associated with its recently renewed membership in EEI. This amount includes $120,000, the first of a three-year amortization for past dues (with interest) as an additional charge to ratepayers. Ratepayers, having bailed LILCO out, and in view of their continuing to do so, are now being asked to further fund discretionary expenditures that are customarily associated with a Company enjoying LILCO's newly elevated status.

In fact, of course, LILCO's perceived need for austerity has been lowered precisely because ratepayers are already bearing an extraordinary burden. Certainly, these improved circumstances should not, in turn, become the occasion for the institution of further ratepayer burdens and less austerity by Company management. In short, at least until the RMC amortization is complete, a tight rein should be held on discretionary costs such as EEI dues.

Q. DOES THE CONCLUDE OUR PREPARED DIRECT TESTIMONY?

A. Yes; it does.

STATE OF NEW YORK

BEFORE THE

PUBLIC SERVICE COMMISSION

Long Island Lighting Company ) Cases 90-E-1185
90-G-0112

TESTIMONY

OF

DAVID NICHOLS

on behalf of

The Long Island Power Authority

Dated: May 22, 1991

RICHARD M. KESSEL
CHAIRMAN
LONG ISLAND POWER AUTHORITY
200 GARDEN CITY PLAZA
SUITE 201
GARDEN CITY, NEW YORK 11530

STATE OF NEW YORK

BEFORE THE

PUBLIC SERVICE COMMISSION

Long Island Lighting Company — Cases 90-E-1185, 90-G-0112

TESTIMONY OF DAVID NICHOLS

on behalf of

The Long Island Power Authority

Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A. My name is David Nichols. My business address is Tellus Institute for Resource and Environmental Strategies, 89 Broad Street, Boston, Massachusetts 02110.

Q. PLEASE DESCRIBE YOUR BACKGROUND AND QUALIFICATIONS.

A. I received my bachelor's degree from Clark University in 1961 and my Ph.D. degree in political science from MIT in 1968. After graduation, I taught a variety of political and social science courses at the university level, including technology and public policy, and economics, most recently as an associate professor at the State University of New York at Albany. In 1976, I co-

founded Energy Systems Research Group, which was renamed in 1990 the Tellus Institute for Resource and Environmental Strategies. Currently, I am a vice-president at Tellus Institute.

The Tellus Institute is a nonprofit corporation engaged in research and analysis of natural resource planning and environmental issues. Tellus is organized into four research groups--Solid Waste, Risk Analysis, International and Energy Systems Research. The Energy Systems Research Group (ESRG) focuses on energy planning and utility ratemaking issues.

Since the establishment of Tellus in 1976, I have been active in the design and evaluation of energy conservation programs, cost-benefit analysis of energy efficiency measures, development of long-range electricity demand forecasts, and energy utility rate design. I have testified before utility regulatory agencies in over twenty jurisdictions, including New York. I have conducted extensive program-by-program evaluations of the elements comprising the demand-side activities of over thirty energy utilities, and presented results through testimony and/or public reports. I have also served as consultant to the Connecticut Energy Advisory Board and the Rhode Island Space Heating Task Force, and as the independent third-party member of the Panel overseeing the energy conservation competition program at Madison Gas & Electric Company. My experience is further summarized in Exhibit___(DN-1).

Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY IN THIS PROCEEDING?

A. The purpose of my testimony is to address: (1) LILCO's proposed mechanism for recovery of demand-side management (DSM) costs and (2) its proposed elimination of the 20 basis point limitation on the incentive for DSM performance. I also will discuss the need from a DSM standpoint for LILCO's proposed sales adjustment mechanism.

The first issue was specifically referred to this rate proceeding by the Commission in Case 28223. The second issue is raised by LILCO's affirmative proposal in the testimony of Madsen, Brandifino, and Nozzolillo (page 17). I am responding to LILCO's proposal to modify the existing DSM incentive in the event that the Commission decides to address that issue in this rate proceeding.

Q. PLEASE SUMMARIZE YOUR ANALYSIS OF LILCO'S PROPOSED MECHANISM FOR RECOVERY OF DSM COSTS.

A. LILCO proposes to recover as a current expense approximately $40 million for its DSM program expenditures through base rates. Under the Company's proposal, any under-spending would be credited to the Rate Moderation Component and any over-spending would be recovered through the Fuel Adjustment Clause (FAC).

I recommend that the Company's authorized DSM program costs be added to rate base and amortized over a five year period, rather than currently expensed, because those expenditures are investments that should be recovered over a period that correlates with their useful life. Demand and supply resources should be accounted for and evaluated on an equivalent basis to encourage systematic, integrated demand-supply planning.

Q. PLEASE SUMMARIZE YOUR ANALYSIS OF LILCO'S PROPOSED MODIFICATION TO THE DSM INCENTIVE ALLOWANCE.

A. The Company's proposal to eliminate the presently effective 20 basis point cap on the award for successful implementation of DSM programs should be rejected. LILCO has provided no basis for increasing the recently adopted performance incentive now in place for the Company. In addition, LILCO's proposal is asymmetric in that it would increase LILCO's potential reward for effective DSM performance, but would provide no penalty in the event of poor DSM performance by LILCO. The Company's projection that its DSM performance will take it above the 20 basis point cap is highly questionable because it is based on faulty energy and capacity savings projections. These issues are the subject of inquiry in LILCO's reconciliation proceeding, Case 91-E-0382.

(1) <u>MECHANISM FOR RECOVERY OF DSM COSTS</u>

Q. PLEASE DESCRIBE THE COST RECOVERY METHOD UNDER WHICH THE COMPANY IS PROPOSING TO RECOVER DSM PROGRAM COSTS.

A. The Company proposes to continue recovering the majority of its DSM program costs through base rates. Costs in excess of those recovered through base rates are passed through the FAC mechanism. According to the Company, its base rates include an allowance of approximately $35 million to cover direct DSM program expenditures. In addition, LILCO presently has pending a proposal to recover $5.4 million for purported under-recovery of DSM costs, specifically lost revenues and incentives, through the FAC mechanism.

In this proceeding, LILCO proposes that the $35 million already included in its base rates be increased to $40 million per year, and that annual amounts for DSM costs be assumed to remain at that level for the period of December 1, 1991 through November 30, 1999. To the extent that this $40 million exceeds LILCO's actual program costs in any year, LILCO proposes that the difference be credited to the Rate Moderation Component (RMC). If DSM program costs are greater than $40 million, the Company proposes to recover the excess via the FAC.

Q. WHAT IS YOUR RECOMMENDATION WITH RESPECT TO LILCO'S PROPOSED MECHANISM FOR RECOVERY OF DSM PROGRAM EXPENDITURES?

A. I recommend that, rather than being expensed as at present, LILCO's DSM program costs be added to its rate base and amortized over a period of five years. The Company would then be allowed to earn its normal return on the unamortized balance. I refer to this as the rate-basing of DSM program costs.

Q. WHAT CONSIDERATIONS FAVOR RATE-BASING OF DSM PROGRAM COSTS?

A. Rate-basing is the normal procedure for recovery of an expenditure which is an investment, i.e., an expenditure made now which yields benefits over its lifetime. The basic principle is that the cost of an investment which has a useful life of more than one year should be allocated over the number of years of its expected life.

Rate-basing DSM investments will spread the costs out over a period of time that better corresponds to the years during which the benefits of DSM expenditures will be realized. This promotes inter-generational equity by providing that future ratepayers share in the costs of the investments from which they are benefitting. A rate-basing treatment of DSM costs provides future customers with price signals that better match the costs of serving them than does the current expensing approach. Further, rate-basing helps to

alleviate the short-term adverse rate impacts of DSM program costs by spreading them over a number of years, making an increased LILCO investment in cost-effective DSM more practical.

In addition, by using the utility accounting approach standardly employed for supply-side resource investments, rate basing sends a signal that demand and supply side resource options are to be evaluated on an equivalent basis. This encourages systematically integrated demand/supply planning by LILCO.

Q. OVER WHAT TIME PERIOD WOULD YOU RECOMMEND LILCO AMORTIZE DSM COSTS IN RATE BASE?

A. A period of ten years has been used in a number of states, and LIPA used a ten-year amortization for expenditures proposed in its alternative DSM plan submitted in its September 1990 Comments in Case 28223. In this case, to be consistent with the five year period over which program costs are amortized in LILCO's DSM performance incentive mechanism, I recommend a five year amortization period. This period conservatively reflects the period of time over which rate year DSM investments can be expected to bring benefits to ratepayers.

Q. WHAT IS WRONG WITH MISMATCHING THE RECOVERY OF COSTS AND THE BENEFIT DERIVED?

A. The longer the life of the investment, the less equitable it is to charge the full cost to the consumer who happens to be purchasing electricity at the time the

investment is made. To take an extreme case, it would be highly inequitable -- as well as impractical -- to charge consumers currently for the full cost of a large power plant which might have a useful life of 40 years. Similarly, it would be inequitable to assess current ratepayers the full costs of DSM investments with useful lives of several years.

Q. WILL THE RATE BASING OF DSM EXPENDITURES HAVE A NEGATIVE IMPACT ON LILCO'S FINANCIAL CONDITION?

A. No. LILCO's earnings would not be negatively affected by rate-basing -- the Company will recover its costs one way or the other. The only question is one of timing, and, in the interim, cash flow.

Q. THE COMPANY HAS INDICATED THAT IT PREFERS CURRENT EXPENSING BECAUSE OF ITS CASH FLOW SITUATION. IS THE COMPANY'S CLAIM WELL BASED?

A. No. It is my understanding from LIPA's witness Wilson that the financial markets have responded well to LILCO's situation in the wake of the approval of the Rate Moderation Agreement (RMA). While things may have been different when LILCO's securities were rated below minimum investment grade status, it is my understanding that the rating agencies have recently upgraded the Company's securities to investment grade, thus lowering the cost of borrowing by the Company. The Company indicates that it plans to access the financial markets for approximately $2.5 billion over the next five years. This

strongly suggests that the Company has satisfactory access to capital markets. It is difficult to believe that its situation would be affected by whether the Company receives cash recovery or deferred (rate base) recovery for a DSM investment flow of only some $40 million per year.

Q. WHAT IMPACT WILL THE RATE BASING OF DSM HAVE ON LILCO'S REVENUE REQUIREMENTS?

A. Rate basing provides for the recovery of the original expenditure plus the amount of the return on the unamortized balance. For this reason, revenue requirements for DSM cost recovery are increased by a rate base treatment. Considered in present value terms, the amount of this increase would be small, on the order of five percent of the initial DSM expenditure amount. Exhibit__(DN-2) presents an approximate comparison of the two alternatives (expensing vs. traditional rate-basing). It is assumed that all DSM expenditures are capitalized and added to rate base in the amount of $40 million per year in costs plus AFUDC, amortized over a five-year period. The analysis further assumes a return based on the Company's proposed capital structure, and an assumed tax rate of 34 percent. Under these assumptions, LILCO would experience a negative cash flow, on a year-to-year basis, in the first four years only. The net cash flow to the Company at year five would be approximately $3.46 million. On a cumulative basis, the Company's cash flow deficit

compared with DSM expenditures, would peak in 1996 at about $54 million, as shown in Exhibit___(DN-2).

Q. ASSUMING THE COMMISSION ADOPTS YOUR RECOMMENDATION OF RATE-BASING THE COMPANY'S DSM EXPENDITURES, HOW WOULD SUCH EXPENDITURES BE REFLECTED IN THE RATE YEAR, AND IN THE FOLLOWING YEARS?

A. Consistent with the procedure implemented by the Commission for Consolidated Edison and Orange and Rockland Utilities, which now rate base their DSM program costs, as of the date the new rates take effect in this case, the Company would cease to collect DSM expenditures as a line-item expense, and such expenditures would no longer be recoverable as expenses through the FAC. Instead, DSM expenditures made from the beginning of the rate year (adjusted, if necessary, for any outstanding balance at that time), would be deferred and included, together with "AFUDC," in rate base in the following rate case.

Q. MIGHT ANY SPECIAL PROVISIONS BE APPROPRIATE TO EASE THE TRANSITION FROM DIRECT EXPENSING TO RATE BASE TREATMENT OF DSM COSTS FOR LILCO?

A. Yes. The Commission could, in the present case, give the Company prior approval to add to rate base, commencing December 1, 1992 (assuming that is the end of the initial rate year in this case), actual investment in DSM programs

in the Company's approved DSM Plan in the twelve-month period commencing December 1, 1991. In this manner, the commencement of the Company's recovery of these costs would not be delayed more than one year. In successive years, the actual amount expended on DSM pursuant to programs in the Company's Commission-approved DSM Plans could, similarly, be added to rate base annually.

Q. IF, DESPITE YOUR RECOMMENDATION, LILCO IS ALLOWED TO CONTINUE EXPENSING DSM PROGRAM COSTS, SHOULD $40 MILLION OF SUCH COSTS BE PLACED IN BASE RATES, AS THE COMPANY REQUESTS?

A. No. In its March 1, 1991, filing in Case 28223, LILCO proposes a 1991 DSM budget totalling $34.9 million, and a 1992 DSM budget of $38.0 million. Unless budget levels higher than these are adopted as a result of the Commission's response to this filing, the current amount in base rates appears to be more appropriate. The Company's current DSM program expenses in base rates amount to $35 million. Obviously, expenses on approved programs in excess of this amount would be collected retroactively through the FAC.

(2) <u>PROPOSED INCREASE IN DSM INCENTIVE</u>

Q. PLEASE DESCRIBE THE CONTEXT IN WHICH LILCO HAS PROPOSED TO MODIFY ITS EXISTING DSM INCENTIVE MECHANISM.

A. The LILCO Settlement Agreement established a return on equity incentive for DSM of up to 20 basis points. Specifically, the 1989 DSM incentive approved by the Commission for LILCO had two components: (1) up to a 20 basis point addition to the allowed return on equity based on a peak reduction target and (2) separate recovery for 120 percent of lost revenues attributable to DSM. In an August 1990 order, the Commission eliminated both the peak reduction incentive and the lost revenue incentive and replaced them with a new DSM performance incentive based on a percentage of "net resource savings." Under the new mechanism, the Company is permitted to earn an incentive equal to 15 percent of the DSM programs' net resource savings, rather than the 20 percent proposed by LILCO, up to **a maximum of a 20 basis point increase** in the otherwise allowed rate of return on common equity.

Net resource savings are determined by first adding the cumulative capacity savings, energy savings, and environmental benefits for each plan year to obtain the total resource savings, and then subtracting amortized program costs for the plan year from the total resource savings to arrive at net resource savings for the plan year. The DSM incentive is being recovered through the FAC pursuant to collection procedures approved by the Commission on June 20, 1989.

Q. HOW DOES THE COMPANY PROPOSE TO MODIFY ITS EXISTING DSM INCENTIVE MECHANISM?

A. LILCO proposes to eliminate the currently effective 20 basis point cap on the incentive award for successful implementation of conservation and DSM programs. In its place, LILCO proposes that the DSM incentive be one component of a proposed 50 basis point incentive "for all causes." Under the Company's proposal, the DSM mechanism would continue to be recovered through the existing FAC mechanism.

Q. WHAT IS THE COMPANY'S RATIONALE FOR THE ELIMINATION OF THE 20 BASIS CAP?

A. The Company's prepared testimony is devoid of any rationale for its proposed elimination of the 20 basis point cap. The only attempt at justification for the proposal is in Mr. Madsen's testimony on cross-examination that the Company, sometime in 1993, or 1994, "...will have passed the 20 basis points," therefore, if the incentive is capped at 20 basis points "...it no longer is an incentive." (Tr. at 292, lines 15-17).

Q. WHAT IS YOUR RESPONSE TO THE COMPANY'S PROPOSAL TO INCREASE ITS DSM PERFORMANCE INCENTIVE?

A. The Company's proposal should be rejected for several reasons. First, the Company has not provided a sufficient rationale for dispensing with the Commission's recently adopted incentive mechanism, nor given it a chance to work. While the currently authorized incentive mechanism may not be perfect,

LILCO has not demonstrated that the Commission's rationale for establishing a 20 basis point limitation is without merit.

Second, the Company's proposal is asymmetric. LILCO proposes to increase the benefits it may reap from DSM achievement, but offers no protection against only minimal levels of DSM achievement. For example, the DSM incentive systems in place for Orange & Rockland Utilities and Consolidated Edison Company include penalties for performance substantially below utility goals for energy savings and net resource benefits. Under LILCO's currently effective incentive system, any level of DSM achievement, no matter how far below the Company's goals or the achievable potential for cost-effective DSM it may be, will count toward the incentive. LILCO's DSM performance incentive should not be increased without considering the development of an appropriate penalty for underperformance.

Finally, LILCO's purported justification for increasing the 20 basis point cap -- the proposition that its programs will be earning incentive awards in excess of that cap -- is flawed. Specifically, it appears that the Company's DSM impact evaluations and its calculations of resource savings, which form the basis for its projection that the value of net DSM savings will exceed the 20 basis points cap, are substantially overstated.

Q. ARE YOU QUESTIONING THE ACCURACY OF LILCO'S PROJECTED NET RESOURCE BENEFITS FROM DSM?

A. Yes, I am. While LIPA is currently preparing substantive comments on this issue for filing in Case 91-E-0382, where this issue is currently pending, I will briefly summarize my concerns here.

The impact of LILCO's DSM programs on energy consumption and coincident peak demand are the starting points for the calculation of resource benefits on which the DSM performance incentive is based. LILCO's impact evaluation methodology relies less on direct measurement than is necessary given the size of its DSM budget and claimed performance incentive. In addition, a review of LILCO's 1989 and 1990 DSM program impact evaluation reports reveals numerous deficiencies.

For example, the survey design and analysis used to estimate the energy and demand savings of LILCO's residential information programs is insufficient to reliably establish whether these programs caused any savings or, if they did, the magnitude of those savings. In addition, LILCO's methodologies for estimating savings from its Commercial Energy Co-op program, its Power Alert program, its Dollars and cents Program, and its nonresidential energy audit program, are either flawed, inadequately documented or both. These programs account for the vast majority of LILCO's claimed energy and demand savings from its DSM programs.

The flaws I am finding in LILCO's methodologies for determining the energy or demand savings from these DSM programs may result in a significant overstatement by LILCO of the DSM performance incentive award.

(3) **PROPOSED SALES ADJUSTMENT MECHANISM**

Q. IN ITS FILING, THE COMPANY ALSO PROPOSES THAT A SALES ADJUSTMENT MECHANISM BE IN PLACE TO REDUCE THE UNCERTAINTY OF EXPERIENCING ELECTRIC SALES THAT ARE SIGNIFICANTLY BELOW THE COMPANY'S SALES FORECAST (Direct Testimony of Madsen, Brandifino, and Nozzolillo, pp. 27-28). FROM THE POINT OF VIEW OF PROVIDING ADEQUATE INCENTIVES FOR COMPANY PURSUIT OF COST-EFFECTIVE DSM, IS THIS PROPOSAL NEEDED?

A. No, it is not. LILCO already enjoys a generous incentive structure consisting of assured recovery of approved DSM program costs, thus reducing the risks associated with these expenses, plus an incentive of 15 percent of net resource savings, as discussed above. Given these considerations, a sales adjustment mechanism is not needed to provide LILCO with a further incentive for DSM.

Q. DOES THIS CONCLUDE YOUR TESTIMONY?

A. Yes, it does.

EXHIBITS OF DAVID NICHOLS

# DAVID NICHOLS

Vice President, Tellus Institute
Senior Researcher, Energy Systems Research Group, Tellus Institute

## Education

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| Ph.D.: | Political Science, Massachusetts Institute of Technology, 1968. |
| A.B.: | Government, Clark University, 1961. |

## Principal Experience

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| 1976-Present | Tellus Institute for Resource and Environmental Strategies:<br><br>Co-founder, Tellus Institute, Inc.<br><br>Research on energy conservation strategies and policies, utility rate design, and electric generation planning demand and supply issues.<br><br>Fiscal and personnel officer. |
| 1974-1978: | Associate Professor, State University of New York at Albany. Allen Center, then Graduate School of Public Affairs. |
| 1973-1974: | Assistant Professor, Department of History and Political Science, Rensselaer Polytechnic Institute. |
| 1969-1972: | Assistant Professor, Division of Interdisciplinary Studies in Social Science, Case Western Reserve University. |
| 1966-1969: | Instructor, Politics Department, University of Massachusetts, Boston. |
| 1964-1965: | Professional Staff Member, Institute of Naval Studies of the Center for Naval Analyses, Cambridge. |

# Testimony

## Energy Conservation & Load Management

Testimony before: Vermont Public Service Board, dockets 5330 (1990), 5270 (1988), 5248 (1988); North Carolina Utilities Commission, docket E-100, sub 58 (1990); Ohio Public Utilities Commission, docket 88-170-EL-AIR (1989); Connecticut Department of Public Utility Control, dockets 85-10-22 (1986), 82-07-01 (1982), 81-06-02/04 (1981); Massachusetts Department of Public Utilities, dockets 84-49/50 (1985), 84-84 (1985), 84-140 (1985); Maine Public Utilities Commission, dockets 82-112 (1984), U.3238/3239/3356 (1981); New York Public Service Commission, case 28223 (1983); New Jersey Board of Public Utilities, dockets 829-764 (1983), 8012-914C (1982), 822-116 (1982); New Jersey Senate, Energy & Environment Committee (1983); Rhode Island Public Utilities Commission, docket 1440 (1982); Federal Energy Regulatory Commission, dockets ER82-481 (1982), ER81-179 (1981); New York Energy Master Planning Board (1981); Virginia State Corporation Commission, docket PUE 800076 (1981); Pennsylvania Public Utility Commission, docket R-80011069 (1980); Connecticut Power Facility Evaluation Council, docket F-80 (1980).

## Energy & Demand Forecasting

Testimony before: Arizona Corporation Commission, docket U-1345-85-156 (1986); Missouri Public Service Commission, dockets ER-85-128/EO-85-185/EO-85-224 (1985); Kansas Corporation Commission, dockets 120,924-U/142,098-U (1985), 120,924-U/142,099-U (1985), 120,924-U/142,100-U (1985); Massachusetts Department of Public Utilities, dockets 1656/1657 (1985); Vermont Public Service Board, docket 4622 (1982); Nevada Public Service Commission, docket 81-660 (1982); Oklahoma Corporation Commission, cause 26669 (1980).

## Rate Design & Cost of Service

Testimony before: Rhode Island Public Utilities Commission, docket 1888 (1987); New Hampshire Public Utilities Commission, docket DR 86-122 (1986); South Carolina Public Service Commission, docket 86-188-E (1986); Maryland Public Service Commission, docket 7456 (1981); New York Public Service Commission, dockets 27461/27462 (1979).

**Other Energy Analysis**

Testimony before: Connecticut Siting Council, docket 74 (1987); Federal Energy Regulatory Commission, dockets ER85-106-000 (1986), ER85-646-000/ER85-647-000 (1986); New York Public Utility Commission, case 28025 (1982); New Jersey

Board of Public Utilities (1983); Texas Public Utility Commission, dockets 2606 (1979), 2572 (1979).

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Sept. 1990: *Long Island Power Authority Comments on the LILCO 1991-92 Electric Conservation and Load Management Biennial Plan and the LILCO 1990 Long Range Electric Conservation and Load Management Plan.* Volumes I and II. Study 90-028. Principal investigator.

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Mar. 1982: *Long Range Forecast of Electric Loads in the State of Vermont.* Study 81-26. Principal investigator.

Mar. 1982: *Conservation Case Forecast of Electric Loads in the State of Vermont.* Study 81-64. Principal investigator.

Feb. 1982: *Forecast of Electric Energy Requirements and Peak Demand in the Sierra Pacific Power Company Service Area.* Study 81-42. Vol. I, Long Range Forecast; Vol. II, Conservation Case Forecast. Co-author.

Feb. 1982: *Energy Conservation and Employment in Ohio.* Study 80-27. Co-author.

Dec. 1981: *Utility Promotion of Residential Customer Conservation,* Priority Incentive Programs to Save Electricity in Massachusetts. Study 81-47. Principal investigator.

Oct. 1981: *Realizing the Potential for Conservation in the Connecticut Territory of the Northeast Utilities Service Company.* Study 81-12/1. Principal investigator.

Sept. 1981: *Realizing the Potential for Conservation in the Service Area of the Arizona Public Service Company.* Study 81-57. Principal investigator.

Sept. 1981: *Implementing Conservation in New York State.* Study 81-09. Principal investigator.

Aug. 1981: *Lifeline Rates in Kentucky.* Study 81-09. Co-author.

May 1981: *Lifeline Rates in Maryland: A Report for the Lifeline Rate Hearing.* Study 81-02. Principal investigator.

Apr. 1981: *Lifeline Rates in New Jersey.* A report prepared for the Lifeline Rate Hearing. Study 81-16. Co-author.

Feb. 1981: *A Conservation Investment Strategy for Utah Power and Light Company: Cost-Benefit Analysis.* Study 81-06. Co-author.

Jan. 1981: *Long Range Forecast of Appalachian Power Company Electrical Loads.* Study 80-08/4. Volume I, The Base Case Forecast; Volume II, *The Conservation Case Forecast.* Principal investigator.

Dec. 1980: *Conservation Case Forecast of Central Maine Power Company Electricity Requirements.* Study 80-39. Principal investigator.

Nov. 1980: *The Conservation Alternative to the Power Plant at Shoreham, Long Island.* Studies 80-08/R and 80-31. Co-author.

Sept. 1980: *Reducing New England's Oil Dependence Through Conservation and Alternative Energy, 1978-2000.* A report to the U.S. General Accounting Office. Study 79-29. Co-author.

Aug. 1980: *Assessment of Conservation Planning for the Duquesne Light Company Area.* Study 80-06. Principal investigator.

July 1980: *The Potential Impact of Conservation and Alternative Supply Sources on Connecticut's Electric Energy Balance.* Study 80-09. Co-author.

July 1979: State Conservation Policy Case Forecast: Volume II of Study 79-12, *Electricity Requirements in New York State.* Co-author.

May 1979: *Assessment of the New England Power Pool - Battelle Long Range Electric Demand Forecasting Model.* A report to the New England Conference of Public Utility Commissioners. Study 79-06. Co-author.

Feb. 1979: *Analyzing the Impact of Energy Price Increases on New England Residents.* Study 79-01. Co-author.

Aug. 1978: *Industrial Cogeneration in New York State: Identifying and Overcoming Barriers.* Study 78-01. Co-author.

Nov. 1977: *Profile of Targets for the Energy Advisory Service to Industry.* Study 77-09. Principal investigator.

June 1977: *Toward an Energy Plan for New York.* A report to the Legislative Commission on Energy Systems. Study 77-03. Principal investigator.

## Selected Other Publications and Professional Activity

Sept. 1990: Paper, "Tracking Results in Demand-Side Management Programs," in *Demand-Side Management Conference*, Canadian Electrical Association, Toronto. Principal Author.

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|---|---|
| 1990: | Paper, "Tracking Activity and Results in DSM Programs," in *Proceedings, ACEEE 1990 Summer Study on Energy Efficiency in Buildings*, pp. 6.109-6.118. Principal author. |
| 1990: | Article, "The Conservation Utility: A New Institutional Approach," in UNEP *Industry and Environment* Review, Volume 13, No. 2. Co-author. |
| Mar. 1990: | Presenter, "Evaluating Residential Conservation Programs," Workshop at "Affordable Comfort IV" Conference, Philadelphia. |
| Nov. 1989: | Paper, "Wisconsin's Conservation Competition Pilot Program," in *Proceedings: ECNE National Conference on Utility DSM Programs*. Palo Alto, CA: Electric Power Research Institute, Report EPRI CU-6598, Vol. 1. |
| Oct. 1989: | Article, "Conservation Utilities: New Force on the Demand Side," in *The Electricity Journal*, Volume 2, Number 8. Co-author. |
| Oct. 1989: | Presenter, "New Ways to Deliver Energy Efficiency," Panel at "Making Housing More Affordable Through Energy Efficiency" Conference, Alliance to Save Energy, Washington, D.C. |
| June 1989: | Presenter, "Roundtable on Natural Gas Issues," 42nd Annual Symposium, New England Conference of Public Utilities Commissioners, Hartford, CT. |
| 1988-1990: | Independent representative on three-party panel administering Madison (Wisconsin) Gas & Electric Company conservation competition pilot program. Tellus Project 88-79. |
| 1987: | Advisor to Hull (Massachusetts) Municipal Light Plant in developing the Hull Action Plan of demand-side programs for energy efficiency improvement. Tellus Project 86-88. |
| 1987: | Advisor to the Governor's Office of Energy Assistance, Rhode Island: utility rate design and conservation programs; electric resistance heating task force. Tellus Project 86-78. |

Aug. 1985: Paper, "Evaluation of the Massachusetts Energy Conservation Service," in *Proceedings: The Second National Conference on Energy Conservation Program Evaluation*, Argonne National Laboratory, Chicago.

June 1981: "Technical Reports" I through IV in Volume 2 of *New England Can Reduce Its Oil Dependence Through Conservation and Renewable Resource Development.* Washington, D.C.: United States General Accounting Office, Report EMD-81-58A, June 11, 1981. Co-author.

July 1980: *Electricity Demand Curtailment Planning: An Assessment of Current Practice.* Upton, New York: Brookhaven National Laboratory, Informal Report BNL-27747-R-2. Co-author.

Winter 1977: Review Essay, "Pluralism and Post-Pluralism in the Study of Public Policy," *Polity.*

Nov. 1977: Organizer and Chair, "Energy Policy Options for the Northeast," Meeting of the Northeastern Political Science Association, Mt. Pocono, Pennsylvania.

Sept. 1977: "Technology and Federalism: The Dilemma of Energy Conservation Policy," *Proceedings of the American Political Science Association.*

1974: Book, *Financing Elections.* New York: Franklin Watts.

1974: "Interest Groups in American Science," Chapter 3 in A.H. Teich, *Scientists and Public Affairs.* Cambridge: MIT Press.

Summer 1973: New York Civil Service Public Administration Intern, Department of Environmental Conservation, Albany.

Dec. 1971: Organizer, "The New Activism in American Science," Panel at Meeting of the American Association for the Advancement of Science, Philadelphia; and paper, same panel.

Apr. 1971: Review, "Federal Budget Priorities for R&D," *Technology and Culture.*

Dec. 1969: "The Political Attitudes of Elite Scientists," American Association for the Advancement of Science, Boston.

Sept. 1969: "Scientists and Politics," *Proceedings of the American Political Science Association.*

Summer
1968: Lecturer, The Summer School, Clark University.

4/91

Exhibit__(DN-2)

RATEBASED TREATMENT OF DSM COSTS
5-YEAR AMORTIZATION PERIOD

| | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 |
|---|---|---|---|---|---|---|
| TOTAL DSM COSTS 1/ | $40,000,000 | $40,000,000 | $40,000,000 | $40,000,000 | $40,000,000 | $40,000,000 |
| AFUDC (1/2 Year) 2/ | | | | | | |
| Common | $707,600 | $707,600 | $707,600 | $707,600 | $707,600 | $707,600 |
| Preferred | $155,520 | $155,520 | $155,520 | $155,520 | $155,520 | $155,520 |
| Debt | $1,331,820 | $1,331,820 | $1,331,820 | $1,331,820 | $1,331,820 | $1,331,820 |
| (less) | | | | | | |
| TAX DEDUCTION 3/ | $452,819 | $452,819 | $452,819 | $452,819 | $452,819 | $452,819 |
| AFUDC NET OF TAX | $1,742,121 | $1,742,121 | $1,742,121 | $1,742,121 | $1,742,121 | $1,742,121 |
| RATE-BASED DSM | $41,742,121 | $41,742,121 | $41,742,121 | $41,742,121 | $41,742,121 | $41,742,121 |
| AMORTIZED AMOUNT | | $8,348,424 | $15,027,164 | $20,370,155 | $24,644,548 | $28,064,063 |
| TOTAL RATE-BASED DSM | | $41,742,121 | $75,135,818 | $101,850,776 | $123,222,742 | $140,320,315 |
| RETURN 2/ | | | | | | |
| Common | | $1,476,836 | $2,658,305 | $3,603,480 | $4,359,621 | $4,964,533 |
| Preferred | | $324,587 | $584,256 | $791,992 | $958,180 | $1,091,131 |
| Debt | | $2,779,650 | $5,003,369 | $6,782,345 | $8,205,526 | $9,344,070 |
| TOTAL RETURN TO COMPANY | | $12,929,497 | $23,273,094 | $31,547,972 | $38,167,875 | $43,463,796 |
| TAXES | | $928,093 | $1,670,568 | $2,264,547 | $2,739,731 | $3,119,878 |
| TOTAL REVENUE REQUIREMENT | | $13,857,590 | $24,943,662 | $33,812,519 | $40,907,605 | $46,583,674 |

| | | | | | |
|---|---|---|---|---|---|
| NET CASH FLOW TO COMPANY (Year-to-Year) | ($27,070,503) | ($16,726,906) | ($8,452,028) | ($1,832,125) | $3,463,796 |
| NET CASH FLOW TO COMPANY (Cumulative) | ($27,070,503) | ($43,797,409) | ($52,249,437) | ($54,081,562) | ($50,617,766) |
| DIFFERENCE TO RATEPAYERS (Year-to-Year) | $26,142,410 | $15,056,338 | $6,187,481 | ($907,605) | ($6,583,674) |
| DIFFERENCE TO RATEPAYERS (cumulative) | $26,142,410 | $41,198,748 | $47,386,229 | $46,478,623 | $39,894,949 |

1/ Annual Expenditures of $40 million per year assumed for analytical purposes
2/ @LILCO'S Capital structure; Common 29% @ 12.20%, Preferred 8% @ 9.72%, Debt 63% @ 10.57%
3/ Assumed tax rate @ 34%