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THE PUBLIC POWER ACT OF 1985

by

Duane Chapman

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THE PUBLIC POWER ACT OF 1985

by

Duane Chapman*

Invited testimony before a joint Hearing of the New York State Assembly, by the Standing Committees on Corporations, Authorities, and Commissions, and on Energy; and the Subcommittees on Economic Development, on Public Utility Rates and Service, and on Public Power.

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1. The Proposal

The New York Power Authority is authorized to purchase common stock of the State's seven privately owned electric utility corporations. Those non-electric activities such as natural gas sales, and coal, nuclear fuel, and natural gas production which are part of electric utility corporations would be acquired.

The Authority may pay up to the adjusted balance sheet value for each share of common stock. This may be interpreted to be total common stock equity, less accumulated construction credit allowance, divided by shares of stock¹. Table 1 shows these values and compares them to stock exchange quotations for May 24.

The Authority is to issue revenue bonds to finance any acquisitions.

The Public Service Commission would oversee the electric rates to be charged to customers by the new corporations.

The new public power corporations would be obligated to continue local property tax and state gross receipts and sales tax obligations.

As discussion evolves, ancillary subjects will need to be clarified. Several are noted in Attachment A.

2. History; Achievements of Investor-Owned Utilities

Throughout the growth era in the American utility industry, customers regularly experienced falling rates, increasing reliability of supply, and accelerating use. Generation increased from 2 billion kWh in 1902 to 2 trillion kWh in 1973, an annual compound growth rate of 10% every year.

¹This interpretation is based upon the bill and a discussion of legislative history and intent by John Wenske, legislative assistant to Assemblyman Richard L. Brodsky.

Table 1. Illustration of Maximum Purchase Offer

Calculations (1984 data) and Stock Prices (current quotations)

Company	Common Stock Equity \$ million	AFUDC Construction Credits \$ million	Adjusted Book Value \$ million	Common Shares Outstanding million	Per Share Value \$ each	May 24 Common Stock Quotation \$ each	Stock Market Value \$ million	52-week High	52-week Low
Central Hudson	\$ 307	\$ 87	\$ 220	11.0	\$ 22	\$ 27	\$ 297	\$ 28	\$ 17
Con Edison	4,012	81	3,931	129.9	30	35	4,547	35	25
Long Island Lighting Co.	2,451	1,134	1,317	110.2	12	7	771	9	4
New York State El. & Gas	1,235	338	897	52.1	17	25	1,303	26	17
Niagara Mohawk	2,207	563	1,644	116.8	14	19	2,219	20	13
Orange & Rockland	259	21	238	12.6	19	26	328	27	19
Rochester Gas & El.	585	167	418	25.7	16	22	565	23	14

Notes: Corporate Annual Reports provide the end of year 1984 data for common stock equity and common shares outstanding. AFUDC construction credit estimates are from John Wenzke. Stock quotations are from the May 25 New York Times. Unpublished current data may significantly affect this illustration.

Adjusted Book Value, the third numerical column, represents illustrative maximum acquisition offer. It does not reflect these values: (a) pre-1979 AFUDC, (b) AFUDC depreciation from rate base, (c) normalized or phantom Federal income tax items which were deducted from net income and retained earnings but not paid out by Dec. 31, 1984.

Considerable tension existed for several decades about ownership and regulation. A few states opted for public ownership. Nebraska, Tennessee, Washington, and Alaska are primarily public power states, but 46 other states are served primarily by private systems. (See Table 2.) The private systems are everywhere regulated by state commissions, as in New York.

Table 2. Leading Public Power States 1983

State	Total Sales billion kWh	Publicly Owned Utility Sales billion kWh	% Public
Nebraska	16.1	16.1	100%
Tennessee	67.6	66.5	98%
Alaska	3.5	3.3	94%
Washington	71.1	51.0	72%
U.S. total sales	2,157.6	517.1	24%
Hydropower	332.1	243.4	73%

During the middle part of the Century, hydropower was viewed as a public resource, and its development has been primarily assigned to public agencies, as in New York. During this period, the role of publicly owned utilities increased. With the conclusion of major public hydropower expansion, the relative positions of public and private utilities stabilized. Since 1960, publicly owned utilities have held a relatively constant one-fourth of the national industry.

Since 1973, growth has disappeared in much of the nation, averaging only 2.4% annually to 1985. In New York, generation grew at a rate equivalent to 1.5%, peak demand at only 6/10 of 1%; but installed capacity

and supply at 2%. Consequently, in 1985, the New York Power Pool will have a reserve margin of installed capacity 40% above the peak hour of the year, and is completing an additional 2,700 MW of capacity.

In spite of these problems of excess capacity, New York's system has three major accomplishments. First, system reliability is so good that there are no regular data on customer outages. Essentially, every customer can plan on 100% -- rather than 99% -- of full power for each of the 8,760 hours each year.

Second, the coal utilities in the state have maintained both sulfur emission standards and low fuel costs. In December last year, the average ton of coal at the 9 old coal plants was 1.8% sulfur and cost \$44.50 per ton. In 1976, the old plants used 1.9% sulfur coal at a cost of \$46.76 in 1985 dollars². Throughout this period, New York's air pollution emission standards have been met. The new Somerset plant with sulfur scrubbers is removing 90% of the sulfur in its coal. In addition, 95%-99% of the particulate soot is being removed at old and new plants.

Third, since operation stopped at the West Valley nuclear waste fuel center and at the Indian Point 1 nuclear plant, the state's utilities have experienced no major new problems with their operating nuclear plants.

In summary, the state's system has done very well in terms of reliability, meeting air pollution goals, and, in recent years, in overall safe operation of nuclear facilities.

²\$27.67/ton in 1976 dollars.

3. Strengths of Publicly Owned Utilities

It is well known that publicly owned utilities offer their customers lower rates. Nationwide, in 1983 a typical business customer paid 6¢/kWh to a private utility and 4.5¢/kWh to a public utility. The difference for residential customers was 2¢/kWh. In New York, the difference is particularly striking. The average public kWh sold for 5¢ to a residence in 1983 while the average private residential kWh cost 11¢³.

This edge for the publics is usually attributed to differential access to public hydropower, to lower borrowing costs for tax exempt bonds, and to lesser tax liability. The first two factors are clearly significant.

The third factor -- lesser tax liability -- may not be wholly correct on a national basis. Many municipal utilities provide electricity for streetlighting and for city buildings. When this service is combined with tax-type payments, public utilities' local and state tax-type responsibilities are claimed to equal or exceed the local and state tax contributions of private utilities⁴.

In New York, the absence of significant tax-type payments by the Authority makes it improbable that the state-local contributions are comparable for public and private utilities in the State. It should be noted that the \$1.8 billion in property and receipts taxes would continue under the proposal.

However, it is unlikely that all of the publics' edge is attributable to these factors. In several technical areas, it appears that the publics are somewhat more efficient. In managerial items, the publics perform better on a cents per kWh basis. They do better in accounting and collections; in customer service and sales; and in administration. The overall edge is 15%, at 1/10 of a cent per kWh⁵.

³Calculated from data in the Edison Electric Institute Statistical Yearbook and in Public Power.

⁴Public Power, May-June 1985.

⁵Estimated from data in U.S. DoE, Financial Statistics of Selected Electric Utilities 1982, pp. 15 and 783.

In plant efficiency, some studies find public plants to be somewhat better operated, and no studies known to me find privately owned plants to be better operated⁶.

The situation in New York is similar. The Authority operates two nuclear plants and one heavy oil plant which are comparable to plants operated by the state's private utilities. Nuclear plant data for 1984 are summarized in Table 3. The Authority's two plants hold a very slight edge against the three private nuclear plants in production cost, heat rate efficiency, and availability.

The Authority's New York City oil plant matches Consolidated Edison's low sulfur oil use, and is less costly than two of Consolidated's five plants. (See Table 4.) Lilco's Northport plant benefits from low cost, high sulfur oil and easy access. It is not comparable. Similarly, Niagara Mohawk's Oswego plant on Lake Ontario must pay more for oil, and is not comparable.

In summary, publicly owned utilities appear to be very slightly more efficient, on average, in terms of management cost and in plant operations. This very slight edge in efficiency is augmented by considerable differentials in access to public hydropower and to tax exempt bonds. The result is major customer rate advantages for publicly owned utilities.

⁶Pescatrice and Trapani find, when they incorporate fuel prices, differential interest rates, and wages in their analysis, that a margin of 25% in production costs remain, the margin favoring publicly owned plants. See their "The Performance and Objectives of Public and Private Utilities," Journal of Public Economics, 1980, v. 13, pp. 259-276.

Table 3. New York Nuclear Plant Operations, 1984

Utility	Plant, yr.	Median Capacity	Avg. Hr. Unavailable %	Avg. Heat Rate Btu/kWh	Prod. Cost ¢/kWh
RGE	Ginna, '70	470 MW	23%	10,842	0.6¢
NiMo	Nine Mile #1, '69	610 MW	28%	10,509	1.5¢
Con Ed	Ind. Pt. #2, '73	857 MW	48%	11,425	3.5¢
Avg. 3 Priv. Utilities		646 MW	33%	10,925	1.9¢
NYPA	Fitzpatrick, '76	798 MW	23%	10,585	1.8¢
NYPA	Ind. Pt. #3, '78	965 MW	24%	10,878	1.8¢
Avg. 2 NYPA		882 MW	23%	10,372	1.8¢

Source: N.Y. Power Pool, Long Range Plan, April 1985.

Table 4. New York Large Heavy Oil Stations, 1984,
Median Values

Company	Plant/Station	Capacity	Heat Rate Btu/kWh	Prod. Cost ¢/kWh	Sulfur Content %, 1983
NYPA	Poletti	825 MW	11, 393	6.3¢	0.3%
Con Ed	Astoria	1,427 MW	11,429	6.4¢	0.3%
Con Ed	ArthurKill	839 MW	11,361	7.5¢	0.3%
Con Ed	Bowline	1,202 MW	10,374	5.0¢	0.3%
Con Ed	Roseton	1,200 MW	9,754	4.7¢	0.3%
Con Ed	Ravenswood	1,747 MW	10,663	5.6¢	0.3%
Lilco	Northport	1,480 MW	10,131	4.7¢	2.1%
NiMo	Oswego	1,700 MW	11,261	6.8¢	1.7%

Note: several plants are jointly owned. Data from NYPP,
op. cit.

4. Problems with Privately Owned Utilities

All five of the Public Service Commission's chairmen since 1970 now work for the utility industries regulated by the Commission. (See Attachment B, prepared by Andrea Krejner.) This unfortunate fact creates a climate in which the Commission may act, or may be believed to be acting, in a less than independent manner in its administrative oversight of the utility industry. The absence of a firm regulatory discipline is particularly evident in the \$10 billion committed to the unneeded Shoreham and Nine Mile #2 nuclear plants.

In this regulatory environment in which the interests of the leadership of the Commission and the regulated industry have become proximate, the susceptibility of the privately owned utilities to growth incentives has become particularly significant. The tax incentives applicable to private utility investment are so great as to render the economic value of corporate income taxation zero or negative. This means that the annual levelized tax liability is zero or negative, and this pertains to new plants which can be expected to earn as much as \$1 billion annually in revenues⁷.

As a real illustration of this economic principle, note that for one New York utility with major construction, the sum of actual Federal Corporate income tax payments for 1983 and 1984 is a negative \$1.1 million. Apparently, a positive \$78 million was authorized by Federal law and the Commission to be collected from customers as a Federal tax expense⁸.

⁷See Chapman, Energy Resources and Energy Corporations, Cornell University Press, pp.212, 213 and Ch.12; "Federal Tax Incentives Affecting Coal and Nuclear Power Economics," Natural Resources Journal, April 1982; "The Economic Status of Nuclear Power in New York," Testimony before the Assembly Special Committee on Nuclear Power Safety Hearing, The Economics of Nuclear Power, February 28, 1980, Cornell Agricultural Economics Staff Paper No. 80-7. These corporate tax incentives arise primarily from accelerated depreciation and the investment tax credit.

⁸New York State Electric & Gas Corporation, 1984 Annual Report, pp.4, 17, 18, 21.

Net income is \$368 million for these two years for the company.

These monies (the "normalized" or "phantom" taxes) are used for new construction, dividends, and short-term financial investments.

Previously, the Federal tax law encouraged new capacity by direct personal tax grants to private utility management as an incentive for their companies' expenditures on new construction. For Long Island Lighting, top management received about \$30,000 each in Federally purchased stock as a personal reward for their company's Shoreham project (Attachment C).

In brief, the large investment subsidies in the Federal corporate income tax encourage New York's private utilities to build unneeded new capacity, and provided personal compensation through tax grants to management as a reward. Public Service Commission leadership has not been independent of the utility industry, and has not applied the necessary rigorous review of unneeded facilities.

The economic framework in New York today is defined by stable customer demand, \$10 billion in unnecessary capacity, a Federal corporate tax system which subsidizes expansion, and a sympathetic State Commission which has endorsed this excess capacity. The interaction of these policies has put in place a framework where the only logical path for New York utilities is to encourage growth in electricity use in the face of increasing rates.

5. Cost Effectiveness for Customers

The economic problem for electricity users is to find the least cost systems for heating, cooling, and lighting. This must take into account the original cost of the energy using equipment, applicable interest rates, kWh requirements, and electricity cost. Large users generally have the technical staff to make these analyses and to develop the right policies.

Here at Cornell, for example, we continue to use district steam heat, operate a cost-effective small hydro plant, are developing power co-generation at our steam plant, and are installing heat saving windows in our old buildings.

In California, many industries are developing cost effective co-generation, and this is particularly true for the oil and gas industry there.

Nationally, industrial use of utility electricity has declined somewhat since 1979, and this has occurred during a period in which industrial production has increased 7%. We may conclude that a large industrial user with a typical annual bill of \$75,000 is well focussed on this point.

However, a problem exists for residential and small business customers. They typically do not have the expertise to evaluate energy saving investments, and may not be able to read the complicated electric bill. In addition, the residential and small business customer may not own their building, or the appliances and heating, cooling, and lighting systems.

This can be illustrated with insulation costs. Suppose "super insulation" adds \$6,000 to the cost of a new house. This would mean air/moisture barriers in walls, a ventilation heat exchange system, multiple window glazings, and insulation as high as R-70 in the attic⁹. Over a 20 year mortgage, this is equivalent to an additional \$800 per year.

⁹R measures resistance to heat loss. R-70 insulation means only 1/70 of a Btu is lost in a square foot in an hour for each degree the outside temperature is below 65°F. See Chapman, Energy Resources, op. cit., pp. 303-308.

Suppose the "super" house requires 9,000 kWh per year heating, and the conventional house 23,500 kWh. If the average rate is 10¢/kWh, the annual electric bills for heating are \$900 for the "super" and \$2,350 for the conventional house. So the total annual cost for the super-insulated house is \$1,700 per year, the sum of the \$800 annual mortgage-type payment plus the \$900 electricity cost for the "super." This total is \$650 a year less than the \$2350 for the conventional house. Since the "super" saved 14,500 kWh annually, the \$800 annual charge for installation is equivalent to a cost of 5.5¢/kWh for each kWh saved.

Our present New York system is, as noted above, now in an economic environment in which it must promote growth and oppose cost-effective use reductions for residential and small business customers. The New York system cannot follow the innovations now developing elsewhere in promoting cost-effective efficiency.

An analogous problem exists with respect to non-utility power sources. In New York, these sources include Ontario Hydro, Quebec Hydro, local hydropower, and industrial co-generation. Each MWh from these non-utility sources reduces the base upon which to allocate the costs of the Nine Mile #2 and Shoreham plants. The cost range begins at 3¢-4¢ per kWh for purchased electricity from Ontario Hydro, and may rise above 10¢/kWh for some local hydropower.

6. Successful Examples: Seattle and Burlington

In at least two cases, publicly owned utilities made important and correct choices in the 1970s about energy efficiency. In the 1980s, these utilities are harvesting the benefits of those earlier decisions, in the sense that they are popular in their communities and studied by other utility systems around the country.

The Seattle City Light Department is a partner with other members of the Washington Public Power Supply System and the Bonneville Power Authority in Nuclear Units 1, 2, and 3. However, in the mid-1970s, Seattle withdrew from the group that initiated units 4 and 5. Formal discussion groups on nuclear power and conservation were common, and the Department made a serious decision to promote efficiency in use. The result? In 1985, average use per residential customer remains below the 1972 peak. Seattle has lower

cost electricity than any other large city in the country, and much lower cost than other systems in Washington.

Another successful publicly owned utility is the Burlington Electric Department. Burlington Vermont is at the other end of the scale, geographically and in size. It shares with Seattle a commitment to conservation, and has reduced average residential customer use since the mid-1970s. It is particularly recognized for its innovations in wood fuel usage, and now has two plants with 80 MW total capacity with low fuel costs.

As with Seattle, its rates are lower than those in the rest of Vermont, and appear to be the lowest in the Northeast. Its 5.7¢/kWh average rate compares to a 6.3¢ average for the rest of Vermont in 1983. Upstate New York averaged 6.5¢/kWh.

As with Seattle, Burlington citizens are regularly involved in the Electric Department's policy through bond elections and city council oversight on supply and conservation planning.

Obviously, I mean to emphasize the Seattle and Burlington Electric Departments as positive examples of publicly owned utilities, and suggest that the Washington Public Power Supply System and the Seabrook public utilities are not positive examples. The elements common to both successful systems include the combination of low rates with conservation, a reliance on renewable power sources, and good fortune with respect to original commitments to nuclear power. Perhaps the unusual degree of public participation in decision making is relevant.

7. Hypothetical Rates with Public Operation

Gene Heinze-Fry has prepared a preliminary examination of the impact of public ownership on company finance and on customers. Table 5 shows his method as applied to Niagara Mohawk data. The results show a \$222 million reduction in customer bills for both electricity and gas sales.

The result is wholly dependent upon the assumptions, and these should be clearly understood.

First, it is assumed that common stock could be purchased at its current price, and the funds for this obtained by Authority bonds giving a 10% annual interest. Hence, \$2.2 billion in bonds are issued, and the proceeds used to acquire the company's common stock. Mortgage-type amortization requires a 10.6% annual payment factor, or a \$235 million sum for annual principal and interest payments.

Customers no longer need provide the \$308 million in net income for common equity, but must provide a new \$235 million in Authority debt costs.

Property and gross receipts taxes of \$269 million continue to be paid. However, removing the corporate income tax eligibility would reduce customer rates and funds available to the company. Customers would no longer pay the \$26 million in actual tax paid, or the \$156 million in "phantom" or normalized taxes. Shareholders would lose the \$33 million in investment and other tax credits.

No analysis has been made of existing debt refinancing, or of continuation of the AFUDC credit. Although the company's average interest was 10.8%, it had obligations of \$430 million for bonds with interest above 12%. Refinancing these bonds would lower interest charges.

Table 5 assumes continuation of AFUDC accounting. However, I think that elimination of the fictitious corporate income tax expenses means that AFUDC is less useful.

AFUDC and normalized taxes are both funny money, in the sense that they indicate future potential earnings or expenses, but are recorded currently. Both arise directly from new construction. AFUDC is positive in its impact on net income, while normalized taxes are negative. They are frequently of equivalent magnitude, and, in effect, offset each other.

TABLE 5. Example of Effect of Public Ownership on Revenue Requirement:
 1984 Income Statement for Niagara Mohawk, in million dollars
 prepared by Gene Heinze-Fry

	Present Capital Structure	Public Authority
Operating Revenue	\$ 2786	\$ 2564
Operating Expenses		
Fuel	476	476
Purchased Electricity	377	377
Gas for Resale	453	453
Other Operation	354	354
Maintenance	141	141
Depreciation & Amortization	141	141
Property, Gross Receipts Taxes	269	269
Federal Income Tax, Current	26	0
Deferred	<u>156</u>	<u>0</u>
Operating Income	393	351
Other Income		
AFUDC	122	122
Income Tax Credits	33	0
Other Income	<u>9</u>	<u>9</u>
Income Before Interest Charges	557	484
Interest		
Long-term Debt, Existing	224	224
New Authority Debt	---	235
AFUDC	(39)	(39)
Other Interest	<u>12</u>	<u>12</u>
Net Income	360	51
Dividends on Preferred Stock	<u>51</u>	<u>51</u>
Income Available for Common Stock	\$308	\$ 0

A public authority loses the ability to collect "phantom" taxes from customers for construction payments, and it is desirable to consider modifying the use of "phantom" AFUDC income for public authorities.

AFUDC in Table 5 is \$161 million for both debt and equity entries. Since AFUDC is not real money, it cannot be used for debt payments for the public authority, just as it cannot now be used to pay debt or dividend charges for private utilities.

Preferred stock obligations are left unchanged.

Although earlier discussion may indicate some very slight potential saving in management efficiency and plant operations, no change is made in these accounts.

Finally, it is possible that Niagara Mohawk revenue is now, in reality, too low for its financial obligations. In this case, 1984 actual revenue should have been higher than \$2.786 billion, and the hypothetical advantage of public ownership might exceed the \$222 million implicit in Table 5.

In Table 6, Heinze-Fry extends the basic assumptions to all of New York's private electric utilities. The result is a hypothetical saving of \$1.3 billion.

For electric rates, the hypothetical impact would range from a 0.5¢/kWh savings for Niagara Mohawk and Orange and Rockland, to a 1.9¢/kWh savings for LILCO customers.

As a cautionary note, I must emphasize that these results followed directly from the assumptions in the legislation.

My own conclusion is a highly qualified approval of the continued development of the concepts in the legislation.

TABLE 6. Hypothetical Summary of Initial Effect of Public Ownership on Annual Company Finances
prepared by Gene Heinze-Fry

(in \$ millions)

Company	Stock Acquisition Cost ^a	Amortized Annual Cost ^b	Net Income less Preferred Dividends ^c	Annual Savings in Capital Expense	Net Income Tax Saving ^d	Actual 1984 Operating Revenue ^c	Total Annual Saving	Revised Annual Revenue	% Required Saving
Central Hudson	\$ 297	\$ 32	\$ 45	\$ 13	\$ 29	\$ 523	\$ 42	\$ 481	8%
Con Edison	4547	482	581	99	431	5729	530	5199	9
LILCO	1317	140	340	201	116	1974	317	1657	16
NYSEG	1303	138	184	46	75	1129	120	1009	11
Niagara Mohawk	2219	235	308	73	148	2786	222	2564	8
Orange & Rockland	328	35	34	0	27	538	26	512	5
RG&E	565	60	91	31	45	784	76	708	10
New York Totals	\$10576	\$1122	\$1584	\$462	\$871	\$13462	\$1333	\$12129	10%

a - from Table 1: the greater of 1) book value of common equity less accumulated AFUDC on December 31, 1984 or 2) the market value of common stock on May 24, 1985

b - Use of 30-year bonds bearing 10% interest is assumed to finance the stock purchase. The amortization factor is .10608; amortized annual cost equals .10608 times stock acquisition cost.

c - from Income Statements in 1984 company annual reports to stockholders.

d - from Income Statements: equals income tax expense (current and deferred) less income tax credits.

Customers gain the reduced income tax expense, while shareholders lose the investment tax credit and other credits.

ATTACHMENTS

Attachment A. Subject Areas Needing Clarification

As consideration of this legislation develops, several other subjects will need to be considered. These include: (A) Treatment of preferred stock. This could continue unchanged, or be acquired through similar mechanisms. (B) Security obligation for the Authority bonds. For some utilities, unsecured revenue bonds would be difficult for the Authority to market. (C) Equity participation by municipalities, counties, and the state. On the positive side, such participation would reduce borrowing requirements and enhance bond marketability. It would also secure the attachment of counties and municipalities to the success of the new corporations. On the negative side, local equity participation would probably demand a more complex management structure and acquisition process. (D) Continued operation of natural gas and other non-electric activities. Sale of these activities could provide significant equity. On the other hand, aggressive sales marketing by a competing gas utility could create severe economic problems for a new public electric utility with excess capacity. (E) Access to municipalization would be important in the case where the new public utilities had high customer rates because of excess capacity developed by the predecessor private utility. In these circumstances, municipalization would be particularly attractive to localities adjacent to Ontario, Quebec, and, to some extent, Pennsylvania. This could be relevant to bond marketing. (F) The tax responsibilities of the Authority itself would need to be clarified. The new Authority-financed public utilities would have significantly greater tax responsibilities than would similar electric operations by the Authority itself.

Attachment B

PRESENT AFFILIATIONS AND WORK
OF NEW YORK STATE PUBLIC SERVICE
COMMISSION CHAIRMEN, 1970 THROUGH 1985

prepared by Andrea Kreiner
for Professor Duane Chapman
April 15, 1985

<u>CHAIRMAN</u>	<u>TERM OF OFFICE</u>	<u>PRESENT EMPLOYMENT</u>
Joseph Swidler	2/1/70 - 5/30/74	Swidler, Berlin, & Strelow
Alan J. Roth	5/31/74 - 6/30/74 (Acting Chairman)	Spiegel & McDiarmid
Alfred E. Kahn	7/1/74 - 6/2/77	NERA Consultant & Cornell University, Professor of Economics
Edward Berlin	6/3/77 - 9/25/77 (Acting Chairman)	Swidler, Berlin, & Strelow
Charles A. Zielinski	9/26/77 - 4/2/81	Wald, Harkrader, & Ross
Paul Gioia	4/2/81 - present	Chairman, New York State Public Service Commission

Spiegel & McDiarmid (Alan J. Roth):

Subject Areas:

Law Directory¹:

Public Utilities, Energy, Communications, Federal Law, Antitrust, Insurance, Administration.

Personal Communication 4/11/85.

Swidler, Berlin, & Strelow (Joseph Swidler, Edward Berlin):

Subject Areas:

Law Directory:

Communications Regulated Industries, Media, Legislation, Environmental, Administration, General.

Personal Communication 4/12/85: Electric & Gas Utilities.

Wald, Harkrader, & Ross (Charles A. Zielinski):

Subject Areas:

Law Directory:

General, Administration, Federal Agencies, Federal Courts.

Personal Communication 4/12/85: Electric & Gas Utilities.

¹Law Directory. Martindale-Hubbell. Summit, N.J. 1985.

Attachment C

Estimates of Tax Expenditure Grants for Personal Compensation
of Executives for NM#2 and Shoreham Nuclear Plants

	<u>NM#2</u>	<u>Shoreham</u>
A. Capital expenditures to Dec. 31, 1982, expiration date of eligibility	\$1.98 bill	\$2.60 bill
B. Capital expenditures to Dec. 31, 1976	\$.19 bill	\$.56 bill
C. Capital expenditures, 1977-1982 inclusive	\$1.79 bill	\$2.04 bill
D. Assumed expenditures, 1975-1976	\$.06 bill	\$.19 bill
E. Estimated expenditures, 1975-1982 inclusive	\$1.85 bill	\$2.23 bill
F. Excluded expenditures, assuming 20% AFUDC	\$-.37 bill	\$-.45 bill
G. Qualifying expenditures	\$1.48 bill	\$1.78 bill
H. Tax expenditures for stock purchase @ 1½% ITC (note: 1975 was 1% only)	\$22.2 mill	\$26.7 mill
I. Estimated median participating employees, 3/4 of total	6,600	4,200
J. Average tax grant per employee	\$3,364	\$6,357
K. Illustrated management tax grant 5 times company average	(\$16,820)*	\$31,786

Sources: Annual Reports, Niagra Mohawk Power Corporation and Long Island Lighting Company; Reports of Member Electric Systems of the New York Power Pool, 1983 and 1977. U.S. Senate Finance Committee, "ESOP's and TRASOPS", Nov. 1978.

*To complete the illustration, the \$16,820 should be subdivided among the NM #2 full set of owner managements.