



**PSNH**

**Public Service Company of New Hampshire**

**1980 Annual Report**

*Under Sea at Seabrook*

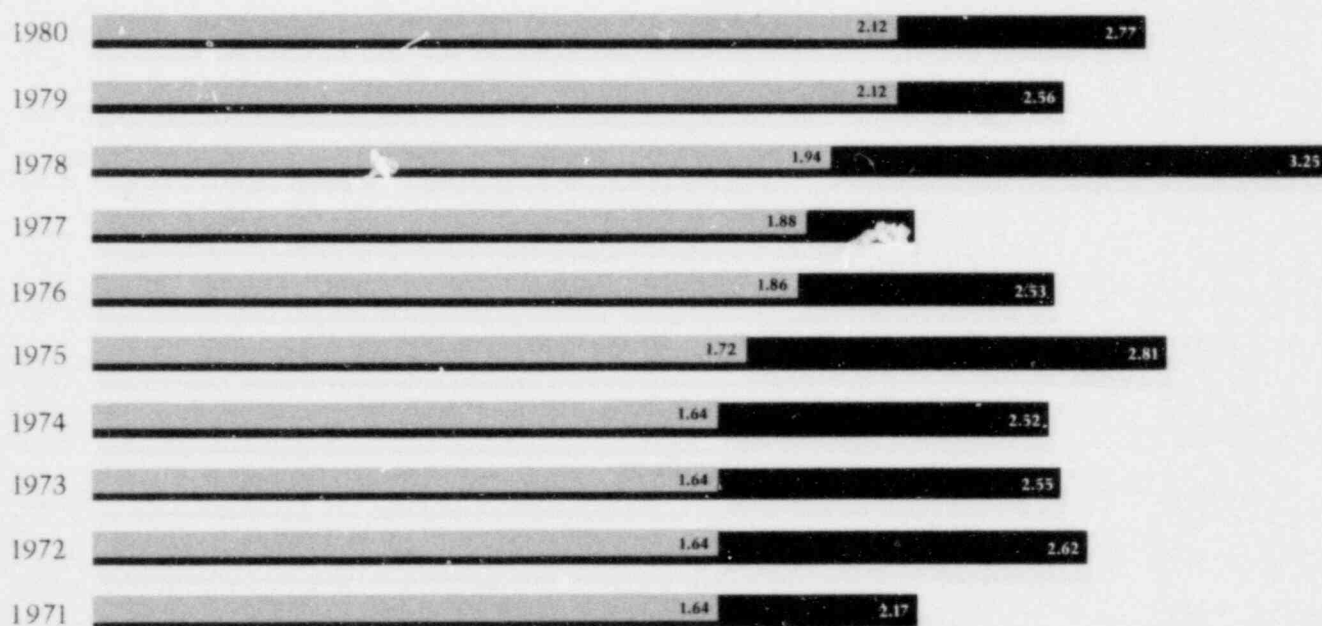
B107300235 B10721  
PDR ADOCK 05000443  
1 PDR

# Highlights of 1980

	1980	Change Since 1979	Annual Growth Rate* 1975-1980
Operating Revenues	\$ 351,247,479	20.0 %	13.9%
Operating Expenses	\$ 303,940,535	22.4 %	14.8%
Earnings Per Share of Common Stock	\$ 2.77	8.2 %	1.1%
Common Shares Outstanding (Average)	16,539,113	30.8 %	22.9%
Gross Investment in Utility Plant	\$1,272,551,216	22.0 %	20.9%
Construction Expenditures	232,852,693	20.9 %	42.7%
Prime Peak Load (Net Kilowatts)	1,145,000	(2.4)%	2.4%
Prime Kilowatt-Hours Sold (Thousands)	5,641,501	0.7 %	4.5%
Number of Customers (Year-End)	289,383	2.7 %	2.4%
Annual KWH per Residential Customer	7,178	(1.9)%	0.6%

\*Least Squares Method

## Earnings Per Average Common Share and Dividends Paid Per Common Share (In Dollars)



■ Dividends Paid Per Share  
 ■ Earnings Per Share

## General Information

### Annual Meeting of Shareowners

All shareowners are urged to attend the Annual Meeting to be held on Thursday, May 14, 1981, at 9:30 a.m., Eastern Daylight Saving Time, at The Carousel Ballroom, Bedford, New Hampshire (Route 3 - Daniel Webster Highway - 1 mile North of the interchange of the Everett Turnpike, Interstate 293, and New Hampshire Route 101). During the meeting there will be opportunity to discuss matters of interest pertaining to the Company.

### Description of Business

Public Service Company of New Hampshire is the largest electric utility in New Hampshire, supplying electricity to approximately 83% of the population of the State of New Hampshire. The Company distributes and sells electricity at retail in 200 cities and towns in the State of New Hampshire, six border towns in the State of Vermont, and 13 border towns in the State of Maine. The Company also sells electricity at wholesale to six other utilities.

### Annual Report and Statistical Supplement

This 1980 Annual Report has been approved by the Board of Directors. The 1980 Statistical Supplement (with comparative statistics for the last 10 years) will be available in early April. If you want a copy, or

have questions about the Annual Report or the Company, please write to Russell A. Winslow, Clerk and Secretary, Public Service Company of New Hampshire, P.O. Box 330, Manchester, New Hampshire 03105.

### Stock Exchange Listing

Public Service Company of New Hampshire common stock and \$25 par value preferred stock are listed on the New York Stock Exchange. The Company's symbol on the exchange is PNH.

### Dividend Reinvestment and Common Stock Purchase Plan

During 1978 the Company instituted a Dividend Reinvestment and Common Stock Purchase Plan for its shareowners and employees. Through the Plan, shareowners can purchase shares of the Company's common stock without the payment of any brokerage commission or service charge. We hope shareowners will find the Plan a convenient way to increase their ownership in Public Service Company of New Hampshire. If you desire more information concerning the Plan, please complete and return the post card attached in the back page of this annual report.

### Dividend Reinvestment Plan Agent

The First National Bank of Boston  
PSNH Dividend Reinvestment and  
Common Stock Purchase Plan  
P.O. Box 1681  
Boston, MA 02105

### Other Information

At December 31, 1980, there were 59,158 owners of the Company's common stock. Shareowner inquiries regarding change of address, dividends, stock transfer requirements, lost or stolen certificates or other account information should be directed to The First National Bank of Boston, Shareholder Services Division, P.O. Box 644, Boston, Massachusetts 02102.

### Transfer Agents

The First National Bank of Boston  
100 Federal Street  
Boston, Massachusetts 02110  
Manufacturers Hanover Trust  
Company  
4 New York Plaza  
New York, New York 10015

### Registrars

The First National Bank of Boston  
100 Federal Street  
Boston, Massachusetts 02110  
Morgan Guaranty Trust Company  
of New York  
30 West Broadway  
New York, New York 10015

### About the Cover

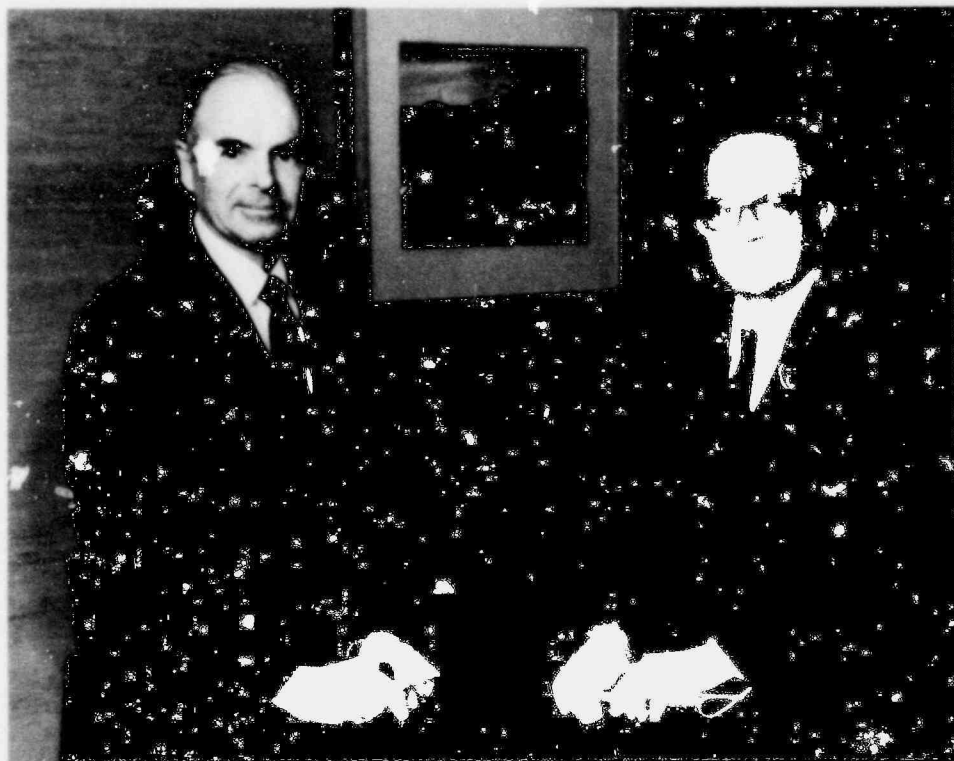
A masterful engineering achievement, the Seabrook Station cooling tunnels will circulate 800,000 gallons per minute of seawater through the plant's condensers. These ten 22-foot diameter tunnels were bored through solid rock under the marsh, harbor, and ocean floor in order to minimize ecological effects to these areas.

**PSNH** PUBLIC SERVICE  
Company of New Hampshire

### Corporate Offices

Public Service Company of  
New Hampshire  
1000 Elm Street, P.O. Box 330  
Manchester, New Hampshire 03105  
Telephone (603) 661-4000

## Letter to Shareowners and Employees



W.C. Tallman, Chairman, and R.J. Harrison, President

In 1980 the Company continued to strive toward its overall objective of meeting customers' energy needs at the lowest cost commensurate with a fair return for the owners of the business and fair wages and good working conditions for the employees.

Balancing these needs has not been easy amid continued inflation, high interest rates, soaring oil prices, and an uncertain regulatory climate. Yet we have accomplishments to recognize. In 1980 we sought and obtained rate increases which have enabled us to hold the earnings line against inflation. We sought and obtained two important and favorable rulings on a reduction of our ownership in Seabrook Station from 50 to about 35 percent. We undertook broad financing initiatives that raised \$204.5 million and opened for us a new capital market, the European financial community.

The Company's earnings per share for the year 1980 were \$2.77 compared to \$2.56 for 1979 and \$3.25 for 1978. The partial recovery in 1980, moving earnings closer to those in 1978, was achieved despite severe inflationary pressures and a substantial increase in the number of shares of common stock outstanding. Revenues for 1980 rose nearly 20 percent over 1979; however, operating income was up less than 7 percent. Rapidly increasing





NO POSTAGE  
NECESSARY  
IF MAILED  
IN THE  
UNITED STATES

**BUSINESS REPLY CARD**

FIRST CLASS PERMIT NO. 3736 BOSTON, MA.

POSTAGE WILL BE PAID BY ADDRESSEE

The First National Bank of Boston  
PSNH Dividend Reinvestment and  
Common Stock Purchase Plan  
P.O. Box 1681  
Boston, MA 02105



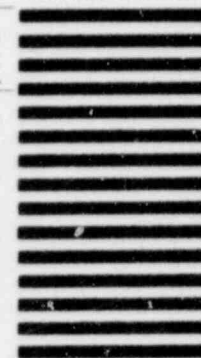
NO POSTAGE  
NECESSARY  
IF MAILED  
IN THE  
UNITED STATES

**BUSINESS REPLY CARD**

FIRST CLASS PERMIT NO. 3736 BOSTON, MA.

POSTAGE WILL BE PAID BY ADDRESSEE

The First National Bank of Boston  
Transfer Agent - PSNH  
P.O. Box 644  
Boston, MA 02102



**Dividend Reinvestment and Common Stock Purchase Plan**

Owners of Common Stock of Public Service Company of New Hampshire (the "Company") and employees of the Company may purchase newly issued Common Stock of the Company pursuant to its Dividend Reinvestment and Common Stock Purchase Plan. To obtain a prospectus containing more complete information on the Plan, please fill in and return this card to The First National Bank of Boston.

Name \_\_\_\_\_

Street \_\_\_\_\_

City \_\_\_\_\_

State \_\_\_\_\_

Zip code \_\_\_\_\_

**Is this a duplicate mailing?**

Are you receiving two or more copies of the Annual Report and other shareowner publications at your address due to multiple shareowner accounts? If you wish to avoid this duplication, please complete this form. A separate form should be completed for each account you wish eliminate future publication mailings. This authorization will not affect distribution of dividends or proxy materials. It is your responsibility to notify the company in writing should you wish these mailings resumed.

Print name shown on back cover of Annual Report \_\_\_\_\_

Street \_\_\_\_\_

City \_\_\_\_\_

State \_\_\_\_\_

Zip code \_\_\_\_\_

Signature(s) \_\_\_\_\_

operating expenses and unprecedented high interest costs arising from continuing high levels of inflation substantiate the need for additional rate relief. On January 14, 1981, the Company filed a request with the New Hampshire Public Utilities Commission (NHPUC) for an emergency surcharge designed to increase annual revenues by approximately \$35 million, or 10%. On February 27, after three days of hearings, the NHPUC denied the Company's request; in part, citing a need for further information, and in part indicating a desire to see more stringent economies achieved by the Company. In response the Company has filed a motion for a rehearing of the NHPUC's order in the matter of the emergency rates and has begun implementation of a six-step program to reduce controllable expenses. The six-step program is described in more detail in *Management's Discussion and Analysis of Financial Condition and Results of Operations* on Page 22.

In seeking to overcome the impacts of inflation, the Company has been implementing ways to ensure that we operate as efficiently as possible. Over recent years, numerous measures have been taken to improve operating efficiency, including consolidation of district and division offices, increased use of computers in customer service and customer accounting, the introduction of improved management control

systems for line operations, the establishment of two-man line crews and improved work methods, and the introduction of a maintenance control system for generating station maintenance. Overall, these programs have avoided the need for a total of 516 jobs; and, on a ten-year basis, will result in expected savings of approximately 95 million dollars.

The second front we are actively pursuing is to build Seabrook Units I and II as quickly as we possibly can, and to retain ownership of as much of it as we can, within the limits of our financial ability to do so. It is clearly in the best interest of customers we serve to own as much of Seabrook as we can. The Company is buttressed in this view by statements of numerous independent groups. Most recently, the Citizens' Energy Policy Advisory Group to the New Hampshire House Science and Technology Committee found:

*"Financing: The Seabrook plant will benefit the citizens of New Hampshire most if (1) the plant is completed and brought to full electric production as soon as possible and if (2) as much ownership as financially possible is retained by companies within this state."*

In addition to Seabrook, the Company is continuing with the planning and construction of other projects which, in the long term, offer potential cost savings to our customers. These include the conversion of Schiller Station from oil to coal, hydroelectric development projects and other projects which must be undertaken to maintain or improve safety, reliability, and oil independence objectives.

Important as it is to build Seabrook, it is equally important to delay the building of other new plants after Seabrook because of their high capital requirements and the attendant impact on electric rates. Therefore, the Company's strategy also calls for utilizing load management, effective and innovative pricing, and conservation to defer needed new capacity as long as possible. Innovative pricing and conservation should be able to assist the consumer in lessening the impact of higher prices which the Company must necessarily charge if it is to carry out its responsibilities in the inflationary climate of today. We are studying ways to avoid construction of any new base load plants until the end of the century, and we are also looking at possible minimal- or non-investment capacity sources such as Canadian hydro power.

To deal with the multiple and interlocking factors which bear on the Company's two-part strategy, we have recently established a top

level Electric System Strategic Planning Committee charged with the following responsibilities:

"The Committee's mission is to develop and recommend a comprehensive integrated electric system plan, with appropriate contingency plans to optimally match load and capacity for a 20-year planning period based on the following criteria and goals:

- Completion of Seabrook Units I and II as quickly as possible
- Minimization of future capital expenditures
- Preservation of flexibility to respond to uncertain future conditions
- Minimization of cost of service
- Maintenance of reasonable system reliability
- Responsiveness to the local socio-political environment while considering regional and national goals."

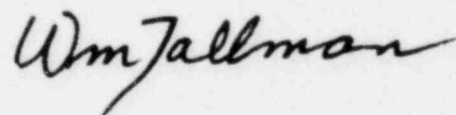
Also, a Corporate Strategic Planning Department was recently established to develop a framework for anticipating and responding to social, political, economic, technological, and regulatory factors. The department will unite Company efforts to implement that framework, formulating short- and long-term goals and a comprehensive plan to reach them.

In addition, during the year the Company's Board of Directors, acting to ensure continuity in management and to achieve an orderly succession in the top management of the Company, made a major change. On May 8, 1980 the Board elected W.C. Tallman, Chairman, and R.J. Harrison, President. Subsequently, the Board also filled two vacancies in the senior management group by electing Charles E. Bayless as Financial Vice President and D. Pierre G. Cameron, Jr., as Vice President and General Counsel.

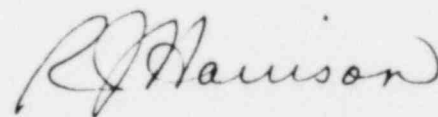
In the course of the last several years, your Company has encountered formidable challenges. The largest construction project in the State's history is progressing well considering the financial constraints of the last year. Financing for Seabrook and other needed facilities has been accomplished in extremely difficult markets.

From 1978 to date over \$490 million of outside capital has been secured. Utility operating efficiencies have been achieved, blunting the impact of rampaging inflation. Management has been challenged and tested to extreme limits. All members of the Company team have responded to the need for strong and dedicated efforts.

The road that stretches ahead of us is not without obstacles, but we've never been better equipped to overcome them.



W.C. Tallman  
*Chairman and  
Chief Executive Officer*



R.J. Harrison  
*President*

## Year in Review

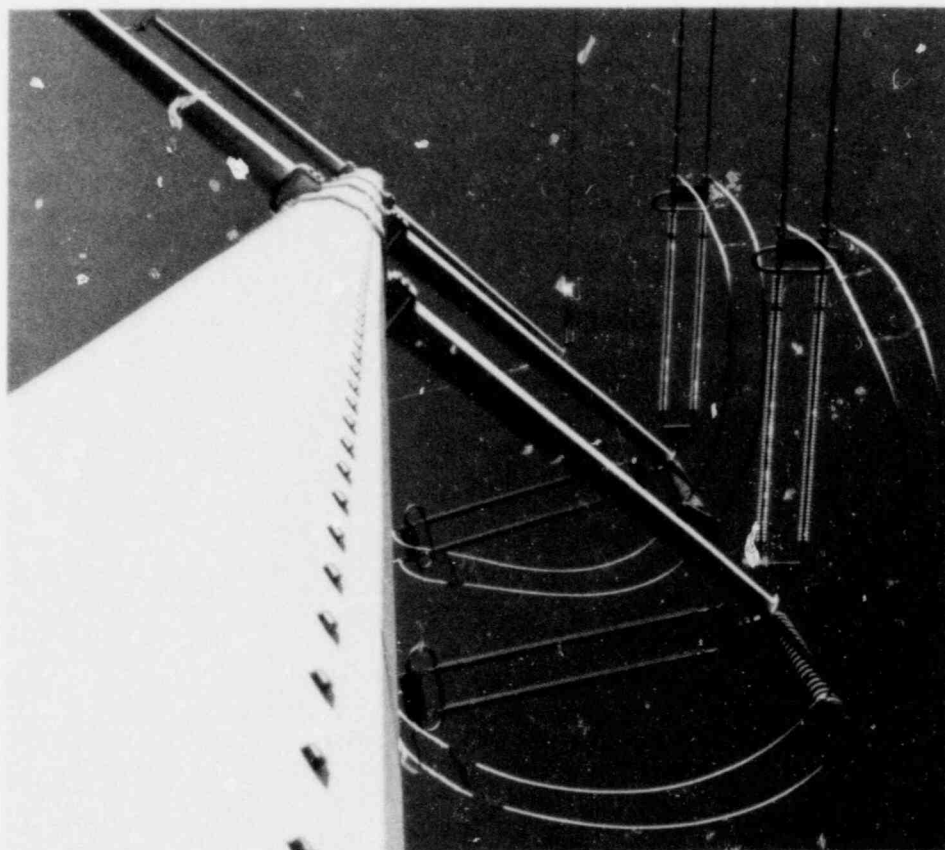
Unusually warm weather, in combination with heightened conservation efforts and a difficult economy for the industrial sector, resulted in essentially no growth in sales in 1980. Indicative of the weather sensitive nature of kilowatt-hour sales, the month of December, 1980, a bitterly cold month, saw prime sales increase by 11.6 percent, although on an annual basis, sales were up only 0.7 percent. The following tabulation sets forth comparative sales results for 1979 and 1980:

### Prime Energy Sales (Thousands of Megawatt-Hours)

	1980	1979	Percent Increase
Residential	1,815	1,804	0.7
Industrial	1,834	1,846	(0.7)
Other	1,992	1,953	2.0
	5,641	5,603	0.7

Revenues from these sales, however, were up 20.3 percent, to \$327.9 million. This increase is attributable to rate increases approved by various regulatory bodies during the year, and from the operation of the fuel adjustment clause which passes through to customers the increases in the cost of fuel burned for generating electricity.

The economy of the area served by the Company continues to expand at a more rapid rate than the economy of the nation as a whole. Reflecting continued high levels of population growth, the number of customers continued to increase. At year-end 1980, the Company had 289,383 customers, a 2.7% increase over 1979 year-end customers of 281,787. During the 1970's, New Hampshire population increased by 24.8%, the second highest growth rate for any state east of the Mississippi River. Demographic experts expect to see a continuation of this growth for the remainder of the century, at least. As a result of this expected growth, and assuming normal weather patterns



The 345 KV transmission lines lead from Seabrook Station to points in Newington and Londonderry, NH and Tewksbury, MA.

will prevail, the Company expects sales to increase about 4.2% per year through 1990.

In January, 1981, the Company experienced a record prime peak load of 1,208 MW. The previous record had been set just a week earlier. The 1,208 MW represents a 3% increase over the 1979 record. The Company currently estimates that peak demand for electricity will increase about 4% per year through 1990.

### Rate Relief

On June 9, 1980, the New Hampshire Public Utilities Commission granted the Company an increase in its New Hampshire retail rates of \$18.3 million on an annual basis, an 8.4% increase. Major findings by the Commission were a 15.9% return on

common equity, and full normalization of inter-period tax-timing differences on a prospective basis. In an earlier order in this same proceeding, the Commission ordered the Company to refund about \$11.3 million to customers over a three-year period. This amount represented Construction Work In Progress (CWIP) related charges which had been billed to customers after the effective date of legislation which prohibited such CWIP charges. Such refunds will be accelerated at the start of the adjustment periods associated with reduction in the Company's ownership of the Seabrook Station discussed below.

In other rate actions, the Federal Energy Regulatory Commission on February 8, 1980 issued an order al-



lowing a two step increase which had been requested by the Company to become effective as proposed, subject to refund. The first step, \$3.6 million on an annual basis, became effective on January 22, 1980, and the second step of \$0.7 million became effective on April 1, 1980. On July 31, 1980 the Maine Public Utilities Commission granted the Company a rate increase of \$0.6 million or 17% on an annual basis to the Company's customers in Maine.

### Financing

During 1980, the Company raised about \$204.5 million: \$52 million from the sales of General and Refunding Mortgage Bonds in January and December, \$61.8 million from sales of common stock in February and July, about \$2.7 million from sales of common stock through the Company's Dividend Reinvestment and Common Stock Purchase Plan, \$60 million from sales of preferred stock in April and October, and \$28

million from a Eurodollar loan in September.

The Eurodollar loan, the Company's first, was negotiated with six European banks. It provided a lower interest rate than was available domestically and introduced the Company to the European financial community, opening a whole new capital market.

### Power Generation - Present and Future

During 1980, the Company's generating mix was as follows:

Fuel	Percent
Oil	53.1
Coal	34.4
Nuclear	8.4
Hydro	4.1

When both units at Seabrook are on line, nuclear generated electricity is expected to be about 69%, coal 21%, oil 6%, and hydro 4%.

Due to the rapid increase in the cost of fossil fuels, and particularly oil, this shift in generation mix toward more nuclear will have a dramatic impact on what the Company's customers would otherwise have had to pay for electricity. During 1980, when the nuclear portion of the Company's generation mix was only 8.4%, nuclear-generated electricity saved customers over \$11 million. The Company would have had to burn about one million additional barrels of oil to meet electric generating needs if nuclear power were not available. At year-end 1980, the cost of a barrel of oil was almost triple what it was in 1975, with more cost increases almost assured.

The management of the Company is greatly concerned about the cost increases which the consumers it serves have had to endure. The root cause of the problem is the cost of oil, which has gone from about 15 percent of the average residential bill in 1972 to 35 percent of the same bill in 1975, and to 50 percent of the same bill in 1981. Going along with the severe impact of fossil fuel costs are all of the general inflationary effects which impact the Company's expenses like those in all industries.

Even with a substantially reduced level of construction initiated in March, 1980 and an extended iron-workers strike during the summer, construction on the Seabrook project has continued satisfactorily. The Seabrook project as a whole is now 33% complete, with Unit I and property and equipment common to both Units over 46% complete and Unit II 8% complete (with work now limited to the containment liner alone). In early 1981 the boring of the cooling water intake tunnel was completed (over 3 miles in length) and, assuming current construction schedules, which contemplate resumption of the pre-March, 1980 levels, can be met during the rest of 1981, the boring of the cooling water discharge tunnel will be completed and the reactor vessel and steam generators, as well as the permanent dome for the contain



Part of the Seabrook Station circulating water system, the second of three vertical shafts drilled into the ocean floor is shown where it intersects with the intake tunnel. After over 17,000 feet of tunnelling, this horizontal tunnel was within inches of the exact center of the vertical shafts.

the containment structure, all for Unit I, will be set.

The Seabrook Station Training Center opened in November, and began providing Seabrook Station control-room operators with the best available training in the nation. The center has a computerized simulator which is an exact duplicate of the plant's actual control room. Although the primary purpose of this intensive training facility is to ensure safety, there are major cost savings associated with it. "It is estimated that the plant's annual availability will be increased by up to 2%, which translates into substantial dollar savings when measured against the high cost of oil.

*The Company is moving ahead aggressively with its hydro redevelopment program. Here, Garvins Falls, one of the earliest plants in the state, is undergoing reconstruction and the addition of two new horizontal tube-type generators.*



*Franklin Hollis, 1904-1980*

### **Director Franklin Hollis**

A Director for nearly 42 years, Franklin Hollis died on December 6, 1980. He was senior partner in the Concord law firm of Sulloway, Hollis & Soden.

Chairman Tallman said of him, "Franklin Hollis' wise counsel and true friendship will be greatly missed by all his friends and associates at Public Service Company. All of us who have known him will always remember his fine legal mind, his quiet good humor, and his quick readiness to contribute his talents to any matter in which he was needed."

A memorial resolution, passed by the Board of Directors of the Company stated that he "contributed immeasurably to the han-

dling of the legal affairs of the Company with thoroughness, dedication and wisdom. Rate matters, labor negotiations, taxes, financings, sitings of power plants and many other legal matters received his careful attention during a half century of dedicated service to this Company and to the utility industry."

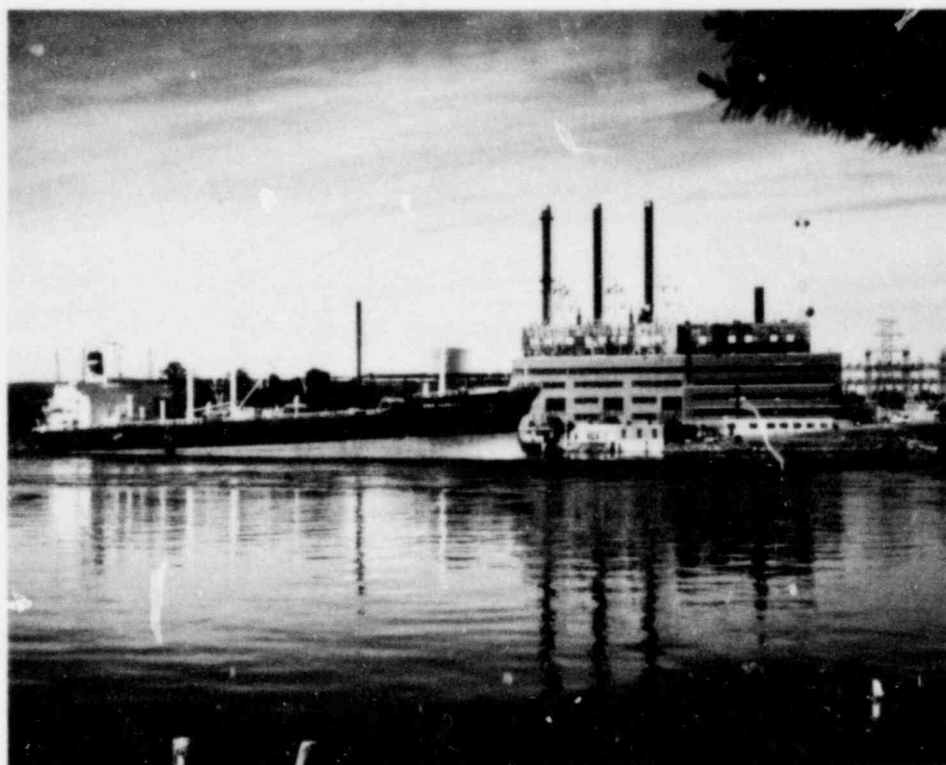
Hollis, 76, had served as president of Exeter and Hampton Electric Company and of Concord Electric Company and was a director of those and several other companies. He had been member and chairman of both the Concord School Board and the State Board of Education.

The Company is attempting to reduce oil dependency on a number of fronts besides building Seabrook Station. Currently in the planning stage is the conversion of three units at Schiller Station in Portsmouth from oil to coal. These conversions are estimated to take two years to complete, at a cost of about \$21 million, assuming flue gas desulfurization equipment will not be required. In November, the Company began its first major hydro redevelopment project at Garvins Falls on the Merrimack River in Bow, New Hampshire. One other hydro station, Eastman Falls, will be redeveloped and applications have been filed to construct three new small stations.

#### Adjustment in Seabrook Ownership

Following issuance of orders by the Massachusetts Department of Public Utilities in October, 1980, and February, 1981, approving the acquisition of additional ownership interests in the Seabrook Project by several Massachusetts electric utilities, the adjustment periods for reduction of the Company's ownership interest to approximately 35% began in part. When the Massachusetts Municipal Wholesale Electric Company completes its financing for its increased ownership share, the New Hampshire Electric Cooperative, Inc., receives approval from the New Hampshire Public Utilities Commission for the financing of its new ownership share, and local approvals are received by the Taunton Municipal Lighting Plant, the adjustment period will be fully effective and the Company will experience approximately a 12-month moratorium on construction costs for the Seabrook Project. When the full adjustment period is completed, and assuming no additional transfers, the Ownership Shares in the Seabrook Project will be as shown above:

Public Service Company of New Hampshire	35.23497%
The United Illuminating Company	17.50000
Massachusetts Municipal Wholesale Electric Company	11.59340
New England Power Company	9.95766
Central Maine Power Company	6.04178
The Connecticut Light and Power Company	4.05985
Commonwealth Electric Company	3.52317
Montauk Electric Company	2.89989
Bangor Hydro-Electric Company	2.17391
New Hampshire Electric Cooperative, Inc.	2.17391
Central Vermont Public Service Corporation	1.59096
Maine Public Service Company	1.46056
Fitchburg Gas and Electric Light Company	0.86519
Taunton Municipal Lighting Plant	0.43479
Vermont Electric Cooperative, Inc.	0.41259
Hudson Light and Power Department	0.07737



An oil tanker on the Piscataqua River at Portsmouth, NH delivers oil to the Company's Schiller Station. This facility is being considered for redevelopment to burn coal in three of its four oil-fired units.

# Common and Preferred Stock Dividends and Market Prices

## Dividends and Stock Prices

Security	Dividends Paid Per Share							
	Calendar Quarter - 1980				Calendar Quarter - 1979			
	First	Second	Third	Fourth	First	Second	Third	Fourth
Common Stock	\$0.53	\$0.53	\$0.53	\$0.53	\$0.53	\$0.53	\$0.53	\$0.53
Preferred Stock (1)								
3.35%	0.84	0.84	0.84	0.83	0.84	0.84	0.84	0.83
4.50	1.125	1.125	1.125	1.125	1.125	1.125	1.125	1.125
5.50	1.375	1.375	1.375	1.375	1.375	1.375	1.375	1.375
7.92	1.98	1.98	1.98	1.98	1.98	1.98	1.98	1.98
7.64	1.91	1.91	1.91	1.91	1.91	1.91	1.91	1.91
11.00	0.6875	0.6875	0.6875	0.6875	0.6875	0.6875	0.6875	0.6875
9.00	2.25	2.25	2.25	2.25	2.25	2.25	2.25	2.25
11.24	0.7025	0.7025	0.7025	0.7025	—	—	0.654	0.7025
17.00	—	0.338	1.0625	1.0625	—	—	—	—
15.00	—	—	—	0.175	—	—	—	—

## High and Low Sales Prices on New York Stock Exchange

Security	Calendar Quarter - 1980								Calendar Quarter - 1979							
	First		Second		Third		Fourth		First		Second		Third		Fourth	
	High	Low	High	Low	High	Low	High	Low	High	Low	High	Low	High	Low	High	Low
Common Stock	17	13	17¼	13¼	17½	14½	16½	13¼	21½	19½	19½	17½	19½	17¼	18½	15
Preferred Stock (2)																
3.35%	25½	19	25	19	25	21½	21½	18	31½	30½	31	30	31	28	28	25
4.50	33	25	31	28	34	31	31	25½	43	40	42½	39	40½	39¼	37½	33
5.50	52	52	61	61	62	62	62	59	77	76	77	77	Not Quoted	60	60	60
7.92	58	44	59	47	60	53	50	45	72	72	73	68	72	65	65	57
7.64 (3)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
11.00	22	17¼	22½	18	22½	18½	20¼	16½	26¼	25	26½	24¼	26½	24¼	25¼	20
9.00 (3)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
11.24	22½	18½	23½	17½	23½	19¼	20½	17¼	—	—	27	25½	27¼	24½	24½	20¼
17.00	—	—	31½	30	32	28	30	26	—	—	—	—	—	—	—	—
15.00	—	—	—	—	—	—	24¼	22	—	—	—	—	—	—	—	—

(1) All preferred stock series have a par value of \$100, except the 11.00%, 11.24%, 17.00% and 15.00% which have a par value of \$25.

(2) Prices for the 3.35%, 4.50%, 5.50% and 7.92% dividend series are the range of bid prices on the "Over the Counter" market which were supplied by the National Quotation Bureau, Inc.

(3) Series privately placed and therefore not traded.

# Statements of Earnings and Retained Earnings

For the Year Ended December 31,

1980

1979

1978

		(Thousands of Dollars)		
Operating Revenues (Note 2)		\$351,247	\$292,814	\$260,751
Operating Expenses	Operation			
	Fuel	137,969	111,411	71,996
	Purchased and Interchanged Power	49,279	36,091	43,422
	Other Operating Expenses	39,695	36,409	31,490
	Maintenance	21,395	19,271	17,502
	Depreciation	17,425	15,487	14,752
	Federal and State Taxes on Income (Note 3)	22,472	15,066	19,666
	Other Taxes, Principally Property Taxes	15,705	14,651	13,585
	Total Operating Expenses	303,940	248,386	212,413
Operating Income		47,307	44,428	48,338
Other Income and Deductions	Allowance for Equity Funds Used During Construction (Note 4)	34,487	15,188	7,828
	Equity in Earnings of Affiliated Companies	877	770	870
	Other — Net	1,492	1,279	983
	Total Other Income and Deductions	36,856	17,237	9,681
Income Before Interest Charges		84,163	61,665	58,019
Interest Charges	Interest on Long-Term Debt	39,711	28,247	21,073
	Other Interest	21,847	14,465	8,201
	Allowance for Borrowed Funds Used During Construction (Note 4)	(37,242)	(21,766)	(7,762)
	Net Interest Charges	24,316	20,946	21,512
Net Income		59,847	40,719	36,507
Retained Earnings at Beginning of Year		76,649	71,140	58,725
		136,496	111,859	95,232
Dividends	Preferred Stock, at Required Annual Rates	12,822	7,966	6,394
	Common Stock	34,840	27,244	17,698
	Total Dividends Paid	47,662	35,210	24,092
Retained Earnings at End of Year		\$ 88,834	\$ 76,649	\$ 71,140
Weighted Average Shares Outstanding		16,539,113	12,642,928	9,275,220
Earnings Per Share of Common Stock		\$2.77	\$2.56	\$3.25
Dividends Per Share of Common Stock		\$2.12	\$2.12	\$1.94

See accompanying Notes to Financial Statements.



# Balance Sheets

Assets	December 31,	1980	1979
		(Thousands of Dollars)	
Utility Plant at Original Cost	Electric Plant	\$ 548,401	\$ 524,415
	Less Accumulated Provision for Depreciation	161,703	147,398
		386,698	377,017
	Unfinished Construction (Principally Nuclear Generating Projects) (Note 10)	724,150	518,880
	Net Utility Plant	1,110,848	895,897
Investments	Nuclear Generating Companies	9,651	9,627
	Real Estate Subsidiary	4,944	3,506
	Other, at Cost	184	184
	Total Investments	14,779	13,317
Current Assets	Cash	3,729	2,137
	Accounts Receivable	42,385	28,097
	Unbilled Revenue	10,160	8,202
	Deferred Collection of Fuel Costs	16,373	13,775
	Refundable Federal Income Tax	—	5,197
	Fuel, Materials and Supplies, at Cost	37,122	32,002
	Prepayments	2,867	3,576
	Total Current Assets	112,636	92,986
Other Assets	Deferred Collection of Fuel Costs	9,776	—
	Other	6,189	8,587
	Total Other Assets	15,965	8,587
		\$1,254,228	\$1,010,787
<b>Capitalization and Liabilities</b>			
Capitalization	Common Stock Equity		
	Common Stock — \$5 Par Value		
	Authorized: 27,000,000 Shares		
	Outstanding: 18,263,922 Shares		
	(1979 — 13,969,133 Shares)	\$ 91,020	\$ 69,846
	Other Paid-In Capital	207,578	166,265
	Retained Earnings (Note 5)	88,834	76,649
	Total Common Stock Equity	387,432	312,760
	Preferred Stock (Note 6)		
	With Mandatory Redemption Requirements	120,000	60,000
	Without Mandatory Redemption Requirements	51,316	52,514
	Long-Term Debt — Net (Note 7)	398,856	344,829
	Total Capitalization	957,604	770,103
Current Liabilities	Notes Payable — Banks (Note 8)	108,350	114,100
	Long-Term Debt to be Retired Within One Year (Note 7)	24,467	555
	Accounts Payable	61,847	50,244
	Accrued Taxes	6,181	3,093
	Accrued Interest	15,302	11,249
	Other	2,759	1,788
	Total Current Liabilities	218,906	181,029
Deferred Credits	Accumulated Deferred Investment Tax Credits	23,761	29,717
	Accumulated Deferred Taxes on Income	53,380	29,482
	Other	577	456
	Total Deferred Credits	77,718	59,655
Commitments and Contingencies (Note 10)		\$1,254,228	\$1,010,787

See accompanying Notes to Financial Statements.

# Statements of Changes in Financial Position

For the Year Ended December 31,

1980 1979 1978

		(Thousands of Dollars)		
Source of Funds	From Operations			
	Net Income	\$ 59,847	\$ 40,719	\$ 36,507
	Principal Non-Cash Charges (Credits) to Income			
	Depreciation	17,425	15,487	14,752
	Allowance for Equity Funds Used During Construction	(34,487)	(15,188)	(7,828)
	Deferred Taxes and Investment Credit Adjustments	17,941	24,936	7,024
	Total from Operations	60,726	66,014	50,455
	From Outside Sources			
	Sale of Long-Term Debt	81,000	60,000	60,000
	Sale of Preferred Stock	60,000	30,000	—
	Sale of Common Stock	64,615	79,716	24,309
	Change in Short-Term Borrowings	(5,750)	28,775	30,212
	Advance Payments from Joint Project Participants	—	10,628	—
	Total from Outside Sources	199,865	209,119	114,521
	Decrease in Working Capital	30,010	—	33,510
	Total	\$290,601	\$275,133	\$198,486
Application of Funds	Property Additions	\$232,853	\$192,566	\$173,539
	Allowance for Equity Funds Used During Construction	(34,487)	(15,188)	(7,828)
	Dividends Paid	47,662	35,210	24,092
	Reduction of Long-Term Debt	26,153	1,214	5,947
	Repayment of Advances from Joint Project Participants	6,033	—	—
	Increase in Working Capital	—	58,064	—
	Deferred Collection of Fuel Costs	9,776	—	—
	Other Applications — Net	2,611	3,267	2,736
	Total	\$290,601	\$275,133	\$198,486
Increase (Decrease) in Working Capital Other than Short-Term Debt and Advances from Participants	Cash	\$ 1,592	\$ 258	\$ (3,050)
	Receivables	14,288	509	5,596
	Inventories	5,120	11,259	3,707
	Long-Term Debt to be Retired Within One Year	(23,912)	4,676	3,397
	Accounts Payable	(17,636)	28,419	(33,125)
	Accrued Taxes	(3,088)	9,256	(11,470)
	Other	(6,374)	3,687	1,435
	Total	\$ (30,010)	\$ 58,064	\$ (33,510)

# Statements of Other Paid-In Capital

For the Year Ended December 31,

1980 1979 1978

		(Thousands of Dollars)		
Other Paid-In Capital	Balance at Beginning of Year	\$166,265	\$108,232	\$ 90,409
	Excess of Proceeds Over Par Value on Issuance of Common Stock			
	Issued 4,234,789 Shares in 1980; 4,182,164 Shares in 1979 and 1,342,455 Shares in 1978	44,264	59,468	17,868
	Preferred Stock Issuance Expenses	(2,951)	(1,435)	(45)
	Balance at End of Year	\$207,578	\$166,265	\$108,232

See accompanying Notes to Financial Statements.

# Notes to Financial Statements

## 1. SUMMARY OF ACCOUNTING POLICIES

### Regulations and Operations

The Company is subject, as to rates, accounting and other matters, to the regulatory authority of the New Hampshire Public Utilities Commission (NHPUC), the Federal Energy Regulatory Commission (FERC) and, to a lesser extent, the public utilities commissions in other New England states where the Company does business.

### Investments

The Company follows the equity method of accounting for its investments in nuclear generating companies and in its wholly-owned real estate subsidiary. The Company's investment in this subsidiary is principally in the form of advances. The Company's ownership interests in nuclear generating companies are:

Company	Ownership Percent
Yankee Atomic Electric Company	7%
Connecticut Yankee Atomic Power Company	5%
Maine Yankee Atomic Power Company	5%
Vermont Yankee Nuclear Power Corporation	4%

In the case of each of the nuclear generating companies, pursuant to provisions of purchased power contracts which are regulated by the FERC, the Company is entitled to its ownership percent of total plant output and is obligated to pay a similar share of each company's operating expenses and return on invested capital. Approximately 7.4%, 9.3% and 10.9% of the Company's total energy requirements were furnished by these companies in 1980, 1979 and 1978, respectively.

### Utility Plant

Provision for depreciation of utility plant is computed on a straight line method at rates based on estimated service lives and salvage values of the several classes of property. The depreciation provisions were equivalent to overall effective rates of 3.48%, 3.23% and 3.19% of depreciable property for 1980, 1979 and 1978, respectively.

Maintenance and repairs of property are charged to maintenance expense. Replacements and betterments are charged to utility plant. At the time properties are retired, the cost of property retired plus costs of removal less salvage are charged to the accumulated provision for depreciation.

### Deferred Collection of Fuel Costs

The Company implemented a new retail fuel adjustment clause on April 1, 1980, which was designed to eliminate the lag between the time increased fuel costs are incurred by the Company and the time such costs are billable to customers. Under the new clause, estimated changes in fossil fuel costs are billed to customers on a monthly basis at a rate which is determined quarterly. Differences, if any, between estimated and actual costs are recognized in determining fuel adjustment clause billing rates for the second subsequent quarter; accordingly, such differences are deferred and amortized to expense as collected from customers.

At April 1, 1980, the unbilled fuel costs under the Company's old fuel adjustment clause were approximately \$18,700,000 which the NHPUC is permitting the Company to collect over a three-year period ending May 31, 1983.

### Operating Revenues

Revenues are based on billing rates authorized by applicable federal and state regulatory commissions which are applied to customers' consumption of electricity. The Company records estimated unbilled revenue at the end of accounting periods.

### Income Taxes

The tax effect of differences between pretax income in the financial statements and income subject to tax, which are the result of timing differences, are accounted for as prescribed by and in accordance with the ratemaking policies of the NHPUC. Accordingly, provisions for deferred income taxes are recognized only for specified timing differences. Tax reductions attributable to other timing differences are flowed through to net income as reductions of income tax expense. See Notes 2 and 3.

Investment tax credits earned are deferred and amortized to income over the lives of the related properties.

### Allowance for Funds Used During Construction

Allowance for funds used during construction is the estimated cost, during the period of construction, of equity funds and borrowed funds used for construction purposes which are not currently recovered from customers through revenues. See Note 4.

### Earnings Per Share

Earnings per share are based on the average number of common shares outstanding, after recognition of preferred dividend requirements.

## 2. OPERATING REVENUES

For the period December 3, 1977 through May 6, 1979 the Company's New Hampshire retail rates were based in part upon the inclusion in the Company's rate base of a portion of the costs of construction work in progress (CWIP) associated with major generating projects. The inclusion of CWIP in rate base increased revenues from customers to cover the costs of financing such CWIP. On May 7, 1979 a New Hampshire statute prohibiting the inclusion of CWIP in rate base became effective. By order dated August 29, 1979 the NHPUC excluded CWIP from the Company's rate base as of May 7, 1979, but determined that the Company's rates would remain unchanged pending an investigation to determine the Company's revenue requirements and to establish fair and reasonable rates. On August 31, 1979, the Company filed a new retail tariff with the NHPUC designed to increase revenues by about \$18,500,000 on an annual basis. This filing was suspended by the NHPUC and consolidated with its rate investigation into the elimination of CWIP from rate base.

The NHPUC granted the Company an emergency temporary surcharge effective December 28, 1979 designed to increase annual revenues by approximately \$11,970,000, and the temporary surcharge was increased to \$18,500,000 effective April 1, 1980 by order of the NHPUC. On April 10, 1980, the NHPUC issued a supplemental order in the combined proceeding requiring the Company to refund to its customers approximately \$11,300,000 based on a finding that during the period from May 7, 1979 to December 28, 1979 the Company's rates were based in part on CWIP and, in addition, that the Company was accruing AFUDC on CWIP previously included in rate base. The April 10 supplemental order requires that the refund be made over a 36-month period commencing June 1, 1980, and that when all regulatory approvals for the reduction of the Company's ownership interest in the Seabrook plant are received, the period for the refund will be cut in half and the rate of refund doubled. The Company and two intervenors have appealed the April 10 order to the New Hampshire Supreme Court. Pending disposition of this appeal, the refunds are being made to customers.

On June 9, 1980, the NHPUC issued its final decision in the combined proceeding which granted the Company an increase in its New Hampshire retail rates of approximately \$18,355,000, superseding the surcharges. The

NHPUC's order is based on a test year ended May 31, 1979 and in part on an increase in the depreciation rate for distribution plant and normalization of the tax effects of all timing differences applicable to post 1970 utility plant additions. Increased provisions for depreciation and deferred income taxes have been recorded in the Company's financial statements commencing April 1, 1980.

The Company is accounting for the combined effect of the April 10 supplemental order and the June 9 final decision as one rate order, and therefore, the \$11,300,000 refund is being netted against the rate increase of \$18,355,000 over the period of the refund which commenced June 1, 1980. Accordingly, commencing June 1, 1980 and continuing until all regulatory approvals for the commencement of the reduction of the Company's ownership interest in the Seabrook plant are received, the net increase in annual revenues (based on a test year ended May 31, 1979) will aggregate approximately \$14,600,000.

On July 29, 1978 the Company began billing new rates to its wholesale-for-resale customers designed to increase annual revenues by approximately \$2,400,000 (about 7.7%) based on a 1978 test year. In January 1980, the Company reached an agreement in principle with these customers pursuant to which, in part, the Company's revenues would be reduced by approximately \$450,000 on an annual basis and rate refunds would be made retroactive to July 29, 1978. Pursuant to the agreement, which was approved by FERC, the refund required by the rate settlement was deferred and is being made over a six month period ending June 30, 1981. The Company recorded the after-tax cost of this refund in 1980.

On December 21, 1979, the Company filed with FERC new rates for its wholesale-for-resale customers designed to increase revenues by approximately \$4,294,000, or 10.1%, on an annual basis. A first step emergency increase of approximately \$3,567,000, or 8.4%, was allowed to become effective on January 22, 1980, and a second step additional rate increase of approximately \$727,000 became effective on April 1, 1980. As a result of these increases, operating revenues for 1980 increased approximately \$3,855,000. These increases are being collected under bond and are subject to possible refund upon a final rate decision by the FERC.

### 3. INCOME TAXES

The components of income tax expense are as follows:

	1980	1979	1978
	(Thousands of Dollars)		
Federal			
Operating Income	\$ 15	\$(13,952)	\$10,166
Other Income and Deductions	145	324	(46)
	160	(13,628)	10,120
State, Included in Operating Income	4,518	2,983	2,468
Total Current Income Taxes	4,678	(10,645)	12,588
Deferred Federal			
Operating Income	24,516	7,634	5,727
Other Income and Deductions	2	7	(8)
	24,518	7,641	5,719
Deferred State			
Operating Income	(620)	126	93
Total Deferred Income Taxes	23,898	7,767	5,612
Investment Tax Credit Adjustment	(5,957)	18,275	1,412
Total Income Tax Expense	\$22,619	\$ 15,397	\$19,612

Investment tax credits of approximately \$15,200,000, \$18,500,000 and \$11,400,000 were generated for 1980, 1979 and 1978, respectively. There are limitations on the amounts of such credits which can be used, however, and based on these limitations as of December 31, 1980 the Company has investment tax credit carry forwards available for use in subsequent years of approximately \$29,800,000, of which \$14,600,000 expires in 1986 and \$15,200,000 expires in 1987.

In accordance with the requirements of the NHPUC, provisions for deferred income taxes are recognized for the following timing differences:

	1980	1979	1978
	(Thousands of Dollars)		
A portion of Depreciation and Amortization of Plant Facilities*	\$ 4,203	\$ 834	\$ 858
Accrued and Unbilled Fuel	(5,957)	1,322	1,049
Adjustment Charges	4,174	—	—
Deferred Fuel Costs	—	—	—
The Interest Component of Allowance for Funds Used During Construction	17,093	9,987	3,713
Investment Tax Credit Applied to Deferred Taxes	4,383	(4,383)	—
Other	2	7	(8)
	\$23,898	\$ 7,767	\$5,612

\* Current income tax reductions are attributable to (1) the tax depreciation permitted under the Class Life ADR System of the 1971 Revenue Act in excess of the tax depreciation permitted under the Guideline Lives provisions of the 1969 Revenue Act, (2) the amortization of certain pollution control facilities over five year periods, and (3) commencing April 1, 1980 all timing differences applicable to post 1970 utility plant additions

The principal reasons for the differences between total income tax expense and the amount calculated by applying the Federal income tax rate to income before income tax are as follows:

	1980	1979	1978
	(Thousands of Dollars)		
Income Before Income Tax	\$82,466	\$56,116	\$56,119
Federal Statutory Rate	46%	46%	48%
Expected Tax Expense	37,934	25,813	26,937
Increases (Reductions) in Taxes Resulting from			
Overheads Charged to Construction and Expensed for Tax Purposes	(16,071)	(8,334)	(4,544)
Excess of Tax Over Book Depreciation (Note 2)	742	(1,976)	(2,265)
State Taxes Net of Federal Income Tax Benefits	2,105	1,679	1,332
Unbilled Revenues	(901)	(549)	(629)
Other Deductions, each less than 5% of Expected Tax Expense	(1,190)	(1,236)	(1,219)
Total Income Tax Expense	\$22,619	\$15,397	\$19,612



#### 4. ALLOWANCE FOR FUNDS USED DURING CONSTRUCTION (AFUDC)

AFUDC is the estimated cost, during the period of construction, of funds invested in the construction program which is not recovered from customers through current revenues. Such allowance is not realized in cash currently but under the rate-making process the amount of the allowance will be recovered in cash over the service life of the plant in the form of increased revenue collected as a result of higher plant costs. The NHPUC, for the period December 3, 1977 through May 6, 1979, permitted the Company to include in rate base a portion of the costs of CWIP associated with major generating projects. Therefore, AFUDC for this period did not include the cost of funds invested in the construction program which were provided by revenues of the Company.

When CWIP is not included in rate base, the cost of funds invested in CWIP (interest on debt and return on equity) is not provided by revenues and AFUDC is added

to the cost of the plant being constructed with offsetting credits in the statement of earnings. Since the credits are not cash items, cash for interest and dividends may need to be provided in whole or in part by additional financing during the construction period. As described in Note 2 above, as of May 7, 1979, the Company was precluded from basing its rates upon CWIP in the rate base. Therefore, as of May 7, 1979, consistent with the August 29, 1979 rate order, the Company began recording AFUDC for CWIP previously included in the Company's rate base, thereby increasing AFUDC by approximately \$5,500,000 for 1979.

The equity funds component of AFUDC equalled 57.6% of net income for 1980. The Company capitalized AFUDC at annual rates of 9½% for 1978, 10% for 1979 and 12% for 1980.

#### 5. DIVIDEND RESTRICTION

Pursuant to terms of the General and Refunding Mortgage Indenture, dividends may not be paid on the common stock in excess of net income accumulated after January 1, 1978 less the aggregate amount of all divi-

dends paid or declared on the preferred stock of the Company during such period plus \$32,000,000. At December 31, 1980, retained earnings of \$62,109,000 were not subject to dividend restriction.

#### 6. PREFERRED STOCK

The Articles of Agreement authorize the Company to issue 1,350,000 shares of Preferred Stock, \$100 Par Value and 5,000,000 shares of Preferred Stock, \$25 Par Value. The dividends of all series outstanding are cumulative. Preferred Stock outstanding is as follows:

##### (a) With Mandatory Redemption Requirements

Dividend	Par Value	Shares Outstanding	1980	1979
(Thousands of Dollars)				
7.64%	\$100	120,000	\$ 12,000	\$12,000
9.00%	\$100	180,000	18,000	18,000
11.24%	\$ 25	1,200,000	30,000	30,000
17.00%	\$ 25	1,200,000	30,000	—
15.00%	\$ 25	1,200,000	30,000	—
			\$120,000	\$60,000

##### (b) Without Mandatory Redemption Requirements

Dividend	Par Value	Shares Outstanding	1980	1979
(Thousands of Dollars)				
3.35%	\$100	102,000	\$10,200	\$10,200
4.50%	\$100	75,000	7,500	7,500
5.50%	\$100	36,163	3,616	4,814
		(1979-48,142)		
7.92%	\$100	150,000	15,000	15,000
11.00%	\$ 25	600,000	15,000	15,000
			\$51,316	\$52,514

The annual Sinking Fund requirements for Preferred Stocks with mandatory redemption requirements are as follows: 1981 — None, 1982 — \$1,080,000, 1983 — \$1,080,000, 1984 — \$1,560,000 and 1985 — \$6,060,000.

## 7. LONG-TERM DEBT

	1980	1979
First Mortgage Bonds	(Thousands of Dollars)	
Series H — 3¼%, Due 1984	\$ 10,337	\$ 10,483
Series I — 3¾%, Due 1986	6,926	6,972
Series M — 4¾%, Due 1992	21,786	21,952
Series N — 6¼%, Due 1996	15,719	15,847
Series O — 6¼%, Due 1997	13,951	14,076
Series P — 7¼%, Due 1998	14,036	14,237
Series Q — 9%, Due 2000	18,922	19,162
Series R — 7¾%, Due 2002	19,223	19,398
Series S — 9%, Due 2004	19,493	19,628
Series T — 12¾%, Due 1981	24,301	24,719
Series U — 10¾%, Due 1985	14,674	14,970
Series V — 9¼%, Due 2006	14,835	15,000
Series W — 10¼%, Due 1993	10,000*	10,000*
Series X — 12%, Due 1999	9,302*	9,302*
	213,505	215,746
Less — First Mortgage Bonds (*) deposited with Trustee of the General and Refunding Mortgage Indenture as additional security for General and Refunding Mortgage Bonds	19,302	19,302
Total First Mortgage Bonds	194,203	196,444

General and Refunding Mortgage Bonds		
Series A — 10¼%, Due 1993	60,000	60,000
Series B — 12%, Due 1999	60,000	60,000
Series C — 14½%, Due 2000	30,000	—
Series D — 17%, Due 1990	23,000	—
Promissory Note, Due January 7, 1982, with interest at 116% of a specific bank's prime rate plus 0.25%	25,000	25,000
Eurodollar Term Loan, Due August 25, 1982, with interest at the rate of ¾% over the London interbank offered rate for three or six month Eurodollar deposits	28,000	—
Pollution Control Revenue Bonds 9%, Due December 1984	5,800	5,800
Total Long-Term Debt	426,003	347,244
Less: Long-Term Debt to be Retired Within One Year	24,467	555
Unamortized Premium and Discount	2,680	1,860
	27,147	2,415
Long-Term Debt — Net	\$398,856	\$344,829

Due to certain restrictions in the Company's First Mortgage Indenture, no significant amount of First Mortgage Bonds may be issued thereunder until an operating license is obtained for Seabrook Unit #1, not anticipated before late 1982.

## 8. SHORT-TERM BORROWINGS

The Company uses borrowings from banks as an interim method of financing construction of new facilities. At December 31, 1980, the Company had line of credit agreements with New Hampshire banks aggregating \$4,600,000 and a revolving credit agreement with other commercial banks which permits the Company to borrow up to \$130,000,000 through November 16, 1981 subject to periodic review by the banks; amounts outstanding under the agreement mature on November 17, 1981. The Company pays commitment fees on the revolving credit agreement and maintains compensating balances for certain line of credit agreements. The effective cost of borrowing under the revolving credit agreement, including fees and assuming the available credit is fully utilized, is 116% of the prime interest rate of a specified bank.

Information regarding short-term borrowings is as follows:

	1980	1979	1978
	(Thousands of Dollars)		
Maximum Short-Term Borrowings	\$134,350	\$114,100	\$88,113
Average Amount Outstanding (Based on Month-End Balances)	106,038	87,056	66,911
Average Interest Rates:			
At Year End	23.17%	16.43%	12.64%
During the Year	18.13%	15.15%	11.36%

On February 11, 1981 the Company sold 2,200,000 shares of common stock. Proceeds of \$31,504,000 were used to reduce short-term bank borrowings.

## 9. PENSION PLAN

The Company has a non-contributory pension plan covering full-time employees who have met a minimum service requirement. The Company's policy is to fund current pension costs accrued. Costs were \$3,450,000, \$2,800,000 and \$2,400,000 in 1980, 1979 and 1978, respectively, and include amortization of past service costs over 25 years. Based upon the most recent actuarial

report as of January 1, 1980, the actuarial present value of accumulated plan benefits aggregating \$34,296,000 (\$32,498,000 vested and \$1,798,000 non-vested) exceeded the net assets available for benefits of \$27,439,000 by \$6,857,000. The assumed rate of return used in determining the actuarial present value of accumulated plan benefits was 5.0%.

## 10. COMMITMENTS AND CONTINGENCIES

The Company's ownership interests and its share of total expenditures included in Unfinished Construction for the jointly-owned nuclear facilities in which it is participating are as follows:

	Ownership Percent	1980	1979
		(Thousands of Dollars)	
Seabrook #1 and #2	50.0000%	\$663,500	\$470,300
Pilgrim #2	3.4700	14,400	11,900
Millstone #3	3.8910	35,600	27,000
		\$713,500	\$509,200

The Company has for some time been experiencing difficulties in obtaining external financing for its construction program and in maintaining cash flow adequate to fund this program and the costs of current business operations. In March 1979, in anticipation of legislation adopted in New Hampshire eliminating CWIP from rate base (see Note 2) and the resultant difficulty of financing a 50% interest in the Seabrook plant, the Company decided to sell all of its Pilgrim #2 and Millstone #3 ownership interests and to reduce its ownership interest in the Seabrook plant by offering 22% to other New England utilities. As a result of its offer, the Company has commitments from other utilities to acquire ownership interests of 14.76503% in the Seabrook plant and has contracted (subject to receipt of necessary regulatory approvals) for the sale of approximately two-thirds of its interest in Millstone #3. The Company has received expressions of interest from other utilities for the balance of its interest in Millstone #3. No expressions of interest have been received by the Company with respect to its offer of its interest in Pilgrim #2.

Each utility acquiring an ownership interest in the Seabrook plant will acquire its interest gradually over an Adjustment Period. During the Adjustment Period, the accepting utilities will share pro rata the costs otherwise attributable to the Company's ownership interest until their aggregate investment in the Seabrook plant has been increased by approximately 15% and the Company's investment decreased to approximately 35% of the total investment of all participants.

In March 1980, in view of the unsettled state of the capital markets and the very high cost of external funds, the Company decided to reduce the level of construction at the Seabrook plant until the capital markets stabilized and the regulatory approvals for increased ownership interests in the plant (the principal condition necessary for the start of the Adjustment Period) were obtained. Most approvals have now been obtained. As a result, the Adjustment Period for utilities acquiring an ownership interest of 6.25576% commenced on January 31, 1981 and the Adjustment Period for the Massachusetts Municipal Wholesale Electric Company (MMWEC) which is acquiring an additional ownership interest of 6.00091% commenced on February 28, 1981. However, until MMWEC has completed its initial financing, the Company has agreed to assume the portion of the Seabrook plant costs applicable to MMWEC's additional ownership interest. These costs will be reimbursed, with interest, to the Company by MMWEC upon completion of its initial financing. If MMWEC is unable to complete its financing by June 30, 1981, MMWEC's Adjustment Period will not commence until the first business day after consummation of MMWEC's initial financing. Approvals are still pending regarding the remaining 2.50836% ownership interest committed for by other utilities.

The Company's construction program expenditures (excluding AFUDC) are estimated to be approximately \$59,600,000 for 1981 and \$639,100,000 for 1982 through 1986 assuming (1) the Company's ownership interest in Seabrook is reduced to approximately 35% with all Adjustment Periods commencing by May 1, 1981, (2) its interest in Millstone #3 is sold by September, 1981 and (3) the reduced level of Seabrook construction continues through March, 1981. The cost estimate for the Seabrook project is currently under review. There can be no assurance that the remaining approvals and financing required by other utilities which are necessary for the proposed reduction in the Company's interest in the Seabrook project to about 35% will be obtained and the Company's ability to obtain necessary financing may be adversely affected if other utilities acquire significantly less than 15% of the Seabrook plant.

See "Management's Discussion and Analysis of Financial Condition and Results of Operations — Construction Program and Financing Requirements" for a discussion of the NHPUC denial of the Company's request for emergency rate relief in February, 1981; Company actions to conserve cash in light of the NHPUC order; 1981 external financing requirements, and the necessity of increased rates to permit the issuance of bonds. At December 31, 1980, based on earnings and capitalization tests of various agreements and indentures the Company could have issued approximately \$86,700,000 of preferred stock (dividend rate of 14.5% assumed), approximately \$76,300,000 of additional short-term unsecured indebtedness and approximately \$28,850,000 of General and Refunding Mortgage Bonds (interest rate of 14.5% assumed).

Construction of the Seabrook project has required numerous approvals and permits from various state and Federal regulatory agencies. The process of obtaining these approvals and permits has been long and complex, has been consistently opposed by a number of intervening groups, has included demonstrations at the Seabrook site and has been plagued by lengthy delays which have resulted in greatly increased costs. One court appeal from Federal regulatory approvals is pending and further appeals are possible. The Company is unable to predict what effect financing problems or further administrative or court decisions relating to Nuclear Regulatory Commission or Environmental Protection Agency actions may have on the Company's ability to complete the Seabrook project or on the ultimate cost thereof.

## 11. UNAUDITED QUARTERLY INFORMATION

The following quarterly information is unaudited, and, in the opinion of management, is a fair summary of results of operations for such periods. The fourth quarter of 1979 includes a rate refund of approximately

\$1,000,000 which reduced earnings per share of common stock by \$0.04. Other variations between quarters reflect the seasonal nature of the Company's business and the effect of rate increases in 1980.

	Three Months Ended							
	December 31,		September 30,		June 30,		March 31,	
	1980	1979	1980	1979	1980	1979	1980	1979
	(Thousands except Per Share Amounts)							
Operating Revenues	\$94,542	\$73,957	\$77,980	\$72,919	\$75,527	\$65,866	\$103,198	\$80,072
Operating Income	11,598	10,077	9,114	10,291	10,382	9,302	16,213	14,758
Net Income	15,128	9,118	14,974	11,049	12,546	8,335	17,199	12,217
Preferred Dividend Requirements	4,469	2,422	3,686	2,420	3,449	1,952	2,418	1,586
Earnings Available for Common Stock	10,659	6,696	11,288	8,629	9,097	6,383	14,781	10,631
Average Shares of Common Stock Outstanding	18,173	13,931	17,701	13,460	15,562	11,823	14,690	11,319
Earnings Per Share of Common Stock	\$ 0.59	\$ 0.48	\$ 0.64	\$ 0.64	\$ 0.59	\$ 0.54	\$ 1.01	\$ 0.94

## 12. UNAUDITED INFORMATION ON THE EFFECTS OF CHANGING PRICES

The following statement of earnings adjusted for changing prices for the year ended December 31, 1980 should be viewed as an estimate of the effects of changing prices on the operations of the Company:

	Conventional Historical Cost	Constant Dollar Average 1980 Dollars	Current Cost Average 1980 Dollars
(Thousands of Dollars)			
Operating revenues	\$351,247	\$351,247	\$351,247
Operation and maintenance expense	248,338	248,338	248,338
Depreciation expense	17,425	36,308	41,821
Federal and state taxes on income	22,472	22,472	22,472
Other taxes	15,705	15,705	15,705
Interest expense — net	24,316	24,316	24,316
Other income and deductions — net	(36,856)	(36,856)	(36,856)
	291,400	310,283	315,796
Income from continuing operations (excluding reduction to net recoverable cost)	\$ 59,847	\$ 40,964*	\$ 35,451*
Reduction to net recoverable cost		\$(96,843)	\$(91,330)
Gain from decline in purchasing power of net amounts owed		71,627	71,627
Net		\$(25,216)	\$(19,703)
Effect of increase in general price level			\$186,703
Increase in specific prices (current cost) of property, plant, and equipment held during the year			106,427
Excess of increase in general price level over increase in specific prices			\$ 80,206

\*Including the reduction to net recoverable cost, the income (loss) from continuing operations on a constant dollar and a current cost basis would have been \$(55,879).

Constant dollar amounts shown represent historical cost stated in terms of dollars of equal purchasing power, as measured by the Consumer Price Index for all Urban Consumers (CPI-U). The current cost of plant was determined by indexing surviving plant by the Handy-Whitman Index of Public Utility Construction Costs.

Since the utility plant is not expected to be replaced precisely in kind, current cost does not necessarily represent the replacement cost of the Company's productive capacity. The current year's provisions for depreciation on the constant dollar and current cost amounts of utility plant were determined by applying the Company's depreciation rates to the indexed plant amounts. Current cost amounts reflect the changes in specific prices of utility plant from the date acquired to the present, and differ from constant dollar amounts to the extent that the general rate of inflation has increased more rapidly than specific prices (\$80,206,000). At December 31, 1980, current cost of property, plant and equipment, net of accumulated depreciation, was \$1,761,285,000 while historical net cost was \$1,110,848,000.

Fuel inventories, the cost of fuel used in generation, and the energy component of purchased power costs have not been restated from their historical cost in nominal dollars. Regulation limits the recovery of fuel and purchased power costs through the operation of adjustment clauses to actual cost incurred during the period. For this reason fuel inventories are effectively monetary assets.

Income taxes have not been adjusted. Only historical costs are deductible for income tax purposes so any restatement of income taxes would have little meaning.

Under the rate-making prescribed by the regulatory commissions to which the Company is subject, only the historical cost of utility property is included in the rate base upon which the Company is allowed to earn a fair return. Therefore, the cost of plant stated in terms of constant dollars or current cost that exceeds the historical cost of plant is not presently recoverable in rates, and is reflected as a reduction to net recoverable costs. While the rate-making process gives no recognition to the current cost of replacing property, plant, and equipment, based on past practices the Company believes it will be allowed to earn on the increased cost of its net investment when replacement of facilities actually occurs.

To reflect properly the economics of rate regulation in the statement of earnings adjusted for changing prices, the reduction of utility plant to net recoverable cost should be offset by the gain from the decline in purchasing power of net amounts owed. During a period of inflation, holders of monetary assets suffer a loss of general purchasing power while holders of monetary liabilities experience a gain. The gain from the decline in purchasing power of net amounts owed is primarily attributable to the substantial amount of debt which has been used to finance property, plant, and equipment. Since the depreciation on utility plant is limited to amounts based on historical costs, the Company does not have the opportunity to realize a holding gain on debt and is limited to recovery only of the embedded cost of debt capital.



Five-Year Comparison of Selected Supplementary Financial Data  
Adjusted for Effects of Changing Prices

(In Average 1980 Dollars)

	Year Ended December 31,				
	(Thousands except Per Share Amounts)				
	1980	1979	1978	1977	1976
Operating revenues	\$351,247	\$332,402	\$329,355	\$292,067	\$284,686
<b>Historical cost information adjusted for general inflation*</b>					
Income from continuing operations (excluding reduction to net recoverable cost)	40,964	30,584			
Income per average common share (after dividend requirements on preferred stock and excluding reduction to net recoverable cost)	1.63	1.67			
Net assets at year-end at net recoverable cost	419,048	392,638			
<b>Current cost information*</b>					
Income from continuing operations (excluding reduction to net recoverable cost)	35,451	23,664			
Income per average common share (after dividend requirements on preferred stock and excluding reduction to net recoverable cost)		1.12			
Excess of increase in general price level over increase in specific prices	80,206	71,415			
Net assets at year-end at net recoverable cost	419,048	392,638			
<b>General information</b>					
Gain from decline in purchasing power of net amounts owed*	71,627	69,525			
Cash dividends declared per common share	\$ 2.12	\$ 2.41	\$ 2.45	\$ 2.56	\$ 2.69
Market price per common share at year-end	\$ 13.73	\$ 16.90	\$ 23.72	\$ 27.19	\$ 30.44
Average consumer price index	246.8	217.4	195.4	181.5	170.5

\* Information not required for years prior to 1979.

## *Report of Independent Certified Public Accountants*

The Board of Directors  
Public Service Company of New Hampshire:

We have examined the balance sheets of Public Service Company of New Hampshire as of December 31, 1980 and 1979 and the related statements of earnings and retained earnings, changes in financial position and other paid-in capital for each of the years in the three-year period ended December 31, 1980. Our examinations were made in accordance with generally accepted auditing standards, and accordingly included such tests of the accounting records and such other auditing procedures as we considered necessary in the circumstances.

In our opinion, the aforementioned financial statements present fairly the financial position of Public Service Company of New Hampshire at December 31, 1980 and 1979 and the results of its operations and the changes in its financial position for each of the years in the three-year period ended December 31, 1980, in conformity with generally accepted accounting principles applied on a consistent basis.

Boston, Massachusetts  
February 18, 1981, except for  
Note 10, which is as of  
March 6, 1981.

PEAT, MARWICK, MITCHELL & CO.

# Management's Discussion and Analysis of

## Construction Program and Financing Requirements

The magnitude of the Company's construction program has continued to cause the Company some difficulty in obtaining external financing and in maintaining cash flow adequate to fund this program and the costs of its current business operations. The major portion of the Company's construction program has been its 50% ownership interest in the 2300 MW nuclear generating plant in Seabrook, New Hampshire. As described in Note 10 of Notes to Financial Statements, the Company has commitments from other utilities, subject to certain conditions, which will reduce its interest to about 35%.

In March, 1980, in view of the unsettled state of the capital markets and the very high cost of external funds, the Company decided to reduce substantially the level of construction on the Seabrook plant. It is anticipated that this reduction will continue until all regulatory approvals necessary for the reduction of the Company's ownership interest have been obtained and the Adjustment Periods with respect thereto have fully commenced.

The Company's reduced 1981-1986 construction program is estimated at \$698,700,000 excluding allowance for funds used during construction of approximately \$583,500,000. Financing of this construction program and the refinancing at maturity of certain long-term debt and the meeting of required sinking fund payments together aggregating \$156,545,000 during this period represent a major undertaking for the Company. The ability of the Company to complete this program is dependent upon receipt of adequate and timely rate increases throughout the period. If it receives such rate increases the Company estimates that approximately \$480,000,000 will be generated from internal funds (principally after 1983). This estimate of internal funds is substantially higher than heretofore estimated due principally to a change in the treatment of allowance for borrowed funds used during construction. In the opinion of management, such revised treatment is consistent with generally accepted accounting principles. The Company expects to finance the balance of its requirements from external sources.

In order to provide the Company with sufficient earnings for the issuance of General and Refunding Mortgage Bonds needed during 1981, the Company filed on January 14, 1981, a request with the New Hampshire Public Utilities Commission (NHPUC) for an emergency surcharge designed to increase annual revenues by approximately \$35,500,000 (about 10.2%). On February 27, 1981, the NHPUC denied the Company's request since in its opinion the Company's request did not reflect the favorable impact on the Company's financial situation resulting from the February, 1981 approval of Massachusetts Municipal Wholesale Electric Company's increased participation in the Seabrook project. In its or-

der, the NHPUC also alleged that the Company had not provided sufficient information or not taken necessary steps to reduce controllable expenses. The Company has filed for a rehearing of the NHPUC's order and has instituted the following measures — a hiring freeze; a salary freeze for all senior executives; a deferral of \$8 million in non-Seabrook related construction projects; a deferral of \$2.5 million in maintenance projects; the elimination, subject to union negotiations, of the employee electric rate discount, and strict limits on business travel and other business expenses. Management believes that the steps outlined above are not in the best interests of maintaining reliable service to customers. Further periodic rate increases are essential to permit the financing of the Company's construction program.

The Company's permanent financing requirements for the balance of 1981 are estimated to be approximately \$100,000,000 assuming that approximately \$117,350,000 of short-term bank borrowings are outstanding at the end of the year. These financing requirements give effect to the austerity measures outlined above and the receipt of the proceeds of approximately \$31,500,000 from the sale of 2,200,000 additional shares of common stock in February, 1981, and are based on the following assumptions: (1) all Adjustment Periods for the reduction in the Company's interest in the Seabrook project to about 35% commence by May 1, 1981, (2) the Company takes steps in April 1981 toward resumption of a normal level of construction on the Seabrook plant, and (3) a rate increase of approximately \$35 million on an annual basis is made effective in a timely manner. A rate increase is required to produce additional earnings necessary for the issuance of additional General and Refunding Mortgage Bonds in the fourth quarter of 1981. The required rate increase could result from favorable action by the NHPUC or the Company's motion for rehearing of the emergency rate request denial or from accelerated action on the Company's permanent rate case expected to be filed in early April 1981.

The Company's 1981 financing requirements are expected to be met by the issue of additional shares of Common Stock, bank or similar debt and, in the fourth quarter, by General and Refunding Mortgage Bonds. The size and timing of these issues will depend on market factors, timing of commencement of the needed rate increase, the status of the reduction of the Company's ownership interest in the Seabrook project to about 35%, and other factors. The Company's financing plans for the 1982-1986 period are expected to include, subject to change as circumstances warrant, additional shares of common and preferred stock, long-term debt, and nuclear and fossil fuel financing.

# Financial Condition and Results of Operations

---

## Results of Operations

Net operating revenues (operating revenues less fossil fuel costs which are recovered under fuel adjustment clause provisions of the Company's tariffs) increased by 10.6% and 2.6%, respectively for 1980 and 1979 as compared with the respective preceding years. Substantially all of the increase in 1980 resulted from rate increases to retail and wholesale customers. KWH sales increased by approximately 4.1% in 1979 which accounted for substantially all of the increase in 1979 net operating revenues.

The electric needs of the Company's customers have increased at a compound annual rate of growth of approximately 4.5% during the six years ended December 31, 1980. Although KWH sales were essentially flat in 1980 as compared with 1979, management is projecting an average annual rate of increase of 4.2% at least through 1990. This is anticipated to be the highest increase of any major electric utility in New England furnishing estimates to the New England Power Pool.

Fuel expense and purchased and interchanged power expense increased significantly in 1980 and 1979 due principally to higher average unit costs of oil and coal. The average unit cost of oil increased by 46% and 29%, respectively for 1980 and 1979 and the average unit cost of coal increased by 5% and 6%, respectively.

Federal and state taxes on income increased in 1980 as compared with 1979 because of (1) the tax effect of higher pretax financial statement income (\$12,121,000) which was offset by an increase in the tax effects of overheads charged to construction and expensed for tax purposes (\$7,737,000), and (2) the effects of additional normalization of depreciation permitted by the NHPUC in 1980

(\$1,936,000). Income taxes decreased in 1979 as compared with 1978 primarily because of a reduction in the Federal income tax rate (\$1,124,000) and an increase in the tax effect of overheads charged to construction and expensed for tax purposes (\$3,790,000).

Allowances for equity funds and borrowed funds used during construction increased significantly in 1980 and 1979 due principally to the Company's increasing investment in the Seabrook project. The amounts also reflect the higher cost of funds (interest on debt and return on equity) and resultant increased rates used in capitalizing such allowances.

Net income has increased significantly over the three year period 1978 through 1980. Earnings per share of common stock have not kept pace, however, due to stock issues necessary to finance the Company's construction program which have increased preferred dividend requirements and the average number of common shares outstanding.

Inflation continues to affect every aspect of the Company's business as is evidenced in particular by the increasing costs of fuel, costs of construction and the costs of funds necessary to finance the Company's construction program. Management has computed certain data on the effects of inflation which are presented in Note 12 of Notes to Financial Statements. Such data has been prepared and presented in conformity with guidelines established by the Financial Accounting Standards Board and should be viewed as experimental and only approximations of certain effects of inflation on operations of the Company.

## Directors

William A. Adams, Jr.  
*Executive Vice President*  
Manchester, N.H.

Robert J. Bottoms  
*Distributor*  
Lindai Cedar Homes  
Lancaster, N.H.

George A. Dorr, Jr.  
*President*  
Dorr Woolen Company,  
Newport, N.H.

Priscilla K. Frechette  
*Director*  
Kingsbury Machine Tool Corp.,  
Keene, N.H.

Harlan L. Goodwin  
*Chairman of the Board*  
The First National Bank of  
Portsmouth  
Portsmouth, N.H.

Robert J. Harrison  
*President*  
Manchester, N.H.

David N. Merrill  
*Executive Vice President*  
Manchester, N.H.

Ann R. Moody  
*Vice President*  
Edgcomb Steel of New England, Inc.  
Nashua, N.H.

Byron C. Radaker\*  
*Chairman and*  
*Chief Executive Officer*  
Congoleum Corporation  
Portsmouth, N.H.

John J. Reilly, Jr.  
*President and Treasurer*  
John J. Reilly, Inc.  
Manchester, N.H.

William M. Scranton  
*President*  
Beede Electrical Instrument  
Company, Inc.  
Penacook, N.H.

William C. Tallman  
*Chairman and Chief*  
*Executive Officer*  
Manchester, N.H.

Hugh C. Tuttle  
*Treasurer, Tuttle Market Gardens, Inc.*  
Dover, N.H.

Richard E. West  
*Retired*  
*Formerly President and General Manager*  
J.F. McElwain Co.  
Nashua, N.H.

David S. Williams  
*President, International Packings Corp.*  
Bristol, N.H.

## Executive Officers

William C. Tallman, 60(34)\*\*  
*Chairman and Chief*  
*Executive Officer*

Robert J. Harrison, 49(23)  
*President*

William A. Adams, Jr., 55(31)  
*Executive Vice President*

David N. Merrill, 56(31)  
*Executive Vice President*

Charles E. Bayless, 38\*  
*Financial Vice President*

D. Pierre G. Cameron, Jr., 46  
*Vice President and General Counsel*

Raymond E. Closson, 60(33)  
*Vice President*

John C. Duffett, 53(26)  
*Vice President*

Henry J. Ellis, 60(34)  
*Vice President*

Warren A. Harvey, 54(33)  
*Vice President*

Elroy L. Littlefield, 62(33)  
*Vice President*

James L. Nevins, 46(12)  
*Vice President*

William T. Frain, Jr., 39(16)  
*Comptroller*

John J. Lampron, 36(9)  
*Treasurer*

Russell A. Winslow, 46(19)  
*Clerk and Secretary*

Christina D. Campbell, 58(30)  
*Assistant Secretary*

Peter B. O'Donnell, 33(9)  
*Assistant Treasurer*

Robert G. Ouellette, 49(28)  
*Assistant Comptroller*

## Honorary Directors

Thomas H. Buckley  
*Retired*  
*Formerly Director,*  
*Vice President and Comptroller*

Burton W. Delaney  
*Retired*  
*Formerly Director, Executive*  
*Vice President*

Albert W. Hamel  
*General Manager*  
Hamel Auto Body, Inc.  
Manchester, N.H.

Marston Heard  
*Retired*  
*Formerly Chairman, Amoskeag*  
*National Bank, Manchester, N.H.*

William S. Moore  
*Retired*  
*Formerly Director, Financial*  
*Vice President*

## Executive Changes

William C. Tallman  
*Chairman*  
Effective 5/8/80

Robert J. Harrison  
*President*  
Effective 5/8/80

Charles E. Bayless  
*Financial Vice President*  
Effective 3/1/81

D. Pierre G. Cameron, Jr.  
*Vice President and*  
*General Counsel*  
Effective 9/24/80

Ralph H. Wood  
*Vice President and*  
*General Counsel*  
Resigned effective 5/1/80

\*Effective 3/1/81

\*\*Figures denote age and (years of service) as of 12/31/80

# Ten Year Comparative Summary

Financial Data	1980	1979	1978	1977	1976	1970
	(Thousands except Per Share Amounts)					
Operating Revenues	\$351,247	\$292,814	\$260,751	\$214,787	\$196,674	\$ 71,754
Fuel and Purchased Power Expense	187,248	147,502	115,418	108,310	91,349	15,957
Net Income	59,847	40,719	36,507	21,722	20,995	10,750
Shares of Common Stock Outstanding (Average)	16,539	12,643	9,275	7,680	6,372	3,826
Earnings Per Share of Common Stock (Average)	\$2.77	\$2.56	\$3.25	\$2.16	\$2.53	\$2.46
Dividends Per Share of Common Stock	\$2.12	\$2.12	\$1.94	\$1.88	\$1.86	\$1.60
Non-Taxable Portion	100%	68%	—	17%	—	16%
Net Utility Plant in Service	386,698	377,017	373,338	364,704	358,923	238,676
Unfinished Construction	724,150	518,880	346,382	196,825	103,484	5,741
Total Assets	1,254,228	1,010,787	812,101	640,207	540,341	277,062
Long-Term Debt	398,856	344,829	287,252	233,110	217,298	142,458
Preferred Stock						
With Mandatory Redemption Requirements	120,000	60,000	30,000	30,000	12,000	—
Without Mandatory Redemption Requirements	51,316	52,514	53,562	54,075	55,012	29,700
Common Stock Equity	387,432	312,760	228,307	191,357	162,942	79,712
Total Capitalization	957,604	770,103	599,121	508,542	347,252	251,870
Notes Payable - Banks	108,350	114,100	85,325	55,113	—	11,700
<b>Operating Statistics</b>						
<b>Customer Data (Average)</b>						
Total Customers	287,221	279,581	274,959	268,217	261,346	217,496
KWH Per Residential Customer	7,178	7,317	7,283	7,230	7,279	5,625
Cents Per KWH-Residential	6.69	5.78	5.57	4.77	4.60	2.64
<b>Prime Sales (Thousands of MWH)</b>						
Residential	1,815	1,804	1,766	1,710	1,677	1,074
Industrial	1,834	1,846	1,743	1,568	1,539	1,184
Commercial and Other	1,992	1,953	1,875	1,763	1,698	1,153
Total Prime Sales	5,641	5,603	5,384	5,041	4,914	3,411
<b>Generating Capability - MW</b>						
Coal	456	456	456	456	456	459
Oil	774	774	766	754	754	353
Hydro	52	48	48	48	48	48
Nuclear (Yankees)	98	98	97	94	94	41
Peak Load - Net MW	1,145	1,173	1,117	1,125	1,113	739
Annual Prime Load Factor	60.9%	58.6%	59.5%	55.2%	54.4%	57.1%

See Page 1 "General Information" concerning availability of a Statistical Supplement to this report.



**PSNH** PUBLIC SERVICE  
Company of New Hampshire

1000 Elm Street, Manchester, New Hampshire 03105

Bulk Rate  
U.S. Postage  
**PAID**  
Boston, Mass.  
Permit No. 27

**SECURITIES AND EXCHANGE COMMISSION**  
**WASHINGTON, D. C. 20549**

**FORM 10-K**

As amended by Form 3 dated April 13, 1981

**ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d)  
OF THE SECURITIES EXCHANGE ACT OF 1934**

For the fiscal year ended  
December 31, 1980

Commission file number  
1-6392

**Public Service Company of New Hampshire**

(Exact name of registrant as specified in charter)

**NEW HAMPSHIRE**  
(State or Other Jurisdiction  
of Incorporation or Organization)

**02-0181050**  
(I.R.S. Employer  
Identification No.)

**2000 ELM STREET, MANCHESTER, NEW HAMPSHIRE 03105**  
(Address of Principal Executive Offices) (Zip Code)

Registrant's telephone number, including area code: **603-669-4000**

Securities registered pursuant to Section 12(b) of the Act:

<u>Title of Each Class</u>	<u>Name of Each Exchange on Which Registered</u>
Common Stock, \$5 Par Value	New York Stock Exchange
Preferred Stock, \$25 Par Value, 11% Dividend Series	New York Stock Exchange
Sinking Fund Preferred Stock, \$25 Par Value, 11.24% Dividend Series	New York Stock Exchange
Sinking Fund Preferred Stock, \$25 Par Value, 15% Dividend Series	New York Stock Exchange
Sinking Fund Preferred Stock, \$25 Par Value, 17% Dividend Series	New York Stock Exchange
General and Refunding Mortgage Bonds, Series B 12% due 1999	New York Stock Exchange
General and Refunding Mortgage Bonds, Series C 14½% due 2000	New York Stock Exchange

Securities registered pursuant to Section 12(g) of the Act:

<u>Title of Class</u>
Preferred Stock, \$100 Par Value, 3.35% Dividend Series
Preferred Stock, \$100 Par Value, 4.50% Dividend Series
Convertible Preferred Stock, \$100 Par Value, 5.50% Dividend Series
Preferred Stock, \$100 Par Value, 7.92% Dividend Series
Sinking Fund Preferred Stock, \$100 Par Value, 7.64% Dividend Series
Sinking Fund Preferred Stock, \$100 Par Value, 9.00% Dividend Series
General and Refunding Mortgage Bonds, Series D 17% due 1990

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes ☒ No ☐

Indicate the number of shares outstanding of each of the issuer's classes of common stock, as of the close of the period covered by this report.

<u>Class</u>	<u>Outstanding at December 31, 1980</u>
Common Stock, \$5 Par Value	18,203,922 Shares

## **Item 1. BUSINESS**

Public Service Company of New Hampshire (the "Company") is the largest electric utility in New Hampshire. It operates a single integrated system furnishing electric service in Manchester, Nashua, Portsmouth, Berlin, Dover, Keene, Laconia, Franklin, Rochester, Somersworth and 187 other New Hampshire municipalities, including about 83% of the total population of the State. It also sells electricity to other utilities and distributes and sells electricity in 6 towns in Vermont and 13 towns in Maine. The area served at retail has a population of about 782,000.

As a member of the New England Power Pool, the Company is required to meet predetermined capacity obligations, which the Company expects to satisfy through its own generating facilities, through participation in jointly owned generating facilities, and through purchases of capacity and energy from other sources.

The area served by the Company has experienced relatively rapid population and economic growth in the last several years and the electric needs of the Company's customers have increased (evidenced by average annual increases of 5.6% and 4.3% in the Company's annual peak load during the ten-year and five-year periods, respectively, ending October 31, 1980). There is some controversy concerning the rate of growth the Company will experience in the future. During the year ended December 31, 1980, the Company's growth in KWH sales was about 0.6%. The Company, in its annual forecast of the needs of its customers made in January, 1981, projected an average annual rate of increase of approximately 4.2% at least through 1990, which is anticipated to be the highest increase of any major electric utility in New England furnishing estimates to the New England Power Pool.

The Company is the lead owner of a nuclear steam electric generating power plant under construction at a site located in Seabrook, New Hampshire ("Seabrook project"), from which the Company proposes to meet the needs of its customers commencing in the mid 1980's. The plant will have two Westinghouse pressurized water nuclear reactors (each with a rated capacity of 1,150 megawatts), utilizing ocean water for condenser cooling purposes. Assuming the reduction in the Company's original 50% ownership interest described below is completed, the Company will have an ownership interest of approximately 35% in the Seabrook project; other principal owners are The United Illuminating Company (17.5%), the Massachusetts Municipal Wholesale Electric Company (11.6%), New England Power Company (9.95%) and twelve other New England utilities with smaller participations.

The Company is also a participant in the Pilgrim #2 and Millstone #3 projects, proposed nuclear power plants to be constructed in Massachusetts and Connecticut, respectively.

At December 31, 1980, the Company had invested approximately \$663,500,000 (including allowance for funds used during construction of approximately \$129,100,000 and nuclear fuel of \$41,700,000) in the Seabrook project. As of the same date, the Seabrook project as a whole was 33% complete, with Unit #1 and property and equipment common to both Units 46% complete; Unit #2 was 8% complete with work limited during most of 1980 to the containment liner alone.

### ***Industry Problems***

The Company has experienced and may in the future experience in varying degrees a number of problems common to the electric utility industry. These problems include obtaining adequate and timely rate increases, financing large construction programs on reasonable terms during a period of high inflation and unsettled capital markets, uncertainties caused by increasing political involvement in utility regulation, compliance with environmental regulations, high costs of fossil fuel, delays in licensing and constructing new facilities, opposition to nuclear power and reduced levels of sales due to the effects of energy conservation.

Events in 1979 at the Three Mile Island Nuclear Unit No. 2 in Pennsylvania ("TMI") have prompted a rigorous reexamination of safety related equipment and operating procedures in all nuclear facilities. Based upon a preliminary engineering review, the Company believes that most of the new requirements promulgated by the Nuclear Regulatory Commission ("NRC") in response to TMI are already reflected in the design of the Seabrook project; other requirements will result in design changes which will increase the capital cost of the Seabrook project by approximately \$2,000,000. While the ultimate effect of the many reexaminations, studies and legislative proposals generated by the TMI situation cannot be predicted, they could cause delays in construction and costly modifications of both the operating and planned nuclear plants in which the Company has an interest.

### ***Construction Program***

The Company's construction program, which consists primarily of expenditures in connection with its interest in the Seabrook project, has for some time been so large that obtaining the substantial financing required to enable the Company to maintain this program and continue its business operations has been and remains a major challenge for the Company. See "Financing" below under this Item 1.

*Reduction in Seabrook Project Ownership.* In 1979 the Company decided to reduce its ownership interest in the Seabrook project and obtained commitments from nine other utilities, some of whom were already participants, to acquire from it ownership interests totaling 14.76503%. These commitments were subject to receipt of required approvals and in two instances to receipt of initial financing for the ownership acquisition. Each utility acquiring such an ownership interest does so gradually over an Adjustment Period, paying pro rata the costs otherwise attributable to the Company's ownership interest until such acquiring utility's investment in the Seabrook project (exclusive of any ownership interest already held by it) equals the percentage for which it has committed. The Company's percentage will decrease accordingly. This period during which the acquiring utilities are paying the Company's share of construction costs is expected to continue for about 12 months after all Adjustment Periods become effective. After the conclusion of all Adjustment Periods, the Company will resume paying all of its then reduced share (35.23497%) of Seabrook project costs.

The accepting utilities have received their required approvals and their Adjustment Periods have commenced, except for Taunton Municipal Lighting Plant ("Taunton") and New Hampshire Electric Cooperative, Inc. ("NH Coop"). The Company and Massachusetts Municipal Wholesale Electric Company ("MMWEC"), which is to acquire from the Company an additional 6.00091% interest, have agreed that, commencing on February 28, 1981 (when MMWEC's Adjustment Period began) and continuing until MMWEC has completed its initial financing, the Company will pay MMWEC's share of costs otherwise attributable to that portion of the Company's ownership interest being acquired by MMWEC, subject to the condition described below. Upon completion of its initial financing, MMWEC will reimburse the Company for these costs, together with interest at the rate of 13% per annum through March 31, 1981 and thereafter at the Company's rate of allowance for funds used during construction. If MMWEC has been unable to complete its financing by June 30, 1981, MMWEC's reimbursement obligation, including interest, will be cancelled and MMWEC's Adjustment Period will not commence until the first business day after consummation of MMWEC's initial financing. The Company has been informed that MMWEC expects to complete such initial financing prior to June 30, 1981.

Taunton is seeking the approvals from the Taunton City Council and the Municipal Lighting Plant Commission of the City of Taunton for its acquisition of a 6.33445% additional ownership interest. Taunton's Adjustment Period will commence on the last day of the month in which it receives such approvals. However, if its Adjustment Period has not commenced by June 30, 1981, Taunton shall not acquire any additional interest in the Seabrook project.



The NH Coop has received the agreement of the Rural Electrification Administration for its financing of its ownership interest of 2.17391% and has filed an application with the New Hampshire Public Utilities Commission ("NHPUC") for approval of such acquisition. Its Adjustment Period will commence when it obtains such financing.

When all Adjustment Periods are completed and assuming that no additional ownership transfers occur, ownership interests in the Seabrook project will be as follows:

Public Service Company of New Hampshire	35.23497%
The United Illuminating Company	17.50000
Massachusetts Municipal Wholesale Electric Company	11.59340
New England Power Company	9.95766
Central Maine Power Company	6.04178
The Connecticut Light and Power Company	4.05985
Commonwealth Electric Company	3.52317
Montaup Electric Company	2.89989
Bangor Hydro-Electric Company	2.17391
New Hampshire Electric Cooperative, Inc.	2.17391
Central Vermont Public Service Corporation	1.59096
Maine Public Service Company	1.46056
Fitchburg Gas and Electric Light Company	0.86519
Taunton Municipal Lighting Plant	0.43479
Vermont Electric Cooperative, Inc.	0.41259
Hudson Light and Power Department	0.07737

*Reduction in Level of Seabrook Project Construction.* In March, 1980, in view of the unsettled state of the capital markets and the very high cost of external funds, the Company's Board of Directors decided that the overall level of construction of the Seabrook project should be reduced substantially in order to lessen the Company's external financing requirements. The Company plans to resume full construction when MMWEC's initial financing for its increased interest has been completed.

In 1980, the NHPUC ordered the Company to delay work on Unit #2 of the Seabrook project until receipt of the regulatory approvals necessary for the reduction in the Company's ownership interest in the Seabrook project and commencement of such reduction and prohibited use of proceeds of future financings for further construction of Unit #2 until commencement of such reduction. However, in its orders authorizing the Company's last three securities issues, the NHPUC authorized the Company to use the proceeds therefrom to meet existing obligations for progress payments and nuclear fuel payments associated with Unit #2, on the understanding that the Company would use its best efforts to seek deferrals of such payments on reasonable terms.

*Offer of Pilgrim and Millstone Interests.* In an additional effort to reduce its ongoing construction program expenditures, the Company in March, 1979, offered to other utilities its ownership interests in the Pilgrim #2 and Millstone #3 projects. No expressions of interest were received by the Company with respect to its offer of its interest in the Pilgrim #2 project. The NHPUC has ordered the Company to cease any and all payments to the Pilgrim #2 project effective immediately or show cause why such payments should not cease. Hearings have been held before the NHPUC, at which the Company has taken the position that, until clarification of the status of the construction permit application for the Pilgrim #2 project pending before the NRC, all required contract payments (estimated to be approximately \$434,000 during 1981) should continue to be made. The Company cannot predict what the outcome of this proceeding will ultimately be nor its impact, if any, upon the Company's contractual commitments with respect to the Pilgrim #2 project.



The Company has contracted for the sale of approximately two-thirds of its 3.8910% interest in the Millstone #3 project to Taunton and Connecticut Municipal Electric Energy Cooperative ("Conn. Coop"), subject to the receipt of necessary regulatory approvals, including that of the NRC. Proceeds from the sale are required to be deposited with the Trustee under the terms of the Company's First Mortgage Indenture. The Company has received expressions of interest in purchasing the balance of the Company's interest in the Millstone #3 project. Only a relatively small portion of the Company's construction program is attributable to the Company's interest in the Millstone #3 project (\$46,554,000 for the period 1981-1986).

**Construction Expenditures.** Assuming a reduction in the Company's Seabrook project ownership to 35.23497%, its share of the total cost of the Seabrook project upon completion, including the initial cores of nuclear fuel, is estimated at \$936,200,000 (excluding any allowance for funds used during construction ("AFUDC") (see Note 4 of Notes to Financial Statements), which allowance is estimated to be \$456,500,000). The foregoing estimate of AFUDC reflects the results of a recent NHPUC order permitting the Company to compute AFUDC net of federal income taxes, the method utilized by the Company prior to 1975. This change in method of computation resulted in a decrease in total estimated AFUDC associated with the construction of the Seabrook project from \$639,000,000 to \$456,500,000. This change will have no significant effect on the Company's net income, and will not reduce the Company's external financing requirements described below under "Financing and Rate Relief".

The Company's aggregate construction program for the six-year period 1981 through 1986, which will be subject to continuing periodic review and adjustment throughout the period, is currently estimated to be about \$803,600,000 (excluding AFUDC), assuming its ownership interest in the Seabrook project is reduced to 35.23497% as described above, the Adjustment Periods referred to above have all commenced by May 1, 1981, and the Company's entire ownership interest in the Millstone #3 project is sold in 1982. The following table sets forth the Company's estimated construction expenditures for the period 1981-1986 before the reduction of its original 50% ownership interest in the Seabrook project and after its projected reduction to 35.23497%, and is based on current construction schedules and cost projections (excluding AFUDC):

	Estimated Construction Expenditures 1981-1986	
	(Millions of Dollars)	
	Original 50% Ownership	Projected 35.23497% Ownership
Generating Facilities		
Company's Share of the Seabrook Project		
Plant	\$ 750.9	\$386.2
Nuclear Fuel	159.2	100.2
Total	910.1	486.4
Participation in the Pilgrim #2 and Millstone #3 Projects		
Plant	76.7	45.8
Nuclear Fuel	6.1	2.8
Total	82.8	48.6
Other Generation	44.1	44.1
Total Generating Facilities	1,037.0	579.1
Transmission Facilities	88.7	88.7
Distribution and General Facilities	135.8	135.8
Total	\$1,261.5	\$803.6

The following table shows the aggregate amount for each of the years 1981 through 1986 of the Company's estimated construction program before and after adjustment to reflect the reduction of the Company's ownership interest in the Seabrook project to 35.23497%, and is based on the same additional assumptions as in the immediately preceding table. If any substantial variation occurs in the commencement of the Adjustment Periods referred to above, expenditures for the Company's construction program would be increased in 1981 and decreased in 1982.

	Original 50% Ownership	Projected 35.23497% Ownership
1981	\$ 233,600,000	\$ 57,100,000
1982	261,800,000	158,700,000
1983	267,600,000	197,000,000
1984	190,700,000	143,500,000
1985	204,900,000	160,700,000
1986	102,900,000	86,600,000
Total	<u>\$1,261,500,000</u>	<u>\$803,600,000</u>

Actual construction expenditures could vary from these estimates because of changes in the Company's plans and load forecasts, cost fluctuations, delays and other factors. It is also possible that additional expenditures may be required to meet regulatory and environmental requirements at the Seabrook project and at the Company's other generating facilities. See "Industry Problems" above and see also "Environmental Matters" and "Conversion from Oil to Coal" below.

The complexity of present-day electric utility technology and the time required for the construction of generating facilities and for the completion of the necessary licensing and regulatory proceedings, which have become increasingly extensive, have compelled the Company, as well as other electric utilities, to make substantial investments in the construction of such facilities before the licensing and regulatory proceedings are final. While it is possible that future developments could lead to cancellation of the Seabrook project, the Company considers such a possibility unlikely not only because the necessary construction permits and approvals have been received, although certain of them are subject to further court appeal and administrative proceedings, and construction is proceeding, but also because of the projected need for power in the Company's service area and in New England generally and the further need to reduce dependency on imported oil. However, if the Seabrook project were cancelled, the Company estimates that at the present time its share of the total costs would be substantially more than its investment; the precise amount would depend upon a number of factors, including the amount of termination charges and salvage and the results of negotiations in connection with contract terminations. The Company would apply to regulatory authorities for approval to amortize its share of total costs over an appropriate future period and to recover such costs through the Company's retail and wholesale rates. While the Company cannot predict whether and to what extent regulatory authorities would permit such recovery, construction of the plant was authorized by the NHPUC based upon its finding that the Seabrook project was required to meet the demand for electric power.

### Financing

Financing of the Company's 1981-1986 construction program estimated at \$803,600,000 plus AFUDC of \$409,100,000 (assuming its ownership interest in the Seabrook project is reduced to about 35% as described above), and the refinancing at maturity of certain long-term debt and the meeting of required sinking fund payments together aggregating \$156,545,000 during the period, represent a major undertaking for the Company. Assuming the receipt of adequate and timely rate increases, the Company estimates that during the period 1981-1986 approximately \$435,000,000 will be provided by operations (principally after 1983) after deducting total estimated preferred dividend requirements. See "Construction Program and Financing Requirements" in item 7 below. Approximately \$760,000,000 is expected to be financed from external sources during this period.

During 1980, the Company raised approximately \$204,500,000 in the aggregate, as follows: \$51,995,000 from the sale of General and Refunding Mortgage Bonds in January and December, \$61,837,000 from the sale of shares of Common Stock in February and July, approximately \$2,700,000 from the sale of shares of Common Stock through the Company's Dividend Reinvestment and Common Stock Purchase Plan, \$60,000,000 from the sale of shares of Preferred Stock in April and October, and \$28,000,000 from a Eurodollar term loan in September. In February, 1981, the Company raised \$31,504,000 from the sale of 2,200,000 shares of Common Stock.

The Company's financing requirements during the balance of 1981 (including refunding of approximately \$24,000,000 of First Mortgage Bonds, Series T) are estimated to be approximately \$107,000,000, assuming that MMWEC obtains financing for its increased Seabrook project ownership interest before June 30, 1981, and that approximately \$118,000,000 of short-term bank credit is outstanding at the end of the year. These 1981 financing requirements are expected to be met by the issue of additional shares of Common Stock during May, approximately \$20,000,000 of additional bank debt during the second quarter, and, in the fourth quarter, by General and Refunding Mortgage Bonds. The size and timing of these issues will depend on market factors, timing of commencement of the Adjustment Periods for the reduction of the Company's interest in the Seabrook project to about 35%, adequate and timely rate increases and other factors.

In order to provide the Company with the revenues necessary for it to obtain the required external financing, and in particular to obtain sufficient revenues to satisfy the earnings test contained in the Company's General and Refunding Mortgage Indenture, dated as of August 15, 1978 (the "G&R Indenture"), for the issuance of the General and Refunding Mortgage Bonds needed during 1981 (see "Mortgage Bonds" below under this caption), the Company filed a request on January 14, 1981 with the NHPUC for an emergency surcharge designed to increase annual revenues by approximately \$35,500,000. The NHPUC denied the Company's request on February 27, 1981, after several days of hearings (see Item 7, "Management's Discussion and Analysis of Financial Condition and Results of Operations") and the Company's request for rehearing has been denied. Without a rate increase during the second quarter of 1981, based on the earnings test in the Indenture, only a limited amount of General and Refunding Mortgage Bonds could be issued in the fourth quarter of 1981, except for General and Refunding Mortgage Bonds which can be issued without compliance with the earnings test to refund the First Mortgage Bonds, Series T, which mature in October, 1981. The Company's ability to issue General and Refunding Mortgage Bonds in adequate amounts and in a timely fashion is considered by the Company to be an essential part of its financing program.

The Company's financing plans for the 1981-1986 period include the issuance of common stock, preferred stock and long-term debt, nuclear and fossil fuel financing and intermediate-term debt financing. The continued success of the Company's financing plans is dependent upon a number of factors, including the Company's ability to obtain adequate and timely rate increases, conditions in the capital markets, economic conditions, and the Company's level of sales. Cost increases, delays and changes in regulatory proceedings and requirements, market conditions and other factors have in the past necessitated revisions in the Company's construction program and in the timing and amount of the Company's projected financings; these factors may require similar revisions in the future.

*Mortgage Bonds.* Due to certain restrictions in the Company's First Mortgage Indenture, no significant amount of First Mortgage Bonds may be issued thereunder until an operating license is obtained for Unit #1 of the Seabrook project, not anticipated before late 1982. Because of the restrictions in the Company's First Mortgage Indenture, the Company entered into the G&R Indenture, constituting a second mortgage on the Company's properties to secure General and Refunding Mortgage Bonds, pursuant to which the Company has issued and sold an aggregate of \$173,000,000 of such Bonds. The G&R Indenture requires that, in order to issue additional General and Refunding Mortgage Bonds (other than for certain refundings), the earnings coverage of interest on the out-

standing First Mortgage Bonds and General and Refunding Mortgage Bonds be 2.0. Approximately \$26,100,000 of General and Refunding Mortgage Bonds are issuable under the earnings coverage test calculated at December 31, 1980 (16% interest rate assumed).

*Bank Financing.* The Company has an aggregate of \$134,350,000 of short-term bank credit, consisting of lines of credit aggregating \$1,350,000 with New Hampshire banks, and a revolving credit agreement with a group of eight commercial banks under which the Company may borrow up to \$130,000,000 through November 16, 1981 subject to periodic review by the banks; amounts outstanding under the agreement mature on November 17, 1981. The Company believes that the continued availability of such credit to November 13, 1981 and any extension thereafter will depend principally upon the success of the Company's financing program described above, and the occurrence of no adverse developments in rate and other regulatory proceedings or in the program to reduce the Company's ownership interest in the Seabrook project.

The Company has a \$25,000,000 term credit due January 7, 1982 with seven of the commercial banks participating in the revolving credit and a \$28,000,000 Eurodollar term loan from European lenders due August 25, 1982.

As of December 31, 1980, the Company was permitted under its Articles of Agreement to incur approximately \$184,700,000 of short-term unsecured indebtedness without obtaining the approval of holders of the Preferred Stock. The NHPUC has approved up to \$146,500,000 of short-term borrowings.

*Preferred Stock.* Under the Company's Articles of Agreement, additional Preferred Stock may be issued without the affirmative vote of the holders of a majority of either class of the Preferred Stock provided that the ratio of earnings to fixed charges and preferred dividends, including dividends on Preferred Stock to be issued, is at least 1.50. For the year ended December 31, 1980, the ratio of earnings to fixed charges and preferred dividends computed under the method prescribed by the Company's Articles of Agreement was 1.93; and based thereon, the Company could issue, without such vote of the holders of the Preferred Stock, approximately \$78,600,000 of Preferred Stock (16% annual dividend rate assumed).

### ***New England Power Pool***

A New England Power Pool Agreement ("NEPOOL"), to which the major investor-owned utilities in New England, including the Company, and certain municipal and cooperative utilities are parties, has been in effect since 1971. This Agreement provides for joint planning and operation of generating and transmission facilities and also incorporates generating capacity reserve obligations and provisions regarding the use of major transmission lines and payment for such use.

Substantially all planning, operation and dispatching of electric generating capacity for New England is done on a regional basis under NEPOOL. At the time of the 1980-1981 NEPOOL winter peak, the New England utilities had about 21,212 MW of installed capacity to meet the New England peak load of about 15,502 MW.

The Company's capability responsibility under NEPOOL involves carrying an allocated share of a New England capacity requirement which is determined for each period based on certain regional reliability criteria. It is expected that the Company's capacity will be sufficient, through its own generating facilities, through its participations in certain jointly-owned generating facilities, and through purchases of capacity and energy from other utilities, to meet its NEPOOL obligations in the foreseeable future.

### Joint Projects

The Company is a part owner with other New England electric utilities of four nuclear generating companies. The Company owns a 7% interest in Yankee Atomic Electric Company, a 5% interest in Connecticut Yankee Atomic Power Company, a 5% interest in Maine Yankee Atomic Power Company and a 4% interest in Vermont Yankee Nuclear Power Corporation, each of which owns an operating nuclear generating plant with present net capabilities of 175 MW, 580 MW, 830 MW and 528 MW, respectively. The stockholders of each of the four nuclear generating companies are entitled to the entire output of the plant in proportion to their respective ownerships, subject to certain sales agreements with other utilities, and are obligated to pay for such output their proportionate shares of the generating company's operating expenses and return on invested capital. They are also obligated to pay, when called upon by the generating company, their proportionate shares of each generating company's capital requirements not provided from outside financing.

The Company is participating on a tenancy-in-common basis with other New England utilities in the ownership of five other generating units. One of these, Wyman Unit #4, a 600 MW oil-fired generating unit in Maine in which the Company has a 3.1433% interest, commenced operation at full capacity in February, 1979. Three of the other units which are under construction are as follows:

		Company Share					
		Scheduled Completion Date (1)	Capacity (MW) Percent (2)		Estimated Construction Cost (2) (3)		
Type					Capacity (MW) (2)	Total (Millions)	Per KW
Seabrook #1 & #2 (New Hampshire)	Nuclear	1984 & 1986 (2)	2,300	35.23497	810.4	\$1,392.7	\$1,719
Millstone #3 (Connecticut)	Nuclear	1986	1,150	3.8910	44.7	121.0	2,707

- (1) These completion dates have been deferred from time to time in the past, and additional deferrals may occur due to licensing delays, economic conditions and other factors.

Due to the time required for the construction of generating facilities and the completion of licensing and regulatory proceedings relating thereto, substantial investments in the above units will be required prior to the completion of licensing and regulatory proceedings. There is no assurance that all necessary approvals, permits or licenses will be obtained, or if obtained, will not be modified or revoked. See "Industry Problems" above under this Item 1.

- (2) See "Reduction in Seabrook Project Ownership" above under this Item 1 for information concerning the proposed reduction of the Company's ownership interest in the Seabrook project to 35.23497% and "Offer of Pilgrim and Millstone Interests" under this Item 1 for information concerning the sale of the Company's interest in the Millstone #3 project.
- (3) Including the cost of the initial nuclear fuel and AFUDC on the estimated costs of unfinished construction not included in the Company's rate base. AFUDC was discontinued on December 3, 1977 on the portion of unfinished construction included in rate base. For purposes of this table such portion of unfinished construction has been excluded from rate base effective May 7, 1979 and it has been assumed that AFUDC will be capitalized thereafter on all unfinished construction. See the discussion of the recent change in the calculation of AFUDC in "Construction Program — Construction Expenditures."

Estimated construction expenditures for the Millstone #3 project used in calculating the estimated cost per KW are based upon information furnished by the lead sponsor, which has advised the Company that the construction budget is continuously under review in light of increased costs due to deferrals, delays and other factors. The estimated expenditures and completion dates of the



nuclear units may also be affected by the licensing and regulatory proceedings relating to each unit and to nuclear power generally and may also be affected by events and conditions which cannot now be predicted.

The Company also has a 3.4700% ownership interest in the fifth of these generating units, the Pilgrim #2 project, a 1,150 MW nuclear plant planned to be constructed in Massachusetts. The Pilgrim #2 project has not yet received a construction permit from the NRC, and due to uncertainty regarding the timing of licensing for the Pilgrim #2 project, the lead sponsor has not reviewed that project's construction budget for some time. Accordingly, the Company does not have a current cost estimate for the Pilgrim #2 project. See "Offer of Pilgrim and Millstone Interests" under this Item 1 for information concerning the Company's continued participation in the Pilgrim #2 project.

### ***Seabrook Nuclear Project***

As described below, the Seabrook project has required numerous approvals and permits from various state and federal regulatory bodies consisting principally of a certificate authorizing construction of the plant (which incorporates related state permits) from the NHPUC under New Hampshire's power plant siting law; approval of the once-through cooling system for the Seabrook project by the Environmental Protection Agency ("EPA"); and construction permits from the Nuclear Regulatory Commission ("NRC"). All of these approvals and permits have been obtained and, except as described below, there are no appeals or proceedings relating thereto.

The process of obtaining these approvals and permits has been long and complex, has been consistently opposed by a number of intervening groups, has included demonstrations at the Seabrook site, and has been plagued by lengthy delays which have resulted in greatly increased costs for the project. Court appeals from these federal regulatory approvals have been decided in the Company's favor, but one appeal described below is still pending and further appeals are possible. The Company is unable to predict what effect adverse legislative action, financing problems, work stoppages or further administrative or court decisions relating to actions of regulatory agencies, including the proceeding recently remanded by the NRC described below, may have on the completion of the Seabrook project, on the cost of the Seabrook project or on the Company.

**NHPUC.** The state siting proceedings began in 1972, involved lengthy hearings during 1972 and 1973 and culminated in issuance of the requisite certificate on January 29, 1974. A subsequent appeal to the New Hampshire Supreme Court resulted in a remand for further findings but did not invalidate the certificate. The supplemental findings were issued on December 30, 1975; no further appeals were taken. The certificate was modified to reflect the extension of the cooling water intake tunnel ordered by the EPA, transmission line relocations ordered by the NRC, and certain other transmission line relocations. The Company has also applied for a modification of the certificate with respect to an additional minor transmission line relocation, and hearings have commenced.

**NRC.** The NRC proceedings commenced with the docketing of the application for construction permits on July 9, 1973. The hearings before an Atomic Safety and Licensing Board (the "Licensing Board"), in which seven intervenors in opposition participated, consumed over sixty days during 1975 and 1976 and culminated on June 29, 1976 in the issuance by the Licensing Board of its Initial Decision (one member dissenting), approving the issuance of construction permits for the Seabrook project. The NRC issued the permits on July 7, 1976, and construction commenced shortly thereafter but was subsequently suspended in 1977 and 1978 for periods of seven months and three weeks, respectively, as a result of administrative proceedings and court appeals.

The Initial Decision was affirmed by an NRC Atomic Safety and Licensing Appeal Board (the "Appeal Board") (with one member dissenting) and by the NRC. On August 3, 1979, the dissenting member of the Appeal Board issued his dissenting opinion which relates to the seismic issue; and the majority issued a supplemental opinion in response to the dissent on September 6, 1979. One

intervenor filed with the NRC a renewal of its petition for review of the seismic issue; on September 25, 1980 the NRC remanded the issue to the Appeal Board for a further limited evidentiary hearing, and the Appeal Board has scheduled commencement of the hearing for April 6, 1981. In December, 1980, the Appeal Board denied an intervenor's motion requesting suspension of the construction permits pending the outcome of this remanded matter. The Company cannot predict the outcome of the hearing.

There is presently pending before the United States Court of Appeals for the First Circuit an appeal by intervenors from a decision of the NRC; the appeal challenges the NRC's refusal in 1976 to suspend the Seabrook project construction permits despite a court decision in litigation not involving the Company which set aside the NRC's rule with respect to the environmental effects of reprocessing spent fuel and disposing of nuclear waste. (*Natural Resources Defense Council, Inc. v. NRC*, D. C. Cir. Nos. 74-1585 and 74-1586, which was reversed and remanded by the United States Supreme Court on April 3, 1978 in *Vermont Yankee Nuclear Power Corporation v. Natural Resources Defense Council, Inc.*, No. 76-419). Effective September 4, 1979, the NRC (one member dissenting) promulgated its final rule (which superseded the interim rule in place since March, 1977) covering the environmental impact of reprocessing spent fuel and disposing of nuclear waste. A petition for review of the final rule is pending before the United States Court of Appeals for the District of Columbia Circuit (*State of New York v. NRC*, D.C. Cir. Nos. 79-2110 and 79-2131). The Company believes that the environmental effects of the fuel cycle, determined in accordance with the new rule, are too small to affect the environmental cost-benefit evaluation of the Seabrook project.

On May 2, 1979 an intervenor filed a request with the NRC staff for issuance of a show cause order as to why the construction permits should not be suspended or revoked because of the NRC's failure to require development of evacuation plans beyond the low population zone and to evaluate the consequences of certain types of accidents including the possibility of such evacuation. On February 11, 1980, the NRC Director of Nuclear Reactor Regulation issued a decision denying that petition, and the NRC review period has expired. Following expiration of the review period on that decision, in response to a letter from an intervenor filed during that period which further elaborated its interpretation of the evacuation issue, the NRC directed the NRC staff to process the letter as a new request for a show cause order on the same issue, and that staff review is currently in progress. In connection with obtaining the Company's operating licenses for the Seabrook project, it will be necessary for the New Hampshire Civil Defense Agency and the Federal Emergency Management Agency to develop satisfactory emergency response and evacuation plans.

Before the Seabrook project can be put into operation, the Company must obtain the requisite operating license from the NRC. The Company intends to file the necessary applications therefor well in advance of the projected in-service date for Unit #1; however, the Company cannot predict the extent of the regulatory proceedings which will result or their outcome. See "Industry Problems" above under this Item 1.

*EPA.* Under the Federal Water Pollution Control Act, as amended, the EPA has jurisdiction over discharges from the cooling system of the Seabrook project. In August, 1974, the Company applied to EPA for approval of the once-through cooling system utilizing ocean water. After adjudicatory proceedings, a court appeal and a further hearing resulting from a court remand, the EPA Administrator on August 4, 1978 reaffirmed his previous approval of the once-through cooling system and that decision was affirmed by the United States Court of Appeals for the First Circuit on May 2, 1979.

*Other.* The Company is also involved in proceedings or disputes concerning title to a portion of the Seabrook site and the use of the Company's water wells on the Seabrook site. The Company believes that neither of these matters will have a materially adverse effect upon the Seabrook project.

*Insurance.* The Federal Price-Anderson Act provides, among other things, that the maximum liability for damages resulting from a nuclear incident would be \$560 million, to be provided by

private insurance and governmental sources. As required by NRC regulations, prior to operation of the Seabrook project, the owners of the Seabrook project will insure against this exposure by purchasing the maximum available private insurance (presently \$160 million), the remainder to be covered by retrospective premium insurance and by an indemnity agreement with the NRC. Under recent amendments to that Act, owners of operating nuclear facilities may be assessed a retrospective premium of up to \$5 million for each reactor owned in the event of any one nuclear incident occurring at any reactor in the United States, with a maximum assessment of \$10 million per year per reactor owned. As a part owner of other operating New England facilities (see "Joint Projects" under this Item 1 above), the Company would be obligated to pay its proportionate share of any such assessments, which presently amounts to a maximum of \$1,050,000 per incident. While it is not yet possible to evaluate the claims being asserted as a result of the TMI incident, the Company does not anticipate any assessments being levied under these provisions as a result of that incident.

### ***Regulation***

The Company, as to retail rates, security issues, and various other matters, is subject to the regulatory authority of the NHPUC. As to properties and business in Maine and Vermont, the Company is subject to the regulatory authority of the Public Utilities Commission of Maine and the Vermont Public Service Board, respectively. Additionally, both the Connecticut Department of Public Utility Control and the Massachusetts Department of Public Utilities have limited jurisdiction over the Company based on the Company's ownership as a tenant-in-common of portions of the Millstone #3 and Pilgrim #2 projects. See "Joint Projects" above under this Item 1. The Company is also subject, as to some phases of its business, including accounts, certain rates, and licensing of its hydro-electric generating plants, to the jurisdiction of the Federal Energy Regulatory Commission ("FERC") under the Federal Power Act. The various nuclear generating units in which the Company has an ownership interest are subject in their construction and operation to the broad regulatory jurisdiction of the NRC under the Atomic Energy Act of 1954, particularly in regard to public health, safety, environmental and antitrust matters. See also "Environmental Matters" below under this Item 1.

### ***Fuel Supply***

For the year ended December 31, 1980, the Company's firm net output was derived 53% from oil, 35% from coal, 8% from nuclear, and 4% from hydro. As indicated above under this Item 1 under the caption "New England Power Pool", substantially all of New England's generation and transmission systems, including those of the Company, are operated as if they were a single system.

***Oil.*** The New England electric utilities, including the Company, make greater use of fuel oil for generation of power than utilities in any other region of the country. Most fuel oil supplies of the New England utilities are derived from foreign sources and are subject to price increases and interference by foreign governments. The Company has a contract expiring on December 31, 1981 with a supplier for fuel oil for the Company's two large oil-burning plants. The storage capacity for the Company's two large oil-burning plants is approximately 30 days operating at full load, and inventory varies substantially depending upon oil shipments. During the 52-week period ending March 21, 1981, the average inventory was approximately 15 days operating at full load. The Company's two smaller oil-burning plants have limited storage capacity. See "Conversion from Oil to Coal" and "Environmental Matters" below under this Item 1.

***Coal.*** Coal for the Company's only coal-burning plant, the two unit Merrimack Station, is presently being furnished from West Virginia sources under a contract which expires in April, 1983. The contract generally provides that a 45-day supply of coal is to be maintained for the Company, that the base price of the coal may be changed by the seller annually but that the Company's disagreement with the change will result in termination of the contract at the end of the contract year, and that

the price of the coal is subject to certain adjustments for changes in the seller's costs. The Company's policy is to maintain a 60-day supply of coal on hand for the Merrimack Station; at March 21, 1981, an 86-day supply was on hand. The plant, with 119 MW and 337 MW units, presently requires a total of approximately 1,000,000 tons of coal per year. Future annual tonnage requirements of the Company may be more or less than that figure depending upon a number of variables including particularly the relative cost and availability of coal and other fuels and possible conversion of units presently burning oil. See "Conversion from Oil to Coal" and "Environmental Matters" below under this Item 1.

The Company's approximate average costs of oil and coal for 1973 through 1980 were as follows:

	Oil Per Barrel	Oil Per Million BTU	Coal Per Ton	Coal Per Million BTU	Coal Spot Price Per Ton
1973	\$ 3.75	\$0.61	\$13.78	\$0.51	*
1974	11.32	1.83	21.97	0.82	\$40.67
1975	11.49	1.88	32.55	1.24	37.50
1976	10.95	1.77	34.33	1.25	35.27
1977	12.97	2.09	35.54	1.31	*
1978	12.13	1.95	39.09	1.47	38.54
1979	15.62	2.51	41.39	1.53	*
1980	22.86	3.67	43.57	1.60	42.55

\*No spot purchases by the Company during the period.

As of March 23, 1981, the price of oil under the Company's long-term contract was approximately \$33.26 per barrel.

*Nuclear.* The cycle of production of nuclear fuel consists of (1) the mining and milling of uranium ore, (2) the conversion of uranium concentrate to uranium hexafluoride, (3) the enrichment of the uranium hexafluoride, (4) the fabrication of fuel assemblies and (5) the reprocessing, storage, or disposal of spent fuel.

With respect to the Seabrook project, the Company has long-term contracts for enrichment. The Company also has contracts for conversion services and for the fabrication of the initial cores and six reload regions (each region consisting of one-third of a complete core). These contracts are expected to meet the Company's requirements for fuel cycle services as follows: enrichment through 2008, conversion through 1987, and fabrication through 1986.

The Company has contracted for all of the uranium concentrates required to commence operation of the Seabrook project and is actively seeking additional sources thereof, which it expects will be available when needed. A dispute as to the intent or enforceability of one agreement has resulted in the supplier instituting litigation against the owners of the Seabrook project, including the Company, for alleged breach of contract (alleging damages of about \$5,000,000 of which the Company's share would be about \$1,250,000) and unlawful restraint of trade (seeking treble damages); a counterclaim and a separate action have been filed against the supplier based upon its wrongful influencing of the market price. An agreement in principle has been reached in settlement of this litigation which will result in cancellation of the existing agreement, dismissal of the litigation, and cash payments to the supplier by the Seabrook project participants over a two year period.

The Company has no contractual arrangements for reprocessing spent fuel and there are no reprocessing facilities currently operating in the United States. If reprocessing is not available when required for the Seabrook project, the spent fuel can be stored on site pending reprocessing or dis-



posal. The Company cannot predict at this time what difficulties will be encountered regarding disposal of nuclear wastes. The NRC, along with other federal agencies, is in the process of developing regulations and guidelines in this area. The Company expects to develop plans for the disposal of its nuclear wastes after promulgation of these regulations and such plans will be subject to regulatory approvals.

The Company has been advised by the companies operating, planning or constructing the other nuclear generating stations in which the Company has an interest that they have contracted for certain segments of the nuclear fuel production cycle through various dates. The Company has further been advised by the sponsors of the four operating nuclear generating stations that they have or will have storage capacity to meet the spent fuel storage needs of the units through various dates ranging from 1985 to the late 1990's. Contracts for other segments of the fuel cycle will be required in the future, and their availability, prices and terms cannot now be predicted.

### ***Conversion from Oil to Coal***

In July, 1979, the NHPUC instituted an investigation to determine whether any of the five Schiller Station units should be converted from burning oil to burning natural gas or coal, and on March 17, 1980, ordered the Company to begin converting three 50 MW units to coal. The Economic Regulatory Administration of the United States Department of Energy ("DOE") on November 19, 1979, had issued a notice of proposed prohibition orders under the Power Plant and Industrial Fuel Use Act of 1978 prohibiting such three units at the Company's Schiller Station from burning oil or natural gas as their primary fuel. There has been no recent action by DOE; it is still possible, however, that DOE will issue its own order prohibiting the burning of oil or natural gas and will thereby require such conversion.

The Company estimates that if such conversion does not require the installation of flue gas desulfurization facilities (scrubbers) to meet interstate air quality standards, the units can be converted at an estimated cost of approximately \$21,000,000 (in 1979 dollars, excluding AFUDC); if scrubbers are required, this cost would increase substantially. Studies are under way to determine whether scrubbers would be required. Assuming that coal containing such sulfur content as may be mandated is available at reasonable prices, the Company is prepared to commence the conversion of the three units if scrubbers are not necessary and expenditures for such conversion have been included in the construction program described above under "Construction Program". The Company intends to vigorously oppose the installation of scrubbers for the units, and expenditures for scrubbers are not included in the construction budget. Any such conversion will reduce the capability of the units.

On August 14, 1980, the NHPUC ordered an investigation to determine whether or not the generating unit at Newington Station should be converted from oil to natural gas and/or its substitutes and/or coal. The Company is studying the availability of such alternative fuels and the construction expenditures required for any such conversion. Preliminary studies indicate that a conversion of this unit to burning coal could involve a very major reconstruction of the station, possibly including a new boiler and flue gas desulfurization facilities and that such reconstruction could result in expenditures in excess of \$300,000,000 in 1980 dollars. No amounts for such expenditures have been included in the construction program described above under "Construction Program". Hearings in this investigation have not yet commenced; the Company intends to vigorously oppose the making of such expenditures. The DOE has classified the existing Newington unit as "non-coal capable" and has not issued any order relative to this unit.

### ***National Energy Policy***

The federal Public Utility Regulatory Policies Act of 1978 requires state utility regulatory commissions to consider and make determinations with respect to certain issues of utility regulation. Accordingly, in mid-August, 1980, the NHPUC instituted rule-making proceedings with respect to compensation for intervenors, advertising, master metering and information to customers, and adopted



rules regarding the latter three areas at the end of October, 1980. Additionally, the NHPUC is utilizing Phase II of the 1979 rate proceeding (see "Rate Proceedings — New Hampshire Retail" under Item 3 below) to make the rate structure examination specific to this Act and hearings have commenced. The Company cannot predict the effect of this Act on its proceedings or its operations. However, the Company's present policies of emphasizing conservation and load management and postponing as long as possible the need for new capacity other than the Seabrook project are consistent with the apparent objectives of the Act.

### ***Environmental Matters***

The Company is subject to regulation with regard to air and water quality and other environmental considerations, by various federal, state and local authorities. The Company cannot forecast the effect of all such regulations upon its generating, transmission and other facilities, or its operations.

The application of federal, state and local standards to protect the environment, including but not limited to those hereinafter described, involves or may involve review, certification or issuance of permits by various federal, state and local authorities. Such standards, particularly in regard to emissions into the air and water, thermal mixing zones and water temperature variations, may halt, limit or prevent operations, or prevent or substantially increase the cost of construction and operation of installations and may require substantial investments in new equipment at existing installations. They may also require substantial investments above the figures stated under "Construction Program" for proposed new projects.

*Air Quality Control.* Pursuant to the Federal Clean Air Act of 1970, as amended, the State of New Hampshire acting through the New Hampshire Air Resources Commission ("ARC") has adopted regulations containing standards limiting emissions of particulates, sulphur oxides and nitrogen oxides, which are generally designed to achieve and maintain Federal primary ambient air quality standards. The Company believes that its fossil fuel generating units are being operated in compliance with ARC's regulations.

Pursuant to the 1977 amendments to the Clean Air Act, ARC has proposed lists showing those areas of New Hampshire which have attained or failed to attain national ambient air quality standards, and revised the State implementation plan, which the EPA has accepted. It does not appear that the revised State implementation plan will require the Company either to modify operations at any of its fossil fuel generating plants or expend funds for additional air pollution control equipment.

While coal now available and expected to be available in the future for the Company's Merrimack Station presently meets all applicable requirements, if more stringent requirements become effective which could not be met by such coal, the Company might have to install sulphur removal equipment at substantial capital cost or take such other actions as may be required by regulatory authorities. The installation of such equipment would increase operating costs and reduce the net capability of the units.

As described under "Conversion from Oil to Coal" above, the conversions of Schiller Station and Newington Station from oil to coal could require the Company to make substantial expenditures for air quality control facilities. The ARC has commissioned a study of the impact of the Schiller conversion.

*Water Quality Control.* The Company has received from EPA, or from the Maine Department of Environmental Protection in the case of one generating station located in the State of Maine, all permits required under the Federal Water Pollution Control Act, as amended, for discharges of thermal and other effluents from its generating stations. Such permits have varying expiration dates and the Company has made and expects to make timely applications for renewal. The EPA issued effluent limitations guidelines for steam electric power plants based on application of the best practicable control technology (to be met by July 1, 1977) and of the best available technology economically achievable (to be met by July 1, 1984), and alternate effluent standards with respect to

thermal discharges from steam electric power plants. The guidelines and standards impose rigorous limitations upon the industry. An industry group filed an appeal in a Federal Court of Appeals challenging the guidelines and standards, and the Court of Appeals remanded the guidelines and standards to the EPA for reconsideration of certain of them. The Company is in compliance with the July 1, 1977 guidelines.

The discharge permit for the Company's Newington Station has contained conditions requiring installation of some type of closed-cycle condenser cooling system if an exemption is not obtained. The Company applied for such an exemption, and the EPA has issued a determination that the existing once-through cooling system at the plant meets the requirements of the Federal Water Pollution Control Act. Failure to receive such an exemption would have required the Company to make substantial capital expenditures to install the closed-cycle condenser cooling system.

The Company has an ongoing requirement in the discharge permit for its Merrimack Station to monitor the effect of the plant's operation on the Merrimack River. The Company has thus far been able to show as required by the permit that the plant's present once-through cooling system does not interfere with resident fish in the affected portion of the Merrimack River. The permit requires that additional biological studies be performed by the Company at such time as significant numbers of migratory fish are restored to the Merrimack River for the purpose of showing as required by the permit that the present cooling system does not interfere with migratory fish.

The Company's construction and operation of the Seabrook project, including environmental considerations, is subject to regulation by the NRC and the EPA. See "Seabrook Nuclear Project" above under this Item 1.

*Resource Conservation and Recovery Act.* Pursuant to the Resource Conservation and Recovery Act of 1976, the EPA has issued regulations relative to the generation, transportation and disposal of certain wastes. The Company has reviewed the application of these regulations to its operations and has complied with the EPA criteria for the required interim status permits.

*Other Environmental Expenditures.* The Company's capital expenditures for environmental protection facilities amounted to approximately \$14,800,000 for 1979, the major portion of which was for facilities to reduce the thermal effect of the discharge of the Seabrook plant condenser cooling systems, and approximately \$8,700,000 during 1980.

For the years 1981, 1982 and 1983, there will be approximately \$12,400,000, \$7,200,000 and \$1,200,000, respectively, of further expenditures for these pollution control facilities. The foregoing amounts are included in the construction expenditures set forth above under this Item 1 under "Construction Program". Any expenditures associated with the conversion at the Newington Station or the installation of scrubbers at Schiller Station referred to under the caption "Conversion from Oil to Coal" above under this Item 1, would be in addition to these amounts.

#### ***Employees, Salaries and Wages***

The Company has approximately 1,900 employees, of whom 33% are represented by unions with which the Company has contracts. Such contracts became effective June 1, 1979, and will expire on July 31, 1981. The contracts reflect a 7.5% general wage increase effective June 3, 1979 and an additional 7.9% increase effective June 1, 1980. Increases comparable to the increases to union-represented employees have been granted to non-represented employees.

#### ***Municipalities and Cooperatives***

New Hampshire law permits municipalities to engage in the production and sale of electricity, including the power to condemn the plant and property of any existing public utility which is located in the municipality, and to finance through the issuance of revenue bonds the ownership of new generating units of at least 25 MW and new transmission facilities of at least 69 KV.

New Hampshire Electric Cooperative, Inc. ("NH Coop"), a cooperative association financed by the Rural Electrification Administration, as well as five small municipal electric utilities, operate in areas adjacent to areas served by the Company. The NH Coop purchases most of its electricity from the Company and is subject to regulation by the NHPUC as a public utility. The NH Coop has agreed to purchase a 2.17391% interest in the Seabrook project. See "Reduction in Seabrook Ownership" under this Item 1 above.

### ***Seasonal Nature of Business***

Although the number of kilowatthours of electricity sold by the Company in its territory has historically been somewhat less in the summer and fall than during the winter and spring, the Company's electric revenues and operating income are dependent on a variety of other factors which are not necessarily seasonal, including contract sales of system and unit power to other electric companies, changes in the Company's rates and charges, the extent and nature of transactions involving the New England Power Pool and general economic conditions.

## **Item 2. PROPERTIES**

The electric properties of the Company form a single integrated system including transmission facilities which are part of the New England-wide transmission grid. On January 12, 1981, the Company experienced a maximum one-hour prime peak load of 1,208 net MW (pending final adjustment), and the Company had available to meet such load 1,181 MW of its own generating capacity, 98 MW from its participations in the four Yankee nuclear generating companies described under "Joint Projects" in Item 1 above and 267 MW of purchased capacity. Because the generation and transmission systems of the major New England utilities, including the Company, are operated as if they were a single system, the ability of the Company to meet its load is dependent on the ability of the New England utilities to meet the New England load. See "New England Power Pool" under Item 1 above.

The Company has one coal-fired 456 MW electric generating station (Merrimack Station), from which the Company has agreed to sell to another utility 100 MW on a single unit basis from Unit #2 through April, 1998, and four oil-fired electric generating stations with an aggregate effective capability of 641 MW, consisting of the Newington plant (420 MW), the Schiller plant (180 MW) and two smaller plants. See "Conversion from Oil to Coal" and "Environmental Matters" under Item 1 above.

The Company also has other generating facilities with an aggregate effective capability of 165 MW as follows: hydro-electric (51 MW), combustion turbine (111 MW) and diesel (3 MW). The Company has participations with other New England utilities in five generating units recently completed, under construction or in design stages, including the two Seabrook units. See "Construction Program", "Joint Projects" and "Seabrook Nuclear Project" under Item 1 above.

On December 31, 1980, the Company had about 1,699 pole-miles of overhead transmission lines, 9,260 pole-miles of overhead distribution lines, minor underground distribution and transmission facilities, and 239 transmission and distribution substations having an aggregate capacity of 5,393,723 KVA.

The Company owns office buildings in Manchester, Portsmouth and Keene. It rents space in an office building in Manchester for its principal offices under a 30-year lease expiring in 2002. Annual base rentals under this lease are approximately \$1,245,000, subject to annual escalation. In 1980 the Company paid approximately \$1,572,000. The Company also owns other structures used as service buildings, storehouses and garages, and leases space for offices and other purposes at various locations in its service area.

### Item 3. LEGAL PROCEEDINGS

#### *Rate Proceedings — New Hampshire Retail*

On June 9, 1980, the NHPUC granted the Company an increase in its New Hampshire retail rates of approximately \$18,355,000 on an annual basis based on a test year ended May 31, 1979 and on certain pro forma adjustments since that date. The NHPUC order allowed the Company an overall rate of return of 12.49% based on a 15.9% return on common equity and an attrition allowance. The order also allowed an increased depreciation rate for distribution plant (from 3% to 3.98%), adopted full normalization of the tax effects of all timing differences with respect to property placed in service after 1970, allowed a secondary rate increase of approximately \$3,500,000 on an annual basis, which became effective as of January 1, 1981, for the 7.9% wage increase negotiated as of June 1, 1980, and authorized a secondary rate increase which will become effective April 16, 1981, based on any increased property tax expenses between March 31, 1980 and March 31, 1981.

In the fall of 1980 the NHPUC indicated that it believed that the June 9 order provided the Company with an opportunity to earn a reasonable rate of return over a reasonable time period and that requests by the Company for rate increases during such a period would receive a negative response. However, due to record high interest rates and rapidly increasing expenses arising from continuing high levels of inflation, the Company believes that its present level of rates will not provide the earnings necessary to ensure the interest coverages which will enable it to issue sufficient General and Refunding Mortgage Bonds. Consequently, on January 14, 1981, the Company requested the NHPUC to grant an emergency surcharge promptly; however, on February 27, 1980, the NHPUC denied the Company's request. The Company's response to this denial is discussed in Item 7, "Management's Discussion and Analysis of Financial Condition and Results of Operations".

On April 10, 1980 by supplemental order issued in the 1979 retail rate proceeding described above, the NHPUC ordered the Company to refund to its customers approximately \$11,300,000, this refund to be credited on bills rendered on or after June 1, 1980 and to be spread over a 36-month period. The NHPUC's April 10 and June 9 orders must be considered together and the effect of the April 10 refund order is to reduce during the period of the refund commencing June 1, 1980 the increase granted by the June 9 order to approximately \$14,600,000 on an annualized basis, based on a test year ended May 31, 1979. The April 10 order also provides that after receipt of regulatory approvals for the reduction of the Company's ownership interest in the Seabrook project, which is the principal condition to commencement of the Adjustment Periods (see "Construction Program" under Item 1 above), the period for the refund will be cut in half and the rate of refund doubled. The NHPUC based its order for a refund on its finding that during the period from May 7, 1979 (the effective date of legislation which prohibited the inclusion of construction work in progress ("CWIP") in rate base as described below) to December 28, 1979 (the date of the NHPUC's emergency rate order issued in connection with the Company's 1979 retail rate proceeding), the Company's rates were based in part on CWIP and, in addition, that the Company was accruing AFUDC on CWIP previously included in rate base. For the accounting treatment of the supplemental order of April 10 and the order issued June 9, 1980, see Note 2 of Notes to Financial Statements under Item 8. The Company's motion for reconsideration of the NHPUC's April 10 order has been appealed by the Company and two intervenors to the New Hampshire Supreme Court.

The June 9, 1980 order of the NHPUC culminated a series of orders and proceedings affecting the level of the Company's New Hampshire retail rates which had commenced with the passage in 1979 of a New Hampshire statute prohibiting the inclusion of expenditures for CWIP in rate base, granted to the Company at its request by the NHPUC in 1978. After passage of the statute, the NHPUC excluded CWIP from the Company's rate base as of May 7, 1979. At the same time, the NHPUC allowed the Company's existing rates to remain in effect, determining that rates could not be changed without an investigation to establish new rates which would provide a just and reasonable rate of return for the Company.



The NHPUC's order of June 9, 1980 reserved final decision as to the proper allocation of the Company's revenue requirement among and within classes of the Company's retail customers for Phase II of that rate case, which is to address those matters. See "National Energy Policy" under Item 1 above.

In an order issued in March, 1980 in the same proceeding, the NHPUC permitted the Company to implement on April 1, 1980 a new fuel adjustment clause designed to collect on a current basis all fossil fuel costs above base cost, including the energy portion of the cost of purchased power; hearing and prior approval by the NHPUC is required with respect to each month's fuel adjustment rate. The Company previously had a fuel adjustment clause designed to recover such costs after a two months' lag. As a result of the change in its fuel adjustment clause, the Company will collect through an adjustment to its new fuel adjustment clause the asset carried on its balance sheet in respect of the unbilled fuel cost above base which would otherwise not be collected. This asset amounting to \$18,700,000 at March 31, 1980 is being collected over a three-year period commencing June 1, 1980.

In January, 1975, the NHPUC ordered an investigation into the rate structures of the electric utilities under its jurisdiction. Hearings began in July, 1975 and continued from time to time through 1978. While that investigation has not been officially terminated, the proceeding has involved only the proper distribution of rates among the various customers and customer classes and not overall revenue requirements. Pursuant to an interim order of the NHPUC issued in January, 1977, the Company performed peak-load pricing rate experiments involving certain of its customers and reported the results to the NHPUC. Legislation was enacted in 1978 requiring the Company to offer time of day and seasonal rates on an optional basis, and such rates have been made available to its residential customers and have been submitted for its other customers.

#### ***Rate Proceedings — Other***

On April 28, 1978, the Company filed new rates with FERC proposed by the Company to be effective on May 29, 1978 that would increase revenue from the Company's wholesale-for-resale customers by approximately \$2,400,000 or 7.7% on an annual basis based on a 1978 test year; the new rates went into effect subject to refund on July 29, 1978. A settlement agreement regarding these new rates and several other matters pending before FERC has been approved and is described below. The Company has also filed with FERC a petition requesting the inclusion of CWIP in rate base. After trial of the CWIP issue, the Administrative Law Judge issued an initial decision on January 25, 1979, which authorized the Company to include in rate base CWIP associated with major generating facilities and which allowed the Company a return on common equity of 13%. That decision has been appealed to FERC. The Company cannot place wholesale rates based on CWIP into effect unless and until FERC issues a final favorable decision on the CWIP issue.

In another proceeding before FERC, the Company's right to collect through a surcharge approximately \$1,850,000 of accrued but unbilled fuel clause revenue was contested by certain wholesale-for-resale customers, and FERC ruled against the surcharge and ordered the Company to refund approximately \$1,622,000 with interest, the balance not having been billed. The Company amortized the after-tax cost of this refund over the twelve-month period ended December 31, 1980.

On December 21, 1979, the Company filed with FERC new rates for its wholesale-for-resale customers that would increase revenues from such customers by approximately \$4,294,000, or 10.1%, on an annual basis. The Company proposed that the new rates be made effective in two steps parallel to the two increases the Company was permitted to make in its retail rates in New Hampshire. The Company requested that the first step emergency increase of approximately \$3,567,000, or 8.4%, be allowed to become effective on January 22, 1980, after a one-day suspension. The Company requested a second step additional rate increase of approximately \$727,000 to be allowed to become effective on April 1, 1980, after a short suspension. On February 8, 1980, FERC issued its order permitting each of the two increases to become effective as proposed, subject to-refund.

On January 22, 1980, the Company and its wholesale-for-resale customers filed with FERC an agreement which settled several aspects of the pending FERC proceedings described above. With



respect to the rates being billed subject to refund before January 22, 1980, it was agreed that those rates would be reduced by \$450,000 on an annual basis and that refunds retroactive to July 29, 1978, based on the agreed rate level, would be made; the Company amortized the after-tax cost of the refund over 1980. Pursuant to the agreement, which was approved by FERC, the refund required by the rate settlement was deferred and is being made over a six-month period ending June 30, 1981. In addition, the wholesale-for-resale customers agreed not to oppose the Company's request for prompt effectiveness of the two-step increase described above.

On July 31, 1980, the Maine Public Utilities Commission granted the Company a retail rate increase of approximately \$635,000 or 17% on an annual basis with respect to its Maine customers. The Company and Central Maine Power Company have agreed in principle on the purchase of the Company's retail properties and business in Maine, subject to preparation of appropriate documentation and receipt of regulatory approvals. In 1979 the Company obtained from its Maine customers approximately 1.4% of its operating revenues.

Rates essentially identical to those in effect in New Hampshire prior to December 3, 1977 were placed in effect in Vermont on May 1, 1975. On March 13, 1981, the Company submitted a letter of notification to the Vermont Public Service Board regarding submission of a request for an annual increase in retail rates of approximately \$350,000. The Company and Green Mountain Power Corporation have agreed upon the sale of the Company's retail business and properties in Vermont for approximately \$727,000 (the price to be adjusted to reflect changes occurring after fiscal 1978), subject to the receipt of necessary regulatory approvals. Revenues from the Company's Vermont business in 1979 amounted to approximately \$740,000, or about 0.25% of the Company's operating revenues.

#### ***Nuclear Regulatory Commission Construction Permits***

See "Seabrook Nuclear Project" under Item 1 above for a discussion of administrative and legal proceedings concerning the Seabrook nuclear project.

#### ***Conversion of Generating Units From Oil to Coal***

See "Conversion from Oil to Coal" under Item 1 above for a description of proceedings relating to this subject.

### **Item 4. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT**

Information in response to this item as to the beneficial ownership shares of the Company's Common Stock, \$5 par value, by all directors and nominees and by all directors and officers of the Company as a group is set forth on pages 3-5 and 9 of the Company's definitive proxy statement, dated April 6, 1981, used in connection with the Annual Meeting of Stockholders to be held May 14, 1981. Such information is hereby incorporated herein and specifically made a part hereof by reference.

### **Item 5. MARKET FOR THE COMPANY'S COMMON STOCK AND RELATED SECURITY HOLDER MATTERS**

The Company's Common Stock is traded on the New York Stock Exchange, where the high and low sales prices during 1980 and 1979 were as follows:

	<u>High</u>	<u>Low</u>		<u>High</u>	<u>Low</u>
1980			1979		
First Quarter	17	13	First Quarter	21 $\frac{1}{8}$	19 $\frac{1}{2}$
Second Quarter	17 $\frac{1}{4}$	13 $\frac{3}{4}$	Second Quarter	19 $\frac{7}{8}$	17 $\frac{1}{8}$
Third Quarter	17 $\frac{5}{8}$	14 $\frac{7}{8}$	Third Quarter	19 $\frac{5}{8}$	17 $\frac{1}{4}$
Fourth Quarter	16 $\frac{7}{8}$	13 $\frac{3}{4}$	Fourth Quarter	18 $\frac{1}{2}$	15

The Company has paid regular quarterly dividends on its Common Stock since 1946 when its Common Stock first became publicly held. Quarterly dividends of 53¢ per share were paid during 1980 and 1979.

Subject to the prior rights of shares of the Preferred Stock, \$100 par value, and the Preferred Stock, \$25 par value, to dividends and to the limitations set forth in the next succeeding paragraph of this Item 5, shares of Common Stock are entitled to dividends when and as declared by the Board of Directors out of any remaining funds legally available therefor. Future dividends will be dependent on the Company's future earnings, its cash position, financial condition and other factors.

The Articles of Agreement contain certain limitations, applicable so long as any shares of the Preferred Stock are outstanding, on the Company's right to declare dividends on the Common Stock out of net income (similar limitations are contained in certain indentures supplemental to the First Mortgage, applicable so long as any bonds of Series H through V are outstanding), or in the event Common Stock Equity (as defined) is less than 25% of Total Capitalization (as defined). Pursuant to terms of the Company's General and Refunding Mortgage Indenture, dividends may not be paid on the Common Stock in excess of the Company's Net Income accumulated after January 1, 1978 less the aggregate amount of all dividends paid or declared on the Preferred Stock of the Company during such period plus \$32,000,000. At December 31, 1980, \$62,109,000 of Retained Earnings was not subject to dividend restriction.

At December 31, 1980, there were 59,158 owners of the Company's Common Stock.

#### Item 6. SELECTED FINANCIAL DATA

	1980	1979	1978	1977	1976
	(Thousands except Per Share Amounts and Ratios)				
Operating Revenues	\$ 351,247	\$ 292,814	\$260,751	\$214,787	\$196,674
Fuel and Purchased Power Expense	187,248	147,502	115,418	108,310	91,349
Net Income	59,847	40,719	36,507	21,722	20,995
Earnings Per Share of Common Stock	2.77	2.56	3.25	2.16	2.53
Dividends Per Share of Common Stock	2.12	2.12	1.94	1.88	1.86
Unfinished Construction	724,150	518,880	346,382	196,825	103,484
Total Assets	1,254,228	1,010,787	812,101	640,207	540,341
Long-Term Debt	398,856	344,829	287,252	233,110	217,298
Preferred Stock With Mandatory Redemption Requirements	120,000	60,000	30,000	30,000	12,000
Total Capitalization	957,604	770,103	599,121	508,542	447,252
Notes Payable — Banks	108,350	114,100	85,325	55,113	—
Shares of Common Stock Outstanding (Average)	16,539	12,643	9,275	7,680	6,372
Ratio of Earnings to Fixed Charges	2.32	2.29	2.87	2.38	2.61

#### Item 7. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

##### *Construction Program and Financing Requirements*

The magnitude of the Company's construction program has continued to cause the Company some difficulty in obtaining external financing and in maintaining cash flow adequate to fund this program and the costs of its current business operations. The major portion of the Company's construction program has been its 50% ownership interest in the 2300 MW nuclear generating plant in

Seabrook, New Hampshire. As described in Note 10 of Notes to Financial Statements, the Company has commitments from other utilities, subject to certain conditions, which will reduce its interest to about 35%.

In March, 1980, in view of the unsettled state of the capital markets and the very high cost of external funds, the Company decided to reduce substantially the level of construction on the Seabrook plant. It is anticipated that this reduction will continue until all regulatory approvals necessary for the reduction of the Company's ownership interest have been obtained and the Adjustment Periods with respect thereto have fully commenced.

The Company's reduced 1981-1986 construction program is estimated at \$803,600,000 excluding allowance for funds used during construction of approximately \$409,100,000. Financing of this construction program, and the refinancing at maturity of certain long-term debt and the meeting of required sinking fund payments together aggregating \$156,545,000 during this period represent a major undertaking for the Company. The ability of the Company to complete this program is dependent upon receipt of adequate and timely rate increases throughout the period. If it receives such rate increases the Company estimates that approximately \$435,000,000 will be provided by operations (principally after 1983) after deducting total estimated preferred and common stock dividend requirements. Of this amount, approximately \$143,000,000 represents allowance for borrowed funds used during construction. The Company expects to finance the balance of its requirements of approximately \$760,000,000 from external sources.

In order to provide the Company with sufficient earnings for the issuance of General and Refunding Mortgage Bonds needed during 1981, on January 14, 1981, the Company filed a request with the New Hampshire Public Utilities Commission (NHPUC) for an emergency surcharge designed to increase annual revenues by approximately \$35,500,000 (about 10.2%). On February 27, 1981, the NHPUC denied the Company's request since in its opinion the Company's request did not reflect the favorable impact on the Company's financial situation resulting from the February, 1981 approval of Massachusetts Municipal Wholesale Electric Company's increased participation in the Seabrook project. In its order, the NHPUC also asserted that the Company had not provided sufficient information or not taken necessary steps to reduce controllable expenses. The Company has filed a motion for rehearing of the NHPUC's order, which motion was denied on March 26, 1981, and has instituted the following measures — a hiring freeze; a salary freeze for all senior executives; a deferral of \$8,000,000 in non-Seabrook related construction projects; a deferral of \$2,500,000 in maintenance projects; the elimination, subject to union negotiations, of the employee electric rate discount; and strict limits on business travel and other business expenses. Management believes that the steps outlined above are not in the best interests of maintaining reliable service to customers. Further periodic rate increases are essential to permit the financing of the Company's construction program.

The Company's permanent financing requirements for the balance of 1981 are estimated to be approximately \$107,000,000 assuming that approximately \$118,000,000 of short-term bank borrowings are outstanding at the end of the year. These financing requirements give effect to the austerity measures outlined above and the receipt of the proceeds of approximately \$31,500,000 from the sale of 2,200,000 additional shares of common stock in February, 1981, and are based on the following assumptions: (1) all Adjustment Periods for the reduction in the Company's interest in the Seabrook project to about 35% commence by May 1, 1981, (2) the Company takes steps in April 1981 toward resumption of a normal level of construction on the Seabrook plant, and (3) a rate increase of approximately \$35,000,000 on an annual basis is made effective during the second quarter. A rate increase is required to allow the Company to earn an adequate rate of return and to produce additional earnings necessary for the issuance of additional General and Refunding Mortgage Bonds in the fourth quarter of 1981. The Company will file for rate relief in early April and ask for accelerated treatment by the NHPUC.

The Company's 1981 financing requirements are expected to be met by the issue of additional shares of Common Stock, bank or similar debt and, in the fourth quarter, by General and Refunding Mortgage Bonds. The size and timing of these issues will depend on market factors, timing of commencement of the needed rate increase, the status of the reduction of the Company's ownership interest in the Seabrook project to about 35%, and other factors. The Company's financing plans for the 1982-1986 period are expected to include, subject to change as circumstances warrant, additional shares of common and preferred stock, long-term debt, and nuclear and fossil fuel financing.

### ***Results of Operations***

Net operating revenues (operating revenues less fossil fuel costs which are recovered under fuel adjustment clause provisions of the Company's tariffs) increased by 10.6% and 2.6%, respectively for 1980 and 1979 as compared with the respective preceding years. Substantially all of the increase in 1980 resulted from rate increases to retail and wholesale customers. KWH sales increased by approximately 4.1% in 1979 which accounted for substantially all of the increase in 1979 net operating revenues.

The electric needs of the Company's customers have increased at a compound annual rate of growth of approximately 4.5% during the six years ended December 31, 1980. Although KWH sales were essentially flat in 1980 as compared with 1979, management is projecting an average annual rate of interest of 12% at least through 1990. This is anticipated to be the highest increase of any major electric utility in New England furnishing estimates to the New England Power Pool.

Fuel expense and purchased and interchanged power expense increased significantly in 1980 and 1979 due principally to higher average unit costs of oil and coal. The average unit cost of oil increased by 46% and 29%, respectively for 1980 and 1979 and the average unit cost of coal increased by 5% and 6%, respectively.

Federal and state taxes on income increased in 1980 as compared with 1979 because of (1) the tax effect of higher pretax financial statement income (\$12,121,000) which was offset by an increase in the tax effects of overheads charged to construction and expensed for tax purposes (\$7,737,000), and (2) the effects of additional normalization of depreciation permitted by the NHPUC in 1980 (\$1,936,000). Income taxes decreased in 1979 as compared with 1978 primarily because of a reduction in the Federal income tax rate (\$1,124,000) and an increase in the tax effect of overheads charged to construction and expensed for tax purposes (\$3,790,000).

Allowances for equity funds and borrowed funds used during construction increased significantly in 1980 and 1979 due principally to the Company's increasing investment in the Seabrook project. The amounts also reflect the higher cost of funds (interest on debt and return on equity) and resultant increased rates used in capitalizing such allowances.

Net income has increased significantly over the three year period 1978 through 1980. Earnings per share of common stock have not kept pace, however, due to stock issues necessary to finance the Company's construction program which have increased preferred dividend requirements and the average number of common shares outstanding.

Inflation continues to affect every aspect of the Company's business as is evidenced in particular by the increasing costs of fuel, costs of construction and the costs of funds necessary to finance the Company's construction program. Management has computed certain data on the effects of inflation which are presented in Note 12 of Notes to Financial Statements. Such data has been prepared and presented in conformity with guidelines established by the Financial Accounting Standards Board and should be viewed as experimental and only approximations of certain effects of inflation on operations of the Company.

Item 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE

STATEMENTS OF EARNINGS

	Year Ended December 31,		
	1980	1979	1978
	(Thousands of Dollars)		
Operating Revenues (Note 2)	\$351,247	\$292,814	\$260,751
Operating Expenses			
Operation			
Fuel	137,969	111,411	71,996
Purchased and Interchanged Power	49,279	36,091	43,422
Other	39,695	36,409	31,490
Maintenance	21,395	19,271	17,502
Depreciation	17,425	15,487	14,752
Federal and State Taxes on Income (Note 3)	22,472	15,066	19,666
Other Taxes, Principally Property Taxes	15,705	14,651	13,585
Total Operating Expenses	303,940	248,386	212,413
Operating Income	47,307	44,428	48,338
Other Income and Deductions			
Allowance for Equity Funds Used During Construction (Note 4)	34,487	15,188	7,828
Equity in Earnings of Affiliated Companies	877	770	870
Other — Net	1,492	1,279	983
Total Other Income and Deductions	36,856	17,237	9,681
Income Before Interest Charges	84,163	61,665	58,019
Interest Charges			
Interest on Long-Term Debt	39,711	28,247	21,073
Other Interest	21,847	14,465	8,201
Allowance for Borrowed Funds Used During Construction (Note 4)	(37,242)	(21,736)	(7,762)
Net Interest Charges	24,316	20,946	21,512
Net Income	59,847	40,719	36,507
Preferred Dividend Requirements	14,022	8,380	6,391
Earnings Available for Common Stock	\$ 45,825	\$ 32,339	\$ 30,116
Average Shares of Common Stock Outstanding (Thousands)	16,539	12,643	9,275
Earnings Per Share of Common Stock	\$2.77	\$2.56	\$3.25
Dividends Per Share of Common Stock	\$2.12	\$2.12	\$1.94
Ratio of Earnings to Fixed Charges	2.32	2.29	2.87

See accompanying Notes to Financial Statements.



**PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE**

**BALANCE SHEETS**

	ASSETS	
	December 31, 1980	December 31, 1979
	(Thousands of Dollars)	
Utility Plant, at Original Cost		
Electric Plant	\$ 548,401	\$ 524,415
Less Accumulated Provision for Depreciation	161,703	147,398
	386,698	377,017
Unfinished Construction (Principally Nuclear Generating Projects) (Note 10)	724,150	518,880
Net Utility Plant	1,110,848	895,897
Investments		
Nuclear Generating Companies	9,651	9,627
Real Estate Subsidiary	4,944	3,506
Other, at Cost	184	184
Total Investments	14,779	13,317
Current Assets		
Cash	3,729	2,137
Accounts Receivable	42,385	28,097
Unbilled Revenue	10,160	8,202
Deferred Collection of Fuel Costs	16,373	13,775
Refundable Federal Income Tax	—	5,197
Fuel, Materials and Supplies, at Cost	37,122	32,002
Prepayments	2,867	3,576
Total Current Assets	112,636	92,986
Other Assets		
Deferred Collection of Fuel Costs	9,776	—
Other	6,189	8,587
Total Other Assets	15,965	8,587
	<u>\$1,254,228</u>	<u>\$1,010,787</u>

See accompanying Notes to Financial Statements.

PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE

BALANCE SHEETS

CAPITALIZATION AND LIABILITIES

	December 31, 1980	December 31, 1979
	(Thousands of Dollars)	
Capitalization		
Common Stock Equity		
Common Stock — \$5 Par Value		
Authorized: 27,000,000 Shares		
Outstanding: 18,203,922 Shares (1979 - 13,969,133)	\$ 91,020	\$ 69,846
Other Paid-In Capital	207,578	166,265
Retained Earnings (Note 5)	88,834	76,649
Total Common Stock Equity	387,432	312,760
Preferred Stock (Note 6)		
With Mandatory Redemption Requirements	120,000	60,000
Without Mandatory Redemption Requirements	51,316	52,514
Long-Term Debt — Net (Note 7)	398,856	344,829
Total Capitalization	957,604	770,103
Current Liabilities		
Notes Payable — Banks (Note 8)	108,350	114,100
Long-Term Debt to be Retired Within One Year (Note 7)	24,467	555
Accounts Payable	61,847	50,244
Accrued Taxes	6,181	3,093
Accrued Interest	15,302	11,249
Other	2,759	1,788
Total Current Liabilities	218,906	181,029
Deferred Credits		
Accumulated Deferred Investment Tax Credits	23,761	29,717
Accumulated Deferred Taxes on Income	53,380	29,482
Other	577	456
Total Deferred Credits	77,718	59,655
Commitments and Contingencies (Note 10)		
	<u>\$1,254,228</u>	<u>\$1,010,787</u>

See accompanying Notes to Financial Statements.

**PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE**

**STATEMENTS OF CHANGES IN FINANCIAL POSITION**

	Year Ended December 31,		
	1980	1979	1978
	(Thousands of Dollars)		
Source of Funds			
From Operations			
Net Income	\$ 59,847	\$ 40,719	\$ 36,507
Principal Non-Cash Charges (Credits) to Income			
Depreciation	17,425	15,487	14,752
Allowance for Equity Funds Used During Construction	(34,487)	(15,188)	(7,828)
Deferred Taxes and Investment Credit Adjustments	17,941	24,996	7,024
Total from Operations	60,726	66,014	50,455
From Outside Sources			
Sale of Long-Term Debt	81,000	60,000	60,000
Sale of Preferred Stock	60,000	30,000	—
Sale of Common Stock	64,615	79,716	24,309
Change in Short-Term Borrowings	(5,750)	28,775	30,212
Advance Payments from Joint Project Participants	—	10,628	—
Total from Outside Sources	199,865	209,119	114,521
Decrease in Working Capital	30,010	—	33,510
Total	\$290,601	\$275,133	\$198,486
Application of Funds			
Property Additions	\$232,853	\$192,566	\$173,539
Allowance for Equity Funds Used During Construction	(34,487)	(15,188)	(7,828)
Dividends	47,662	35,210	24,092
Reduction of Long-Term Debt	26,153	1,214	5,947
Repayment of Advances from Joint Project Participants	6,033	—	—
Increase in Working Capital	—	58,064	—
Deferred Collection of Fuel Costs	9,776	—	—
Other Applications—Net	2,611	3,267	2,736
Total	\$290,601	\$275,133	\$198,486
Increase (Decrease) in Working Capital*			
Cash	\$ 1,592	\$ 258	\$ (3,050)
Receivables	14,288	509	5,596
Inventories	5,120	11,259	3,707
Long-Term Debt to be Retired Within One Year	(23,912)	4,676	3,397
Accounts Payable	(17,636)	28,419	(33,125)
Accrued Taxes	(3,088)	9,256	(11,470)
Other	(6,374)	3,687	1,435
Total Increase (Decrease) In Working Capital*	\$(30,010)	\$ 58,064	\$(33,510)

\*Other than Short-Term Debt and Advances from Participants.

See accompanying Notes to Financial Statements.

# PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE

## STATEMENTS OF RETAINED EARNINGS

	Year Ended December 31,		
	1980	1979	1978
	(Thousands of Dollars)		
Balance at Beginning of Year	\$ 76,649	\$ 71,140	\$58,725
Net Income	59,847	40,719	36,507
	<u>136,496</u>	<u>111,859</u>	<u>95,232</u>
Deduct			
Dividends Declared			
Preferred Stock, at Required Annual Rates	12,822	7,966	6,394
Common Stock	34,840	27,244	17,698
Total Dividends	<u>47,662</u>	<u>35,210</u>	<u>24,092</u>
Balance at End of Year (Note 5)	<u>\$ 88,834</u>	<u>\$ 76,649</u>	<u>\$71,140</u>

## STATEMENTS OF OTHER PAID-IN CAPITAL

	Year Ended December 31,		
	1980	1979	1978
	(Thousands of Dollars)		
Balance at Beginning of Year	\$166,265	\$108,232	\$ 90,409
Excess of Proceeds over the Par Value on the Issuance of Common Stock			
Issued — 4,234,789 Shares in 1980, 4,182,164 Shares in 1979 and 1,342,455 Shares in 1978	44,264	59,468	17,868
Preferred Stock Issuance Expenses	(2,951)	(1,435)	(45)
Balance at End of Year	<u>\$207,578</u>	<u>\$166,265</u>	<u>\$108,232</u>

See accompanying Notes to Financial Statements.

## PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE

### NOTES TO FINANCIAL STATEMENTS

#### 1. SUMMARY OF ACCOUNTING POLICIES

*Regulation and Operations:* The Company is subject, as to rates, accounting and other matters, to the regulatory authority of the New Hampshire Public Utilities Commission (NHPUC), the Federal Energy Regulatory Commission (FERC) and, to a lesser extent, the public utilities commissions in other New England states where the Company does business.

*Investments:* The Company follows the equity method of accounting for its investments in nuclear generating companies and in its wholly-owned real estate subsidiary. The Company's investment in this subsidiary is principally in the form of advances. The Company's ownership interests in nuclear generating companies are:

<u>Company</u>	<u>Ownership Percent</u>
Yankee Atomic Electric Company	7%
Connecticut Yankee Atomic Power Company	5%
Maine Yankee Atomic Power Company	5%
Vermont Yankee Nuclear Power Corporation	4%

In the case of each of the nuclear generating companies, pursuant to provisions of purchased power contracts which are regulated by the FERC, the Company is entitled to its ownership percent of total plant output and is obligated to pay a similar share of each company's operating expenses and return on invested capital. Approximately 7.4%, 9.3% and 10.9% of the Company's total energy requirements were furnished by these companies in 1980, 1979 and 1978, respectively.

*Utility Plant:* Provision for depreciation of utility plant is computed on a straight line method at rates based on estimated service lives and salvage values of the several classes of property. The depreciation provisions were equivalent to overall effective rates of 3.48%, 3.23% and 3.19% of depreciable property for 1980, 1979 and 1978, respectively.

Maintenance and repairs of property are charged to maintenance expense. Replacements and betterments are charged to utility plant. At the time properties are retired, the cost of property retired plus costs of removal less salvage are charged to the accumulated provision for depreciation.

*Deferred Collection of Fuel Costs:* The Company implemented a new retail fuel adjustment clause on April 1, 1980, which was designed to eliminate the lag between the time increased fuel costs are incurred by the Company and the time such costs are billable to customers. Under the new clause, estimated changes in fossil fuel costs are billed to customers on a monthly basis at a rate which is determined quarterly. Differences, if any, between estimated and actual costs are recognized in determining fuel adjustment clause billing rates for the second subsequent quarter; accordingly, such differences are deferred and amortized to expense as collected from customers.

At April 1, 1980, the unbilled fuel costs under the Company's old fuel adjustment clause were approximately \$18,700,000 which the NHPUC is permitting the Company to collect over a three-year period ending May 31, 1983.

*Operating Revenues:* Revenues are based on billing rates authorized by applicable federal and state regulatory commissions which are applied to customers' consumption of electricity. The Company records estimated unbilled revenue at the end of accounting periods.

*Income Taxes:* The tax effect of differences between pretax income in the financial statements and income subject to tax, which are the result of timing differences, are accounted for as prescribed by and in accordance with the ratemaking policies of the NHPUC. Accordingly, provisions for deferred income taxes are recognized only for specified timing differences. Tax reductions attributable



## PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE

### NOTES TO FINANCIAL STATEMENTS — (Continued)

#### 1. SUMMARY OF ACCOUNTING POLICIES — (Continued)

to other timing differences are flowed through to net income as reductions of income tax expense. See Notes 2 and 3.

Investment tax credits earned are deferred and amortized to income over the lives of the related properties.

*Allowance for Funds Used During Construction:* Allowance for funds used during construction is the estimated cost, during the period of construction, of equity funds and borrowed funds used for construction purposes which are not currently recovered from customers through revenues. See Note 4.

*Earnings Per Share:* Earnings per share are based on the average number of common shares outstanding, after recognition of preferred dividend requirements.

*Ratio of Earnings to Fixed Charges:* Earnings represent the aggregate of net income, less undistributed income of unconsolidated companies, plus provisions for federal and state taxes on income and fixed charges. Fixed charges represent interest, related amortization and the interest component of annual rentals.

#### 2. OPERATING REVENUES

For the period December 3, 1977 through May 6, 1979 the Company's New Hampshire retail rates were based in part upon the inclusion in the Company's rate base of a portion of the costs of construction work in progress (CWIP) associated with major generating projects. The inclusion of CWIP in rate base increased revenues from customers to cover the costs of financing such CWIP. On May 7, 1979 a New Hampshire statute prohibiting the inclusion of CWIP in rate base became effective. By order dated August 29, 1979 the NHPUC excluded CWIP from the Company's rate base as of May 7, 1979, but determined that the Company's rates would remain unchanged pending an investigation to determine the Company's revenue requirements and to establish fair and reasonable rates. On August 31, 1979, the Company filed a new retail tariff with the NHPUC designed to increase revenues by about \$18,500,000 on an annual basis. This filing was suspended by the NHPUC and consolidated with its rate investigation into the elimination of CWIP from rate base.

The NHPUC granted the Company an emergency temporary surcharge effective December 28, 1979 designed to increase annual revenues by approximately \$11,970,000, and the temporary surcharge was increased to \$18,500,000 effective April 1, 1980 by order of the NHPUC. On April 10, 1980, the NHPUC issued a supplemental order in the combined proceeding requiring the Company to refund to its customers approximately \$11,300,000 based on a finding that during the period from May 7, 1979 to December 28, 1979 the Company's rates were based in part on CWIP and, in addition, that the Company was accruing AFUDC on CWIP previously included in rate base. The April 10 supplemental order requires that the refund be made over a 36-month period commencing June 1, 1980, and that when all regulatory approvals for the reduction of the Company's ownership interest in the Seabrook plant are received, the period for the refund will be cut in half and the rate of refund doubled. The Company and two intervenors have appealed the April 10 order to the New Hampshire Supreme Court. Pending disposition of this appeal, the refunds are being made to customers.

On June 9, 1980, the NHPUC issued its final decision in the combined proceeding which granted the Company an increase in its New Hampshire retail rates of approximately \$18,355,000, superseding the surcharges. The NHPUC's order is based on a test year ended May 31, 1979 and in part on an increase in the depreciation rate for distribution plant and normalization of the tax effects of all timing differences applicable to post 1970 utility plant additions. Increased provisions for depreciation and deferred income taxes have been recorded in the Company's financial statements commencing April 1, 1980.

# PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE

## NOTES TO FINANCIAL STATEMENTS — (Continued)

### 2. OPERATING REVENUES — (Continued)

The Company is accounting for the combined effect of the April 10 supplemental order and the June 9 final decision as one rate order, and therefore, the \$11,300,000 refund is being netted against the rate increase of \$18,355,000 over the period of the refund which commenced June 1, 1980. Accordingly, commencing June 1, 1980 and continuing until all regulatory approvals for the commencement of the reduction of the Company's ownership interest in the Seabrook plant are received, the net increase in annual revenues (based on a test year ended May 31, 1979) will aggregate approximately \$14,600,000.

On July 29, 1978, the Company began billing new rates to its wholesale-for-resale customers designed to increase annual revenues by approximately \$2,400,000 (about 7.7%) based on a 1978 test year. In January 1980, the Company reached an agreement in principle with these customers pursuant to which, in part, the Company's revenues would be reduced by approximately \$450,000 on an annual basis and rate refunds would be made retroactive to July 29, 1978. Pursuant to the agreement, which was approved by FERC, the refund required by the rate settlement was deferred and is being made over a six month period ending June 30, 1981. The Company recorded the after-tax cost of this refund in 1980.

On December 21, 1979, the Company filed with FERC new rates for its wholesale-for-resale customers designed to increase revenues by approximately \$4,294,000, or 10.1%, on an annual basis. A first step emergency increase of approximately \$3,567,000, or 8.4%, was allowed to become effective on January 22, 1980, and a second step additional rate increase of approximately \$727,000 became effective on April 1, 1980. As a result of these increases, operating revenues for 1980 increased approximately \$3,855,000. These increases are being collected under bond and are subject to possible refund upon a final rate decision by the FERC.

### 3. INCOME TAXES

The components of income tax expense are as follows:

	1980	1979	1978
	(Thousands of Dollars)		
Federal			
Operating Income	\$ 15	\$(13,952)	\$10,166
Other Income and Deductions	145	324	(46)
	160	(13,628)	10,120
State, Included in Operating Income	4,518	2,983	2,468
Total Current Income Taxes	4,678	(10,645)	12,588
Deferred Federal			
Operating Income	24,516	7,634	5,527
Other Income and Deductions	2	7	(8)
	24,518	7,641	5,519
Deferred State			
Operating Income	(620)	126	93
Total Deferred Income Taxes	23,898	7,767	5,612
Investment Tax Credit Adjustment	(5,957)	18,275	1,412
Total Income Tax Expense	<u>\$22,619</u>	<u>\$ 15,397</u>	<u>\$19,612</u>

Investment tax credits of approximately \$15,200,000, \$18,500,000 and \$11,400,000 were generated for 1980, 1979 and 1978, respectively. There are limitations on the amounts of such credits which can

**PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE**  
**NOTES TO FINANCIAL STATEMENTS — (Continued)**

3. INCOME TAXES — (Continued)

be used, however, and based on these limitations as of December 31, 1980 the Company has investment tax credit carry forwards available for use in subsequent years of approximately \$29,800,000, of which \$14,600,000 expires in 1986 and \$15,200,000 expires in 1987.

In accordance with the requirements of the NHPUC, provisions for deferred income taxes are recognized for the following timing differences:

	<u>1980</u>	<u>1979</u>	<u>1978</u>
	(Thousands of Dollars)		
A portion of Depreciation and Amortization of Plant Facilities*	\$ 4,203	\$ 834	\$ 858
Accrued and Unbilled Fuel Adjustment Charges	(5,957)	1,322	1,049
Deferred Fuel Costs	4,174	—	—
The Interest Component of Allowance for Funds Used During Construction	17,093	9,987	3,713
Investment Tax Credit Applied to Deferred Taxes	4,383	(4,383)	—
Other	2	7	(8)
	<u>\$23,898</u>	<u>\$ 7,767</u>	<u>\$ 5,612</u>

\*Current income tax reductions are attributable to (1) the tax depreciation permitted under the Class Life ADR System of the 1971 Revenue Act in excess of the tax depreciation permitted under the Guideline Lives provisions of the 1969 Revenue Act, (2) the amortization of certain pollution control facilities over five year periods, and (3) commencing April 1, 1980 all timing differences applicable to post 1970 utility plant additions.

The principal reasons for the differences between total income tax expense and the amount calculated by applying the Federal income tax rate to income before income tax are as follows:

	<u>1980</u>	<u>1979</u>	<u>1978</u>
	(Thousands of Dollars)		
Income Before Income Tax	\$82,466	\$ 56,116	\$56,119
Federal Statutory Rate	46%	46%	48%
Expected Tax Expense	37,934	25,813	26,937
Increase (Reductions) in Taxes Resulting from			
Overheads Charged to Construction and Expensed for Tax Purposes	(16,071)	(8,334)	(4,544)
Excess of Tax Over Book Depreciation (Note 2)	742	(1,976)	(2,265)
State Taxes Net of Federal Income Tax Benefits	2,105	1,679	1,332
Unbilled Revenues	(901)	(549)	(629)
Other Deductions, each less than 5% of Expected Tax Expense	(1,190)	(1,236)	(1,219)
Total Income Tax Expense	<u>\$22,619</u>	<u>\$ 15,397</u>	<u>\$19,612</u>

4. ALLOWANCE FOR FUNDS USED DURING CONSTRUCTION (AFUDC)

AFUDC is the estimated cost, during the period of construction, of funds invested in the construction program which is not recovered from customers through current revenues. Such allowance is not realized in cash currently but under the rate-making process the amount of the allowance will be recovered in cash over the service life of the plant in the form of increased revenue collected as a result of higher plant costs. The NHPUC, for the period December 3, 1977 through May 6, 1979, permitted the Company to include in rate base a portion of the costs of CWIP associated with major generating projects. Therefore, AFUDC for this period did not include the cost of funds invested in the construction program which were provided by revenues of the Company.

# **PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE**

## **NOTES TO FINANCIAL STATEMENTS — (Continued)**

### **4. ALLOWANCE FOR FUNDS USED DURING CONSTRUCTION (AFUDC) — (Continued)**

When CWIP is not included in rate base, the cost of funds invested in CWIP (interest on debt and return on equity) is not provided by revenues and AFUDC is added to the cost of the plant being constructed with off-setting credits in the statement of earnings. Since the credits are not cash items, cash for interest and dividends may need to be provided in whole or in part by additional financing during the construction period. As described in Note 2 above, as of May 7, 1979, the Company was precluded from basing its rates upon CWIP in the rate base. Therefore, as of May 7, 1979, consistent with the August 29, 1979 rate order, the Company began recording AFUDC for CWIP previously included in the Company's rate base, thereby increasing AFUDC by approximately \$5,500,000 for 1979.

The equity funds component of AFUDC equalled 57.6% of net income for 1980. The Company capitalized AFUDC at annual rates of 9½% for 1978, 10% for 1979 and 12% for 1980.

### **5. DIVIDEND RESTRICTION**

Pursuant to terms of the General and Refunding Mortgage Indenture, dividends may not be paid on the common stock in excess of net income accumulated after January 1, 1978 less the aggregate amount of all dividends paid or declared on the preferred stock of the Company during such period plus \$32,000,000. At December 31, 1980, retained earnings of \$62,109,000 were not subject to dividend restriction.

### **6. PREFERRED STOCK**

The Articles of Agreement authorize the Company to issue 1,350,000 shares of Preferred Stock, \$100 Par Value and 5,000,000 shares of Preferred Stock, \$25 Par Value. The dividends of all series outstanding are cumulative. Preferred Stock outstanding is as follows:

#### (a) With Mandatory Redemption Requirements

<u>Dividend</u>	<u>Par Value</u>	<u>Shares Outstanding</u>	<u>1980</u>	<u>1979</u>
<u>(Thousands of Dollars)</u>				
7.64%	\$100	120,000	\$ 12,000	\$12,000
9.00%	\$100	180,000	18,000	18,000
11.24%	\$ 25	1,200,000	30,000	30,000
17.00%	\$ 25	1,200,000	30,000	—
15.00%	\$ 25	1,200,000	30,000	—
			<u>\$120,000</u>	<u>\$60,000</u>

#### (b) Without Mandatory Redemption Requirements

<u>Dividend</u>	<u>Par Value</u>	<u>Shares Outstanding</u>	<u>1980</u>	<u>1979</u>
<u>(Thousands of Dollars)</u>				
3.35%	\$100	102,000	\$ 10,200	\$10,200
4.50%	\$100	75,000	7,500	7,500
5.50%	\$100	36,163	3,616	4,814
		(1979-48,142)		
7.92%	\$100	150,000	15,000	15,000
11.00%	\$ 25	600,000	15,000	15,000
			<u>\$ 51,316</u>	<u>\$52,514</u>

The annual Sinking Fund requirements for Preferred Stocks with mandatory redemption requirements are as follows: 1981 — None, 1982 — \$1,080,000, 1983 — \$1,080,000, 1984 — \$1,560,000 and 1985 — \$6,060,000.

**PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE**

**NOTES TO FINANCIAL STATEMENTS — (Continued)**

**7. LONG-TERM DEBT**

	<u>1980</u>	<u>1979</u>
	(Thousands of Dollars)	
First Mortgage Bonds		
Series H — 3¼%, Due 1984	\$ 10,337	\$ 10,483
Series I — 3⅞%, Due 1986	6,926	6,972
Series M — 4⅝%, Due 1992	21,786	21,952
Series N — 6⅛%, Due 1996	15,719	15,847
Series O — 6¼%, Due 1997	13,951	14,076
Series P — 7⅛%, Due 1998	14,036	14,237
Series Q — 9 %, Due 2000	18,922	19,162
Series R — 7⅝%, Due 2002	19,223	19,398
Series S — 9 %, Due 2004	19,493	19,628
Series T — 12¾%, Due 1981	24,301	24,719
Series U — 10¾%, Due 1985	14,674	14,970
Series V — 9⅛%, Due 2006	14,835	15,000
Series W — 10⅛%, Due 1993	10,000*	10,000*
Series X — 12 %, Due 1999	9,302*	9,302*
	<u>213,505</u>	<u>215,746</u>
Less — First Mortgage Bonds (*) deposited with Trustee of the General and Refunding Mortgage Indenture as additional security for General and Refunding Mortgage Bonds	<u>19,302</u>	<u>19,302</u>
Total First Mortgage Bonds	194,203	196,444
General and Refunding Mortgage Bonds		
Series A — 10⅛%, Due 1993	60,000	60,000
Series B — 12 %, Due 1999	60,000	60,000
Series C — 14½%, Due 2000	30,000	—
Series D — 17 %, Due 1990	23,000	—
Promissory Note, Due January 7, 1982, with interest at 116% of a specific bank's prime rate plus 0.25%	25,000	25,000
Eurodollar Term Loan, Due August 25, 1982, with interest at the rate of ¾% over the London interbank offered rate for three or six month Eurodollar deposits	28,000	—
Pollution Control Revenue Bonds 9%, Due December 1984	<u>5,800</u>	<u>5,800</u>
Total Long-Term Debt	<u>426,003</u>	<u>347,244</u>
Less: Long-Term Debt to be Retired Within One Year	<u>24,467</u>	<u>555</u>
Unamortized Premium and Discount	<u>2,680</u>	<u>1,860</u>
	<u>27,147</u>	<u>2,415</u>
Long-Term Debt — Net	<u><u>\$398,856</u></u>	<u><u>\$344,829</u></u>

The annual Sinking Fund requirements with respect to First Mortgage Bonds, which may be met by the payment of cash or bonds or, up to one-half of their amounts, by the certification of additional property, are as follows: 1981 — \$2,636,318, 1982 — \$2,052,984, 1983 — \$2,052,984, 1984 —



# **PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE**

## **NOTES TO FINANCIAL STATEMENTS — (Continued)**

### **7. LONG-TERM DEBT — (Continued)**

\$2,052,984, 1985 — \$1,928,846, and 1986 — \$1,678,846. Annual Sinking Fund requirements with respect to General and Refunding Mortgage Bonds during the six years through 1986 are \$5,460,000 payable in cash in 1983 through 1986.

Long-term debt maturities, excluding the aforementioned Sinking Fund requirements, are as follows: 1981 — \$24,135,000, 1982 — \$53,000,000, 1983 — None, 1984 — \$15,973,000, 1985 — \$14,250,000, and 1986 — \$6,753,000.

Under the terms of the First Mortgage Indenture and the General and Refunding Mortgage Indenture, substantially all utility property of the Company is subject to the liens thereof.

Due to certain restrictions in the Company's First Mortgage Indenture, no significant amount of First Mortgage Bonds may be issued thereunder until an operating license is obtained for Seabrook Unit #1, not anticipated before late 1982.

### **8. SHORT-TERM BORROWINGS**

The Company uses borrowings from banks as an interim method of financing construction of new facilities. At December 31, 1980, the Company had line of credit agreements with New Hampshire banks aggregating \$4,600,000 and a revolving credit agreement with other commercial banks which permits the Company to borrow up to \$130,000,000 through November 16, 1981 subject to periodic review by the banks; amounts outstanding under the agreement mature on November 17, 1981. The Company pays commitment fees on the revolving credit agreement and maintains compensating balances for certain line of credit agreements. The effective cost of borrowing under the revolving credit agreement, including fees and assuming the available credit is fully utilized, is 116% of the prime interest rate of a specified bank.

Information regarding short-term borrowings is as follows:

	<u>1980</u>	<u>1979</u>	<u>1978</u>
	(Thousands of Dollars)		
Maximum Short-Term Borrowings	\$134,350	\$114,100	\$88,113
Average Amount Outstanding (Based on Month-End Balances)	106,038	87,056	66,911
Average Interest Rate			
At Year End	23.17%	16.43%	12.64%
During the Year	18.13%	15.15%	11.36%

On February 11, 1981 the Company sold 2,200,000 shares of common stock. Proceeds of \$31,504,000 were used to reduce short-term bank borrowings.

### **9. PENSION PLAN**

The Company has a non-contributory pension plan covering full-time employees who have met a minimum service requirement. The Company's policy is to fund current pension costs accrued. Costs were \$3,450,000, \$2,800,000 and \$2,400,000 in 1980, 1979 and 1978, respectively, and include amortization of past service costs over 25 years. Based upon the most recent actuarial report as of January 1, 1980, the actuarial present value of accumulated plan benefits aggregating \$34,296,000 (\$32,498,000 vested and \$1,798,000 non-vested) exceeded the net asset available for benefits of \$27,439,000 by \$6,857,000. The assumed rate of return used in determining the actuarial present value of accumulated plan benefits was 5.0%.

# PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE

## NOTES TO FINANCIAL STATEMENTS — (Continued)

### 10. COMMITMENTS AND CONTINGENCIES

The Company's ownership interests and its share of total expenditures included in Unfinished Construction for the jointly-owned nuclear facilities in which it is participating are as follows:

	Ownership Percent	1980 (Thousands of Dollars)	1979 (Thousands of Dollars)
Seabrook #1 and #2	50.0000%	\$663,500	\$470,300
Pilgrim #2	3.4700	14,400	11,900
Millstone #3	3.8910	35,600	27,000
		<u>\$713,500</u>	<u>\$509,200</u>

The Company has for some time been experiencing difficulties in obtaining external financing for its construction program and in maintaining cash flow adequate to fund this program and the costs of current business operations. In March 1979, in anticipation of legislation adopted in New Hampshire eliminating CWIP from rate base (see Note 2) and the resultant difficulty of financing a 50% interest in the Seabrook plant, the Company decided to sell all of its Pilgrim #2 and Millstone #3 ownership interests and to reduce its ownership interest in the Seabrook plant by offering 22% to other New England utilities. As a result of its offer, the Company has commitments from other utilities to acquire ownership interests of 14.76503% in the Seabrook plant and has contracted (subject to receipt of necessary regulatory approvals) for the sale of approximately two-thirds of its interest in Millstone #3. The Company has received expressions of interest from other utilities for the balance of its interest in Millstone #3. No expressions of interest have been received by the Company with respect to its offer of its interest in Pilgrim #2.

Each utility acquiring an ownership interest in the Seabrook plant will acquire its interest gradually over an Adjustment Period. During the Adjustment Period, the accepting utilities will share pro rata the costs otherwise attributable to the Company's ownership interest until their aggregate investment in the Seabrook plant has been increased by approximately 15% and the Company's investment decreased to approximately 35% of the total investment of all participants.

In March 1980, in view of the unsettled state of the capital markets and the very high cost of external funds, the Company decided to reduce the level of construction at the Seabrook plant until the capital markets stabilized and the regulatory approvals for increased ownership interests in the plant (the principal condition necessary for the start of the Adjustment Period) were obtained. Most approvals have now been obtained. As a result, the Adjustment Period for utilities acquiring an ownership interest of 6.25576% commenced on January 31, 1981 and the Adjustment Period for the Massachusetts Municipal Wholesale Electric Company (MMWEC) which is acquiring an additional ownership interest of 6.00091% commenced on February 28, 1981. However, until MMWEC has completed its initial financing, the Company has agreed to assume the portion of the Seabrook plant costs applicable to MMWEC's additional ownership interest. These costs will be reimbursed, with interest, to the Company by MMWEC upon completion of its initial financing. If MMWEC is unable to complete its financing by June 30, 1981, MMWEC's Adjustment Period will not commence until the first business day after consummation of MMWEC's initial financing. Approvals are still pending regarding the remaining 2.50836% ownership interest committed for by other utilities.

The Company's construction program expenditures (excluding AFUDC) are estimated to be approximately \$57,100,000 for 1981 and \$746,500,000 for 1982 through 1986 assuming (1) the Company's ownership interest in Seabrook is reduced to approximately 35% with all Adjustment Periods

# PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE

## NOTES TO FINANCIAL STATEMENTS — (Continued)

### 10. COMMITMENTS AND CONTINGENCIES — (Continued)

commencing by May 1, 1981, (2) its interest in Millstone #3 is sold in 1982 and (3) the reduced level of Seabrook construction continues through March, 1981. There can be no assurance that the remaining approvals and financing required by other utilities which are necessary for the proposed reduction in the Company's interest in the Seabrook project to about 35% will be obtained and the Company's ability to obtain necessary financing may be adversely affected if other utilities acquire significantly less than 15% of the Seabrook plant.

See "Management's Discussion and Analysis of Financial Condition and Results of Operations — Construction Program and Financing Requirements" for a discussion of the NHPUC denial of the Company's request for emergency rate relief in February, 1981; Company actions to conserve cash in light of the NHPUC order; 1981 external financing requirements, and the necessity of increased rates to permit the issuance of bonds. At December 31, 1980, based on earnings and capitalization tests of various agreements and indentures the Company could have issued approximately \$86,700,000 of preferred stock (dividend rate of 14.5% assumed), approximately \$76,300,000 of additional short-term unsecured indebtedness and approximately \$28,850,000 of General and Refunding Mortgage Bonds (interest rate of 14.5% assumed).

Construction of the Seabrook project has required numerous approvals and permits from various state and Federal regulatory agencies. The process of obtaining these approvals and permits has been long and complex, has been consistently opposed by a number of intervening groups, has included demonstrations at the Seabrook site and has been plagued by lengthy delays which have resulted in greatly increased costs. One court appeal from Federal regulatory approvals is pending and further appeals are possible. The Company is unable to predict what effect financing problems or further administrative or court decisions relating to Nuclear Regulatory Commission or Environmental Protection Agency actions may have on the Company's ability to complete the Seabrook project or on the ultimate cost thereof.

### 11. UNAUDITED QUARTERLY INFORMATION

The following quarterly information is unaudited, and, in the opinion of management, is a fair summary of results of operations for such periods. The fourth quarter of 1979 includes a rate refund of approximately \$1,000,000 which reduced earnings per share of common stock by \$0.04. Other variations between quarters reflect the seasonal nature of the Company's business and the effect of rate increases in 1980.

	Three Months Ended							
	December 31,		September 30,		June 30,		March 31,	
	1980	1979	1980	1979	1980	1979	1980	1979
	(Thousands except Per Share Amounts)							
Operating Revenues	\$94,542	\$73,957	\$77,980	\$72,919	\$75,527	\$65,866	\$103,198	\$80,072
Operating Income	11,598	10,077	9,114	10,291	10,382	9,302	16,213	14,758
Net Income	15,128	9,118	14,974	11,049	12,546	8,335	17,199	12,217
Preferred Dividend Requirements	4,469	2,422	3,686	2,420	3,449	1,952	2,418	1,586
Earnings Available for Common Stock	10,659	6,696	11,288	8,629	9,097	6,383	14,781	10,631
Average Shares of								
Common Stock Outstanding	18,173	13,931	17,701	13,460	15,562	11,823	14,690	11,319
Earnings Per Share of Common Stock	\$ 0.59	\$ 0.48	\$ 0.64	\$ 0.64	\$ 0.59	\$ 0.54	\$ 1.01	\$ 0.94

# PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE

## NOTES TO FINANCIAL STATEMENTS — (Continued)

### 12. UNAUDITED INFORMATION ON THE EFFECTS OF CHANGING PRICES

The following statement of earnings adjusted for changing prices for the year ended December 31, 1980 should be viewed as an estimate of the effects of changing prices on the operations of the Company:

	Conventional Historical Cost	Constant Dollar Average 1980 Dollars	Current Cost Average 1980 Dollars
	(Thousands of Dollars)		
Operating revenues	\$351,247	\$351,247	\$351,247
Operation and maintenance expense	248,338	248,338	248,338
Depreciation expense	17,425	36,308	41,821
Federal and state taxes on income	22,472	22,472	22,472
Other taxes	15,705	15,705	15,705
Interest expense — net	24,316	24,316	24,316
Other income and deductions — net	(36,856)	(36,856)	(36,856)
	<u>291,400</u>	<u>310,283</u>	<u>315,796</u>
Income from continuing operations (excluding reduction to net recoverable cost)	<u>\$ 59,847</u>	<u>\$ 40,964*</u>	<u>\$ 35,451*</u>
Reduction to net recoverable cost		\$(96,843)	\$(91,330)
Gain from decline in purchasing power of net amounts owed		<u>71,627</u>	<u>71,627</u>
Net		<u>\$(25,216)</u>	<u>\$(19,703)</u>
Effect of increase in general price level			\$186,703
Increase in specific prices (current cost) of property, plant, and equipment held during the year			<u>106,497</u>
Excess of increase in general price level over increase in specific prices			<u>\$ 80,206</u>

\*Including the reduction to net recoverable cost, the income (loss) from continuing operations on a constant dollar and a current cost basis would have been \$(55,879).

Constant dollar amounts shown represent historical cost stated in terms of dollars of equal purchasing power, as measured by the Consumer Price Index for all Urban Consumers (CPI-U). The current cost of plant was determined by indexing surviving plant by the Handy-Whitman Index of Public Utility Construction Costs.

Since the utility plant is not expected to be replaced precisely in kind, current cost does not necessarily represent the replacement cost of the Company's productive capacity. The current year's provisions for depreciation on the constant dollar and current cost amounts of utility plant were determined by applying the Company's depreciation rates to the indexed plant amounts. Current cost amounts reflect the changes in specific prices of utility plant from the date acquired to the present, and differ from constant dollar amounts to the extent that the general rate of inflation has increased more rapidly than specific prices (\$80,206,000). At December 31, 1980, current cost of property,

## PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE

### NOTES TO FINANCIAL STATEMENTS — (Continued)

#### 12. UNAUDITED INFORMATION ON THE EFFECTS OF CHANGING PRICES — (Continued)

plant and equipment, net of accumulated depreciation, was \$1,761,285,000 while historical net cost was \$1,110,848,000.

Fuel inventories, the cost of fuel used in generation, and the energy component of purchased power costs have not been restated from their historical cost in nominal dollars. Regulation limits the recovery of fuel and purchased power costs through the operation of adjustment clauses to actual cost incurred during the period. For this reason fuel inventories are effectively monetary assets.

Income taxes have not been adjusted. Only historical costs are deductible for income tax purposes so any restatement of income taxes would have little meaning.

Under the rate-making prescribed by the regulatory commissions to which the Company is subject, only the historical cost of utility property is included in the rate base upon which the Company is allowed to earn a fair return. Therefore, the cost of plant stated in terms of constant dollars or current cost that exceeds the historical cost of plant is not presently recoverable in rates, and is reflected as a reduction to net recoverable costs. While the rate-making process gives no recognition to the current cost of replacing property, plant and equipment, based on past practices the Company believes it will be allowed to earn on the increased cost of its net investment when replacement of facilities actually occurs.

To reflect properly the economics of rate regulation in the statement of earnings adjusted for changing prices, the reduction of utility plant to net recoverable cost should be offset by the gain from the decline in purchasing power of net amounts owed. During a period of inflation, holders of monetary assets suffer a loss of general purchasing power while holders of monetary liabilities experience a gain. The gain from the decline in purchasing power of net amounts owed is primarily attributable to the substantial amount of debt which has been used to finance property, plant and equipment. Since the depreciation on utility plant is limited to amounts based on historical costs, the Company does not have the opportunity to realize a holding gain on debt and is limited to recovery only of the embedded cost of debt capital.



PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE

NOTES TO FINANCIAL STATEMENTS — (Continued)

Five-Year Comparison of Selected Supplementary Financial Data

Adjusted for Effects of Changing Prices  
(In Average 1980 Dollars)

	Year Ended December 31,				
	1980	1979	1978	1977	1976
	(Thousands except Per Share Amounts)				
Operating revenues	\$351,247	\$332,402	\$329,355	\$292,067	\$284,686
HISTORICAL COST INFORMATION ADJUSTED FOR GENERAL INFLATION*					
Income from continuing operations (excluding reduction to net recoverable cost)	\$ 40,964	\$ 30,584			
Income per average common share (after dividend requirements on preferred stock and excluding reduction to net recov- erable cost)	\$ 1.63	\$ 1.67			
Net assets at year-end at net recoverable cost	\$419,048	\$392,638			
CURRENT COST INFORMATION*					
Income from continuing operations (excluding reduction to net recoverable cost)	\$ 35,451	\$ 23,664			
Income per average common share (after dividend requirements on preferred stock and excluding reduction to net recov- erable cost)	\$ 1.30	\$ 1.12			
Excess of increase in general price level over increase in specific prices	\$ 80,206	\$ 71,415			
Net assets at year-end at net recoverable cost	\$419,048	\$392,638			
GENERAL INFORMATION					
Gain from decline in purchasing power of net amounts owed*	\$ 71,627	\$ 69,525			
Cash dividends declared per common share	\$ 2.12	\$ 2.41	\$ 2.45	\$ 2.56	\$ 2.69
Market price per common share at year-end	\$ 13.73	\$ 16.90	\$ 23.72	\$ 27.19	\$ 30.44
Average consumer price index	246.8	217.4	195.4	181.5	170.5

\*Information not required for years prior to 1979.

## REPORT OF INDEPENDENT CERTIFIED PUBLIC ACCOUNTANTS

THE BOARD OF DIRECTORS

PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE

We have examined the balance sheets of Public Service Company of New Hampshire as of December 31, 1980 and 1979 and the related statements of earnings, retained earnings, changes in financial position and other paid-in capital for each of the years in the three-year period ended December 31, 1980. Our examinations were made in accordance with generally accepted auditing standards, and accordingly included such tests of the accounting records and such other auditing procedures as we considered necessary in the circumstances.

In our opinion, the aforementioned financial statements present fairly the financial position of Public Service Company of New Hampshire at December 31, 1980 and 1979 and the results of its operations and the changes in its financial position for each of the years in the three-year period ended December 31, 1980, in conformity with generally accepted accounting principles applied on a consistent basis.

In connection with our examinations of the aforementioned financial statements, we also examined the related financial statement schedules listed in the index under Item 11. In our opinion, such supporting schedules present fairly the information set forth therein.

Boston, Massachusetts  
February 18, 1981, except for  
Note 10, which is as of  
April 14, 1981.

PEAT, MARWICK, MITCHELL & Co.

**Item 9. Directors and Executive Officers of the Company**

Information as to the names and ages of the directors of the Company, all of whom are also nominees for election as directors, all positions and offices with the Company held by such persons, their current terms of office and length of service, and their individual principal occupation and employment for the past five years are set forth at pages 3-5 of the Company's proxy material, dated April 6, 1981, for use at the Company's Annual Meeting of Stockholders to be held on May 14, 1981. Such information is hereby incorporated herein and specifically made a part hereof by reference.

Information is set forth below as to the names and ages of the executive officers of the Company, including certain executive officers who are also directors of the Company, their positions as officers of the Company both current and for the past five years, their length of service with the Company, and in the case of Messrs. Bayless and Cameron, a brief explanation of their respective prior five years business positions and responsibilities.

<u>Name</u>	<u>Position</u>	<u>Age and (Years of Service)</u>
William C. Tallman	Chairman and Chief Executive Officer since May 1980; President (1965-1980)	60 (34)
Robert J. Harrison	President since May, 1980; Financial Vice President (1978- 1980); Vice President and Treasurer (1977-1978); Vice President (1973-1977)	49 (23)
William A. Adams, Jr.	Executive Vice President(1)	55 (31)
David N. Merrill	Executive Vice President(1)	56 (31)
Charles E. Bayless	Financial Vice President since March, 1981; Director of Special Corporate Projects, Consumers Power Company, Jackson, Michigan (1978-1981); Director of Nuclear Fuel Supply, Consumers Power Company (1976-1978); Attor- ney, Legal Department Consumers Power Company (1972-1976) (2)	38
D. Pierre G. Cameron, Jr.	Vice President and General Counsel since September, 1980; Treasurer and Assistant Secretary, Baltimore Gas and Electric Company, Baltimore, Maryland (1979-1980); As- sociate General Counsel-Corporate, Baltimore Gas and Electric Company (1971-1979) (3)	46
Raymond E. Closson	Vice President since November, 1978; Assistant to the Presi- dent (1978); Division Manager-Manchester (1968-1978)	60 (33)
John C. Duffett	Vice President since November, 1978; Director of Division Operations (1975-1978)	53 (26)
Henry J. Ellis	Vice President since December, 1976; Director of Engineer- ing (1968-1976)	60 (34)
Warren A. Harvey	Vice President since December, 1976; Director of Produc- tion (1970-1976)	54 (33)
Elroy L. Littlefield	Vice President since December, 1979; Comptroller (1968- 1979)	62 (33)
James L. Nevins	Vice President since November, 1978; Director of Employee Relations (1975-1978)	46 (12)

<u>Name</u>	<u>Position</u>	<u>Age and (Years of Service)</u>
William T. Frain, Jr.	Comptroller since December, 1979; Assistant Comptroller (1971-1979)	39 (16)
John J. Lampron	Treasurer since June, 1978; Assistant Treasurer (1975-1978)	36 (9)
Russell A. Winslow	Clerk and Secretary(1)	46 (19)

- (1) Has held same positions for at least 5 years.
- (2) As Director of Special Corporate Projects for Consumers Power Company, Mr. Bayless was responsible for specialized financing projects, including nuclear fuel leases, leveraged and single investor leases, pollution control financing and acceptance facility agreements. As Director of Nuclear Fuel Supply, Mr. Bayless was responsible for the procurement of nuclear fuel and related services for Consumers Power Company and as an attorney in that company's Legal Department Mr. Bayless was engaged in the legal aspects of such matters as licensing and fuel contracts for nuclear power plants as well as various financial transactions relating to fuel leases, building sales and leasebacks, acceptance facility agreements and conventional debt and equity financings.
- (3) As Treasurer and Assistant Secretary of Baltimore Gas and Electric Company, Mr. Cameron had supervisory responsibility for the Finance Department of Baltimore Gas and Electric Company, including all financial planning, cash management, stockholder records, insurance, employee benefit plan administration, and financial documents (statistical reports) activities. As Associate General Counsel-Corporate for Baltimore Gas and Electric Company, Mr. Cameron had both supervisory and primary responsibility for all legal aspects of equity and debt financings including pollution control financings, proxy solicitation/annual meeting preparation, negotiation and preparation of major construction and equipment procurement contracts and Federal government agency liaison.

#### **Item 10. *Management Remuneration and Transactions***

Information in response to this item is set forth on pages 6-9 of the Company's definitive proxy statement, dated April 6, 1981, used in connection with the Annual Meeting of Stockholders of the Company to be held May 14, 1981, and is hereby incorporated herein and specifically made a part hereof by reference.

## **PART IV**

### **Item 11. Exhibits, Financial Statement Schedules, and Reports on Form 8-K**

The following documents are filed as a part of this report:

#### **Financial Statements (see Item 8):**

Statements of Earnings, Years ended December 31, 1980, 1979 and 1978

Balance Sheets, December 31, 1980 and 1979

Statements of Changes in Financial Position, Years ended December 31, 1980, 1979 and 1978

Statements of Retained Earnings, Years ended December 31, 1980, 1979 and 1978

Statements of Other Paid-In Capital, Years ended December 31, 1980, 1979 and 1978

Notes to Financial Statements

Report of Independent Certified Public Accountants

#### **Financial Statement Schedules**

Schedule V — Utility Plant, Years ended December 31, 1980, 1979 and 1978

Schedule VI — Accumulated Provision for Depreciation, Years ended December 31, 1980, 1979 and 1978

Schedule VIII — Valuation and Qualifying Accounts, Years ended December 31, 1980, 1979 and 1978

All other schedules are omitted as the required information is not applicable or is included in the financial statements or related notes.

#### **Exhibits**

The exhibits which are filed with this Form 10-K or which are incorporated herein by reference are set forth in the Exhibit Index which appears in Part IV of this report at pages 49 through 54.

#### **Reports on Form 8-K**

No Reports on Form 8-K were filed during the fourth quarter of 1980.



**PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE**

**SCHEDULE V — UTILITY PLANT**

**Years Ended December 31, 1980, 1979 and 1978**

<u>Col. A</u>	<u>Col. B</u>	<u>Col. C</u>	<u>Col. D</u>	<u>Col. E</u>	<u>Col. F</u>
<u>Classification</u>	<u>Balance at Beginning of Period</u>	<u>Additions at Cost</u>	<u>Retire- ments</u>	<u>Other Changes — Add (Deduct)</u>	<u>Balance at End of Period</u>
<b>(Thousands of Dollars)</b>					
<b>YEAR ENDED DECEMBER 31, 1980</b>					
Intangibles	\$ 45	\$ —	\$ —	\$ —	\$ 45
Generating Plant — Steam	188,792	1,499	93	—	190,198
Generating Plant — Hydro	15,445	334	39	—	15,740
Generating Plant — Other	8,393	—	—	—	8,393
Transmission	113,976	10,821	334	19	124,482
Distribution	175,844	13,241	2,797	—	186,288
General	20,071	1,688	334	—	21,425
Plant Held for Future Use	1,849	—	—	(19)	1,830
Unfinished Construction	484,086	187,865	—	—	671,951
Nuclear Fuel	34,794	17,405	—	—	52,199
<b>TOTAL</b>	<b>\$1,043,295</b>	<b>\$232,853</b>	<b>\$3,597</b>	<b>\$ —</b>	<b>\$1,272,551</b>
<b>YEAR ENDED DECEMBER 31, 1979</b>					
Intangibles	\$ 45	\$ —	\$ —	\$ —	\$ 45
Generating Plant — Steam	187,988	1,126	322	—	188,792
Generating Plant — Hydro	15,403	55	13	—	15,445
Generating Plant — Other	8,381	12	—	—	8,393
Transmission	111,578	2,788	390	—	113,976
Distribution	165,206	13,061	2,423	—	175,844
General	17,234	3,053	216	—	20,071
Plant Held for Future Use	1,876	(27)	—	—	1,849
Unfinished Construction	334,199	149,887	—	—	484,086
Nuclear Fuel	12,183	22,611	—	—	34,794
<b>TOTAL</b>	<b>\$ 854,093</b>	<b>\$192,566</b>	<b>\$3,364</b>	<b>\$ —</b>	<b>\$1,043,295</b>
<b>YEAR ENDED DECEMBER 31, 1978</b>					
Intangibles	\$ 45	\$ —	\$ —	\$ —	\$ 45
Generating Plant — Steam	182,156	6,128	296	—	187,988
Generating Plant — Hydro	15,376	32	10	5	15,403
Generating Plant — Other	8,378	3	—	—	8,381
Transmission	108,946	3,090	467	9	111,578
Distribution	155,210	12,318	2,322	—	165,206
General	15,072	2,410	248	—	17,234
Plant Held for Future Use	1,885	—	—	(9)	1,876
Unfinished Construction	188,557	145,642	—	—	334,199
Nuclear Fuel	8,268	3,915	—	—	12,183
<b>TOTAL</b>	<b>\$ 683,893</b>	<b>\$173,538</b>	<b>\$3,343</b>	<b>\$ 5</b>	<b>\$ 854,093</b>

**PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE**  
**SCHEDULE VI — ACCUMULATED PROVISION FOR DEPRECIATION**  
**Years Ended December 31, 1980, 1979 and 1978**

<u>Col. A</u>	<u>Col. B</u>	<u>Col. C</u>	<u>Col. D</u>	<u>Col. E</u>	<u>Col. F</u>
<u>Description</u>	<u>Balance at Beginning of Period</u>	<u>Additions Charged to Costs and Expenses</u>	<u>Retire-ments</u>	<u>Other Changes — Add (Deduct)</u>	<u>Balance at End of Period</u>
(Thousands of Dollars)					
Accumulated provision for de- preciation of electric plant:					
1980 .....	\$147,398	\$17,425	\$3,591	\$471 (A)	\$161,703
1979 .....	134,373	15,487	3,328	866 (A)	147,398
1978 .....	122,364	14,752	3,305	562 (A)	134,373

	<u>1980</u>	<u>1979</u>	<u>1978</u>
(A) Represents:			
Depreciation charged to automotive clearing .....	\$ 726	\$ 729	\$ 665
Depreciation on plant units acquired .....	17	121	—
Net salvage .....	(272)	16	(108)
Non-operating reserve transfer .....	—	—	5
	<u>\$ 471</u>	<u>\$ 866</u>	<u>\$ 562</u>

**PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE**  
**SCHEDULE VIII — VALUATION AND QUALIFYING ACCOUNTS**  
**Years Ended December 31, 1980, 1979 and 1978**

Col. A	Col. B	Col. C		Col. D	Col. E
Description	Balance at Beginning of Period	Additions		Deductions	Balance at End of Period
		Charged to Costs and Expenses	Charged to Other Accounts		
(Thousands of Dollars)					
Reserves Deducted From Related Assets:					
Provision for Uncollectible Accounts					
1980 .....	\$330	\$714	\$ —	\$724 (A)	\$320
1979 .....	320	552	—	542 (A)	330
1978 .....	317	535	—	532 (A)	320
Accumulated Provision for Depreciation of Non-Operating Property					
1980 .....	\$526	\$ 7	\$ —	\$ —	\$533
1979 .....	519	7	—	—	526
1978 .....	517	7	—	5 (B)	519
Reserve Included Under “Deferred Credits - Other”:					
Reserve for Injuries and Damages					
1980 .....	\$302	\$210	\$ 81 (C)	\$194 (D)	\$399
1979 .....	357	120	114 (C)	289 (D)	302
1978 .....	270	120	101 (C)	134 (D)	357

(A) Accounts written off, net of recoveries.

(B) Non-operating reserve transferred to operating.

(C) Charged principally to construction and retirement accounts.

(D) Losses charged to reserve.

## SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the Registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

### PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE

By: W. C. TALLMAN  
W. C. TALLMAN, *Chairman*

Date: March 30, 1981

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the Registrant and in the capacities and on the dates indicated.

Signature	Title	Date
<u>W. C. TALLMAN</u> W. C. TALLMAN (Principal Executive Officer)	Chairman and Chief Executive Officer; Director	March 30, 1981
<u>R. J. HARRISON</u> R. J. HARRISON	President; Director	March 30, 1981
<u>C. E. BAYLESS</u> C. E. BAYLESS (Principal Financial Officer)	Financial Vice President	March 30, 1981
<u>W. T. FRAIN, JR.</u> W. T. FRAIN, JR.	Comptroller	March 30, 1981
<u>W. A. ADAMS, JR.</u> W. A. ADAMS, JR.	Director	March 30, 1981
<u>ROBERT J. BOTTOMS</u>	Director	March 30, 1981
<u>GEORGE A. DORR, JR.</u>	Director	March 30, 1981
<u>PRISCILLA K. FRECHETTE</u>	Director	March 30, 1981
<u>HARLAN L. GOODWIN</u>	Director	March 30, 1981
<u>D. N. MERRILL</u> D. N. MERRILL	Director	March 30, 1981

Signature	Title	Date
_____ ANN R. MOODY	Director	March 30, 1981
_____ BYRON C. RADAKER	Director	March 30, 1981
_____ JOHN J. REILLY, JR. JOHN J. REILLY, JR.	Director	March 30, 1981
_____ WILLIAM M. SCRANTON WILLIAM M. SCRANTON	Director	March 30, 1981
_____ HUGH C. TUTTLE HUGH C. TUTTLE	Director	March 30, 1981
_____ RICHARD E. WEST RICHARD E. WEST	Director	March 30, 1981
_____ DAVID S. WILLIAMS	Director	March 30, 1981



## EXHIBIT INDEX

The following designated exhibits are, as indicated below, either filed herewith or have heretofore been filed with the Securities and Exchange Commission under the Securities Act of 1933, the Securities Exchange Act of 1934 or the Public Utility Holding Company Act of 1935 and are referred to and incorporated herein by reference to such filings.

	<u>Exhibit</u>	<u>SEC Docket</u>	<u>Form 10-K Page Nos.</u>
<b>Exhibit 3. Articles of Incorporation and by-laws</b>			
<i>Incorporated herein by reference:</i>			
3.1. Articles of Agreement, as amended.	2.2.1		2-61924
3.2. By-laws, as amended.	2.2(b)		2-68168
<b>Exhibit 4. Instruments defining the rights of security holders, including indentures</b>			
<i>Incorporated herein by reference:</i>			
4.1. General and Refunding Mortgage Indenture dated as of August 15, 1978 between the Company and New England Merchants National Bank, Trustee.	2.32		2-6285
4.1.1. First Supplemental Indenture to the General and Refunding Mortgage Indenture dated as of September 15, 1979.	2.32		2-65421
4.1.2. Second Supplemental Indenture to the General and Refunding Mortgage Indenture dated as of January 15, 1980.	2.5		2-66334
4.1.3. Third Supplemental Indenture to the General and Refunding Mortgage Indenture dated as of December 1, 1980.	2.3.3		2-69947
4.2. First Mortgage dated as of January 1, 1943 between the Company and Old Colony Trust Company, Trustee.	B-1		2-5076 (22-221)
4.2.1. First Supplemental Indenture to the Company's First Mortgage dated as of December 1, 1943.	A-1a		70-684
4.2.2. Second Supplemental Indenture to the Company's First Mortgage dated as of June 1, 1947.	7.3		2-7066
4.2.3. Third Supplemental Indenture dated as of January 1, 1948.	7.4		2-7324
4.2.4. Fourth Supplemental Indenture dated as of October 1, 1948.	7.5		2-7658
4.2.5. Fifth Supplemental Indenture dated as of June 1, 1949.	7.6		2-7985
4.2.6. Sixth Supplemental Indenture dated as of June 1, 1951.	7.7		2-8969
4.2.7. Seventh Supplemental Indenture dated as of September 1, 1953.	4.9		2-10426

	<u>Exhibit</u>	<u>SEC Docket</u>	<u>Form 10-K Page Nos.</u>
4.2.8. Eighth Supplemental Indenture dated as of November 1, 1954.	2.10	2-11246	
4.2.9. Ninth Supplemental Indenture dated as of June 1, 1956.	2.11	2-13619	
4.2.10. Tenth Supplemental Indenture dated as of October 1, 1957.	2.12	2-15260	
4.2.11. Eleventh Supplemental Indenture dated as of July 1, 1959.	2.13	2-17162	
4.2.12. Twelfth Supplemental Indenture dated as of November 1, 1960.	2.14	2-20451	
4.2.13. Thirteenth Supplemental Indenture dated as of July 1, 1962.	2.15	2-25452	
4.2.14. Fourteenth Supplemental Indenture dated as of January 1, 1966.	2.16	2-25452	
4.2.15. Fifteenth Supplemental Indenture dated as of October 1, 1966.	2.17	2-25452	
4.2.16. Sixteenth Supplemental Indenture dated as of June 1, 1967.	2.18	2-26592	
4.2.17. Seventeenth Supplemental Indenture dated as of November 1, 1968.	2.19	2-30554	
4.2.18. Eighteenth Supplemental Indenture dated as of November 1, 1970.	4.20	2-38646	
4.2.19. Nineteenth Supplemental Indenture dated as of June 15, 1972.	2.22	2-50198	
4.2.20. Twentieth Supplemental Indenture dated as of March 1, 1974.	2.23	2-50198	
4.2.21. Twenty-First Supplemental Indenture dated as of October 15, 1974.	2.24	2-51999	
4.2.22. Twenty-Second Supplemental Indenture dated as of December 1, 1974.	2.25	2-54646	
4.2.23. Twenty-Third Supplemental Indenture dated as of March 1, 1975.	2.26	2-54646	
4.2.24. Twenty-Fourth Supplemental Indenture dated as of October 15, 1975.	2.27	2-57289	
4.2.25. Twenty-Fifth Supplemental Indenture dated as of October 15, 1976.	2.28	2-59516	
4.2.26. Twenty-Sixth Supplemental Indenture dated as of November 1, 1976.	2.29	2-59516	
4.2.27. Twenty-Seventh Supplemental Indenture dated as of May 1, 1978.	2.30	2-61924	
4.2.28. Twenty-Eighth Supplemental Indenture dated as of August 15, 1978.	2.31	2-62856	
4.2.29. Twenty-Ninth Supplemental Indenture dated as of September 15, 1979.	2.33	2-65427	

		<u>Exhibit</u>	<u>SEC Docket</u>	<u>Form 10-K Page Nos.</u>
4.2.30.	Thirtieth Supplemental Indenture dated as of January 15, 1980.	2.4.30	2-66492	
4.2.31.	Thirty-First Supplemental Indenture dated as of December 1, 1980.	2.4.31	2-69947	

#### **Exhibit 10. Material Contracts**

*Incorporated herein by reference:*

10.1.	Directors and Officers Liability and Company Reimbursement Liability Policy with The Home Insurance Company. For other arrangements for indemnification of directors and officers of the Company, see Item 15 and Article X, Section 7 of the Company's By-laws contained in Exhibit 3.2 hereto.	4.1	2-69370
10.2.	Directors and Officers Liability Insurance Endorsement with Associated Electric & Gas Insurance Services Limited covering the same risk as Exhibit 10.1.	4.2	2-66334
10.3.	Form of New England Power Pool Agreement dated as of September 1, 1971 as amended to November 1, 1975.	4.8	2-55385
10.4.	Agreement dated October 13, 1972 for Joint Ownership, Construction and Operation of Pilgrim Unit No. 2 among Boston Edison Company and other utilities including the Company.	5.3(d)	2-45990
10.4.1.	Amendments Nos. 1 and 2 to Exhibit 10.4 dated September 20, 1973 and September 15, 1974, respectively.	5.14	2-51999
10.4.2.	Amendment No. 3 to Exhibit 10.4 dated December 1, 1974.	13-45	2-54449
10.4.3.	Amendments Nos. 4 and 5 to Exhibit 10.4 dated February 15, 1975 and April 30, 1975, respectively.	13-52-A 13-52-B	2-53819
10.4.4.	Amendment No. 6 to Exhibit 10.4 dated June 30, 1975.	13-45(a)	2-54449
10.4.5.	Amendment No. 7 to Exhibit 10.4 dated November 30, 1975.	5.9(f)	2-55748
10.4.6.	Addendum to Exhibit 10.4 dated as of October 1, 1976.	10.1 {	Annual Report 1-2301-2 for 1976
10.5.	Agreement for Sharing Costs Associated with Pilgrim Unit No. 2 Transmission dated October 13, 1972 among Boston Edison Company and other utilities including the Company.	5.3(e)	2-45990
10.5.1.	Addendum to Exhibit 10.5 dated as of January 17, 1975.	1.5.1 {	Annual Report 1-2301-2 for 1975

		<u>Exhibit</u>	<u>SEC Docket</u>	<u>Form 10-K Page Nos.</u>
10.5.2.	Addendum to Exhibit 10.5 dated as of October 1, 1976.	10.2	{	Annual Report 1-2301-2 for 1976
10.6.	Agreement dated as of May 1, 1973 for Joint Ownership, Construction and Operation of New Hampshire Nuclear Units among the Company and other utilities.	13-57		2-48966
10.6.1.	Amendments to Exhibit 10.6 dated May 24, 1974, June 21, 1974 and September 25, 1974.	5.15		2-51999
10.6.2.	Amendments to Exhibit 10.6 dated October 25, 1974 and January 31, 1975.	5.23		2-54646
10.6.3.	Sixth Amendment to Exhibit 10.6 dated as of April 18, 1979.	5.4.3		2-64294
10.6.4.	Seventh Amendment to Exhibit 10.6 dated as of April 18, 1979.	5.4.4		2-64294
10.6.5.	Eighth Amendment to Exhibit 10.6 dated as of April 25, 1979.	5.4.5		2-64815
10.6.6.	Ninth Amendment to Exhibit 10.6 dated as of June 8, 1979.	5.4.6		2-64815
10.6.7.	Tenth Amendment to Exhibit 10.6 dated as of October 10, 1979.	5.4.2		2-66334
10.6.8.	Eleventh Amendment to Exhibit 10.6 dated as of December 15, 1979.	5.4.8		2-66492
10.6.9.	Twelfth Amendment to Exhibit 10.6 dated as of June 16, 1980.	5.4.9		2-68168
10.6.10.	Thirteenth Amendment to Exhibit 10.6 dated as of December 31, 1980.	10.6.10		2-70579
10.7.	Transmission Support Agreement dated as of May 1, 1973 among the Company and other utilities with respect to New Hampshire nuclear units.	13-58		2-48966
10.8.	Sharing Agreement — 1979 Connecticut Nuclear Unit dated September 1, 1973 to which the Company is a party.	6.43		2-50142
10.8.1.	Amendment to Exhibit 10.8 dated August 1, 1974.	5.45		2-52392
10.8.2.	Amendment to Exhibit 10.8 dated December 15, 1975.	7.47		2-60806
10.9.	Coal Sales Agreement dated September 1, 1977, between the Company and Consolidation Coal Company.	5.17		2-61287
10.10.	Agreement for the Sale of Residual Fuel Oil dated December 31, 1979 between the Company and C. H. Sprague & Son Company.	5.8		2-66334

		<u>Exhibit</u>	<u>SEC Docket</u>	<u>Form 10-K Page Nos.</u>
10.11.	Agreement executed on January 23, 1973 for the design and furnishing of the nuclear steam supply systems for the Company's Seabrook plant between the Company and Westinghouse Electric Corporation.	C {		Annual Report 1-6392 for 1972
10.12.	Agreement dated November 1, 1974 for Joint Ownership, Construction and Operation of William F. Wyman Unit No. 4 among Central Maine Power Company and other utilities including the Company.	5.16		2-52900
10.12.1.	Amendment to Exhibit 10.12 dated June 30, 1975.	5.48		2-55458
10.12.2.	Amendment to Exhibit 10.12 dated as of August 16, 1976.	5.19		2-58251
10.12.3.	Amendment to Exhibit 10.12 dated as of December 31, 1978.			
10.13.	Transmission Support Agreement dated November 1, 1974 among Central Maine Power Company and other utilities including the Company.	13-57		2-54449
10.14.	Transmission Support Agreement dated August 9, 1974 between the Connecticut Light and Power Company and other utilities including the Company.	5.24		2-54646
10.15.	Pension Plan of the Company, as amended effective as of June 1, 1977.	D {		Annual Report 1-6392 for 1977
10.16.	Revolving Credit Agreement dated as of December 28, 1977, among the Company and seven Banks.	E {		Annual Report 1-6392 for 1977
10.16.1.	Amendment No. 1 to Exhibit 10.16 dated as of May 24, 1978.	5.15.1		2-62856
10.16.2.	Amendment No. 2 to Exhibit 10.16 dated as of June 30, 1978.	5.15.2		2-62856
10.16.3.	Amendment No. 3 to Exhibit 10.16 dated as of October 24, 1978.	5.15.3		2-62856
10.16.4.	Amendment No. 4 to Exhibit 10.16 dated April 24, 1979.	5.14.4		2-64294
10.16.5.	Amendment No. 5 to Exhibit 10.16 dated as of June 25, 1979.	5.14.5		2-64815
10.16.6.	Amendment No. 6 to Exhibit 10.16 dated as of September 9, 1979.	5.14.6		2-66334
10.16.7.	Amendment No. 7 to Exhibit 10.16 dated as of January 8, 1980.	5.14.7		2-66334
10.16.8.	Amendment No. 8 to Exhibit 10.16 dated as of June 30, 1980.	5.14.8		2-68168



		<u>Exhibit</u>	<u>SEC Docket</u>	<u>Form 10-K Page Nos.</u>
10.16.9.	Amendment No. 9 to Exhibit 10.16 dated as of December 1, 1980.	10.16.9		2-70579
10.17.	Term Loan Agreement dated as of December 28, 1977, among the Company and several Banks.	F {	Annual Report 1-6392 for 1977	
10.17.1.	Amendment No. 1 to Exhibit 10.17 dated as of December 26, 1978.	5.16.1		2-62856
10.17.2.	Amendment No. 2 to Exhibit 10.17 dated as of December 28, 1979.	5.15.2		2-66334
10.17.3.	Amendment No. 3 to Exhibit 10.17 dated as of December 1, 1980.	10.17.3		2-70579
10.18.	Eurodollar Loan Agreement dated August 25, 1980.	5.16		2-69370
10.19.	Employee Stock Ownership Plan and Trust.	10.19		2-70579

**Exhibit 12. *Statement re computation of ratios***

*Filed herewith:*

- 12.1. Calculation of Ratios of Earnings to Fixed Charges.

55

## EXHIBIT 12.1

## PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE

## CALCULATION OF RATIOS OF EARNINGS TO FIXED CHARGES

	Year Ended December 31,				
	1980	1979	1978	1977	1976
	(Thousands of Dollars)				
Net Income .....	\$ 59,847	\$40,719	\$36,507	\$21,722	\$20,995
Add: Provision for Taxes Based on Income ..	22,619	15,397	19,612	8,286	9,643
Fixed Charges .....	62,681	43,614	30,083	21,766	18,945
	<u>145,147</u>	<u>99,730</u>	<u>86,202</u>	<u>51,774</u>	<u>49,583</u>
Deduct: Undistributed Earnings of Affiliated Companies .....	(48)	(92)	(109)	14	103
Earnings Available for Fixed Charges .....	<u>\$145,195</u>	<u>\$99,822</u>	<u>\$86,311</u>	<u>\$51,760</u>	<u>\$49,480</u>
Fixed Charges					
Interest on Long-Term Debt .....	\$ 39,711	\$28,247	\$21,073	\$18,980	\$17,932
Other Interest .....	21,847	14,465	8,201	2,029	290
Interest Component of Rental Charges .....	1,123	902	809	757	723
Total Fixed Charges .....	<u>\$ 62,681</u>	<u>\$43,614</u>	<u>\$30,083</u>	<u>\$ 1,766</u>	<u>\$18,945</u>
Ratios .....	2.32	2.29	2.87	2.38	2.61

**2,500,000 Shares**  
**Public Service Company of New Hampshire**  
**Common Stock**  
**(\$5 PAR VALUE)**

Outstanding shares of the Common Stock are, and the shares offered hereby will be, listed on the New York Stock Exchange. The last reported sale price of the Common Stock on such Exchange on May 4, 1981, was \$14.875 per share.

See "Financing and Rate Relief" for a description of the Company's financial difficulties.

**THESE SECURITIES HAVE NOT BEEN APPROVED OR DISAPPROVED BY THE  
SECURITIES AND EXCHANGE COMMISSION NOR HAS THE COMMISSION  
PASSED UPON THE ACCURACY OR ADEQUACY OF THIS PROSPECTUS.  
ANY REPRESENTATION TO THE CONTRARY IS A CRIMINAL OFFENSE.**

	Price to Public	Underwriting Discounts and Commissions (1)	Proceeds to Company (2)
Per Share .....	\$14.875	\$0.67	\$14.205
Total .....	\$37,187,500	\$1,675,000	\$35,512,500

- (1) The Company has agreed to indemnify the several Underwriters against certain civil liabilities, including liabilities under the Securities Act of 1933.
- (2) Before deduction of expenses payable by the Company estimated at \$106,000.

The shares of Common Stock are offered by the several Underwriters when, as and if issued by the Company and accepted by the Underwriters and subject to their right to reject orders in whole or in part. It is expected that certificates for such shares will be ready for delivery at the offices of Kidder, Peabody & Co. Incorporated, 10 Hanover Square, New York, New York on or about May 12, 1981.

**Kidder, Peabody & Co.**  
**Incorporated**

**Blyth Eastman Paine Webber**  
**Incorporated**

The date of this Prospectus is May 5, 1981.

IN CONNECTION WITH THIS OFFERING, THE UNDERWRITERS MAY OVER-ALLOT OR EFFECT TRANSACTIONS WHICH STABILIZE OR MAINTAIN THE MARKET PRICE OF THE COMPANY'S COMMON STOCK AT LEVELS ABOVE THOSE WHICH MIGHT OTHERWISE PREVAIL IN THE OPEN MARKET. SUCH TRANSACTIONS MAY BE EFFECTED ON THE NEW YORK STOCK EXCHANGE, THE OVER-THE-COUNTER MARKET OR OTHERWISE. SUCH STABILIZING, IF COMMENCED, MAY BE DISCONTINUED AT ANY TIME.

Kidder, Peabody & Co. Incorporated and Blyth Eastman Paine Webber Incorporated, as Representatives of the Underwriters, have advised the Company that on May 4, 1981 they made a stabilizing purchase of 1,200 shares of the Company's Common Stock at \$14.875 per share.

#### AVAILABLE INFORMATION

Public Service Company of New Hampshire (the "Company") is subject to the informational requirements of the Securities Exchange Act of 1934 and in accordance therewith files reports and other information with the Securities and Exchange Commission. Information for the year 1980 and prior years concerning directors and officers of the Company, remuneration and any material interests of such persons in transactions with the Company, is disclosed in proxy statements distributed to stockholders of the Company and filed with the Commission. Such reports, proxy statements and other information can be inspected at the office of the Commission at Room 6101 at 1100 L Street, N.W., Washington, D. C.; Room 1100, Federal Building, 26 Federal Plaza, New York, N.Y.; Suite 1710, Tishman Building, 10960 Wilshire Boulevard, Los Angeles, California; and Room 1228, Everett McKinley Dirksen Building, 219 South Dearborn Street, Chicago, Illinois. Copies of such material may also be obtained at prescribed rates from the Public Reference Section of the Commission at 500 North Capitol Street, N.W., Washington, D. C. 20549. Certain of the Company's securities are listed on the New York Stock Exchange, 20 Broad Street, New York, New York where reports, proxy material and other information concerning the Company may also be inspected.

#### INCORPORATION OF CERTAIN DOCUMENTS BY REFERENCE

The following documents heretofore filed with the Commission are hereby incorporated in this Prospectus by reference:

1. The Company's Annual Report on Form 10-K for the year ended December 31, 1980, as amended.
2. The Company's definitive proxy statement dated April 6, 1981 in connection with its Annual Meeting of Stockholders to be held on May 14, 1981.

All documents filed by the Company with the Commission pursuant to Section 13, 14 or 15(d) of the Securities Exchange Act of 1934 after the date of this Prospectus and prior to the termination of this offering of Common Stock shall be deemed to be incorporated in this Prospectus by reference and to be a part hereof from the date of filing of such documents.

The Company hereby undertakes to provide without charge to each person to whom a copy of this Prospectus has been delivered, on the written request of any such person, a copy of any or all of the documents referred to above which have been or may be incorporated in this Prospectus by reference, other than exhibits to such documents. Written requests for such copies should be directed to the Office of the Treasurer, Public Service Company of New Hampshire, P.O. Box 330, Manchester, New Hampshire 03105.

## THE ISSUE IN BRIEF

The following material is qualified in its entirety by the detailed information appearing elsewhere in this Prospectus and by the detailed information and the financial statements and notes appearing in the documents incorporated in this Prospectus by reference. See especially "Financing and Rate Relief".

### THE OFFERING

Common Stock Offered	2,500,000 Shares
Expected Closing Date	May 12, 1981
Common Stock Listed	New York Stock Exchange (Symbol: PNH)
1981 Price Range (through May 4, 1981)	14 3/8-16 1/2
Current Dividend Rate	\$2.12 annually
Book Value of Common Stock at March 31, 1981	\$20.65 per share

Since the allowance for funds used during construction generated by the Company's construction program is very substantial, all of the Company's 1980 dividends on Common Stock will be treated as a return of capital for Federal income tax purposes and accordingly will not be taxable as ordinary income. Based on current estimates, substantially all of the 1981 dividends on Common Stock will also be treated in this manner.

### PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE

Business	Electric utility
Energy Sources (12 months ended December 31, 1980)	Oil — 53%, Coal — 35%, Nuclear — 8% and Hydro — 4%
Estimated 1981-1986 Construction Expenditures (see "Construction Program"):	
Assuming proposed reduction of ownership interest in the Seabrook plant to approximately 35%	\$803,600,000

### FINANCIAL INFORMATION (Thousands except Per Share Amounts)

	Twelve Month Ended March 31, 1981	Year Ended December 31,	
		1980	1979
Operating Revenues	\$371,991	\$351,247	\$292,814
Net Income	59,550	59,847	40,719
Earnings Available for Common Stock	43,140	45,825	32,339
Average Shares of Common Stock Outstanding	17,706	16,539	12,643
Per Share of Common Stock			
Earnings	\$2.44	\$2.77	\$2.56
Dividends	\$2.12	\$2.12	\$2.12

Capitalization and short-term debt as of March 31, 1981, and as adjusted for the proceeds from the sale of the additional Common Stock offered hereby (aggregating \$35,512,500):

	Actual	As Adjusted	Adjusted Percentage
Long-Term Debt (including current maturities)	\$ 423,193	\$ 423,193	40.2%
Preferred Stock	171,299 <sup>a</sup>	171,299	16.3
Common Stock Equity	421,401	456,805	43.5
	<u>\$1,015,893</u>	<u>\$1,051,300</u>	<u>100.0%</u>
Short-Term Debt	\$ 119,100	\$ 83,587	



## THE COMPANY

The Company was incorporated in New Hampshire in 1926. The mailing address of the Company is 1000 Elm Street, Post Office Box 330, Manchester, New Hampshire 03105 and the Company's telephone number is (603) 669-4000.

The Company is the largest electric utility in New Hampshire. It operates a single integrated system furnishing electric service in Manchester, Nashua, Portsmouth, Berlin, Dover, Keene, Laconia, Franklin, Rochester, Somersworth and 187 other New Hampshire municipalities, including about 83% of the total population of the State. It also sells electricity to other utilities and distributes and sells electricity in 6 towns in Vermont and 13 towns in Maine. The area served at retail has a population of about 782,000.

## USE OF PROCEEDS

The proceeds to the Company from the sale of the additional Common Stock will be used to reduce short-term bank borrowings which were incurred principally in connection with the Company's continuing construction program, the principal portion of which is expenditures in connection with its interest in the Seabrook project described below, and also in connection with the Company's current business operations. On the date of issue of the additional Common Stock, short-term borrowings are expected to be approximately \$125,000,000.

## CONSTRUCTION PROGRAM

The Company is the lead owner of a 2,000 MW nuclear generating power plant under construction at a site located in Seabrook, New Hampshire (the "Seabrook project"), with two 1,150 MW units recently rescheduled for completion in February, 1984 and May, 1986, respectively. At February 28, 1981, the Company had invested approximately \$686,200,000 (including allowance for funds used during construction of approximately \$143,500,000 and nuclear fuel of \$41,200,000) in the Seabrook project. As of the same date, the Seabrook project as a whole was 33% complete, with Unit #1 and property and equipment common to both Units 46% complete; Unit #2 was 8% complete with work limited during most of 1980 to the containment liner alone.

The Company's construction program, which consists primarily of expenditures in connection with its interest in the Seabrook project, has for some time been so large that obtaining the substantial financing required to maintain this program and continue its business operations has been and remains a major challenge for the Company. See "Financing and Rate Relief" below.

*Reduction in Seabrook Project Ownership.* In 1979 the Company decided to reduce its 50% ownership interest in the Seabrook project and obtained commitments from nine other utilities, some of whom were already participants, to acquire from it ownership interests totaling 14.76503%. These commitments were subject to receipt of required approvals and in two instances to receipt of initial financing for the ownership acquisition. Each utility acquiring such an ownership interest does so gradually over an Adjustment Period, paying pro rata the costs otherwise attributable to the Company's ownership interest until such acquiring utility's investment in the Seabrook project (exclusive of any ownership interest already held by it) equals the percentage for which it has committed. The Company's investment will decrease accordingly. This period during which the acquiring utilities are paying the Company's share of construction costs is expected to continue for about 12 months

after all Adjustment Periods become effective. After the conclusion of all Adjustment Periods, the Company will resume paying all of its then reduced share (35.23497%) of Seabrook project costs.

The accepting utilities have received their required approvals and their Adjustment Periods have commenced, except for Taunton Municipal Lighting Plant, which is acquiring a 0.33445% additional interest, and New Hampshire Electric Cooperative, Inc. ("NH Coop"). The NH Coop has received the agreement of the Rural Electrification Administration for financing of its ownership interest of 2.17391% and the approval of the New Hampshire Public Utilities Commission ("NHPUC") for such acquisition. Its Adjustment Period will commence when it obtains such financing.

The Company and Massachusetts Municipal Wholesale Electric Company ("MMWEC"), which is to acquire from the Company an additional 6.00091% interest, have agreed that, commencing on February 28, 1981 (when MMWEC's Adjustment Period began) and continuing until MMWEC has completed its initial financing, the Company will pay MMWEC's share of costs otherwise attributable to that portion of the Company's ownership interest being acquired by MMWEC, subject to the condition described below. Upon completion of its initial financing, MMWEC will reimburse the Company for these costs, together with interest at the rate of 13% per annum through March 31, 1981 and thereafter at the Company's rate of allowance for funds used during construction ("AFUDC"). If MMWEC has been unable to complete its financing by June 30, 1981, MMWEC's reimbursement obligation, including interest, will be cancelled and MMWEC's Adjustment Period will not commence until the first business day after consummation of MMWEC's initial financing. The Company has been informed that MMWEC expects to complete such initial financing prior to June 30, 1981.

*Reduction in Level of Seabrook Project Construction.* In March, 1980, in view of the unsettled state of the capital markets and the very high cost of external funds, the Company's Board of Directors decided that the overall level of construction of the Seabrook project should be reduced substantially in order to lessen the Company's external financing requirements. The Company plans to resume full construction when MMWEC's initial financing for its increased interest has been completed.

*Offer of Pilgrim and Millstone Interests.* In an additional effort to reduce its ongoing construction program expenditures, the Company in March, 1979, offered to other utilities its ownership interests in the Pilgrim #2 and Millstone #3 projects. No expressions of interest were received by the Company with respect to its offer of its interest in the Pilgrim #2 project. The Company has contracted for the sale of approximately two-thirds of its 3.8910% interest in the Millstone #3 project, subject to the receipt of necessary regulatory approvals, and has received expressions of interest in purchasing the balance. Proceeds from the sale are required to be deposited with the Trustee under the terms of the Company's First Mortgage Indenture. Only a relatively small portion of the Company's construction program is attributable to the Company's interest in the Millstone #3 project (\$46,554,000 for the period 1981-1986).

*Construction Expenditures.* Assuming a reduction in the Company's Seabrook project ownership to 35.23497%, its share of the total cost of the Seabrook project upon completion, including the initial cores of nuclear fuel, is estimated at \$936,200,000 (excluding AFUDC, which is estimated to be \$456,500,000). The foregoing estimate of AFUDC reflects the results of a recent NHPUC order per-

mitting the Company to change its method of recording the borrowed funds (interest) component of AFUDC and its associated income tax effects to conform to the methodology followed by a majority of utilities. For the period 1975 through 1980, the Company's financial statements set forth separately an item for capitalized interest at a gross rate and an item for deferred income taxes associated with the deductibility of construction interest for income tax purposes. The NHPUC order requires the Company to net these two items, and the Company has commenced recording AFUDC calculated net of deferred income taxes as of January 1, 1981. The only effect on net income resulting from the change will be a reduction in the amounts of state franchise taxes payable by the Company in future years. This change in method of computation also resulted in a decrease in total estimated AFUDC associated with the construction of the Seabrook project from \$639,000,000 to \$456,500,000, but will not reduce the Company's external financing requirements described below under "Financing and Rate Relief".

The Company's aggregate construction program for the six-year period 1981 through 1986, which is subject to continuing review and adjustment, is currently estimated to be \$803,600,000 (excluding AFUDC), assuming its ownership interest in the Seabrook project is reduced to 35.23497% as described above, the Adjustment Periods referred to above have all commenced by May 1, 1981, and the Company's entire ownership interest in the Millstone #3 project is sold in 1982. This estimate, based on recently completed projections, represents an increase over earlier projections due principally to inflation, delay in completion dates resulting from reduction in construction levels and other factors. The following table sets forth the Company's estimated construction expenditures for the period 1981-1986 before the reduction of its original 50% ownership interest in the Seabrook project and after its projected reduction to 35.23497%, and is based on current construction schedules and cost projections (excluding AFUDC):

	Estimated Construction Expenditures 1981-1986	
	(Millions of Dollars)	
	Original 50% Ownership	Projected 35.23497% Ownership
Generating Facilities		
Company's Share of the Seabrook Project		
Plant	\$ 750.9	\$386.2
Nuclear Fuel	159.2	100.2
Total	910.1	486.4
Participation in the Pilgrim #2 and Millstone #3 Projects		
Plant	76.7	45.8
Nuclear Fuel	6.1	2.8
Total	82.8	48.6
Other Generation	44.1	44.1
Total Generating Facilities	1,037.0	579.1
Transmission Facilities	88.7	88.7
Distribution and General Facilities	135.8	135.8
Total	\$1,261.5	\$803.6

The following table shows the aggregate amount for each of the years 1981 through 1986 of the Company's estimated construction program before and after adjustment to reflect the reduction of

the Company's ownership interest in the Seabrook project to 35.23497%, and is based on the same additional assumptions as in the immediately preceding table. If any substantial variation occurs in the commencement of the Adjustment Periods referred to above, expenditures for the Company's construction program would be increased in 1981 and decreased in 1982.

	<u>Original 50% Ownership</u>	<u>Projected 35.23497% Ownership</u>
1981 .....	\$ 233,600,000	\$ 57,100,000
1982 .....	261,800,000	158,700,000
1983 .....	267,600,000	197,000,000
1984 .....	190,700,000	143,500,000
1985 .....	204,900,000	160,700,000
1986 .....	102,900,000	86,600,000
Total .....	<u>\$1,261,500,000</u>	<u>\$803,600,000</u>

Actual construction expenditures could vary from these estimates because of changes in the Company's plans and load forecasts, cost fluctuations, delays and other factors. Delays and cost increases could result from, among other things, expiration and renegotiation of labor contracts for the Seabrook project; several contracts expired on April 30, 1981 and there could be strikes if new contracts are not reached. It is also possible that additional expenditures may be required to meet regulatory and environmental requirements at the Seabrook project and at the Company's other generating facilities.

#### FINANCING AND RATE RELIEF

Financing of the Company's 1981-1986 construction program estimated at \$803,600,000 plus the borrowed funds component of AFUDC of \$143,200,000 (assuming its ownership interest in the Seabrook project is reduced to about 35% as described above), the refinancing at maturity of certain long-term debt and the meeting of required sinking fund payments together aggregating \$156,545,000, and the financing of working capital and other uses estimated at \$71,100,000 represent a major undertaking for the Company. Assuming the receipt of adequate and timely rate increases, the Company estimates that during the period 1981-1986 approximately \$434,445,000 will be provided by operations (principally after Seabrook Unit #1 is included in rate base, now anticipated to be in early 1984) after deducting total estimated preferred and common stock dividend requirements. Approximately \$740,000,000 is expected to be financed from external sources during this period, of which approximately \$580,000,000 would be financed during the period 1981-1983.

The Company's financing plans for the 1981-1986 period include the issuance of common stock, preferred stock and long-term debt, nuclear and fossil fuel financing and intermediate-term debt financing. The continued success of the Company's financing plans is dependent upon a number of factors, including the Company's ability to obtain adequate and timely rate increases, conditions in the capital markets, economic conditions, and the Company's level of sales. Cost increases, delays and changes in regulatory proceedings and requirements, market conditions and other factors have in the past necessitated revisions in the Company's construction program and in the timing and amount of the Company's projected financings; these factors may require similar revisions in the future.

The Company has a total of \$134,350,000 of short-term bank credit, consisting of lines of credit aggregating \$4,350,000 with New Hampshire banks, and a revolving credit agreement with a group



of eight commercial banks under which the Company may borrow up to \$130,000,000 through November 16, 1981 subject to periodic review by the banks; amounts outstanding under the agreement mature on November 17, 1981. The Company believes that the continued availability of this bank credit to November 16, 1981 and any extension thereafter will depend principally upon the success of the Company's financing program, and the occurrence of no adverse developments in rate and other regulatory proceedings or in the program to reduce the Company's ownership interest in the Seabrook project. The banks party to the revolving credit agreement have agreed to increase the credit to \$150,000,000 and to extend the maturity to January 7, 1982, subject to appropriate documentation.

As of March 31, 1981, the Company was permitted under its Articles of Agreement to incur approximately \$191,400,000 of short-term unsecured indebtedness without obtaining the approval of holders of the Preferred Stock. The NHPUC has approved up to \$190,000,000 of short-term borrowings.

The Company's financing requirements during the balance of 1981 (including refunding at maturity of approximately \$24,000,000 of First Mortgage Bonds, Series T) are estimated, after the sale of the additional Common Stock offered hereby, to be approximately \$50,000,000 (to be met by the issue of General and Refunding Mortgage Bonds in the fourth quarter), assuming that MMWEC obtains financing for its increased Seabrook project ownership interest before June 30, 1981, that the \$20,000,000 increase in the Company's revolving credit agreement is effective, and that approximately \$118,000,000 of short-term bank credit is outstanding at the end of the year. Without the proceeds from the issue of the additional Common Stock or the additional bank credit described above, the Company estimates that it will have utilized all of its presently available bank credit before June, 1981.

In order to provide the Company with sufficient revenues to satisfy the earnings test required for the issuance of General and Refunding Mortgage Bonds needed during 1981, on January 14, 1981, the Company filed a request with the NHPUC for an emergency surcharge designed to increase annual revenues by approximately \$35,500,000. On February 27, 1981, the NHPUC denied the Company's request since in its opinion the Company's request did not reflect the favorable impact on the Company's financial situation resulting from the February, 1981 approval of MMWEC's increased participation in the Seabrook project. The Company's motion for rehearing was denied on March 26, 1981. In its February order, the NHPUC asserted that the Company had not taken necessary steps to reduce controllable expenses. The Company has since instituted the following measures — a hiring freeze; a salary freeze for all senior executives; a deferral of \$8,000,000 in non-Seabrook related construction projects; a deferral of \$2,500,000 in maintenance projects; the elimination, subject to union negotiations, of the employee electric rate discount; and strict limits on business travel and other business expenses. Management believes that the steps outlined above are not in the best interests of maintaining reliable service to customers.

On April 2, 1981, the Company filed with the NHPUC a request for permanent rates designed to increase annual revenues by approximately \$34,900,000 (about 9.7%) together with a request for temporary rates at the increased level to be effective at the earliest possible date. On May 1, 1981, the NHPUC granted the Company temporary rates (which will be collected subject to refund) designed to increase annual revenues by \$17,435,268, effective with bills sent out for services rendered on or after May 1, 1981. The NHPUC based its decision on the overall rate of return of 13.6% (15.9% on common equity) allowed in its most recent rate decision in June, 1980; in its April, 1981 request for increased rates, the Company requested the NHPUC to allow an 18.65% return on common equity. The Company estimates that the additional revenues provided by the temporary rates will enable the Company to issue somewhat less than the \$50,000,000 of General and Refunding Mortgage Bonds



planned for the fourth quarter of 1981 unless the NHPUC grants the Company increased permanent rates. The Company's ability to issue General and Refunding Mortgage Bonds in adequate amounts and in a timely fashion is considered by the Company to be an essential part of its financing program.

### NECESSITY OF ADEQUATE RATES, REQUIRED APPROVALS AND FINANCING

If continued rate support is not granted in sufficient amounts and in a timely manner or if the reduction in the Company's interest in the Seabrook project to about 35% does not continue in due course, the Company may be unable to obtain the external financing necessary to finance its ownership interest in the Seabrook project.

Adequate rates, timely reduction of its Seabrook interest, and timely financing (including the additional Common Stock offered hereby) are all essential to enable the Company to maintain its construction program and continue its business operations.

### RECENT RESULTS OF OPERATIONS

Information with respect to the results of operations for the twelve months and three months ended March 31, 1981 and 1980 is as follows:

	Twelve Months Ended March 31,		Three Months Ended March 31,	
	1981	1980	1981	1980
	(Thousands except Earnings Per Share)			
Operating Revenues .....	\$371,991	\$315,940	\$123,942	\$103,198
Operating Income .....	44,163	45,883	13,069	16,213
Net Income .....	59,550	45,701	16,902	17,199
Preferred Dividend Requirements .....	16,410	9,212	4,806	2,418
Earnings Available for Common Stock .....	43,140	36,489	12,096	14,781
Average Shares of Common Stock Outstanding .....	17,706	13,514	19,402	14,690
Earnings Per Share of Common Stock .....	\$2.44	\$2.70	\$0.62	\$1.01

The foregoing information is unaudited and, in the opinion of management, includes all adjustments (consisting only of normal recurring accruals) necessary to a fair statement of results of operations for such periods.

Earnings per share for both the twelve months and the three months ended March 31, 1981 decreased from corresponding periods during 1980. This decline in earnings reflects the effects of continuing inflationary pressure on the Company's operating expenses and interest costs as well as increased preferred dividend requirements and a substantial increase in the number of average shares of common stock outstanding. Operating expenses rose 27% in the first quarter, while operating revenues increased only 20%.

The decline in earnings performance emphasizes the importance and need for the permanent rate relief now being sought by the Company. See "Financing and Rate Relief" regarding a temporary rate increase of approximately \$17,400,000 granted by the NHPUC, effective May 1, 1981.

## COMMON STOCK DIVIDENDS AND PRICE RANGE

The Company has paid regular quarterly dividends on its Common Stock since 1946 when its Common Stock first became publicly held. The Company's annual dividend increased from \$1.64 to \$1.72 in 1975, to \$1.86 in 1976, to \$1.88 in 1977, and \$2.12 in 1978. A quarterly dividend of .53¢ per share was paid on February 14, 1981, indicating a continuation of an annual dividend rate of \$2.12 paid in 1979 and 1980. The shares of the additional Common Stock offered hereby will not be entitled to the May, 1981 dividend. Future dividends will be dependent on the Company's future earnings, its cash position, its financial condition and other factors.

The Company has determined that 100% of the Company's 1980 Common Stock dividends and approximately 74% of the Company's 1980 Preferred Stock dividends will be treated as a return of capital for federal income tax purposes and accordingly will not be taxable as dividend income. The return of capital will have the effect of reducing the tax basis of a stockholder's shares and, to the extent it exceeds such basis, will be taxable to stockholders as a capital gain. The Company currently estimates that substantially all of the 1981 dividends on Common Stock will also be treated in this manner.

The following table indicates the high and low sales prices of the Company's Common Stock as reported in *The Wall Street Journal* as composite transactions:

	<u>High</u>	<u>Low</u>		<u>High</u>	<u>Low</u>
1979			1980		
First Quarter	21 $\frac{1}{8}$	19 $\frac{1}{2}$	First Quarter	17	13
Second Quarter	19 $\frac{7}{8}$	17 $\frac{1}{8}$	Second Quarter	17 $\frac{1}{4}$	13 $\frac{3}{4}$
Third Quarter	19 $\frac{5}{8}$	17 $\frac{1}{4}$	Third Quarter	17 $\frac{5}{8}$	14 $\frac{7}{8}$
Fourth Quarter	18 $\frac{1}{2}$	15	Fourth Quarter	16 $\frac{7}{8}$	13 $\frac{3}{4}$
			1981		
			First Quarter	16 $\frac{1}{4}$	14 $\frac{1}{2}$
			Second Quarter		
			(through May 4)	16 $\frac{1}{2}$	14 $\frac{3}{8}$

The last reported sales price on the New York Stock Exchange on May 4, 1981 was 14 $\frac{7}{8}$ . The book value of the Common Stock at March 31, 1981 was \$20.65 per share. After the sale of the additional Common Stock offered hereby, the book value per share at that date on a pro forma basis would have been \$19.94.

The Company has a Dividend Reinvestment and Common Stock Purchase Plan under which holders of its Common Stock may automatically reinvest their dividends, make optional cash investments of an aggregate of from \$25 to \$5,000 per quarter, or both, in additional shares of Common Stock without payment of any brokerage commission or service charge. Participation in the Plan is offered only by means of a separate prospectus available upon request from the Company.

## DESCRIPTION OF COMMON STOCK

The authorized capital stock of the Company consists of 27,000,000 shares of Common Stock, \$5 par value (the "Common Stock") and two classes of Preferred Stock consisting of 1,350,000 shares of Preferred Stock, \$100 par value, and 5,000,000 shares of Preferred Stock, \$25 par value. The two classes of Preferred Stock rank on a parity with each other and are hereinafter referred to collectively as the "Preferred Stock". Each class of the Preferred Stock may be issued in one or more series.

### Dividend Rights.

Subject to the prior rights of the Preferred Stock and to the limitations described below, the Common Stock is entitled to dividends when and as declared by the Board of Directors out of any remaining funds legally available therefor.

Each series of the Preferred Stock is entitled, when and as declared by the Board of Directors, to cumulative quarterly dividends at the annual rate per share designated in its title in preference to the Common Stock and any other junior stock. Sinking fund requirements on each of the five outstanding Series of the Sinking Fund Preferred Stock are on a parity with dividend requirements on the Preferred Stock.

The Articles of Agreement contain certain limitations, applicable so long as any shares of the Preferred Stock are outstanding, on the Company's right to declare dividends on the Common Stock out of net income (similar limitations are contained in certain indentures supplemental to the First Mortgage, applicable so long as any bonds of Series H through V are outstanding), or in the event Common Stock Equity (as defined) is less than 25% of Total Capitalization (as defined). Pursuant to terms of the Company's General and Refunding Mortgage Indenture, dividends may not be paid on the Common Stock in excess of the Company's Net Income accumulated after January 1, 1978 less the aggregate amount of all dividends paid or declared on the Preferred Stock of the Company during such period plus \$32,000,000. At March 31, 1981, \$64,556,000 of Retained Earnings was not subject to dividend restriction.

### Voting Rights.

Each share of Common Stock is entitled to one vote and this class of capital stock has general voting rights. Under New Hampshire law and the Company's Articles of Agreement, an amendment to the Articles of Agreement containing the terms of any new series of the Preferred Stock requires for approval the favorable vote of the holders of at least two-thirds ( $\frac{2}{3}$ ) of the shares of Common Stock voting at the meeting called for the purpose of considering such an amendment.

If and when dividends payable on any class of the Preferred Stock are in arrears in an amount equal to four or more quarterly dividends on all series of the class, the holders of the Preferred Stock of all series of such class voting as a single class or voting with holders of one or more other classes of the Preferred Stock, as a single class, if such holders have the right to participate in such election, have the right to elect a majority of the Board of Directors.

The affirmative vote of certain percentages of the Preferred Stock is required for (1) authorization of any additional prior or parity preferred stock or securities convertible into such stock, except

to refund all of the Preferred Stock; (2) issuance of stock having a preference as to dividends or assets over the Preferred Stock, or securities convertible into such stock, except to refund funded indebtedness; (3) any prejudicial change in the terms and provisions of such stock; (4) issuance of any shares of Preferred Stock or other preferred stocks ranking on a parity as to dividends or assets with the Preferred Stock, or securities convertible into shares of such preferred stocks, unless to refund preferred stocks or funded indebtedness or unless certain requirements are met as to net income and as to the amount of capital, premium and surplus; (5) issuance or assumption of unsecured indebtedness in excess of specified amounts; or (6) merger or consolidation of the Company with or into another corporation unless such merger or consolidation or the issuance or assumption of securities to be issued in connection therewith is authorized by any Federal regulatory authority having jurisdiction.

#### **Liquidation Rights.**

Upon any liquidation, dissolution or winding up, after payment of the Company's obligations and after payment in full to holders of the Preferred Stock, the remaining net assets of the Company shall be distributed ratably to the holders of the Common Stock. In case of involuntary liquidation the \$25 Preferred Stock is entitled to \$25 per share and the \$100 Preferred Stock to \$100 per share, in each case plus accrued dividends, or in case of voluntary liquidation, to the redemption price applicable to the particular series, and no more, in preference to the Common Stock.

#### **Other Rights.**

Holders of the Common Stock have preemptive rights to purchase each future issue of Common Stock, warrants carrying rights to Common Stock or securities convertible into Common Stock which is offered for sale for cash other than (i) by a public offering or (ii) to or through underwriters or investment bankers who shall have agreed promptly to make a public offering thereof, or (iii) to employees of the Company or (iv) to holders of the Common Stock under a dividend reinvestment and common stock purchase plan.

The Common Stock is not liable for further calls or to assessment.

#### **Transfer Agents and Registrars.**

The transfer agents for shares of Common Stock are The First National Bank of Boston and Manufacturers Hanover Trust Company, New York, New York, and the registrars are The First National Bank of Boston and Morgan Guaranty Trust Company of New York.

### **LEGAL OPINIONS**

The validity of the additional Common Stock will be passed upon for the Company by Messrs. Sulloway Hollis & Soden, Concord, New Hampshire, and by Messrs. Ropes & Gray, Boston, Massachusetts, and for the Underwriters by Messrs. Choate, Hall & Stewart, Boston, Massachusetts; the last two firms, as to the organization and existence of the Company, approvals of state commissions and legal conclusions affected by the laws of New Hampshire, Vermont, Maine and Connecticut, may rely upon Messrs. Sulloway Hollis & Soden, who in turn may rely upon counsel in Vermont, Maine and Connecticut.

## EXPERTS

The financial statements and related schedules in the Annual Report on Form 10-K, as amended, of Public Service Company of New Hampshire incorporated by reference in this Registration Statement have been incorporated herein in reliance upon the report of Peat, Marwick, Mitchell & Co., independent certified public accountants, and upon the authority of said firm as experts in accounting and auditing.

Messrs. Sulloway Hollis & Soden have reviewed the statements made in the Company's Annual Report on Form 10-K, as amended, incorporated herein by reference, as to matters of law and legal conclusions under the captions "Regulation" and "Municipalities and Cooperatives" in Item 1 "Business", under the caption "Rate Proceedings—New Hampshire Retail" in Item 3 "Legal Proceedings", and the statements made herein as to matters of law and legal conclusions under the caption "Description of Common Stock". Messrs. Ropes & Gray have reviewed the statements made in the Company's Annual Report on Form 10-K, as amended, incorporated herein by reference, as to matters of law and legal conclusions under the subcaptions "Mortgage Bonds" and "Preferred Stock", under the caption "Financing" in Item 1 "Business", under the captions "New England Power Pool" and "Seabrook Nuclear Project" in Item 1 "Business", and concerning the jurisdiction of the Federal Energy Regulatory Commission, the Nuclear Regulatory Commission, and the Massachusetts Department of Public Utilities under the caption "Regulation" in Item 1 "Business" and the statements made herein as to matters of law and legal conclusions under the caption "Description of Common Stock". Such statements are included or incorporated herein by reference, as the case may be, on the authority of such firms as experts.



## UNDERWRITING

The names of the several Underwriters and the respective numbers of shares of the additional Common Stock which they have severally agreed to purchase from the Company, subject to the terms and conditions specified in the Underwriting Agreement filed as an exhibit to the Registration Statement, are as follows:

Name	Number of Shares of Stock	Name	Number of Shares of Stock
Adler, Peabody & Co. Incorporated	346,500	Dain Bosworth Incorporated	22,500
Blyth Eastman Paine Webber Incorporated	346,500	Eppler, Guerin & Turner, Inc.	22,500
Bache Halsey Stuart Shields Incorporated	46,500	Fahnestock & Co.	22,500
The First Boston Corporation	46,500	First of Michigan Corporation	22,500
Bear, Stearns & Co.	46,500	Gruntal & Co.	22,500
Drexel Burnham Lambert Incorporated	46,500	Janney Montgomery Scott Inc.	22,500
Goldman, Sachs & Co.	46,500	Josephthal & Co. Incorporated	22,500
E. F. Hutton & Company Inc.	46,500	Ladenburg, Thalmann & Co. Inc.	22,500
Lehman Brothers Kuhn Loeb Incorporated	46,500	Legg Mason Wood Walker, Incorporated	22,500
Merrill Lynch, Pierce, Fenner & Smith Incorporated	46,500	McDonald & Company	22,500
L. F. Rothschild, Unterberg, Towbin	46,500	Philips, Appel & Walden, Inc.	22,500
Salomon Brothers	46,500	Piper, Jaffray & Hopwood Incorporated	22,500
Shearson Loeb Rhoades Inc.	46,500	Prescott, Ball & Turben	22,500
Smith Barney, Harris Upham & Co. Incorporated	46,500	Rauscher Pierce Refsnes, Inc.	22,500
Warburg Paribas Becker Incorporated	46,500	The Robinson-Humphrey Company, Inc.	22,500
Wertheim & Co., Inc.	46,500	Rotan Mosle Inc.	22,500
Dean Witter Reynolds Inc.	46,500	Sutro & Co. Incorporated	22,500
Advest, Inc.	31,000	Wheat, First Securities, Inc.	22,500
Alex. Brown & Sons	31,000	Birr, Wilson & Co., Inc.	8,000
A. G. Edwards & Sons, Inc.	31,000	B. C. Christopher & Co.	8,000
Moseley, Hallgarten, Estabrook & Weeden Inc.	31,000	Faherty & Faherty Inc.	8,000
Oppenheimer & Co., Inc.	31,000	Ferris & Company, Incorporated	8,000
Thomson McKinnon Securities Inc.	31,000	First Albany Corporation	8,000
Tucker, Anthony & R. L. Day, Inc.	31,000	First Mid America Inc.	8,000
Bacon, Whipple & Co.	22,500	Herzfeld & Stern	8,000
Bateman Eichler, Hill Richards Incorporated	22,500	J. J. B. Hilliard, W. L. Lyons, Inc.	8,000
William Blair & Company	22,500	Interstate Securities Corporation	8,000
Blunt Ellis & Loewi Incorporated	22,500	Investment Corporation of Virginia	8,000
Boettcher & Company	22,500	Jesup & Lamont Securities Co., Inc.	8,000
J. C. Bradford & Co., Incorporated	22,500	Johnston, Lemon & Co. Incorporated	8,000
Bruns, Nordeman, Rea & Co.	22,500	Edward D. Jones & Co.	8,000
Burgess & Leith Incorporated	22,500	Laidlaw Adams & Peck Inc.	8,000
Butcher & Singer Inc.	22,500	Morgan, Olmstead, Kennedy & Gardner Incorporated	8,000
Crowell, Weedon & Co.	22,500	Newhard, Cook & Co. Incorporated	8,000
		Parker/Hunter Incorporated	8,000
		Wm. C. Roney & Co.	8,000

<u>Name</u>	<u>Number of Shares of Stock</u>	<u>Name</u>	<u>Number of Shares of Stock</u>
R. Rowland & Co., Incorporated	8,000	Emmett A. Larkin Company, Inc.	4,500
Wagenseller & Durst, Inc.	8,000	A. E. Masten & Co., Incorporated	4,500
Wedbush, Noble, Cooke, Inc.	8,000	The Milwaukee Company	4,500
Anderson & Strudwick, Incorporated	4,500	F. L. Putnam & Company, Inc.	
Barrett & Company	4,500	Barclay Putnam Division	4,500
William M. Cadden & Co., Inc.	4,500	Raffensperger, Hughes & Co., Inc.	4,500
Robert C. Carr & Co., Inc.	4,500	Scherck, Stein & Franc, Inc.	4,500
Evaus & Co., Incorporated	4,500	I. M. Simon & Co.	4,500
First Affiliated Securities, Inc.	4,500	E. W. Smith Co.	4,500
First Equity Corporation of Florida	4,500	Smith, Moore & Co.	4,500
Gradison & Company Incorporated	4,500	Stix & Co. Inc.	4,500
Bernard Herold & Co., Inc.	4,500	Edward A. Viner & Co., Inc.	4,500
Howe, Barnes & Johnson, Inc.	4,500	Total	<u>2,500,000</u>

The Underwriting Agreement provides that the several Underwriters are required to take and pay for all of the shares of the additional Common Stock offered hereby if any are taken. The obligations of the Underwriters are subject to certain conditions precedent.

The Company has been advised by Kidder, Peabody & Co. Incorporated and Blyth Eastman Paine Webber Incorporated, as Representatives of the several Underwriters, that the Underwriters propose to offer the additional Common Stock to the public initially at the offering price set forth on the cover page of this Prospectus and, through the Representatives, to certain dealers at such price less a concession of not in excess of 50¢ a share, and that the Underwriters and such dealers may realow a discount of not in excess of 10¢ a share to other dealers. The public offering price and the concessions and discounts to dealers may be changed by the Representatives.

No dealer, salesman or any other person has been authorized to give any information or to make any representations other than those contained in this Prospectus and, if given or made, such information or representations must not be relied upon as having been authorized by the Company or the Underwriters. This Prospectus does not constitute an offer to sell, or a solicitation of an offer to buy, any of these securities by any Underwriter in any jurisdiction to any person to whom it is unlawful to make such offer or solicitation in such jurisdiction. The delivery of this Prospectus does not imply that the information herein is correct as of any time subsequent to its date.

#### TABLE OF CONTENTS

	<i>Page</i>
Available Information .....	2
Incorporation of Certain Documents by Reference .....	2
The Issue in Brief .....	3
The Company .....	4
Use of Proceeds .....	4
Construction Program .....	4
Financing and Rate Relief .....	7
Necessity of Adequate Rates, Required Approvals and Financing .....	9
Recent Results of Operations .....	9
Common Stock Dividends and Price Range .....	10
Description of Common Stock .....	11
Legal Opinions .....	12
Experts .....	13
Underwriting .....	14

**PSNH** **PUBLIC SERVICE**  
Company of New Hampshire

2,500,000 Shares

Common Stock

(\$5 Par Value)

#### PROSPECTUS

**Kidder, Peabody & Co.**  
Incorporated

**Blyth Eastman Paine Webber**  
Incorporated

May 5, 1981

RECEIVED

MAY - 1 1981

DR 81-87

PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE

..00..

Appearances: Martin Gross, Esquire, Philip Ayers, Esquire, Eaton Tarbell, Esquire for Public Service Company of New Hampshire; Gerald Eaton, Esquire on behalf of the Community Action Program; Gerald Lynch, Esquire on behalf of the Legislative Utility Consumers' Council; Dom D'Ambruoso, Esquire for the Business and Industry Association.

..00..

REPORT

On April 2, 1981, Public Service Company (hereinafter referred to as "PSNH" or the "Company") filed a request for temporary and permanent rate relief in the amount of \$34,962,094. The Commission suspended the proposed tariff pages pending hearings and investigation. A hearing was scheduled on April 21, 1981 on PSNH's temporary rate request.

The temporary rate statute, RSA 378:27, was enacted in 1941 by the legislature. The New Hampshire Supreme Court has interpreted this statute on numerous occasions. In State v. New England Telephone and Telegraph Co., 103 N.H. 394, 173 A.2d 810 (1959), the Supreme Court found that the legislature enacted this statute to protect utilities against confiscatory rates.

The Supreme Court noted in New England Tel. and Tel. Co. v. State, 95 N.H. 515, 68 A.2d 114 (1949) that temporary rates are to be established under this statute with expedition and without such investigation as is required for the determination of permanent rates. Thus temporary rates require a lesser burden of proof and investigation compared to either per-





manent or emergency rates. Public Service Company, DR 81-6, Report and Second Supplemental Order No. 14,766, page 1.

The burden of proof required by the temporary statute can be satisfied by the filing of reports with the Commission unless there appears to be reasonable grounds to question the figures in such reports.

In denying PSNH's request for temporary and emergency rates two months ago, the Commission noted that while temporary rates have a lesser burden of proof, they are not available simply for the asking. In that prior proceeding, the Commission was provided estimated data. Estimated data as to jurisdictional allocations and return are a perfect example of the type of information envisioned by RSA 378:27 to be questioned and for which the request may be denied.

This time PSNH has filed an actual jurisdictional study reflecting a 1980 test year and providing a calculation of the earned rate of return for each aspect of its business. For PSNH's Vermont and Maine jurisdictions there is now evidence that these portions of the business are not carrying their fair share. PSNH has, however, taken steps to correct this situation with a major increase filed in Vermont and an agreement to sell its Maine operations. Such action responds to the Commission's concerns expressed in DR 81-6 as well as DR 79-187.

In its New Hampshire jurisdiction the return is higher but still below that found reasonable in the last proceeding. The next question to be evaluated is whether management has done all that was necessary to minimize costs. Our review of PSNH's Form 1 reveals actual reduction in major expense categories. Further, PSNH has eliminated more expenses in response to our rejection of the emergency rate increase. These factors demonstrate a positive response and satisfy the lesser burden of proof required for

temporary rates. Whether the more extensive inquiry required in a permanent rate decision will yield the same result depends on the data the Commission receives from all parties.

The question that must be considered before the conclusion of the proceedings is what has caused the need for an increase despite recent rate awards and management cuts in expenses. Two identifiable causes have already surfaced; the state franchise tax and expenses associated with cable television rentals of poles.

A portion of the state franchise tax relates to earnings. A portion of PSNH's earnings are not cash earnings but rather can be viewed as promises to pay in the future. Yet, the state franchise tax is leveled on these non-cash earnings. The tax associated with these non-cash, AFUDC earnings was \$861,132 in 1978, \$2,095,551 in 1979 and \$5,262,571 in 1980. This 3.1 million dollar increase since the last rate case is totally unreasonable. Even worse is that when the AFUDC costs are placed in rate base after 1984, the earnings from the return on this rate base entry will also have an associated franchise tax. The result, double taxation and higher electric rates.

House Bill 449, sponsored by Representative Arnold Wight, would eliminate this unfairness and lower electric rates. If the legislature is serious about cutting electric rates, they have an excellent opportunity to reduce rates by 5.2 million dollars.

Another aspect increasing electric rates is the widening differential between the expenses associated with cable television pole attachments and the revenues derived from the rental fees charged. The fees are set by the Federal Communications Commission (FCC) and as is typical of

federal regulations, it is slow in responding to changed economics. The expenses associated with maintaining poles has risen, yet the pole rental revenue collected from cable television companies has remained stationary. If these expenses are not reflected by an increase in pole rental revenue, the electric consumer pays and thereby subsidizes the cable television customer. When so much concern is being voiced about the high costs of energy it is extraordinary that this state would elevate the rights of the cable television viewer over that of a poor person trying to heat his or her home.

This situation could have been remedied by passage of House Bill 531\* which would have transferred authority for setting pole rental rates from the FCC to this Commission. PSNH estimated that the failure of pole rental revenues to match expenses has cost ratepayers \$311,630. When similar figures were compiled for the other electric utilities and the twelve telephone utilities, a major subsidy for the cable television industry emerges. The Commission believes that reducing PSNH rates by \$311,630 is far more important than holding down cable television costs. The Commission would request the legislature to reconsider its rejection of this legislative proposal. Compassion and logic both dictate that society should place a higher priority on keeping people warm instead of television sets.

Hopefully the legislature will act to remove these two barriers which together would lower rates by approximately 5.5 million dollars.

The Commission finds that based on the records of the Company, submitted by Witness Long and the testimony of witnesses Harrison and Littlefield, a temporary rate increase is justified.

\*sponsored by Representative Barbara Bowler

The level of the increase is raised by all parties. PSNH initially sought an increase of \$34,962,094 on April 2, 1981. During the interim, the Commission issued its decision in DA 81-94 which changed the accounting practice allowed PSNH. The result of the change in accounting reduces the increase requested by \$1,342,151. All parties agree that the amount requested should be reduced by this amount. This 1.3 million dollar figure relates to a reduction in expenses.

There are other expenses which have been placed in question as to temporary rates. Two of these expense items relate to expenses which will occur after August of 1981. One is a pro-forma payroll expense and the other is a pro-forma property tax adjustment. Both the Commission Staff and the LUCC questioned the reasonableness of including these expenses in temporary rates. The Commission agrees that such expenses do not merit inclusion in rates at this time. The Commission has demonstrated that it is prepared to recognize these expenses where reasonable after they have occurred, our most recent recognition being the secondary step increases for these items in DR 79-187. Temporary rates are not designed to reflect potential increases in the future. Consequently, the \$776,276 pro forma for real estate taxes and the \$1,729,123 pro forma for payroll taxes will be removed from the temporary rate request.

The next area of controversy is the proposal by Public Service Company to increase its return on common equity to 18.65%. Both the Community Action Program and the LUCC argue that temporary rates cannot include a higher return on common equity from that found in the last proceeding. The Commission agrees.

Temporary rates are to be established with expedition and without such investigation as required for setting permanent rates. New England Tel. & Tel. Co. v. State AS N.H. 515, 68A.2d.114 (1949). The rate of return calculation and especially the return on common equity aspect require significant investigation and proof. A Commission cannot obtain a just and reasonable return on common equity from just examining the records of a given utility. Rather, a complex analysis of the utility in question compared to other enterprises of corresponding risks is required. Expert testimony is necessary and judgment plays an important role.

The New Hampshire Supreme Court has recognized this complexity by finding that during a temporary rate proceeding this Commission can give consideration to a rate of return found to be reasonable in an earlier proceeding without finding its present reasonableness. Public Service Co. v. State 102 N.H. 66, 150 A.2d 810 (1959). The Commission will not accept PSNH's proposal for a 18.65% return on common equity for purposes of temporary rates. Rather, the Commission will substitute the return on common equity found to be reasonable in the last proceeding. DR 79-187, Report and Order dated June, 1980.

The Commission neither accepts or rejects the testimony offered on this subject. Rather, the Commission refuses to read any return on common equity testimony during a <sup>temporary</sup> rate proceeding. All parties have the right to explore this topic through testimony, discovery and cross examination.

In its testimony, PSNH raises the possibility of further lines of credit by its bankers if the results are favorable from this Commission decision. The recent history involving PSNH and its bankers do not substantiate this assertion. PSNH's bankers have been slow to provide



the necessary lines of credit for PSNH to function. Furthermore, the rates charged are high relative to others within the industry. The rate of progress by PSNH's bankers can only be described as glacial. If the Commission is to seriously respond to such assertions, the banks will have to respond in a favorable fashion sometime in the very near future.

The use of our previous finding as to return on common equity leads to an overall rate of return of 13.6%.

PSNH also seeks a 1% attrition factor in its temporary rate request. Commission Staff, CAP, and the Lucc all object to this. The Supreme Court established the standard for utilities as far as permanent rates are concerned. New England Tel. & Tel. v. State 113 N.H. 92, 302 A.2d.813 (1973). The standard set forth in that case requires recognition of attrition if established by a utility. In Granite State Electric 119 N.H. \_\_\_\_ (1979). The Court further defined the standard by requiring elaborate findings to support a utilities allowance. Thus, the standard in New Hampshire is that an attrition will be recognized if proven by a utility and that such proof supports the adjustment requested. To restate the standard, not only must a utility prove attrition but it also must carry the burden as to quantifying the adjustment. Hampton Water Company 64 NHPUC (1979)

The duration of a temporary rate proceeding does not allow for the necessary offers of proof that would lead to a quantified attrition adjustment. Furthermore, an attrition factor is an adjustment made at the end of a permanent rate proceeding to provide a greater likelihood that the utility will earn the return set by the Commission. Consequently, an attrition adjustment would not proper ratemaking at this time.

The Commission believes that the test year filed by PSNH provides the greatest access of information because of its characteristic calendar

year. Consequently, much of the information usually obtained by data requests are available in reports routinely filed with the Commission.

This access to information will necessitate a tighter hearing schedule. Furthermore, since temporary rates have been established it is necessary to expedite the proceedings. This case will be finished prior to July 14, 1981 and the hearing schedule will be conducted accordingly.

The Commission will allow temporary rates in the amount of \$17,435,268. The calculation for these rates is as follows:

NH Rate Base, Adjusted to Net of Tax AFUDC	\$362,430,797
Less: Working Capital Adjustment Due to Est. Rate Increase (1,319,793 x 12.5% x NH Portion 80.52%)	<u>132,837</u>
Adjusted Rate Base	362,297,960
Cost of Capital (Using 15.9% Common Equity and No Attrition)	<u>x 13.6%</u>
N.H. Net Operating Income Requirement	49,272,523
Less Adj. Net Operating Income	<u>40,293,883</u>
Required Increase in Net Operating Income	8,978,640
Tax Effect ( $\div$ 51.497%)	17,435,268

The Adjusted net operating income has been calculated as follows:

<u>Revised Net Operating</u>		<u>calculation</u>
Net Operating Income (Adj.) Net Method		\$ 39,327,499
Plus: Salary Adjustment		
O & M Expense:		
Total Company	\$716,650	
x NH Allocator	<u>87.5%</u>	627,069
Real Estate Taxes	397,185	
x NH Allocator	<u>85.43</u>	<u>339,315</u>
Adjusted Net Operating Income		40,293,883

The rate increase approved here refers to the overall increase for the New Hampshire retail rates and does not endorse any particular method of allocating those revenues to class. In making such allocations the Commission believes that consideration must be given to cost of service principles and to rate design objectives such as conservation. For this reason, the Commission has examined the issue of rate design under the temporary rates and made the determinations specified in the remaining sections of this report.

#### RATE DESIGN

##### A. Introduction

The primary issues in rate design are the allocation of revenue responsibility to class and subclass and the setting of specific charges within those classes. In DR 79-187, the Company's previous rate case, the Commission established Phase II to allow for a detailed review of rate design and for the consideration of the ratemaking standards of the Public Utility Regulatory Policies Act (PURPA). The proceedings are now under way and will culminate in an order pertaining to rate design sometime this summer. The rate design established will be based on a thorough and complete record and on a careful consideration of the objectives of fairness and equity, efficiency, conservation, consistency and other objectives of rate design.

However, the Company has applied for a rate increase and, in particular, a temporary rate increase, prior to the establishment of a complete record in DR 79-187, Phase II. The granting of a temporary rate increase will require the allocation of the increased revenues to class and the assignment of these revenues to specific elements in the tariff. The ch

of methods used to allocate or to assign the increased revenues constitutes rate design and must be carefully considered by this Commission. The methods chosen must achieve, to the extent possible, the objectives of rate design and must not undermine or erode these objectives. This Commission does not have the luxury of waiting for the completion of DR 79-187, Phase II to make a determination on rate design in DR 81-87. Temporary rates must be established immediately, based on the best sources of data and information available and based on the considered judgment of the Commission.

B. Allocation of Increased Revenues

The Company has proposed an across-the-board percentage increase in the revenues collected from each class. However, we note in the Company's own Time-Differentiated Accounting Cost (TDAC) Study submitted in DR 79-187, Phase II, that the calculation of the estimated actual rate of return by class indicates serious inter-class subsidies. For example, the study indicates that the small commercial customers under the General Service Rate are being overcharged by a substantial amount. An across-the-board percentage increase not only fails to address the issue of inter-class subsidies, it actually increases the subsidy. Therefore, the Commission finds that an across-the-board percentage increase is an unacceptable method of allocating the increased revenues to class.

However, the Commission notes that the Company's TDAC study is not the only evidence that will be submitted in DR 79-187, Phase II, and that the assumptions used in any accounting cost study are subject to considerable judgment. The judgment the Company has used in its TDAC study has not yet

been subject to review in the record of DR 79-187, Phase II. In addition, the study is based on calendar year 1979 and is not specifically applicable to the test year in DR 81-87. For these reasons, the Commission cannot adopt the Company's TDAC study as the sole means of determining the allocation of increased revenues to class.

The Commission finds that the allocation of the revenue increase to class must be based on a compromise that spreads the increase across all classes while heavily weighting the Company's TDAC study. By this means, the inter-class subsidies will tend to be reduced, while leaving considerable room for error and for further refinements in DR 79-187, Phase II. In particular, the compromise means that the General Service Customers will receive a substantially lower percentage increase, that Transmission General customers will receive a slightly higher percentage increase, and that outdoor lighting customers will receive the highest percentage increase. The compromise approved by the Commission is specified in Table I, Summary of Rate Changes, PSNH Tariff 25, and is based on an allocation of the revenue increase according to these percentages:

Residential	45%
General	4%
Primary General	22%
Transmission General	25%
Outdoor Lighting	4%



DR 81-87

Table I -- Summary of Rate Changes

PSNH Tariff 25

Rate Class	Average Customers	Revenue at Present Rates	Revenue at Temporary Rates	Change In Revenue	% Increase
Residential (Rate D)	246,360	\$150,107,327	157,953,198	7,845,871	5.2
General Service (Rate G)	31,731	58,330,446	59,027,837	697,411	1.2
Primary General (Rate GV)	1,226	72,598,479	76,434,238	3,835,759	5.3
Transmission General (Rate IR)	85	71,577,275	75,936,092	4,358,817	6.1
Outdoor Lighting (Rate ML)	13,430	7,862,170	8,559,580	697,410	8.9
Total	279,575*	360,475,697	377,910,965	17,435,268	4.8

\*Does not include 13,257 private area light customers already counted under other rates.

In addition to inter-class subsidies, the Company's TDAC study also indicated that serious intra-class subsidies exist. The Commission is aware of the apparently severe intra-class subsidy in the General Service Class apparently due to the lower rates for Space Heating and Uncontrolled Water Heating, and addresses that issue in the section on tariff provisions. For the Residential Class, the Commission examined the TDAC study and data on 1980 class consumption and revenue filed by the Company as a data response to PURPA Staff Data Request, Set Number 4, Request 3, in DR 79-187, Phase II. Again, the Commission determined that an across-the-board percentage increase

was unacceptable. Based in part on the Company's TDAC study, the Commission finds that the increased revenues within the residential class should fall more heavily on the Space Heating customers and the Uncontrolled Water Heating customers. There is no evidence to indicate that the lower rates for these sub-classes substantially meet the objectives of rate design in today's environment. The allocation of the revenue increase to the residential sub-classes is designed to increase space and Water heating sub-class average revenues per kwh by approximately twice the increase of the power and light sub-class average revenue per kwh. The sub-class "other" does not include the categories which the Commission feels should be exempted from the increase and is assigned an increase somewhere between the space heating and power and light increases. The allocation of increased revenues within the residential class shall be based on the following percentages:

Power and Light	39%
Space Heating	35%
Uncontrolled Water Heating	24%
Other	2%

#### C. Tariff Provisions

The remaining issues in the design of rates under the temporary rate increase pertain to the review of the specific rates and terms of service and the assignment of the additional revenues to specific charges in the tariff. The assignment of revenues to particular charges cannot be completed without a detailed analysis of the billing determinants for those charges, but the basic rate design principles to be followed in making those assignments can be specified. The Commission has examined the existing tariff and other available information and has considered the many important objectives of rate making. The Commission finds that the additional revenues

from the temporary rate increase should be assigned in specific manners to the tariffs for the different classes, and that several changes in the terms and conditions of certain rates are required. The specific changes and revenue increase assignments approved by the Commission are as follows:

Residential

1. Close out the Space Heating rate and the G-Option Space Heating Rate to new customers.
2. Close out the Uncontrolled Water Heating rate to new customers.
3. Offer service to new space heating and uncontrolled water heating customers under the standard Residential rate.
4. Do not apply any increase to the Controlled Water Heating rate, the Optional Seasonal summer rate, the Optional Time-of-Day Off Peak rate.
5. Assign the revenue increase to the energy charge portion of each rate.
6. For existing space heating customers, set the energy charge for the first block equal to the temporary residential energy charge.

General Service

1. Close out the Space Heating rate to new customers.
2. Close out the Uncontrolled Water Heating rate to new customers.
3. Offer service to new space heating and uncontrolled water heating customers under the standard General Service rates.
4. Set the Space Heating rate energy charge equal to the energy charge for the high use block under the residential Space Heating rate, including G-Option Space Heating taken by residential customers.
5. Set the Uncontrolled Water Heating rate energy charge for all kilowatt hours equal to the energy charge for residential Uncontrolled Water Heating.

6. Do not assign any increase to the Controlled Water Heating rate.
7. Assign any remaining revenue increase to the highest use block of the General Service tariff, or apply any overcharge resulting from the above requirements to the two lowest use energy blocks of the tariff.

Primary General Service

1. Assign the entire increase to the energy charge by first eliminating the two-block differential and raising the resulting energy charge as needed.

Transmission General Service

1. Assign the increase on a mills per kilowatt hour basis equally to all portions of the energy charges.

Lighting Service

1. Assign the increase to each element of the tariff on the basis of wattage.

These requirements are based on the Commission's judgment as to the best means of furthering the objectives of rate design, including fairness and equity, efficiency, conservation, consistency and others. It is the judgment of the Commission that the requirements are necessary and justified based on all the information available at this time. It is expected, however, that the final decision in DR 79-18, Phase II, based as it will be a complete and thorough record, will substantially improve upon these requirements. The rate design approved under the temporary rate increase represents a further preliminary step in implementing a new and updated rate design for the Company. The decision in DR 79-187, Phase II to flatten the rates for residential service represented the first step.

Our Order will issue accordingly.

Concurring:  
May 1, 1981

J. Michael Love

Paul R. McQuade

Francis J. Riordan

COMMISSIONERS

PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE

..00..

S U P P L E M E N T A L O R D E R N O. 14,877-


Upon consideration of the foregoing report, which is made a part hereof; it is

ORDERED, that a new tariff for temporary rates as authorized in the aforementioned report, be filed to raise additional revenue in the sum of \$17,435,268 to become effective with all bills for services rendered on or after May 1, 1981; and it is

FURTHER ORDERED, that the Public Service Company of New Hampshire shall file a bond pursuant to RSA 378:30 in such a form and with such sureties, if any, as the Commission may determine, to secure the repayment to the customers of the utility of the difference between the amounts collected under such temporary rates and the rates which the Commission finds should have been in effect during the continuance of such temporary rates. And it is

FURTHER ORDERED, that the Public Service Company of New Hampshire give public notice by publication in a newspaper having general circulation in the territory served by the Company in accordance with the Tariff Filing Rules of this Commission.

By order of the Public Utilities Commission of New Hampshire this first day of May, 1981.

  
Vincent J. Iacopino  
Executive Director and Secretary



BANGOR HYDRO-ELECTRIC COMPANY

Units No. 1 and No. 2

Seabrook Nuclear Power Station

Seabrook, New Hampshire

Information furnished pursuant to § 50.33  
of Commission's Rules and Regulations with  
respect to the particular Applicant named  
above as part of Final Safety Analysis  
Report and Operating License Application  
for the above Units.

---

July 1981

I. ORGANIZATION AND CONTROL

(a) Name of Applicant

Bangor Hydro-Electric Company ("BHE" or the "Company")

(b) Address of Applicant

33 State Street, P.O. Box 932, Bangor, Maine 04401

(c) Description of Business of Applicant

Bangor Hydro-Electric Company is a public utility engaged in the generation, purchase and transmission of electric energy for distribution and sale to approximately 76,000 customers. BHE's service area covers approximately 4,850 square miles in eastern Maine. It is the second largest electric utility in Maine. Approximately 2% of the Company's KWH sales are to other utilities for resale. The maximum peak electric demand experienced during 1980 was 219.5 megawatts on December 15, 1980, at which time the Company had available 279 megawatts of generating capacity. The Company is a participant in the New England Power Pool, and the Company's generating units and those in which it has an interest are centrally dispatched by the Pool. The Company occasionally purchases power from the New Brunswick Electric Power Commission, and is currently negotiating with New Brunswick for a nine year contract for the purchase of 30 megawatts of capacity and energy from New Brunswick's Pt. LePreau Nuclear Unit No. 1, presently anticipated to commence commercial operation in early 1982.

For a more specific description of BHE, reference should be made to Items 1 and 2 of its Form 10-K for 1980 which is submitted herewith as Exhibit A.

(d) Corporate Organization

BHE is a corporation organized under the laws of the State of Maine. As of March 31, 1981, BHE had 7798 domestic shareholders owning 2,082,240 common shares and 13 foreign shareholders owning 6920 common shares.

(e) Corporate Officers and Directors

The names and residence addresses of BHE's directors and principal officers are as follows:

Directors

<u>Name</u>	<u>Residence</u>
George D. Carlisle	Bangor, Maine
John F. Grant	Bangor, Maine
Thomas A. Greenquist	Brewer, Maine
Robert N. Haskell	Bangor, Maine
John T. Maines	Brewer, Maine
James G. Sargent	Hampden, Maine
Earle R. Webster	Bangor, Maine

Officers

Robert N. Haskell Chairman of the Board	Bangor, Maine
Thomas A. Greenquist President	Brewer, Maine
Gerald F. Hart Vice President-Engineering	Brewer, Maine
John P. O'Sullivan Vice President & Treasurer	Brewer, Maine

Paul A. LeBlanc Vice President-Administration	Bangor, Maine
Robert S. Briggs Vice President and General Counsel	Bangor, Maine
William H. Beardsley Vice President-Rates & Research	Orono, Maine
Carroll R. Lee Assistant Vice President- Engineering	Brewer, Maine
Carroll A. Brochu Assistant Treasurer	Brewer, Maine
Robert S. Briggs Clerk	Bangor, Maine
John P. O'Sullivan Assistant Clerk	Brewer, Maine

All of the directors and principal officers of BHE are citizens of the United States of America. BHE is not owned, controlled or dominated by an alien, foreign corporation or foreign government.

## II. FINANCIAL QUALIFICATIONS

Under the Joint Ownership Agreement, BHE is responsible for its Ownership Share of the operation and maintenance cost of the Units which, when the pending transactions described herein have been consummated prior to commercial operation, will be 2.17391% of those costs, and a similar percentage of the ultimate cost of decommissioning the Units.

Based upon the estimates set forth above under Part IV of the General Information, BHE's share of these costs should amount approximately to \$3,261,000 and \$3,261,000 for the first five years of operations of Units 1 and 2, respectively;

and approximately \$913,000 to \$1,870,000 for the decommissioning of the two Units. In addition, BHE's share of fuel expenses during the period would be \$11,152,000.

As evidence of its financial qualifications to meet those costs, BHE submits herewith:

- (i) 1980 Annual Report on Form 10-K, including the 1980 Annual Report to Stockholders. (Exhibit A)
- (ii) 1981 Quarterly Report on Form 10-Q. (Exhibit B)
- (iii) Prospectus, dated December 10, 1980, relating to 250,000 shares of Common stock, \$5 par value. (Exhibit C)
- (iv) Order dated August 8, 1980, of the Maine Public Utilities Commission in BHE's most recent rate proceeding. (Exhibit D)

### III REGULATORY AGENCIES AND PUBLICATIONS

#### (a) Regulatory Agencies

The following regulatory agencies have jurisdiction over the rates and services of BHE:

Maine Public Utilities Commission

Federal Energy Regulatory Commission

#### (b) Publications

The following trade and news publications are used by BHE for official notifications, and/or are otherwise appropriate for notices regarding this unit:

Bangor Daily News  
491 Main Street  
Bangor, Maine 04401



*Seabrook FSAR  
Section D, Exh. A*

SECURITIES AND EXCHANGE COMMISSION

WASHINGTON, D. C. 20549

FORM 10-K

ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF  
THE SECURITIES EXCHANGE ACT OF 1934

For the fiscal year ended December 31, 1980 Commission File No. 0-505

BANGOR HYDRO-ELECTRIC COMPANY

(Exact name of registrant as specified in its charter)

MAINE

(State of incorporation)

01-0024370

(I.R.S. Employer ID No.)

33 State Street, Bangor, Maine

(Address of principal executive offices)

04401

(Zip Code)

Registrant's telephone number, including area code 207-945-5621

Securities registered pursuant to section 12(g) of the Act:

Common Stock, \$5 Par value

(2,803,600 shares outstanding at December 31, 1980)

7% Preferred Stock, \$100 Par value

4 1/4% Preferred Stock, \$100 Par Value

4% Preferred Stock, Series A, \$100 Par Value

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days.

Yes ☒ No ☐

The aggregate market value on March 19, 1980 of the voting stock held by non-affiliates of the registrant was \$22.9 million.

The information required by Items 4, 9 and 10 is incorporated by reference from the registrant's proxy statement which will be filed with the Securities and Exchange Commission within 120 days of the close of the registrant's fiscal year ended December 31, 1980.

FORM 10-K TABLE OF CONTENTS/CROSS REFERENCE SHEET

PART I

Item 1.	<u>Business</u>	Annual Report, page 3
Item 2.	<u>Properties</u>	Annual Report, page 4
Item 3.	<u>Legal Proceedings</u>	Annual Report, page 23 (note 10 to Financial Statements)
Item 4.	<u>Security Ownership of Certain Beneficial Owners and Management</u>	Proxy Statement

PART II

Item 5.	<u>Market for the Registrant's Common Stock and Related Security Holder Matters</u>	Annual Report, pages 1, 27
Item 6.	<u>Selected Financial Data</u>	Annual Report, page 28
Item 7.	<u>Management's Discussion and Analysis of Financial Condition and Results of Operations</u>	Annual Report, page 11
Item 8.	<u>Financial Statements and Supplementary Data</u>	Annual Report, pages 13-26 and Schedules A and B

PART III

Item 9.	<u>Directors and Executive Officers of the Registrant</u>	Annual Report, inside front cover, and Proxy Statement
Item 10.	<u>Management Remuneration and Transactions</u>	Proxy Statement

PART IV

Item 11.	<u>Exhibits, Financial Statement Schedules, and Reports on Form 8-K</u>	
----------	---	--

(a) Financial Statements of the Company

Report of Independent Public Accountants	Annual Report, page 26
Balance Sheet - December 31, 1980 and 1979	Annual Report, page 14
Statements for the Years ended December 31, 1980 and 1979: Capitalization	Annual Report, page 16

FORM 10-K TABLE OF CONTENTS/CROSS REFERENCE SHEET - Continued

Income	Annual Report, page 13
Retained Earnings	Annual Report, page 16
Sources of Funds for Plant Additions	Annual Report, page 17
Notes to Financial Statements	Annual Report, page 18

(b) Schedules

Schedules V, VI & VIII Maine Yankee Atomic Power Company Financial Statements for the years ended December 31, 1980 and 1979	Annual Report, page 25 Schedule A
Maine Electric Power Company, Inc. Financial Statements for the years ended December 31, 1980 and 1979	Schedule B

(c) Exhibits See Exhibit Index

(d) Reports on Form 8-K

No reports on Form 8-K were filed  
during the last quarter of 1980