

ROPES & GRAY  
225 FRANKLIN STREET  
BOSTON 02110

CABLE ADDRESS: ROPGRALOR  
TELEX: ROPGR 940819

AREA CODE 617 423 6100

January 4, 1980

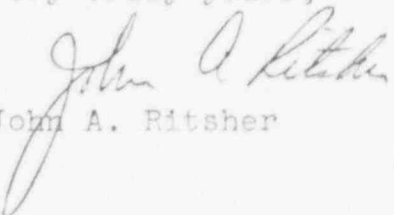
L. S. Rubenstein, Branch Chief  
Light Water Reactors, Branch #4  
Division of Project Management  
United States Nuclear Regulatory  
Commission  
Washington, D. C. 20555

Re: Public Service Company of New Hampshire,  
Docket Nos. 50-443 and 50-444; Director's  
Decision under 10 CFR 2.206 Denying Show  
Cause Petition.

Dear Mr. Rubenstein:

In connection with the Staff's continuing interest in this subject and with the Commission's order dated December 21, 1979 extending the period of review until January 31, 1980, I enclose twenty-five copies of the report and order of the New Hampshire Public Utilities Commission granting the emergency rate increase requested by Public Service Company of New Hampshire and twenty-five copies of the Preliminary Prospectus dated December 28, 1979 relating to \$30,000,000 of General and Refunding Mortgage Bonds of Public Service Company of New Hampshire.

Very truly yours,

  
John A. Ritsher

JAR:vml  
Enclosures

cc: Attached List

Boos  
SE  
1/25  
ADD:  
MURRAY  
90009147

8001080 308

Copies to:

Alan S. Rosenthal, Chairman  
Atomic Safety and Licensing  
Appeal Board  
U.S. Nuclear Regulatory Commission  
Washington, D.C. 20555

Dr. John H. Buck  
Atomic Safety and Licensing  
Appeal Board  
U.S. Nuclear Regulatory Commission  
Washington, D.C. 20555

Michael C. Farrar, Esquire  
Atomic Safety and Licensing  
Appeal Board  
U.S. Nuclear Regulatory Commission  
Washington, D.C. 20555

Ivan W. Smith, Esquire  
Atomic Safety and Licensing  
Board Panel  
U.S. Nuclear Regulatory Commission  
Washington, D.C. 20555

Joseph F. Tubridy, Esquire  
4100 Cathedral Avenue, N.W.  
Washington, D.C. 20016

Dr. Marvin M. Mann  
Atomic Safety and Licensing  
Board Panel  
U.S. Nuclear Regulatory Commission  
Washington, D.C. 20555

Stephen G. Burns, Esq.  
Office of the Executive Legal  
Director  
U.S. Nuclear Regulatory Commission  
Washington, D.C. 20555

E. Tupper Kinder, Esquire  
Assistant Attorney General  
Environmental Protection Division  
Office of the Attorney General  
208 State House Annex  
Concord, New Hampshire 03301

Karin P. Sheldon, Esquire  
Sheldon, Harmon, Roisman & Weiss  
Suite 506  
1725 I Street, N.W.  
Washington, D. C. 20006

Dr. Ernest O. Salo  
Professor of Fisheries Research  
Institute  
College of Fisheries  
University of Washington  
Seattle, Washington 98195

Dr. Kenneth A. McCollum  
1107 West Knapp Street  
Stillwater, Oklahoma 74074

Robert A. Backus, Esquire  
O'Neill Backus Spielman  
116 Lowell Street  
Manchester, New Hampshire 03105

Laurie Burt, Esquire  
Assistant Attorney General  
One Ashburton Place  
Boston, Massachusetts 02108

John F. Ahearne, Chairman  
U.S. Nuclear Regulatory Commission  
Washington, D.C. 20555

Victor Gilinsky, Commissioner  
U.S. Nuclear Regulatory Commission  
Washington, D.C. 20555

Richard T. Kennedy, Commissioner  
U.S. Nuclear Regulatory Commission  
Washington, D.C. 20555

Peter A. Bradford, Commissioner  
U.S. Nuclear Regulatory Commission  
Washington, D.C. 20555

Joseph Hendrie, Commissioner  
U.S. Nuclear Regulatory Commission  
Washington, D.C. 20555

90009148

PRELIMINARY PROSPECTUS DATED DECEMBER 28, 1979

**\$30,000,000**

# Public Service Company of New Hampshire

## General and Refunding Mortgage Bonds, Series C % due 2000

Interest is payable January 15 and July 15, commencing July 15, 1980. The Series C Bonds are entitled to a mandatory annual sinking fund payment of \$2,250,000, payable in cash or Series C Bonds, beginning in 1990 with a redemption price of 100% of the principal amount plus accrued interest and are also redeemable at the option of the Company at any time, in whole or in part, at the prices set forth herein, except that prior to January 15, 1985, the Series C Bonds are not refundable at the option of the Company at an interest cost less than % per annum. The Company may make an additional sinking fund payment in any year in an amount not exceeding the mandatory sinking fund payment for that year. See "Description of the Bonds".

The Series C Bonds are secured by a mortgage on substantially all of the Company's properties which is subordinate to the lien of a first mortgage on substantially the same properties and are also secured by a pledge of certain First Mortgage Bonds. At October 31, 1979 there was outstanding \$196,495,000 aggregate principal amount of First Mortgage Bonds (exclusive of pledged First Mortgage Bonds). See "Description of the Bonds" for information with respect to the participation of holders of the Series C Bonds in the lien of the first mortgage.

See "Problems Facing the Company" for a description of the Company's financial difficulties.

Application will be made to list the Series C Bonds on the New York Stock Exchange. Listing will be subject to meeting the requirements of the Exchange, including those relating to distribution.

**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 (1)	Underwriting Discounts and Commissions (2)	Proceeds to Company (1) (3)
Per Bond	%	%	%
Total	\$	\$	\$

(1) Plus accrued interest, if any, from the date of original issue.

(2) The Company has agreed to indemnify the several Underwriters against certain civil liabilities, including liabilities under the Securities Act of 1933.

(3) Before deduction of expenses payable by the Company estimated at \$178,000.

The Series C Bonds 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 the Series C Bonds will be ready for delivery at the office of Kidder, Peabody & Co. Incorporated, 10 Hanover Square, New York, New York, on or about January , 1980.

**Kidder, Peabody & Co.**  
Incorporated

**Blyth Eastman Paine Webber**  
Incorporated

The date of this Prospectus is January , 1980.

90009149

A Registration Statement relating to these securities has been filed with the Securities and Exchange Commission but has not yet become effective. Information contained herein is subject to completion or amendment. These securities may not be sold nor may offers to buy be accepted prior to the time the Registration Statement becomes effective. This Prospectus shall not constitute an offer to sell or the solicitation of an offer to buy nor shall there be any sale of these securities in any State in which such offer, solicitation or sale would be unlawful prior to registration or qualification under the securities laws of any such State.

IN CONNECTION WITH THIS OFFERING, THE UNDERWRITERS MAY OVER-ALLOT OR EFFECT TRANSACTIONS WHICH STABILIZE OR MAINTAIN THE MARKET PRICE OF THE BONDS OFFERED HEREBY AT LEVELS ABOVE THOSE WHICH MIGHT OTHERWISE PREVAIL IN THE OPEN MARKET. SUCH STABILIZING, IF COMMENCED, MAY BE DISCONTINUED AT ANY TIME.

---

### 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 1978 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 where reports, proxy material and other information concerning the Company may also be inspected.

### 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 746,000.

The Company is presently experiencing serious difficulties in financing its construction program. See "Problems Facing the Company" for a description of the external financing and rate relief required in order to enable the Company to maintain its construction program and continue its business operations, pending commencement of the proposed reduction in its construction program.



## PROSPECTUS SUMMARY

The following material is qualified in its entirety by the detailed information and the financial statements and notes appearing elsewhere in this Prospectus. See especially "Problems Facing the Company".

## THE OFFERING

Company	Public Service Company of New Hampshire
Bonds Offered	\$30,000,000 General and Refunding Mortgage Bonds, Series C % due 2000
Sinking Fund	\$2,250,000 annually, commencing January 15, 1990, to retire 75% of the issue prior to maturity.
Use of Proceeds	To reduce short-term debt incurred for construction and for other corporate purposes.
Bonds to be listed	New York Stock Exchange

## THE COMPANY

Business	Electric utility
Energy Sources (12 months ended October 31, 1979)	Oil — 48%, Coal — 37%, Nuclear — 10% and Hydro — 5%
Estimated 1980-1985 Construction Expenditures (excluding allowance for funds used during construction)	\$585,200,000*

\*Assuming proposed reduction of ownership interests in nuclear plants under construction. See "Problems Facing the Company"

**FINANCIAL INFORMATION**  
(Amounts in thousands except ratios)

	Twelve Months Ended October 31, 1979	Year ended December 31,	
		1978	1977
Operating Revenues	\$289,522	\$260,751	\$214,787
Operating Income	44,637	48,338	29,174
Net Income	39,708	36,507	21,722
Ratio of Earnings to Fixed Charges — Actual	2.39	2.87	2.38
Pro Forma	1.72	—	—

Capitalization and short-term debt as of October 31, 1979, and as adjusted for the estimated proceeds from the sale of the Series C Bonds (see "Capitalization"):

	Actual	As Adjusted	Percent of Adjusted Capitalization
Long-Term Debt (including current ma- turities)	\$346,909	\$376,249	47.4%
Preferred Stock	112,543	112,543	14.2
Common Stock Equity	305,200	305,200	38.4
	<u>\$764,652</u>	<u>\$793,992</u>	<u>100.0%</u>
Short-Term Debt	\$ 73,100	\$ 43,760	

## PROBLEMS FACING THE COMPANY

The Company is presently experiencing serious difficulties in obtaining external financing for its construction program and in maintaining cash flow adequate to fund this program and the costs of the Company's current business operations. The major portion of the Company's construction program is the Company's present 50% ownership interest in the 2300 MW nuclear generating plant at Seabrook, New Hampshire. Although the Company has commitments from other utilities which would reduce the Company's interest to about 35%, delays in obtaining the necessary regulatory approvals require the Company to continue to finance 50% of construction costs, possibly until January, 1981, or beyond. In that event the Company would have to raise approximately \$200,000,000 in permanent financing in 1980, after the sale of the Series C Bonds offered hereby.

### Rate Proceedings

The Company's financing program had been based upon the inclusion in the Company's rate base of a portion (approximately 50% on average) of the expenditures for construction work in progress ("CWIP") associated with major generating facilities, and in 1978 the Company's request for such inclusion was granted by the New Hampshire Public Utilities Commission ("NHPUC"). After passage of a New Hampshire statute prohibiting the inclusion of CWIP in rate base, the NHPUC excluded CWIP from the Company's rate base as of May 7, 1979. At the same time, the NHPUC allowed the existing rates to remain in effect, determining that the Company's 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. Such an investigation was ordered, and the NHPUC has stated that intervenors' rights with respect to possible rebates would be preserved.

On August 31, 1979, the Company filed a new retail tariff with the NHPUC providing permanent rates designed to generate revenues of approximately \$18,500,000 (about 8.4%) on an annual basis above those currently received. This filing has been suspended by the NHPUC pending full investigation and has been consolidated with the rate investigation initiated by the NHPUC in connection with the elimination of CWIP from rate base. See "Business — Rates — New Hampshire Retail".

In order to provide the Company with the revenues necessary for it to obtain external financing for its construction program, and in particular to obtain sufficient revenues to satisfy the earnings test contained in the Company's General and Refunding Mortgage Indenture for the issuance of the General and Refunding Mortgage Bonds needed during 1980 (see "Financing — Mortgage Bonds"), on November 27, 1979, the Company filed a request with the NHPUC for an emergency surcharge designed to increase annual revenues by approximately \$11,970,000 (about 5.5%) based on a test year ending May 31, 1979. This surcharge represents a portion of the 8.4% permanent rate increase requested by the Company in August. On December 21, 1979, the NHPUC granted the Company the full amount of its request to take effect under bond on December 28, 1979.

On December 21, 1979, the Company filed with the Federal Energy Regulatory Commission ("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. See "Business — Rates — Other". The Company is seeking to expedite action by the Maine Public Utilities Commission on its presently pending requests for rate increases. See "Business — Rates — Other".

## Reduction of Construction Program

In view of the cash stringency which would result from the anticipated elimination of CWIP (see Note D to the Statement of Earnings and "Business — Rates — New Hampshire Retail") and the resultant difficulty of financing the 50% interest in Seabrook, the Company decided in March, 1979 to reduce its ownership interest in the Seabrook plant to 28% and thereafter offered ownership interests aggregating 22% to other utilities (the "March offer"); it also offered to other utilities its ownership interests in the Pilgrim #2 and Millstone #3 projects.

*Reduction of Seabrook Ownership.* The full amount of the March offer was accepted by nine other New England utilities, but three have since informed the Company that they will be unable to take part or all of the amount accepted. Massachusetts Municipal Wholesale Electric Company ("MMWEC") agreed to take the major portion of such offer (13.87446% of the plant) but was able to obtain power purchase commitments from its constituent town and city electric departments which permit it to commit for only approximately 6% of the plant. Central Vermont Public Service Corporation and Green Mountain Power Corporation each accepted 1% but neither will proceed with its acquisition because of conditions contained in the opinion of the Vermont Public Service Board approving the acquisitions which would place the entire risk of the investment on the utilities' stockholders until the plant is placed in operation.

Consequently, the March offer has resulted in commitments for about 12% out of the 22% of the ownership interest in Seabrook originally offered. In mid-October, 1979 the Company re-offered the remaining 10% ownership interest in the Seabrook plant to other participants in the plant and to the Company's New Hampshire wholesale customers (the "October offer"); commitments for ownership interests aggregating approximately 3% of the plant were received.

Each utility acquiring an ownership interest under either offer 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 project has been increased to approximately 15% and the Company's investment decreased to approximately 35%\* of the total investment of all participants. Until the Adjustment Periods begin, the Company must continue to finance its construction program at its present 50% ownership interest in Seabrook.

The Adjustment Period for the March offer will begin only after receipt by the accepting utilities of all required regulatory and stockholder approvals (and in the case of MMWEC, the obtaining of financing for its increase). The Adjustment Period for each accepting offeree of the October offer will begin only after the Adjustment Period for the March offer begins, and after the accepting offeree obtains its required regulatory approvals (and in the case of one utility, the approval of its stockholders), whether or not other accepting offerees have obtained their approvals, and in the case of New Hampshire Electric Cooperative, Inc., which accepted 2.17391%, after it has obtained satisfactory financing.

---

\*The Company's actual ownership percentage would be 35.23497%, and figures for the Company's financing and construction programs have been calculated using this percentage.

Action by the NHPUC, the Massachusetts Department of Public Utilities ("MDPU") and the Nuclear Regulatory Commission ("NRC") is required. All required New Hampshire approvals were obtained from the NHPUC for the March offer, but new approvals have been sought for the reduced amount of that offer and for the October offer. Under Massachusetts law, the increases of Montaup Electric Company, New Bedford Gas and Edison Light Company, and Fitchburg Gas and Electric Light Company must be approved by their respective stockholders (which in the case of Montaup and New Bedford are their parent companies), and by the Company's stockholders, who approved the increases of Montaup and New Bedford under the March offer at a meeting held in September, 1979. Approval by the MDPU is also required for these increases, as is MDPU approval of the financing for MMWEC's increased interest; petitions have been filed with the MDPU for the Montaup and New Bedford increases and for the MMWEC financing, and hearings have commenced. The proceeding involving Montaup and New Bedford has been consolidated with two other proceedings relating to transfers of Seabrook interests by other participants. The Massachusetts Attorney General and others have intervened in these proceedings in opposition to the several proposals; in the proceedings relating to other transfers, the Attorney General has challenged the other Massachusetts utilities' need for the power from the Seabrook plant, among other things. The MDPU has recently decided that the proceeding relating to MMWEC's financing will involve consideration of the "financial viability" of the Seabrook project and the "economic and financial impact of the proposed purchase and bond issue upon the municipal entities which comprise MMWEC". Consequently, it now appears that the several proceedings before the MDPU will take much longer than originally anticipated. On the present schedule, the proceedings may not be concluded until June, 1980 at the earliest, and perhaps not before January, 1981, or later. If the Adjustment Period of any accepting offeree under the October offer has not commenced by January 1, 1981, such offeree's commitment may be terminated by the offeree or by the Company.

Filings have been made with the NRC with respect to the offers but clearance has not yet been received.

*Possible Slowdown of Seabrook Construction.* The Company has been considering the possibility of a deferral for up to four years of the completion date of Unit #2 of the Seabrook plant as a means of reducing the Company's immediate cash needs; under the Joint Ownership Agreement relating to Seabrook, the agreement of holders of 75% of the ownership interests would be required for a deferral. A four year deferral of Unit #2 would reduce the Company's requirements for external financing in 1980 and 1981 by approximately \$27,000,000 and \$33,000,000, respectively, assuming 50% ownership in both years. However, the Company estimates that the deferral would increase the total cost of the project by approximately \$740,000,000 and the Company believes that the cost of replacement power would greatly exceed the cost of the power which would have been produced by the Unit. The Company believes that the power from both Units of the Seabrook plant is needed in its service area and in the New England region at the 1983 and 1985 scheduled completion dates.

*Offer of Pilgrim and Millstone Interests.* 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 interest in Millstone #3 subject to the receipt of necessary regulatory approvals, including that of the NRC; proceeds from the sale are required to be deposited with the First Mortgage Trustee under the terms of the Company's First Mortgage Indenture. The Company has reoffered and received expressions of interest in purchasing the balance of the Com-

pany's interest in Millstone. Only a relatively small portion of the proposed reduction in the Company's construction program is attributable to the proposed sale of the Company's interest in Millstone #3 (\$31,286,000 for the period 1981-1985). See "Construction Program".

### **Immediate Financing Program**

The Company has a revolving credit agreement with a group of seven commercial banks under which the Company may borrow up to \$115,000,000 through June 30, 1980 subject to periodic review by the banks; amounts outstanding under the agreement mature on July 1, 1980. One additional commercial bank has agreed to join the revolving credit, increasing the amount available under the credit to \$130,000,000, subject to NHPUC approval of an increase in the Company's short-term borrowing limit. The Company believes that the availability of such credit to June 30, 1980 will depend principally upon the success of the Company's financing program described below, 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 plant. The group of seven commercial banks has extended to the Company a \$25,000,000 term credit due January 3, 1980; the banks have agreed to extend the maturity of the term credit to January 5, 1981. The Company has additional lines of credit aggregating \$5,350,000 with New Hampshire banks. At December 27, 1979, an aggregate of \$104,100,000 was outstanding under such agreement and lines of credit. On the date of the sale of the Series C Bonds offered hereby, the Company's aggregate short-term borrowings are expected to be approximately \$127,100,000.

If the necessary approvals for commencement of the Adjustment Periods for the March and October offers are not obtained until January, 1981, the Company estimates that it must raise approximately \$200,000,000 in permanent financing during 1980 after the sale of the Series C Bonds and the extension of the term credit, assuming full utilization of the Company's short-term bank credit by the end of 1980 and without giving effect to the emergency surcharge granted to the Company by the NHPUC effective December 28, 1979 or to any other requested rate increase which may be granted the Company during the period. If all regulatory approvals are received before January, 1981, these financing requirements will be reduced.

In July, 1979, the Company received advance payments aggregating \$10,600,000 from the other Seabrook participants against their present ownership interests in the project. These advances were to be credited against amounts payable by such participants commencing in January, 1980, and are secured by the Company's interest in nuclear fuel for the Seabrook project. The Company has requested the other Seabrook participants to extend the date after which credits are to be made against their accounts to July 1, 1980.

At the present time, the Company is unable to issue any significant amount of First Mortgage Bonds and the amount of General and Refunding Mortgage Bonds which the Company can issue is also limited to the extent described under "Financing — Mortgage Bonds".

### **Necessity of Adequate Rates, Required Approvals and Financing**

The Company may be unable to obtain the external financing necessary for its 50% interest in the Seabrook plant if it does not obtain adequate rates from its pending rate proceedings, and there



can be no assurance that the required approvals for the proposed reduction in the Company's interest in the Seabrook project to 35.23497% will be obtained or that the Company or other Seabrook participants can obtain financing in the necessary amounts or in a timely manner. The Company's ability to obtain necessary financing may also be adversely affected if regulatory and other approvals for significantly less than the 14.76503% of the Seabrook plant committed for by other utilities should be obtained.

Adequate rates and timely approvals and financing are all essential to enable the Company to maintain its construction program and continue its business operations.

### INDUSTRY PROBLEMS

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

Events at the Three Mile Island Nuclear Unit No. 2 in Pennsylvania ("TMI") resulted in damage to the plant and release of radioactivity into the surrounding environment and caused widespread concern about the safety of nuclear generating plants. The Company has interests not only in the Seabrook project but also in six other nuclear generating plants which are either operating or planned or under construction in New England (see "Business — Joint Projects"); its interests in the four such operating plants represent approximately 8% of the Company's present generating capacity. The Company cannot predict what effect the events at TMI which have precipitated increased opposition to nuclear power may ultimately have upon the completion or the cost of completion of the Seabrook project or such other planned nuclear units or upon the continued operation of the existing nuclear generating plants in New England or upon its planned reduction of its interest in the Seabrook project. Neither the Seabrook Units nor any of these six other New England plants utilize a nuclear steam supply system furnished by the vendor which supplied TMI. United Engineers & Constructors Inc., the engineer-constructor for the Seabrook project, was constructor of TMI but was not involved in its design.

The TMI incident has prompted a rigorous reexamination of safety related equipment and operating procedures in all nuclear facilities. On October 30, 1979, President Carter's Commission on TMI issued its final report which, among other things, contained extensive recommendations on aspects of nuclear power; on December 7, 1979, the President, while reaffirming his support for continued inclusion of nuclear power in his national energy policy, announced his agreement with the spirit and intent of those recommendations and his initiation of steps toward their implementation. The NRC has already promulgated numerous requirements in response to TMI and the report on an independent study of TMI instituted by the NRC is expected in January, 1980. The plants in which the Company has an interest are being reviewed by their owner-operators, and those plants and all other nuclear facilities are being reexamined by the NRC. The TMI incident has also generated a multiplicity of legislative proposals in Congress and various state legislatures. While the ultimate

effect of these reexaminations, studies and proposals cannot be specifically 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.

### USE OF PROCEEDS

The proceeds to the Company from the sale of the Series C Bonds will be used to reduce short-term debt incurred for construction and for other corporate purposes. On the date of issue of the Series C Bonds, short-term borrowings are expected to be approximately \$127,100,000.

### CONSTRUCTION PROGRAM

The area served by the Company has experienced relatively rapid population and economic growth in the last several years. According to statistics compiled by the United States Department of Commerce, Bureau of the Census, the average annual rate of population growth in the State of New Hampshire was approximately 2% during the period 1970-78, the second highest rate of growth for any state east of Colorado. Figures released by the New Hampshire Department of Employment Security show that New Hampshire is experiencing one of the lowest unemployment rates in the nation, and the lowest in New England — 2.8% (not seasonally adjusted) for the month of September, 1979.

As a result, the electric needs of the Company's customers have increased (an average annual increase of 6.9% and 4.3% in the Company's annual peak load during the ten-year and five-year periods, respectively, ending October 31, 1979). While there is some controversy concerning the rate of growth the Company will experience in the future, the Company has projected the needs of its customers to increase at an average annual rate of approximately 5.1% at least through 1988, 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's forecasts indicate that its net purchases of capacity will have increased to 306 MW at the time of scheduled completion in 1983 of the first unit of the Seabrook plant described below, of which a 35.23497% share would be 405.2 MW. If the Seabrook plant is not completed on schedule, there can be no assurance that the Company would be able to purchase sufficient power to render adequate service to its customers.

On July 30, 1979, the NHPUC issued its finding that the electrical peak growth rate for New Hampshire is 5.0% and that the NHPUC will use that number pending further review.

The Company proposes to meet the projected needs of its customers primarily through its share of the 2,300 MW Seabrook nuclear plant, with two units each having a capacity of 1,150 MW currently planned for completion in 1983 and 1985, respectively. The Seabrook plant is the only major base load generating station in New England now scheduled to begin service before 1986. In the view of the Company, the plant is essential to meet not only the Company's needs but the New England load as well. As described under "Problems Facing the Company", the Company and other New England utilities have agreed to adjust their ownership interests in the Seabrook project, subject to receipt of the necessary regulatory approvals. Assuming an adjustment of the Company's share to



35.23497%, its share of the total cost of Seabrook upon completion, including the initial nuclear fuel, is estimated at \$704,700,000, excluding any allowance for funds used during construction ("AFUDC") (see Note D to the Statement of Earnings), which allowance is estimated to be \$366,000,000. If the Company's ownership interest should remain at 50%, these estimated amounts would be \$1,000,000,000 and \$429,600,000, respectively. See "Problems Facing the Company" and "Financing" for a discussion of the factors affecting the financing of the Seabrook plant, and see "Business — Seabrook Nuclear Project" for a discussion of administrative proceedings and litigation relating to the Seabrook plant.

The Company's aggregate construction program for the six-year period 1980 through 1985, which is subject to continuing review and adjustment, is currently estimated to be about \$585,200,000 (excluding AFUDC) if its ownership interest in Seabrook is reduced to 35.23497% as described above under "Problems Facing the Company" and its ownership interest in Millstone #3 is sold. Such construction expenditures would total \$911,900,000 if such interests remain at their present levels. The following table sets forth the Company's estimated construction expenditures for 1980 (assuming no effect in 1980 of its reduced construction program) and the unadjusted and adjusted 1981-1985 construction programs as described above based on current construction schedules and cost projections (including an inflation factor, which in the case of Seabrook is 8% per annum, and excluding AFUDC):

	Estimated Construction Expenditures		
	(Millions of Dollars)		
	1980	Unadjusted 1981-1985	Adjusted 1981-1985
Generating Facilities			
Company's Share of Seabrook Nuclear Project			
Plant	\$168.0	\$370.5	\$100.9
Nuclear Fuel	10.5	42.2	16.4
Total	178.5	412.7	117.3
Participation in Other Plants*			
Nuclear Plants	5.9	58.0	30.3
Nuclear Fuel	1.1	5.7	2.1
Total	7.0	63.7	32.4
Other Generation	1.4	8.3	8.3
Total Generating Facilities	186.9	484.7	158.0
Transmission Facilities	11.1	106.0	106.0
Distribution and General Facilities	17.7	105.5	105.5
Total	\$215.7	\$696.2	\$369.5

\*See "Business — Joint Projects."

90009158

The following table shows the aggregate amount for each of the years 1980 through 1985 of the Company's estimated construction program before and after adjustment to reflect the maximum reduction of the Company's ownership interest in Seabrook to 35.23497% commencing in January, 1981 and the sale of its interest in Millstone #3 as of that date:

	Unadjusted Construction Program	Adjusted Construction Program
1980	\$215,700,000	\$215,700,000
1981	207,600,000	39,000,000
1982	175,900,000	72,500,000
1983	137,500,000	108,600,000
1984	109,900,000	90,000,000
1985	65,300,000	59,400,000
Total	<u>\$911,900,000</u>	<u>\$585,200,000</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. The Company estimates that the ultimate cost of its share of Seabrook would increase between \$7,260,000 and \$9,940,000 for a 35.23497% ownership interest (and between \$10,300,000 and \$14,100,000 for a 50% ownership interest) for each month's delay in completion. Delays of more than one month may result in a higher per month cost; the increase in cost in each case depends upon the cause and length of the delay. It is also possible that additional expenditures may be required to meet regulatory and environmental requirements at the Seabrook nuclear plant and at the Company's other generating facilities. See "Industry Problems" and "Business — Environmental Matters".

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. At October 31, 1979, the Company had invested approximately \$434,200,000 (including AFUDC of approximately \$56,900,000 and nuclear fuel of \$28,200,000) in the Seabrook nuclear plant. While it is possible that future developments could lead to cancellation of the 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, see "Business — Seabrook Nuclear Project") and construction is proceeding but also because of the projected need for the plant's power in the Company's service area and in New England generally. 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 New Hampshire Public Utilities Commission based upon its finding that the plant was required to meet the demand for electric power. See "Business — Seabrook Nuclear Project — NHPUC".

## FINANCING

Financing of the Company's 1980-1985 construction program estimated at \$585,200,000 (assuming its construction program is reduced as described above), and the refinancing at maturity of certain long-term debt and required sinking fund payments together aggregating \$108,988,000 during this period (see Notes 5 and 7 of Notes to Financial Statements), represents a major undertaking for the Company. The Company estimates that approximately \$280,000,000 will be generated from internal funds during this period (principally after 1982). The balance is expected to be financed from external sources.

During 1979, the Company raised approximately \$166,060,000 from permanent financing, consisting of \$39,640,000 from the sale of 2,000,000 shares of Common Stock in January, \$30,000,000 from the sale of 1,200,000 shares of Preferred Stock (\$25 Par Value) in May, \$37,740,000 from the sale of 2,000,000 shares of Common Stock in July and \$58,680,000 from the sale of General and Refunding Mortgage Bonds in September. The Company's financing plans for the 1980-1985 period include the issuance of common stock, preferred stock and long-term debt, nuclear fuel financing and intermediate-term debt financing.

The success of the Company's financing plan is dependent upon a number of factors, including the Company's ability to obtain adequate and timely rate increases, conditions in the securities markets, economic conditions and the Company's level of sales and particularly resolution of the matters discussed under "Problems Facing the Company"

*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 Seabrook Unit #1, now anticipated in late 1982. The Company is considering seeking the consent of the holders of its First Mortgage Bonds (75% in principal amount required) to amend that Indenture by modifying or eliminating these restrictions, but no assurance can be given that such consent will be sought or obtained. If these amendments are made, the Company is required to redeem all outstanding General and Refunding Mortgage Bonds, including the Series C Bonds offered hereby, by exchange for First Mortgage Bonds; until such time, such First Mortgage Bonds as may be issued will be pledged as additional security for the General and Refunding Mortgage Bonds. At October 31, 1979, the Company had \$196,495,000 of First Mortgage Bonds outstanding (exclusive of pledged First Mortgage Bonds) and \$857,640,000 of Net Utility Plant, including \$484,626,000 of Unfinished Construction.

Because of the restrictions in the Company's First Mortgage Indenture, the Company has entered into the General and Refunding Mortgage Indenture dated as of August 15, 1978 (the "G&R Indenture"), constituting a second mortgage on the Company's properties to secure General and Refunding Mortgage Bonds. The Company sold \$60,000,000 of such Bonds to institutional investors in September, 1978 and \$60,000,000 pursuant to a public offering in September, 1979. The terms of the G&R Indenture are generally similar to those of the First Mortgage Indenture except for elimination of the

921800008

90009160

above-mentioned restrictions on issuance of bonds and the inclusion of a limitation on the amount of other income (including AFUDC) includible in earnings coverage under the G&R Indenture. See "Description of the Bonds". For the twelve months ended October 31, 1979, the earnings coverage of interest on bonds was approximately 2.36, as compared with the requirements for the issuance of additional bonds contained in the G&R Indenture of 2.0. At October 31, 1979 the earnings coverage test would have limited the principal amount of General and Refunding Mortgage Bonds (14% annual interest rate assumed) which could have been issued to \$37,000,000.

*Bank Financing.* The Company has a revolving credit agreement with a group of seven commercial banks under which the Company may borrow up to \$115,000,000 through June 30, 1980 subject to periodic review by the banks; amounts outstanding under the agreement mature on July 1, 1980. One additional commercial bank has agreed to join the revolving credit increasing the amount available under the credit to \$130,000,000, subject to NHPUC approval of an amount equal to the amount permitted under the Company's Articles of Agreement. See "Problems Facing the Company — Immediate Financing Program". Seven of the commercial banks have extended to the Company a \$25,000,000 term credit due January 3, 1980, but the banks have agreed to extend the maturity date to January 5, 1981. The Company has additional lines of credit aggregating \$5,350,000 with New Hampshire banks.

As of October 31, 1979, the Company could have incurred approximately \$146,480,000 of short-term unsecured indebtedness under its Articles of Agreement without obtaining the approval of holders of the Preferred Stock. The NHPUC has approved up to \$121,700,000 of short-term borrowings, and the Company has requested approval of the amount from time to time permitted under its Articles of Agreement.

*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 twelve months ended October 31, 1979, the ratio of earnings to fixed charges and preferred dividends computed under the method prescribed by the Company's Articles of Agreement was 1.98; and based thereon, the Company could issue, without such vote of the holders of the Preferred Stock, approximately \$69,740,000 of additional Preferred Stock (14% annual dividend rate assumed).

90009161

## CAPITALIZATION

The capitalization and short-term debt of the Company as of October 31, 1979 was, and adjusted as of that date to reflect the issuance of \$30,000,000 principal amount of Series C Bonds offered hereby and the application of the proceeds thereof (assumed to aggregate \$29,340,000) would have been, as follows:

	Amount Outstanding October 31, 1979		Adjusted	
	Amount	Percent	Amount	Percent
(Thousands of Dollars)				
Long-Term Debt (including current maturities)				
First Mortgage Bonds (a)	\$196,006		\$196,006	
General and Refunding Mortgage Bonds (b)	118,688		148,028	
Promissory Note	25,000		25,000	
Pollution Control Revenue Bonds	7,215		7,215	
Total Long-Term Debt	346,909	45.4%	376,249	47.4%
Preferred Stock — Cumulative				
\$100 Par Value, Authorized, 1,350,000 shares				
Outstanding, 675,432 shares (c)	67,543		67,543	
\$25 Par Value, Authorized, 5,000,000 shares				
Outstanding, 1,800,000 shares (c)	45,000		45,000	
Total Preferred Stock	112,543	14.7	112,543	14.2
Common Stock Equity				
Common Stock — \$5 Par Value				
Authorized, 18,000,000 shares				
Outstanding, 13,932,209 shares (d)	69,661		69,661	
Other Paid-In Capital	166,202		166,202	
Retained Earnings	69,337		69,337	
Total Common Stock Equity	305,200	39.9	305,200	38.4
Total Capitalization (e)	\$764,652	100.0%	\$793,992	100.0%
Short-Term Debt	\$ 73,100		\$ 43,760(f)	

(a) Because of certain restrictions in the First Mortgage Indenture no significant amount of bonds may now be issued thereunder. See "Financing". For a description of the outstanding series, see Note 7 of Notes to Financial Statements. Amounts shown exclude pledged First Mortgage Bonds.

(b) The amount of bonds issuable under the General and Refunding Mortgage Indenture is subject to certain restrictions. See "Description of Bonds — Additional G&R Bonds" and "Financing". For a description of the outstanding series, see Note 7 of Notes to Financial Statements.

(c) For a description of the outstanding series, see Notes 4 and 5 of Notes to Financial Statements.

(d) In addition, as of October 31, 1979 there were reserved for issuance upon conversion of the 48,432 shares of Convertible Preferred Stock, 5.50% Dividend Series, 214,585 shares of Common Stock based upon the conversion price of \$22.57 per share (the Convertible Preferred Stock being taken at its par value of \$100 per share).

(e) See Note 8 of Notes to Financial Statements with respect to Commitments and Contingencies.

(f) On the date of the issue of the Series C Bonds, short-term bank borrowings are expected to be approximately \$127,100,000. See "Use of Proceeds" and Note 3 of Notes to Financial Statements.

## STATEMENT OF EARNINGS

The following Statement of Earnings, so far as it relates to the five years in the period ended December 31, 1978, has been examined by Peat, Marwick, Mitchell & Co., independent certified public accountants, whose report thereon appears elsewhere in this Prospectus. The information for the twelve months ended October 31, 1979 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 period. This statement should be read in conjunction with the other financial statements and the related notes appearing elsewhere in this Prospectus.

	Twelve Months Ended October 31, 1979 (Unaudited)	Year Ended December 31, (Thousands of Dollars)				
	1979	1978	1977	1976	1975	1974
Operating Revenues (A)(B)	\$289,522	\$260,751	\$214,787	\$196,674	\$186,393	\$155,930
Operating Expenses						
Operation						
Fuel (B)	110,188	71,996	70,500	54,881	58,511	43,161
Purchased and Interchanged Power	33,735	43,422	37,810	36,468	27,153	32,505
Other	35,809	31,490	27,641	25,058	22,048	19,283
Maintenance (A)	19,027	17,502	14,550	12,930	10,727	8,575
Depreciation (A)	15,369	14,752	14,117	13,791	13,522	11,624
Federal and State Taxes on Income (A)(C)	16,437	19,666	8,399	9,733	9,916	3,702
Other Taxes, Principally Property Taxes	14,320	13,585	12,596	11,860	10,018	9,756
Total Operating Expenses	244,885	212,413	185,613	164,721	151,895	128,606
Operating Income	44,637	48,338	29,174	31,953	34,498	27,324
Other Income and Deductions						
Allowance for Equity Funds Used During Construction (D)	13,601	7,828	6,093	3,205	1,573	1,785
Equity in Earnings of Affiliated Companies (A)	903	870	802	1,007	821	870
Other — Net	1,614	983	491	391	498	2,644
Total Other Income and Deductions	16,118	9,681	7,386	4,603	2,892	5,299
Income Before Interest Charges	60,755	58,019	36,560	36,556	37,390	32,623
Interest Charges						
Interest on Long-Term Debt	26,866	21,073	18,980	17,932	16,680	13,547
Other Interest	12,948	8,201	2,029	290	1,209	4,672
Allowance for Borrowed Funds Used During Construction (D)	(18,767)	(7,762)	(6,171)	(2,661)	(1,307)	(1,896)
Net Interest Charges	21,047	21,512	14,838	15,561	16,582	16,323
Net Income	39,708	36,507	21,722	20,995	20,808	16,300
Preferred Dividend Requirements	7,829	6,391	5,120	4,848	3,604	3,378
Earnings Available for Common Stock	\$ 31,879	\$ 30,116	\$ 16,602	\$ 16,147	\$ 17,204	\$ 12,922
Average Shares of Common Stock Outstanding (Thousands)	11,944	9,275	7,680	6,372	6,124	5,134
Earnings Per Share of Common Stock (E)	\$2.67	\$3.25	\$2.16	\$2.53	\$2.81	\$2.52
Dividends Per Share of Common Stock	\$2.12	\$1.94	\$1.88	\$1.86	\$1.72	\$1.64
Ratio of Earnings To Fixed Charges (F)						
Actual	2.39	2.87	2.38	2.61	2.66	1.93
Pro Forma	1.72	—	—	—	—	—

(See "Management's Discussion and Analysis of the Statement of Earnings".)

(A) See the applicable portion of Note 1 of Notes to Financial Statements.

(B) 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 the Company's 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. The NHPUC has stated that intervenors' rights with respect to possible rebates will be preserved. See "Business — Rates — New Hampshire Retail" for information concerning a new tariff filed with the NHPUC on August 31, 1979.

See "Business — Rates — Other" for a discussion of increased rates to wholesale customers put into effect by the Company on July 29, 1978.

In August, 1976, the Company and a fuel supplier reached agreement on the amount of a fuel inventory adjustment. As a result of this settlement, operating revenues and fuel expense for 1976 are each approximately \$4,598,000 less than they otherwise would have been.

- (C) See Note 2 of Notes to Financial Statements for information regarding income taxes.
- (D) AFUDC is the estimated cost, during the period of construction, of funds invested in the construction program which are 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.

To the extent CWIP is not included in the Company's rate base, the cost of funds invested in CWIP (interest on debt and return on equity, including dividends) 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 B 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 \$4,100,000 for the twelve months ended October 31, 1979.

AFUDC net of applicable deferred income tax provisions equalled 32.5% and 59.8% of net income for 1978 and the twelve months ended October 31, 1979, respectively. The Company capitalized AFUDC at a net-of-tax rate of 7½% for 1974. Effective January 1, 1975, the Company began using a pre-tax rate of 9½% (increased to 10% effective January 1, 1979) and began recognizing deferred income tax expense applicable to the current tax reduction resulting from interest expense associated with construction, but these changes had no significant effect on net income.



The Company began compounding AFUDC on February 1, 1977 resulting in an increase in the gross amount of AFUDC capitalized during 1977 and subsequent periods. This change increased 1977 net income and earnings per share of common stock by approximately \$816,000 and \$0.11, respectively.

- (E) Earnings per share are based on the average number of common shares outstanding, after recognition of preferred stock dividend requirements.
- (F) 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. The pro forma ratio of earnings to fixed charges is 1.72 after giving effect to (1) the annual interest requirements on long-term debt outstanding at October 31, 1979, (2) the annual interest requirements on the Series C Bonds being offered (assumed to aggregate \$4,200,000) and (3) the annual interest requirements on the estimated average short-term debt expected to be outstanding during the twelve months ending October 31, 1980 (\$92,520,000 at 17.77% effective interest rate assumed).

Supplemental ratios of earnings to fixed charges have been calculated pursuant to Accounting Series Release No. 122 of the Securities and Exchange Commission. Such ratios include in earnings the undistributed income of unconsolidated companies, and include in fixed charges the Company's allocable portion of the fixed charges of the regional nuclear generating companies in which the Company has investments. The supplemental ratios are not materially different from the basic ratios.

- (G) The following quarterly information is unaudited, and, in the opinion of management, is a fair summary of results of operations for such periods. Variations between quarters reflect the seasonal nature of the Company's business, and beginning with the fourth quarter of 1977, additionally includes the effect of rate increases. See "Management's Discussion and Analysis of the Statement of Earnings." The fourth quarter of 1977 also includes an adjustment which decreased maintenance expenses recorded in the first three quarters of 1977 by approximately \$1,000,000.

	Quarter Ended											
	Year 1979			Year 1978				Year 1977				
	Sept.	June*	March	Dec.	Sept.	June	March	Dec.	Sept.	June	March	
	(Thousands except Per Share Amounts)											
Operating Revenues	\$72,919	\$65,866	\$80,072	\$69,346	\$62,387	\$57,038	\$71,980	\$57,091	\$52,678	\$47,491	\$57,527	
Operating Income	10,291	9,302	14,758	12,324	11,700	10,119	14,195	9,109	6,611	5,252	8,202	
Net Income	11,049	8,335	12,217	9,359	8,872	7,192	11,084	7,390	5,098	3,244	5,990	
Preferred Dividend Requirements	2,420	1,952	1,586	1,594	1,598	1,599	1,600	1,516	1,199	1,197	1,208	
Earnings Available for Common Stock	8,629	6,383	10,631	7,765	7,274	5,593	9,484	5,874	3,899	2,047	4,782	
Average Shares of Common Stock Outstanding	13,460	11,823	11,319	9,770	9,755	9,109	8,447	8,444	7,823	7,230	7,209	
Earnings Per Share of Common Stock	\$0.64	\$0.54	\$0.94	\$0.79	\$0.75	\$0.61	\$1.12	\$0.70	\$0.50	\$0.28	\$0.66	

\*Amounts restated to be consistent with the August 29, 1979 rate order of the NHPUC described in Note B above.

## MANAGEMENT'S DISCUSSION AND ANALYSIS OF THE STATEMENT OF EARNINGS

### Twelve Months Ended October 31, 1979 as Compared with Calendar 1978:

*"Operating Revenues"* increased \$28,771,000 principally due to (1) the operation of the fuel adjustment clause (\$18,081,000), (2) an increase in unit power sales (\$3,924,000) and (3) an increase in prime energy sales.

*"Fuel Expense"* increased \$38,192,000 because a larger percentage of total power supply was generated by Company-owned fossil fuel plants and due to increases in the unit costs of coal and oil.

*"Purchased and Interchanged Power"* decreased \$9,687,000 due to the increased generation by Company-owned fossil fuel plants.

*"Other Operating Expenses"* increased principally because of the effect of inflation on wages, supplies and services and employee benefits, the exact amount of which cannot be determined individually.

*"Federal and State Taxes on Income"* decreased primarily due to a decrease in taxable income.

*"Allowance for Equity Funds Used During Construction"* and *"Allowance for Borrowed Funds Used During Construction"* increased due to an increase in the Company's construction program, primarily the Seabrook nuclear plant and because AFUDC has been accrued from May 7, 1979 through October 31, 1979 on CWIP included until May 6, 1979 in New Hampshire rate base.

*"Interest Charges"* increased principally due to (1) additional long-term debt outstanding and (2) an increase in the rates and level of short-term borrowings from banks as an interim method of financing construction of new facilities.

### 1978 as Compared with 1977:

*"Operating Revenues"* increased \$45,964,000 principally due to a rate increase to New Hampshire retail customers on December 3, 1977 (\$27,000,000 on an annual basis), increased to \$30,000,000 on an annual basis on June 1, 1978; a rate increase to wholesale customers on July 29, 1978 (approximately \$2,400,000 on an annual basis); increased revenue associated with the operation of a fuel adjustment clause (\$10,000,000), and an increase in prime energy sales.

*"Purchased and Interchanged Power"* increased \$5,612,000 principally due to increases in capacity and energy purchases necessary to meet the Company's increased KWH sales and replacement power as required during the shutdown of Merrimack Station.

*"Other Operating Expenses"* increased principally because of the effect of inflation on wages, supplies and services and employee benefits, the exact amount of which cannot be determined individually.

*"Maintenance Expenses"* increased principally due to increased cost of maintenance at Merrimack Station (approximately 60% of the total increase) and because of the effect of inflation on wages and materials (approximately 34%) and on costs of annual maintenance at other generating stations (approximately 6%).

28190008

90009166

*"Federal and State Taxes on Income"* increased \$11,267,000 principally due to an increase in current taxable income due to increased operating revenues, and an increase in deferred taxable income.

*"Other Taxes, Principally Property Taxes"* increased due primarily to higher real estate property assessments and tax rates.

*"Allowance for Equity Funds Used During Construction"* and *"Allowance for Borrowed Funds Used During Construction"* increased due to an increase in the Company's construction program, primarily the Seabrook nuclear plant.

*"Other Income and Deductions — Other — Net"* increased \$560,000 primarily as a result of increased interest income from short-term investments.

*"Interest Charges"* increased principally due to (1) additional long-term debt outstanding (approximately 25% of the total increase) and (2) an increase in the rates and level of short-term borrowings from banks as an interim method of financing construction of new facilities (approximately 75%).

#### **1977 as Compared with 1976:**

*"Operating Revenues"* increased \$18,113,000 in 1977 principally due to increased revenue associated with the operation of a fuel adjustment clause (\$7,685,000), an increase in unit power sales (\$3,268,000), a rate increase to New Hampshire retail customers on December 3, 1977 (\$27,000,000 on an annual basis) and an increase in prime energy sales.

*"Fuel Expense"* increased \$15,619,000 in 1977 because a larger percentage of total power supply was generated in Company-owned fossil fuel plants (approximately 49% of the total amount) and due to increases in the unit costs of coal and oil (approximately 21%), and also because of the inventory adjustment referred to in Note B to Statement of Earnings (approximately 30%).

*"Other Operating Expenses"* increased in 1977 principally because of the effect of inflation on wages, supplies and services, employee benefits, and additional cost for transmission services associated with additional power purchased.

*"Maintenance Expenses"* increased in 1977 principally due to increased costs of maintenance at Merrimack Station (approximately 12% of the total increase) and because of the effect of inflation on wages and materials (approximately 48%) and on costs of annual maintenance at all generating stations (approximately 40%).

*"Federal and State Taxes on Income"* decreased \$1,334,000 in 1977 primarily due to a decrease in taxable income.

*"Other Taxes, Principally Property Taxes"* increased in 1977 due primarily to higher real estate property tax rates.

*"Allowance for Equity Funds Used During Construction"* and *"Allowance for Borrowed Funds Used During Construction"* increased substantially in 1977 due to (1) an increase in the Company's construction program, primarily the Seabrook nuclear plant and (2) the effect of compounding of AFUDC semi-annually, effective February 1, 1977 as permitted by Federal Power Commission Order No. 561. See Note D to Statement of Earnings.

# OPERATING STATISTICS

	Twelve Months Ended October 31, 1979	Year Ended December 31,				
		1978	1977	1976	1975	1974
MWH Generated and Purchased — Net						
Generated by Water Power	280,052	291,972	332,523	328,701	335,521	347,129
Generated by Fuel	5,265,169	3,849,853	4,033,704	3,596,002	3,669,800	3,385,098
Total Generated	5,545,221	4,141,825	4,366,227	3,924,703	4,005,321	3,732,227
Power Purchased — Nuclear Affiliates	608,991	674,337	629,116	670,994	618,787	530,129
Other Power Purchased and Interchanged	501,065	1,374,245	999,082	1,092,414	819,437	1,138,423
Total Generated and Purchased	6,655,277	6,190,407	5,994,425	5,688,111	5,443,545	5,400,779
Disposition of MWH Output						
Sold	6,209,680	5,752,784	5,586,378	5,286,507	5,055,673	5,054,271
Used by the Company	30,543	22,734	15,217	13,476	13,047	23,821
Absorbed in Delivery	415,054	414,889	392,830	388,128	374,825	322,687
Total Output	6,655,277	6,190,407	5,994,425	5,688,111	5,443,545	5,400,779
MWH Sold						
Residential	1,803,161	1,765,553	1,709,528	1,676,980	1,552,212	1,552,714
Industrial	1,851,902	1,743,131	1,568,068	1,539,489	1,396,957	1,470,307
Unit Power	600,632	368,785	545,755	372,321	524,831	502,715
Wholesale, Commercial and Other	1,953,985	1,875,315	1,763,027	1,697,717	1,581,673	1,528,535
Total MWH Sold	6,209,680	5,752,784	5,586,378	5,286,507	5,055,673	5,054,271
Sources of Electric Revenue (Thousands of Dollars)						
Residential Sales	\$ 102,572	\$ 98,331	\$ 81,551	\$ 77,153	\$ 72,167	\$ 57,866
Industrial Sales	72,390	63,565	48,878	45,361	42,049	34,807
Unit Power Sales	13,028	9,104	10,297	7,029	9,130	6,746
Wholesale, Commercial and Other	92,335	82,549	69,278	63,392	55,992	44,742
Miscellaneous Operating Revenue	9,197	7,202	4,783	3,739	7,055	11,769
Total Electric Revenues	\$ 289,522	\$ 260,751	\$ 214,787	\$ 196,674	\$ 186,393	\$ 155,930
Electric Customers (End of Period)						
Residential	247,978	244,008	238,830	232,358	226,215	221,737
Industrial	1,096	1,080	1,046	1,018	987	982
Unit Power	1	1	1	1	1	1
Wholesale, Commercial and Other	32,362	31,766	30,871	30,115	29,268	28,853
Total Electric Customers	281,437	276,855	270,748	263,492	256,471	251,573
Diversity of Industrial Revenues						
Textile Products	3.3%	3.7%	3.9%	4.1%	4.5%	5.6%
Paper Products	17.7	17.2	16.5	16.8	15.7	17.9
Leather Products	2.7	3.0	3.2	3.4	3.6	3.5
Chemicals	9.8	9.3	9.0	8.3	7.9	8.1
Other Non-Durable Products	6.8	7.4	7.9	7.6	7.7	7.5
Total Non-Durable Products	40.3	40.6	40.5	40.2	39.4	42.6
Machinery	17.1	16.8	16.3	15.2	14.8	14.7
Other Durable Products	13.2	13.2	13.0	12.4	12.1	12.0
Total Durable Products	30.3	30.0	29.3	27.6	26.9	26.7
Total Manufacturing	70.6	70.6	69.8	67.8	66.3	69.3
Commercial and Service	29.4	29.4	30.2	32.2	33.7	30.7
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Customer Statistics (Annual)						
Average Customers — Residential	245,818	242,416	236,453	230,390	224,886	220,937
Average KWH Per Customer — Residential	7,335	7,283	7,230	7,279	6,902	7,028
Average Rate — Cents Per KWH						
Residential	5.69	5.57	4.74	4.60	4.65	3.73
Industrial	3.91	3.65	3.12	2.95	3.01	2.37
Other Utilities	3.63	3.20	3.07	2.85	2.44	2.12
Average Annual Bill — Residential	\$417.27	\$405.63	\$344.90	\$334.88	\$320.90	\$261.91
Average Nuclear Fuel Cost per KWH Generated	0.4127¢	0.3638¢	0.3181¢	0.2859¢	0.3506¢	0.2248¢
Average Fossil Fuel Cost per KWH Generated	2.0927¢	1.8701¢	1.7575¢	1.6540¢	1.5944¢	1.2902¢

## BUSINESS

### *Power Supply and 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. The maximum one-hour prime peak load experienced to date by the Company's system was 1,173 net MW on February 13, 1979. At that time the Company had available to meet such load 1,154 MW of its own generating capacity, 97 MW from its participations in the four Yankee nuclear generating companies described below under "Joint Projects" and 217 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" below.

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 "Environmental Matters" below.

The Company also has other generating facilities with an aggregate effective capability of 162 MW as follows: hydro-electric (48 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", and see "Joint Projects" and "Seabrook Nuclear Project" below.

The Company purchases capacity and energy from other utilities as necessary, together with its own generating capacity, to meet its load growth and its reserve obligations under NEPOOL discussed below. These purchases are expected to increase from 217 MW to approximately 306 MW by April, 1983 when Seabrook Unit #1, in which the Company's reduced interest will be 405.2 MW, is currently scheduled to be completed and to reduce substantially the need for such purchases. See "Problems Facing the Company".

### *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 1978-1979 NEPOOL winter peak, the New England utilities had about 21,500 MW of installed capacity to meet the New England peak load of about 14,956 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, its participations and through purchases 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, 575 MW, 781 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, and are obligated to pay their proportionate shares of the generating company's operating expenses and return on invested capital.

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; the other units are planned or under construction as follows:

	Type	Completion Date (1)	Capacity (MW)	Percent(2)	Capacity (MW)(2)	Company Share	
						Estimated Construction Cost(3)	
						Total (Millions)(2)	Per KW
Seabrook #1 & #2 (New Hampshire)	Nuclear	1983 & 1985	2,300	35.23495	810.4	\$1,070.7	\$1,321
Pilgrim #2 (Massachusetts)	Nuclear	1986	1,150	3.4700	39.9	68.3	1,712
Millstone #3 (Connecticut)	Nuclear	1986	1,150	3.8910	44.7	100.7	2,253

- (1) The completion dates of the four nuclear units have been deferred from time to time 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".

- (2) See "Problems Facing the Company" for information concerning the proposed reduction of the Company's interest in Seabrook to 35.23497% and sale of the Company's interest in Millstone #3. If the Company's ownership interest in Seabrook should remain at 50%, the capacity would be 1,150 MW and the estimated total cost, \$1,429,600,000.
- (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 Note D to the Statement of Earnings for a discussion of AFUDC.

Estimated construction expenditures for the jointly owned units used in calculating the estimated cost per KW are based upon information furnished by the utility responsible for the construction of such unit. The Company has been advised by each of the sponsoring utilities that construction budgets are 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.

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

The Company is the lead owner of the Seabrook project now under construction in Seabrook, New Hampshire and has entered into contracts covering the purchase of equipment and services in connection with the project. The project is planned to consist of two Westinghouse pressurized water nuclear reactors utilizing ocean water for condenser cooling purposes. Other owners of the project presently include The United Illuminating Company ("UI") (20%), New England Power Company (10%) and a number of other utilities with smaller participations. UI has made available for sale to other utilities one-half of its 20% ownership interest in accordance with a recommendation of the Connecticut Department of Business Regulation, Division of Public Utility Control contained in a December, 1978 rate decision; however, the UI offering has not been fully subscribed. See "Problems Facing the Company" for information concerning the proposed reduction of the Company's ownership interest in the project.

The 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 New Hampshire Public Utilities Commission ("NHPUC") under New Hampshire's power plant siting law; approval of the once-through cooling system for the 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. Construction of the project is continuing and, at September 30, 1979, Unit #1 and the portion of the project common to both units were approximately 27% complete and Unit #2 was 5% complete.

The process of obtaining these approvals and permits has been long and complex, has been consistently opposed by a number of intervening groups, demonstrations at the Seabrook site, and has been plagued by lengthy delays which greatly increased costs for the project. Court appeals from these federal regulatory decisions 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 may have on the completion of the project, on the cost of the project or on the Company. See "Problems Facing the Company" and "Construction Program".

**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 invali-



date the certificate. The supplemental findings were issued on December 30, 1975; no further appeals were taken. The certificate has recently been 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.

*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. The dissenting member of the Appeal Board issued his dissenting opinion which relates to the seismic issue on August 3, 1979 and the majority issued a supplemental opinion in response to the dissent on September 6, 1979. One intervenor has filed a timely renewal of its petition for review of the seismic issue which is now pending before the NRC.

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 challenging the NRC's refusal in 1976 to suspend the Seabrook 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. 74-1385 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) has promulgated its final rule (which supersedes 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 project.

In March, 1979, after the Company announced its decision to reduce its ownership interest in the Seabrook project, 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 Company's alleged lack of financial qualifications and lack of review of financial qualifications of the participants whose ownership interests are proposed to be increased. On November 16, 1979 the NRC Director of Nuclear Reactor Regulation issued a decision denying the petition. On May 2, 1979 the same intervenor filed a further 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. The Company cannot predict when the staff will act on either request or what actions it will take.

Before either of the Seabrook units 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 in mid-1981 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".

*EPA.* Under the Federal Water Pollution Control Act, as amended, the EPA has jurisdiction over discharges from the cooling system of the Seabrook plant. In August, 1974, the Company applied to EPA for approval of the once-through cooling system utilizing ocean water and, in June and October, 1975, the regional administrator of Region I of EPA approved the concept subject to extending the intake tunnel further offshore. After 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. The period for seeking further review has expired.

*Other.* The Company is also involved in proceedings or disputes concerning title to a portion of the Seabrook site, the undergrounding of the Seabrook transmission lines and the use of the Company's water wells on the Seabrook site. The Company believes that none of these matters will have a material 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" 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. A management audit report prepared by an independent management consulting firm at the direction of the NHPUC released in October, 1978, identified the following management strengths: tight control of staff levels and employee compensation, sound financial planning, sound management of the Seabrook project, and a strong transmission and distribution system planning and engineering function. According to the report, the more significant opportunities for improvement are in the following areas: the overburdening of top management, correction of operating problems at Merrimack Station, fuel procurement and storage, and public relations. In

addition to recommending expansion of the top management group by the creation of several new executive positions, the report recommends reorganization and strengthening of the fuel management function, strengthening of the public affairs function, and a comprehensive review of Merrimack Station operations. The Company accepted most of the audit report recommendations and is in the process of implementing those recommendations which were accepted. While the implementation of any particular recommendation is not expected to have a material effect upon the Company's operations, overall implementation is expected to improve the efficiency of the Company's operations at an annual cost of approximately \$3,000,000.

As to properties and business in Maine and Vermont, the Company is subject to the regulatory authority of the Public Utilities Commission of Maine ("MPUC") and the Vermont Public Service Board, respectively. Additionally, both the Connecticut Department of Business Regulation, Division 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 nuclear units. See "Joint Projects" above. 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.

#### ***Rates — New Hampshire Retail.***

On May 25, 1978, the NHPUC granted the Company an increase in its New Hampshire retail rates of approximately \$30,000,000 on an annual basis based on a test year ending in April, 1977. The order allowed the Company a return on common equity of 14%, an overall rate of return of 10.19%, and included in rate base CWIP associated with major generating facilities. The order of the NHPUC was affirmed by the New Hampshire Supreme Court on May 17, 1979. The rates filed with the NHPUC in April, 1977 were placed in effect on December 3, 1977 subject to refund; under the NHPUC's May 25, 1978 order, no refunds were necessary. On May 17, 1979 the New Hampshire Supreme Court decided that the Company had unlawfully applied the new higher rates to bills rendered after December 3, 1977 for service rendered before that date, and pursuant to an NHPUC order the Company has made refunds to its New Hampshire retail customers of approximately \$1,000,000.

After passage of a New Hampshire statute prohibiting the inclusion of CWIP in rate base, the NHPUC excluded CWIP from the Company's rate base as of May 7, 1979. At the same time, the NHPUC allowed the existing rates to remain in effect, determining that the Company's 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, and noted its preliminary conclusion that the exclusion of CWIP by increasing the overall risk to investors justifies an overall rate of return to the Company higher than that allowed in the 1978 proceeding. On intervenor application for rehearing, the NHPUC, on December 11, 1979, refused to order immediate refunds based on the exclusion of CWIP, but stated that intervenor rights with respect to possible rebates would be preserved.

The Company filed with the NHPUC on August 31, 1979, a new tariff intended to establish new permanent rates designed to generate revenues approximately \$18,500,000 (about 8.4%) on an annual basis higher than those presently in effect. These rates would be based on a test year ending May 31, 1979 and in part on pro forma adjustments to reflect changes since that date, deletion of CWIP from rate base, an increase in depreciation rates for distribution plant, normalization of the income tax effect of liberalized depreciation with respect to property placed in service after 1970, and an 18% return on common equity. The new tariff has been suspended for investigation, and evidentiary hearings have begun.

On November 27, 1979, the Company filed a request with the NHPUC for an emergency surcharge designed to increase annual revenues by approximately \$11,970,000 (about 5.5%) on an annual basis above those currently received. This surcharge represents a portion of the 8.4% permanent rate increase requested by the Company in August. On December 21, 1979, the NHPUC granted the Company the full amount of its requested increase to take effect under bond on December 28, 1979.

The Company has a fuel adjustment clause which is designed to recover, after a two months' lag, all fuel costs above base, including the energy portion of the cost of purchased power. A hearing and prior approval by the NHPUC is required with respect to each month's fuel adjustment rate.

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 the investigation has not been concluded, 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 filed for its other customers.

#### ***Rates — Other.***

Rates to the Company's wholesale-for-resale customers increasing revenues from these customers by approximately \$3,865,000 on an annual basis became effective as of April 11, 1976. 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. 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 approxi-



mately \$1,622,000 with interest, the balance not having been billed. FERC's decision was affirmed by the United States Court of Appeals for the District of Columbia Circuit, and the Company's request for Supreme Court review has been denied. The Company intends to amortize the after-tax cost of this refund over the twelve-month period ended December 31, 1980. In another phase of the same proceeding, FERC has ordered a refund of the higher cost of spot-market purchases of coal by the Company; the Company's request for a rehearing on the order has been denied. The Company has not yet determined whether to appeal the order.

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 has proposed that the new rates be made effective in two steps parallel to the steps the Company has taken to increase its retail rates in New Hampshire. The Company has 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 has 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. FERC is empowered to suspend each proposed increase for up to five months from the proposed effective date, and such increases will be subject to refund.

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, and in Maine on March 2, 1976. On an annual basis, about \$65,000 of additional revenues results from the Vermont increase and approximately \$592,000 results from the Maine increase. In its decision allowing the increase to become effective in Maine, the MPUC commented on the disparity between the allowed rates of the Company and those of Central Maine Power Company (CMP), which serves adjacent territory at lower rates. The decision requested the managements of the two companies to discuss the possibility of a transfer of the Company's Maine business to CMP and stated that in the future the MPUC might use CMP's rates as a yardstick to determine the reasonableness of the Company's rates. While preliminary discussions have been held between the two managements, no conclusions have been reached concerning the desirability of such a transfer. A complaint was filed with the MPUC in April, 1976, by two Maine municipalities and a number of their residents who are customers of the Company alleging that the Company's rates are unreasonable and discriminatory and requesting that the rates be reduced to a level no higher than the rates of CMP. Hearings began in December, 1976, and the proceeding is still pending. In 1978 the Company obtained from its Maine customers approximately 1.4% of its operating revenues.

On August 20, 1979, the Company filed with the MPUC a petition requesting a temporary rate adjustment for its Maine customers which would increase revenues approximately 9% or \$340,000 on an annual basis; this proceeding is pending. On October 31, 1979, the Company filed new rates with the MPUC proposed by the Company to be effective on December 1, 1979 which would increase revenues from the Company's Maine customers by approximately \$1,000,000 or 27% on an annual basis on a test year ending May 31, 1979; the new rates have been suspended pending investigation. The requested 27% permanent increase includes the requested 9% interim increase.

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 1978 amounted to approximately \$672,000, or about 0.25% of the Company's operating revenues.

### **Fuel Supply.**

For the twelve months ended October 31, 1979, the Company's firm net output was derived 48% from oil, 37% from coal, 10% from nuclear, and 5% from hydro. As indicated above under "Power Supply and Properties" and "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 those 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 interference by foreign governments and price increases. The Company has negotiated 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 1979, the average inventory through December 15, 1979 was approximately 15 days operating at full load. The two small plants have limited storage capacity. See "Environmental Matters" below.

**Coal.** Coal for the Company's only coal-burning unit, the 456 MW Merrimack plant, 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 the Company's disagreement with the change will result in termination of the contract at the end of the 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 plant; at December 8, 1979, a 62-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 "Environmental Matters" below.

The Company's approximate average costs of oil and coal for 1973 through October 31, 1979 were as follows:

	<u>Oil Per Barrel</u>	<u>Oil Per Million BTU</u>	<u>Coal Per Ton</u>	<u>Coal Per Million BTU</u>	<u>Coal Spot Price Per Ton</u>
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 (through October 31)	15.27	2.45	41.28	1.53	*

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

*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 units, 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 units and is actively seeking additional sources thereof, which it expects will be available when needed. The Company has no contractual arrangements for reprocessing of spent fuel and there are no reprocessing facilities currently operating in the United States; President Carter has stated the position of his Administration to be that the United States should defer indefinitely commercial reprocessing and the recycling of spent nuclear fuel. If such services are not available when required for the Seabrook units, the spent fuel can be stored pending reprocessing or disposal. Although the cost of such storage is not known at the present time, it is anticipated that such cost would be substantial. 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.

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

A national energy act was recently enacted dealing with coal conversion, gas deregulation, energy conservation, energy taxes and utility rate regulation; the effect of this act on the Company, including its rates and fuel supply, cannot be predicted at this time.

#### ***Environmental Matters.***

The Company is subject to regulation with regard to air and water quality, and may be subject to regulation with regard to 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 conditionally 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.

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. Hearings have been held at which the Company has expressed its willingness to proceed with conversion to coal provided certain environmental and economic questions are satisfactorily resolved, but the Company has requested the NHPUC to suspend further consideration of the matter pending developments in the federal proceedings described below. The Economic Regulatory Administration of the United States Department of Energy ("DOE") on November 19, 1979, issued a notice of proposed prohibition orders under the Fuel Use Act of 1978 prohibiting three 50 MW units of the five units at the Company's Schiller Station from burning oil or natural gas as their primary fuel. It is expected that DOE will, following expiration of certain comment periods and public hearings, issue its order prohibiting the burning of oil or natural gas and thereby requiring conversion of the three units to the burning of coal. Such conversions would require substantial expenditures and reduce the capability of the units affected.

*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 plant contains conditions requiring installation of some type of closed-cycle condenser cooling system if an exemption is not obtained. The Company has been studying the effects of the plant's operation on the aquatic environment of the Piscataqua River and will apply to EPA for an exemption to permit continuation of the present once-through cooling. While it cannot be known what action EPA will take on such application when filed, the Company believes that the results of its studies will support the granting of such exemption. If the Company should be unable to obtain such requested exemption, it would have 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 plant 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 plant, including environmental considerations, is subject to regulation by the NRC and the EPA. See "Seabrook Nuclear Project" above.

*Other Environmental Expenditures.* The Company's capital expenditures for environmental protection facilities amounted to approximately \$8,630,000 for 1978, the major portion of which was for facilities to reduce the thermal effect of the discharge of the Seabrook plant condenser cooling systems, with \$250,000 for the control of water pollution at other Company facilities, and approximately \$13,600,000 during 1979.

For the years 1980 and 1981 and for the years 1982-1983, there will be approximately \$10,000,000, \$8,850,000 and \$1,950,000, respectively, of further expenditures for these pollution control facilities. The foregoing amounts are included in the construction expenditures set forth under the captions "1980" and "Unadjusted 1981-1985" in the table under "Construction Program." Any expenditures associated with the conversion at the Schiller Station referred to above would be in addition to these amounts.

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

The Company has approximately 1,730 employees, of whom 35% 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 June 3, 1979 increase to union-represented employees have been and will be granted to non-represented employees.

### ***Voluntary Wage and Price Guidelines.***

The Company is subject to the voluntary Wage and Price Standards of the Federal Council on Wage and Price Stability. The guidelines, now in the second program year, provide that annual increases of wage and benefit payments should not exceed 7%, basically the same pay standards which applied the first program year, and that price increases during 1979-1980 can be no greater than the base period (1976-1977) price change or 19%, whichever is less. The regulatory agencies are asked to assure compliance to the fullest extent possible. The Company is unable to predict what effect these standards will have upon its operations in the future.

### ***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. Under legislation enacted in 1975, intended primarily to enable all electric systems (including municipalities) to participate in regional bulk power supply projects, New Hampshire municipalities now have broader powers with respect to contracting and extra-territorial activity, as well as the power 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. The City of Berlin took preliminary action in 1969 and 1970 authorizing the City to engage in the production, distribution and sale of electricity, but the matter has not been finally determined. The Company's revenues from sales in the City of Berlin in 1978 were about \$6,220,000 including revenues of about \$3,229,000 from a single large industrial customer. If the City of Berlin were to acquire ownership of the Company's property, the Company would be entitled to compensation for the fair value of its property and any severance damages. No other municipality served at retail by the Company is, so far as is known to the Company, taking steps to engage in such business.

New Hampshire Electric Cooperative, Inc., 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 Cooperative purchases most of its electricity from the Company and is subject to regulation by the NHPUC as a public utility. The Cooperative has agreed to purchase a 2.17391% interest in the Seabrook plant. See "Problems Facing the Company".

90009181

98,0000

[THIS PAGE INTENTIONALLY LEFT BLANK]

90009182

18190000

## REPORT OF INDEPENDENT CERTIFIED PUBLIC ACCOUNTANTS

The Board of Directors

PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE

We have examined the balance sheet of Public Service Company of New Hampshire as of December 31, 1978 and the related statements of earnings, retained earnings, other paid-in capital and changes in financial position for each of the five years in the period then ended. 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, 1978 and the results of its operations and the changes in its financial position for each of the five years in the period then ended, in conformity with generally accepted accounting principles applied on a consistent basis.

PEAT, MARWICK, MITCHELL & Co.

Boston, Massachusetts

February 16, 1979, except as to Note 8,  
which is as of March 5, 1979

90009183

48120002



# PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE

## BALANCE SHEET

### ASSETS

	October 31, 1979	December 31, 1978
	(Unaudited)	
	(Thousands of Dollars)	
Utility Plant, at Original Cost (Note 1):		
Electric Plant	\$519,737	\$507,711
Less Accumulated Provision for Depreciation	146,723	134,373
	<u>373,014</u>	<u>373,338</u>
Unfinished Construction (Principally Nuclear Generating Projects) (Note 8)	484,626	346,382
Net Utility Plant	<u>857,640</u>	<u>719,720</u>
Investments (Note 1):		
Nuclear Generating Companies	9,622	9,529
Real Estate Subsidiary	3,951	4,472
Other, at Cost	184	184
Total Investments	<u>13,757</u>	<u>14,185</u>
Current Assets:		
Cash (Note 3)	2,259	1,879
Temporary Cash Investments, at Cost Approximating Market	1,500	—
Accounts Receivable	27,731	27,588
Unbilled Revenue, Estimated (Note 1)	21,624	18,057
Fuel, Materials and Supplies, at Cost	27,321	20,743
Prepayments	577	3,330
Total Current Assets	<u>81,012</u>	<u>71,597</u>
Other Assets:		
Miscellaneous Properties	251	314
Deferred Debits	8,312	5,359
Unamortized Debt Expense	963	926
Total Other Assets	<u>9,526</u>	<u>6,599</u>
	<u>\$961,935</u>	<u>\$812,101</u>

See accompanying Notes to Financial Statements.

## PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE

## BALANCE SHEET

## CAPITALIZATION AND LIABILITIES

	October 31, 1979	December 31, 1978
Capitalization:	(Unaudited)	
	(Thousands of Dollars)	
Common Stock Equity:		
Common Stock — \$5 Par Value (Note 4)		
Authorized: 18,000,000 Shares		
Outstanding: 13,932,209 Shares (1978 — 9,786,969)	\$ 69,661	\$ 48,935
Other Paid-In Capital	166,202	108,232
Retained Earnings (Note 6)	69,337	71,140
Total Common Stock Equity	305,200	228,307
Preferred Stock (Note 4)	52,543	53,562
Preferred Stock — Redeemable (Note 5)	60,000	30,000
Long-Term Debt — Net (Note 7)	319,813	287,252
Total Capitalization	737,556	599,121
Current Liabilities:		
Notes Payable — Banks (Note 3)	73,100	85,325
Long-Term Debt to be Retired Within One Year (Note 7)	27,096	5,231
Accounts Payable (Note 3)	45,747	68,035
Dividends Payable	9,806	—
Accrued Taxes	4,423	12,349
Accrued Interest	6,019	6,215
Other	1,749	1,145
Total Current Liabilities	167,940	178,300
Deferred Credits:		
Accumulated Deferred Investment Tax Credits (Note 1)	28,081	12,488
Accumulated Deferred Taxes on Income (Note 1)	27,873	21,716
Other	485	476
Total Deferred Credits	56,439	34,680
Commitments and Contingencies (Note 8)		
	\$961,935	\$812,101

See accompanying Notes to Financial Statements.

# PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE

## STATEMENT OF RETAINED EARNINGS

	Ten Months Ended October 31, 1979	Year Ended December 31,				
	(Unaudited)	1978	1977	1976	1975	1974
		(Thousands of Dollars)				
Balance at Beginning of Period	\$ 71,140	\$58,725	\$56,084	\$51,936	\$45,070	\$40,613
Net Income	33,407	36,507	21,722	20,995	20,808	16,300
	104,547	95,232	77,806	72,931	65,878	56,913
Deduct:						
Dividends Declared:						
Preferred Stock, at Required Annual Rates	7,966	6,394	4,925	4,854	3,416	3,379
Common Stock	27,244	17,698	14,156	11,993	10,526	8,464
Total Dividends	35,210	24,092	19,081	16,847	13,942	11,843
Balance at End of Period (Note 6)	\$ 69,337	\$71,140	\$58,725	\$56,084	\$51,936	\$45,070

## STATEMENT OF OTHER PAID-IN CAPITAL

	Ten Months Ended October 31, 1979	Year Ended December 31,				
	(Unaudited)	1978	1977	1976	1975	1974
		(Thousands of Dollars)				
Balance at Beginning of Period	\$108,232	\$ 90,409	\$70,821	\$54,411	\$53,102	\$38,348
Excess of Proceeds over the Par Value on the Issuance of Common Stock:						
Sold — 1,650,000 Shares in 1974, 1,000,000 Shares in 1976, 1,200,000 Shares in 1977, 1,321,284 Shares in 1978 and 4,100,736 Shares in 1979	58,449	17,461	18,961	15,781	(24)	14,665
Conversions — 5.50% Convertible Preferred Stock, 3,632 Shares in 1974, 97,545 Shares in 1975, 35,000 Shares in 1976, 37,092 Shares in 1977, 21,171 Shares in 1978 and 44,504 Shares in 1979	796	407	751	739	2,061	89
Preferred Stock Issuance Expenses	(1,275)	(45)	(124)	(110)	(728)	—
Balance at End of Period	\$166,202	\$108,232	\$90,409	\$70,821	\$54,411	\$53,102

See accompanying Notes to Financial Statements.

90009186

# PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE

## STATEMENT OF CHANGES IN FINANCIAL POSITION

	Twelve Months Ended October 31, 1979 (Unaudited)	Year Ended December 31,				
		1978	1977	1976	1975	1974
		(Thousands of Dollars)				
Source of Funds:						
From Operations:						
Net Income	\$ 39,708	\$ 36,507	\$ 21,722	\$ 20,995	\$ 20,808	\$ 16,300
Principal Non-Cash Charges						
(Credits) to Income:						
Depreciation	15,369	14,752	14,117	13,791	13,522	11,624
Allowance for Equity Funds Used During Construction	(13,601)	(7,828)	(6,093)	(3,205)	(1,573)	(1,785)
Deferred Taxes and Investment Credit Adjustments	23,075	7,024	5,610	2,517	6,400	4,136
Total from Operations	64,551	50,455	35,356	34,098	39,157	30,275
From Outside Sources:						
Sale of Long-Term Bonds and Notes	60,000	60,000	25,000	15,000	22,300	45,000
Sale of Preferred Stock	30,000	—	18,000	—	15,000	—
Sale of Common Stock	79,579	24,309	25,092	20,870	—	23,022
Change in Short-Term Borrowing	19,475	30,212	55,113	—	(28,400)	(20,880)
Advance Payments from Joint Project Participants	10,628	—	—	—	—	—
Total from Outside Sources	199,682	114,521	123,205	35,870	8,900	47,142
Decrease in Working Capital	—	33,510	—	44,939	5,100	—
Total	\$264,233	\$198,486	\$158,561	\$114,907	\$53,157	\$77,417
Application of Funds:						
Property Additions	\$210,836	\$173,539	\$114,310	\$70,252	\$38,313	\$46,926
Allowance for Equity Funds Used During Construction	(13,601)	(7,828)	(6,093)	(3,205)	(1,573)	(1,785)
Dividends	35,210	24,092	19,081	16,847	13,942	11,843
Reduction of Long-Term Debt	2,758	5,947	9,271	29,517	947	882
Increase in Working Capital	23,766	—	20,378	—	—	19,528
Other Applications — Net	5,264	2,736	1,614	1,496	1,528	23
Total	\$264,233	\$198,486	\$158,561	\$114,907	\$53,157	\$77,417
Increase (Decrease) in Working Capital Other Than Short-Term Debt:						
Cash and Cash Investments	\$ 1,167	\$ (3,050)	\$ (442)	\$ (2,467)	\$ 1,370	\$ 1,625
Receivables	5,334	5,596	2,195	(1,157)	(3,414)	10,481
Inventories	8,171	3,707	(3,020)	2,564	3,696	6,814
Long-Term Debt to be Retired Within One Year	1,771	3,397	20,332	(28,911)	95	25
Accounts Payable	(4,024)	(33,125)	(1,520)	(13,338)	(6,344)	(5,053)
Dividends Payable	(3,038)	—	—	—	—	—
Accrued Taxes	10,867	(11,470)	3,090	(1,054)	(2,220)	(270)
Other	3,518	1,435	(257)	(576)	1,717	5,906
Total Increase (Decrease) in Working Capital Other Than Short-Term Debt	\$ 23,766	\$ (33,510)	\$ 20,378	\$ (44,939)	\$ (5,100)	\$ 19,528

See accompanying Notes to Financial Statements.

## NOTES TO FINANCIAL STATEMENTS

(Information related to periods subsequent to December 31, 1978 is unaudited)

### 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 investments in nuclear generating companies are:

<u>Company</u>	<u>Ownership Percent</u>	<u>October 31, 1979</u>	<u>December 31, 1978</u>
(Thousands of Dollars)			
Yankee Atomic Electric Company .....	7%	\$1,480	\$1,443
Connecticut Yankee Atomic Power Company .....	5%	2,435	2,335
Maine Yankee Atomic Power Company .....	5%	3,372	3,427
Vermont Yankee Nuclear Power Corporation .....	4%	2,335	2,324
		<u>\$9,622</u>	<u>\$9,529</u>

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 10.9% and 10.5% of the Company's total energy requirements were furnished by these companies in 1978 and 1977, 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 ranging from 3.11% to 3.19% of depreciable property for the five years ended December 31, 1978. The rate for 1978 was 3.19%.

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.

*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, including amounts to be billed under a retail fuel adjustment clause, 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



## 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 Note 2.

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 recovered from customers through revenues. See Note D to Statement of Earnings.

*Pension Plan:* The Company has a non-contributory pension plan covering all full-time employees who have met a minimum service requirement. The Company's policy is to fund current pension costs accrued. Pension plan costs were as follows: 1974 — \$1,320,000, 1975 — \$1,650,000, 1976 — \$1,850,400, 1977 — \$2,112,000, 1978 — \$2,400,000 and the twelve months ended October 31, 1979 — \$2,744,000. At December 31, 1978, vested benefits under the plan exceeded the market value of the plan's assets by approximately \$5,296,000. At that date, the total unfunded past service liability was approximately \$4,943,000.

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

## 2. INCOME TAXES

The components of income tax expense are as follows:

	Twelve Months Ended October 31, 1979	Year Ended December 31,				
		1978	1977	1976	1975	1974
		(Thousands of Dollars)				
Federal:						
Operating Income	\$(10,370) *	\$10,166	\$ 1,297	\$ 5,815	\$ 2,038	\$(1,342)
Other Income and Deductions	292	(46)	(113)	(96)	159	(2,333)
	(10,078)	10,120	1,184	5,719	2,197	(3,675)
State, Included in Operating Income	2,689	2,468	1,492	1,407	1,480	987
Total Current Income Taxes	(7,389)	12,588	2,676	7,126	3,677	(2,688)
Deferred Federal:						
Operating Income	7,746	5,527	3,882	1,709	2,183	3,754
Other Income and Deductions	3	(8)	—	6	2	79
	7,749	5,519	3,882	1,715	2,185	3,833
Deferred State:						
Operating Income	199	93	3	(37)	60	278
Total Deferred Income Taxes	7,948	5,612	3,885	1,678	2,245	4,111
Investment Tax Credit Adjustment	16,173 *	1,412	1,725	839	4,155	25
Total Income Taxes	\$ 16,732	\$19,612	\$ 8,286	\$ 9,643	\$10,077	\$ 1,448

\*During 1979, the Company made elections under certain provisions of the Internal Revenue Code which resulted in the availability of approximately \$9,500,000 of additional investment tax credits.

**NOTES TO FINANCIAL STATEMENTS — Continued**  
**(Information related to periods subsequent to December 31, 1978 is unaudited)**

**2. INCOME TAXES — Continued**

for 1978 and prior years. Approximately \$1,100,000 of such amount relates to a recently formed stock ownership plan for Company employees which does not affect net income but does result in additional funds for the Company from issuance of additional shares of the Company's common stock. The remaining \$8,400,000 does not affect net income but has reduced the amount of income taxes paid by the Company for 1978 by approximately \$6,900,000 and resulted in a claim for refund of taxes paid in years prior to 1978 of approximately \$1,500,000.

The Company estimates that investment tax credits of approximately \$18,700,000 will be generated for 1979. There are limitations on the amounts of such credits which can be used, however, and based on these limitations the Company estimates that approximately \$9,700,000 of the credits will be recognized for financial statement purposes. The Company estimates that only \$4,600,000 of such credits will be used for income tax purposes in 1979 with the balance available for use on subsequent years' returns through 1986.

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

	Twelve Months Ended October 31, 1979	Year Ended December 31,				
		1978	1977	1976	1975	1974
		(Thousands of Dollars)				
A portion of Depreciation and Amortization of Plant Facilities*	\$ 855	\$ 858	\$ 895	\$ 815	\$ 948	\$ 904
Accrued and Unbilled Fuel Adjustment Charges	2,149	1,049	36	(417)	669	3,128
The Interest Component of Allowance for Funds Used During Construction (See Note D to Statement of Earnings)	8,641	3,713	2,954	1,274	626	—
Investment Tax Credit Used to Reduce Deferred Taxes	(3,700)	—	—	—	—	—
Other	3	(8)	—	6	2	79
	<u>\$ 7,948</u>	<u>\$5,612</u>	<u>\$3,885</u>	<u>\$1,678</u>	<u>\$2,245</u>	<u>\$4,111</u>

\*Current income tax reductions 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 and (2) the amortization of certain pollution control facilities over five year periods.

90009190

**NOTES TO FINANCIAL STATEMENTS — Continued**  
**(Information related to periods subsequent to December 31, 1978 is unaudited)**

**2. INCOME TAXES — Continued**

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

	Twelve Months Ended October 31, 1979	Year Ended December 31,				
		1978	1977	1976	1975	1974
		(Thousands of Dollars)				
Income Before Income Tax	\$56,440	\$56,119	\$30,008	\$30,638	\$30,885	\$17,748
Federal Statutory Rate (1979 Approx.)	46.347%	48%	48%	48%	48%	48%
Expected Tax Expense	26,158	26,937	14,404	14,706	14,825	8,519
Increases (Reductions) in Taxes Resulting from:						
Interest and Overhead Charged to Construction and Expensed for Tax Purposes	(7,281)	(4,544)	(3,377)	(1,859)	(979)	(2,109)
Excess of Tax Over Book Depreciation	(1,716)	(2,265)	(2,318)	(2,773)	(3,019)	(3,924)
State Taxes Net of Federal Income Tax Benefits	1,550	1,332	777	712	800	658
Unbilled Revenues	(577)	(629)	(200)	(181)	(457)	(501)
Other Deductions, each less than 5% of Expected Tax Expense	(1,402)	(1,219)	(1,000)	(962)	(1,093)	(1,195)
Total Income Taxes	<u>\$16,732</u>	<u>\$19,612</u>	<u>\$ 8,286</u>	<u>\$ 9,643</u>	<u>\$10,077</u>	<u>\$ 1,448</u>

**3. COMPENSATING BALANCES AND SHORT-TERM BORROWINGS**

The Company uses borrowings from banks as an interim method of financing construction of new facilities. At December 31, 1978, the Company had a revolving credit agreement which permitted the Company to borrow up to \$95,000,000 through April 30, 1979 and also had line of credit agreements which aggregated \$5,350,000. See "Problems Facing the Company — Immediate Financing Program" for information concerning an extension of and increase in the revolving credit agreement. 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. Compensating balances amounted to \$305,000 at December 31, 1978 and October 31, 1979.

The average interest rate on short-term borrowings at December 31, 1978 and October 31, 1979 was 12.64% and 16.14%, respectively. During 1978, maximum short-term borrowings were \$88,112,500; the average amount outstanding (based on month-end balances) was \$66,911,458; and the weighted average interest rate was 11.36% computed with commitment fees included in interest expense. During the twelve months ended October 31, 1979, maximum short-term borrowings were \$114,100,000; the average amount outstanding was \$83,052,083, and the weighted average interest rate was 14.32%.

At December 31, 1978, accounts payable included deferred payments to vendors of approximately \$7,500,000. Such deferrals, with interest, were paid in January, 1979. At October 31, 1979, accounts payable included advance payments aggregating \$10,600,000 from other Seabrook participants against their present ownership interests in the project. These advances were to be credited against amounts payable by such participants commencing in January, 1980, and are secured by the Company's interest in nuclear fuel for the Seabrook project.

**NOTES TO FINANCIAL STATEMENTS — Continued**  
**(Information related to periods subsequent to December 31, 1978 is unaudited)**

**4. 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:

<u>Dividend</u>	<u>Par Value</u>	<u>Shares Outstanding</u>	<u>October 31, 1979</u>	<u>December 31, 1978</u>
(Thousands of Dollars)				
3.35%	\$100	102,000	\$10,200	\$10,200
4.50%	\$100	75,000	7,500	7,500
5.50%	\$100	48,432 (1978—58,622)	4,843	5,862
7.92%	\$100	150,000	15,000	15,000
11.00%	\$ 25	600,000	15,000	15,000
Total Preferred Stock			<u>\$52,543</u>	<u>\$53,562</u>

During the five years and ten months ended October 31, 1979, the Company issued (in October 1975) \$15,000,000, 11% Dividend Series Preferred Stock.

General redemption prices of preferred stocks are: 3.35% Series \$100.00, 4.50% Series \$102.00, 5.50% Series \$100.00, 7.92% Series \$105.94 and 11% Series \$27.75.

At October 31, 1979 there were reserved for issuance upon conversion of the 48,432 shares of Convertible Preferred Stock, 5.50% Dividend Series, 214,585 shares of Common Stock based upon the conversion price of \$22.57 per share (the Convertible Preferred Stock being taken at its par value of \$100 per share).

**5. PREFERRED STOCK — REDEEMABLE**

Redeemable Preferred Stock outstanding is as follows:

<u>Dividend</u>	<u>Par Value</u>	<u>Shares Outstanding</u>	<u>October 31, 1979</u>	<u>December 31, 1978</u>
(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 (1978—None)	30,000	—
Total Preferred Stock — Redeemable			<u>\$60,000</u>	<u>\$30,000</u>

Redeemable preferred stocks issued during the five years and ten months ended October 31, 1979 were \$18,000,000, 9% Dividend Series in October 1977 and \$30,000,000, 11.24% Dividend Series in May, 1979.

Sinking Fund provisions require the Company to redeem all shares at par on the basis of 4,800 shares annually beginning in 1984 for the 7.64% series, 10,800 shares annually beginning in 1982 for the 9% series and 60,000 shares annually beginning in 1985 for the 11.24% series. The annual Sinking Fund requirements are as follows: 1979 through 1981 — none, 1982 — \$1,080,000, 1983 — \$1,080,000 and 1984 — \$1,560,000. Subject to certain refunding limitations, Redeemable Preferred Stocks are redeemable for other than Sinking Funds at redemption prices of \$106.12, \$109.00 and \$27.81 for the 7.64%, 9.00% and 11.24% series, respectively.

# NOTES TO FINANCIAL STATEMENTS — Continued

(Information related to periods subsequent to December 31, 1978 is unaudited)

## 6. 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, 1978, and at October 31, 1979 Retained Earnings of \$44,415,000 and \$42,612,000, respectively, were not subject to dividend restriction.

## 7. LONG-TERM DEBT

	October 31, 1979	December 31, 1978
	(Thousands of Dollars)	
First Mortgage Bonds:		
Series E — 3 %, Due 1979	\$ —	\$ 3,356
Series H — 3 1/4 %, Due 1984	10,483	10,483
Series I — 3 7/8 %, Due 1986	6,972	7,047
Series M — 4 5/8 %, Due 1992	21,952	22,149
Series N — 6 1/8 %, Due 1996	15,847	15,910
Series O — 6 1/4 %, Due 1997	14,086	14,173
Series P — 7 1/8 %, Due 1998	14,242	14,277
Series Q — 9 %, Due 2000	19,168	19,206
Series R — 7 5/8 %, Due 2002	19,398	19,455
Series S — 9 %, Due 2004	19,628	19,778
Series T — 12 3/4 %, Due 1981	24,719	25,000
Series U — 10 3/4 %, Due 1985	15,000	15,000
Series V — 9 1/8 %, Due 2006	15,000	15,000
Series W — 10 1/8 %, Due 1993	10,000*	10,000*
Series X — 12 %, Due 1999	9,302*	— *
	215,797	210,834
Less — Deposited with Trustee of the General and Refunding Mortgage Indenture as additional security for General and Refunding Bonds	19,302*	10,000*
Total First Mortgage Bonds	196,495	200,834
General and Refunding Mortgage Bonds:		
Series A — 10 1/8 %, Due 1993	60,000	60,000
Series B — 12 %, Due 1999	60,000	—
Promissory Note, †Due January 3, 1980 with interest at 116% of a specific bank's prime rate plus 0.25%	25,000	25,000
Pollution Control Revenue Bonds:		
8 1/4 %, Due December 1979	1,500	1,500
9 %, Due December 1984	5,800	5,800
Total Long-Term Debt	348,795	293,134
Less: Long-Term Debt To Be Retired Within One Year	27,096	5,231
Unamortized Premium and Discount	1,886	651
	28,982	5,882
Long-Term Debt — Net	\$319,813	\$287,252

††† maturity of this Note has been extended to January 5, 1981.

48190008

90009193



## NOTES TO FINANCIAL STATEMENTS — Continued

(Information related to periods subsequent to December 31, 1978 is unaudited)

### 7. LONG-TERM DEBT — Continued

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: 1979 — \$2,213,241, 1980 — \$2,463,241, 1981 — \$2,636,318, 1982 — \$2,052,984, 1983 — \$2,052,984 and 1984 — \$2,052,984. Annual Sinking Fund requirements with respect to General and Refunding Mortgage Bonds during the five years through 1984 are \$5,460,000 payable in cash in 1983 and 1984.

Long-term debt maturities, excluding the aforementioned Sinking Fund requirements, are as follows: 1979 — \$4,856,000, 1980 — None, 1981 — \$49,719,000, 1982 — None, 1983 — None and 1984 — \$16,283,000.

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.

### 8. COMMITMENTS AND CONTINGENCIES

The Company (both as sole and as joint owner of facilities) and the nuclear generating companies in which the Company has investments, in common with other electric utilities, are subject to present and developing regulations with regard to air and water quality, nuclear plant licensing and safety, land use and other environmental matters by various Federal, state and local authorities. It is possible that compliance with such regulations may require additional capital expenditures and increased operating costs not now determinable in amount.

If the Company's construction program is not reduced as described in the next paragraph, construction program expenditures are forecast to be \$195,700,000 for 1979, \$215,700,000 for 1980 and \$696,200,000 for 1981 through 1985 (excluding allowance for funds used during construction). These estimates included \$158,700,000, \$178,500,000 and \$412,700,000, respectively, for the Company's interest in a nuclear generating station under construction in Seabrook, New Hampshire, and \$5,300,000, \$7,000,000 and \$63,700,000, respectively, for the Company's interests in other nuclear generating units owned on a tenancy-in-common basis with other New England utilities. 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	October 31, 1979	December 31, 1978
		(Thousands of Dollars)	
Seabrook #1 and #2	50.0000%	\$434,200	\$307,800
Pilgrim #2	3.4700	11,600	9,600
Millstone #3	3.8910	26,200	21,200
		<u>\$472,000</u>	<u>\$338,600</u>

On March 3, 1979, the Company's Board of Directors directed management to proceed to sell all of the Company's Pilgrim #2 and Millstone #3 ownership interests and to reduce its ownership inter-

**NOTES TO FINANCIAL STATEMENTS — Continued**  
**(Information related to periods subsequent to December 31, 1978 is unaudited)**

**8. COMMITMENTS AND CONTINGENCIES — Continued**

est in the Seabrook nuclear plant by offering 22% to other Seabrook participants. Through October 31, 1979, subject to receipt of requisite regulatory approvals, other utilities have committed to acquire only 14.76503% of the plant. See "Problems Facing the Company — Reduction of Construction Program" for a description of the proposed arrangements for the reduction of the Company's interests. See "Problems Facing the Company — Immediate Financing Program" and "Construction Program" for the effect of such agreements on the Company's financing plans for 1980 and subsequent years.

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 for the project. 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 project or on the cost of the project.

**9. UNAUDITED REPLACEMENT COST INFORMATION**

The replacement cost data described in this note has been compiled in response to regulations promulgated by the Securities and Exchange Commission and represents, in the opinion of management, reasonable estimates of replacement costs given the guidelines of the regulations. However, imprecisions exist and subjective judgments have been made in the estimating process. Also, certain income effects which might result from the replacement of productive capacity are not required to be described by the regulations and have not been evaluated, including the impact of replacement on capital costs and taxes. Furthermore, the regulations do not call for a description of all factors which may result from inflation, including the impact of long-term debt outstanding in a time of inflation and these have not been evaluated or included in the replacement cost data presented. Consequently, in the opinion of management this note is of limited usefulness in the evaluation of the impact of inflation on the financial position or results of operations of the Company. Furthermore, the disclosure of this replacement cost data should not be construed as a plan to replace existing productive capacity, and the actual replacement of productive capacity may not take the form implied by the techniques used to develop the estimates. Finally, the replacement cost data presented in this note should not be taken to be management's estimate of the current value of existing property, plant and equipment.

The Company's operating costs and the recovery of its investment in utility property are significantly affected by inflation and the current and expected more stringent environmental regulations. Replacing existing utility property with equivalent productive capacity will require substantially greater dollars of capital investment than was required to construct or acquire the property originally; but replacement cost is not normally considered in the rate making process, since only the historical cost of utility property is normally included in the rate base upon which the Company is allowed to earn a fair rate of return. However, the cost of replacement property, when existing productive capacity is actually replaced, is expected to be included in the rate base.

# NOTES TO FINANCIAL STATEMENTS — Continued

(Information related to periods subsequent to December 31, 1978 is unaudited)

## 9. UNAUDITED REPLACEMENT COST INFORMATION — Continued

The computed replacement cost of the Company's productive capacity, depreciated replacement cost and related depreciation expense and corresponding historical cost data are presented below for December 31, 1978 and 1977:

	December 31, 1978		December 31, 1977	
	Historical Cost	Estimated Replacement Cost	Historical Cost	Estimated Replacement Cost
	(Thousands of Dollars)			
Utility Plant:				
Plant in Service Subject to Replacement				
Cost Disclosure	\$493,080	\$1,452,671	\$472,510	\$1,345,446
Construction Work in Progress	346,382	346,382	196,825	196,825
Other Property, at Historical Costs	14,631	14,631	14,558	14,558
Total	854,093	1,813,684	683,893	1,556,829
Accumulated Provision for Depreciation	134,373	435,985	122,364	381,292
Net Utility Plant	\$719,720	\$1,377,699	\$561,529	\$1,175,537
Depreciation Expense	\$ 15,417	\$ 45,479	\$ 14,731	\$ 42,163

*Generating Plants:* Fuel generation replacement costs were estimated on the basis of current construction cost per megawatt at December 31, 1978 and 1977 developed by engineering studies and applied to essentially the generation mix at the end of each year. Hydro generation replacement costs were calculated using the Handy-Whitman Index.

*Transmission and Distribution Plant:* High voltage transmission line replacement costs were computed based on engineering studies which determined the cost per mile of line at the end of each year. The replacement costs of certain transmission substations were computed based on costs and technology at the end of each year. The replacement costs of the remainder of transmission facilities along with the replacement costs of all distribution plant were calculated using the Handy-Whitman Index.

*General Plant:* Estimated replacement costs of buildings were developed by applying the estimated cost per square foot at the end of each year to the then present facilities. Estimated replacement costs for all other general plant were developed by applying unit prices or the appropriate Wholesale Price Index at the end of each year. Other property consists primarily of land and land rights.

*Reserve For Depreciation:* Related accumulated depreciation based on replacement costs was developed by applying the same percentage relationship that existed between depreciable plant and accumulated depreciation by functional groups on an historical cost basis at December 31, 1977 and 1978 to the current replacement costs of the same groups.

*Depreciation Expense:* Depreciation expense for the replacement costs of utility plant was developed by applying the actual average rates and methods by functional groups in use to the average of beginning and year end balances of depreciable replacement costs.

## DESCRIPTION OF THE BONDS

The Series C Bonds will mature on January 15, 2000 and will be issued under and secured by a General and Refunding Mortgage Indenture dated as of August 15, 1978 and a Second Supplemental Indenture to be dated as of January 15, 1980 (the "G&R Indenture") between the Company and New England Merchants National Bank, as Trustee. The lien of the G&R Indenture is subject to the prior lien of the Company's First Mortgage (see "Security and Priority" below).

Interest on the Series C Bonds will accrue from the date of their initial issue and will be payable semi-annually on each January 15 and July 15 to holders of record on the preceding January 1 or July 1, respectively. Principal and interest will be payable at the principal corporate trust office of the Trustee in Boston, Massachusetts, and at an office of Manufacturers Hanover Trust Company, Paying Agent, in New York City. The Series C Bonds will be issued only in fully registered form without coupons in denominations of \$1,000 or multiples thereof. No service charge will be made for any transfer or exchange of Series C Bonds.

The brief summary herein of certain provisions of the G&R Indenture is merely an outline and does not purport to be complete. It uses terms defined in the G&R Indenture and is qualified in its entirety by reference to the G&R Indenture which is an exhibit to the registration statement. Where references are made to the Company's First Mortgage Indenture dated as of January 1, 1943 and supplements thereto (the "First Mortgage"), such references are qualified in their entirety by reference to the First Mortgage, which is an exhibit to the registration statement.

### Redemption

Series C Bonds will be redeemable at the option of the Company as a whole or in part at any time prior to maturity, on at least 30 days' notice given as provided in the G&R Indenture, at the general redemption prices shown in the table below, expressed as percentages of the principal amount; *provided, however*, that neither the Series C Bonds nor any portion thereof shall be redeemed prior to January 15, 1985, if such redemption is for the purpose or in anticipation of refunding such Bonds, or any portion thereof, through the use, directly or indirectly, of funds borrowed by the Company at an effective interest cost to the Company (computed in accordance with generally accepted financial practice) of less than  $\frac{1}{2}$ % per annum, and the Series C Bonds will also be redeemable for the sinking fund on January 15, 1990, or any January 15 thereafter (and at any time prior to maturity through the application of certain release, insurance, eminent domain, and replacement fund moneys and certain other moneys required to be deposited with and held by the Trustee, as a whole or in part) on like notice, at the principal amount thereof, together in each case with accrued and unpaid interest to the redemption date.

If redeemed at any time in the respective twelve-month period beginning January 15 in each of the following years:

<u>Year</u>	<u>General Redemption Price</u>	<u>Year</u>	<u>General Redemption Price</u>
1980		1990	
1981		1991	
1982		1992	
1983		1993	
1984		1994	
1985		1995	
1986		1996	
1987		1997	
1988		1998	
1989		1999	

All outstanding G&R Bonds, including the Series C Bonds, may also be redeemed in whole but not in part on at least 30 days' notice at the option of the Company, by issuance in exchange therefor of an equal aggregate principal amount of First Mortgage Bonds; and the Company covenants that, if the First Mortgage is amended to permit the issuance of First Mortgage Bonds against unlicensed or disconnected property additions, it will so redeem all outstanding G&R Bonds by exchange of First Mortgage Bonds. The First Mortgage Bonds exchanged for the G&R Bonds shall bear interest at the same rate, shall have the same maturity, interest payment dates and redemption prices, shall be so dated that no gain or loss in interest shall result from the exchange, and shall be entitled to the benefits of the same sinking funds (except as the First Mortgage may otherwise require) and the same dividend limitations and the same restrictions on the right of redemption, shall be entitled to the benefits of the same replacement fund or maintenance and renewal covenant.

### **Sinking Fund**

The G&R Indenture requires that the Company shall on or before January 15, 1990 and each January 15 thereafter, up to and including January 15, 1999, deposit with the Trustee the sum of \$2,250,000, payable in cash or an equivalent principal amount of Series C Bonds. The Company may, at its option, pay to the Trustee prior to any sinking fund date as an additional sinking fund payment an amount payable in cash or in Series C Bonds not exceeding the amount of the mandatory sinking fund payment; the right to make such additional sinking fund payment in any year shall not be cumulative.

### **Replacement Fund**

So long as any First Mortgage Bonds remain outstanding, the Company will comply with the requirements of the maintenance and renewal covenant under the First Mortgage, as described below. When said requirements cease, the Company will be obligated under the G&R Indenture to pay to the Trustee as a replacement fund  $2\frac{1}{4}\%$  of the average of its investment in depreciable property on the last day of each month of the previous calendar year. The replacement fund requirement may be satisfied by cash, G&R Bonds of any series, or Available Amount of Additional Property. Additional property evidenced under either the maintenance and renewal covenant of the First Mortgage or the replacement fund under the G&R Indenture may be used to offset certain retirements in computing Available Net Additional Property.

### **Maintenance and Renewal Covenant**

The First Mortgage contains a specific maintenance and renewal covenant providing that the Company will, during each calendar year, in the aggregate expend for, or allocate Additional Property to, or deposit in cash with the Trustee on account of maintenance, repairs, renewals and replacements, a total of not less than 15% of the gross operating revenues (after deduction of the aggregate cost of electric energy, gas and steam purchased for resale) during such period from the physical properties, other than leased properties, covered by the First Mortgage and used for the Primary Purposes of the Company's Business. Expenditures, deposits and allocations from insurance and eminent domain proceedings and certain other sources may not be included.



## Security and Priority

The Series C Bonds will be secured by the G&R Indenture equally and ratably with G&R Bonds of other series by a mortgage lien on substantially all the properties and franchises owned by the Company at the time of the execution and delivery of the Second Supplemental Indenture and on substantially all property and franchises subsequently acquired by the Company, except real property in Maine and Massachusetts acquired after the filing of the Second Supplemental Indenture and before the filing of a further supplemental indenture specifically subjecting such after-acquired property to such lien; subject, however, to the payment of the Trustee's charges, to the lien of the First Mortgage, to liens on after-acquired property existing at the time of acquisition or created in connection with the purchase thereof not exceeding 60% of the Cost or Fair Value, whichever is less, to certain exceptions set forth in the descriptions of properties in the G&R Indenture and in the deeds referred to in such descriptions, and to Permitted Liens. Certain types of property are excepted from the lien of the G&R Indenture, including, among others: fuel, nuclear cores and materials; all gas, oil, and other mineral properties and personal property related thereto; supplies; cash; securities; contracts; and accounts receivable. While the principal currently operating generating stations, dams, and substations are on land owned by the Company, the principal transmission lines are mostly on lands of others pursuant to easement rights. Ownership of generating stations now under construction is held in undivided joint ownership with other utility participants.

No debt may be created by the Company ranking prior to or on a parity with the Series C Bonds with respect to the security provided by the G&R Indenture, except additional G&R Bonds issued in the manner summarized below, First Mortgage Bonds pledged with the Trustee under the G&R Indenture, obligations supported by additions and enlargements to property already subject to certain types of prior liens (none of which currently exists), and purchase money obligations existing or created in connection with the acquisition of after-acquired property not to exceed 60% of its cost or value. Prior liens and purchase money obligations, other than First Mortgage Bonds, shall not exceed 25% of the sum of all outstanding G&R Bonds and obligations (other than Pledged Bonds) representing liens prior to the G&R Indenture.

G&R Bonds are further secured by First Mortgage Bonds which the Company is obligated to issue and pledge with the G&R Trustee. Upon any application to issue G&R Bonds (including the Series C Bonds) or certain other actions, the Company is required to deposit as a pledge with the G&R Trustee First Mortgage Bonds ("Pledged Bonds") in the maximum amount then issuable, subject to the Company's option not to so issue and deposit a limited amount of First Mortgage Bonds otherwise issuable. The Pledged Bonds are secured, together with all First Mortgage Bonds now issued and outstanding under the First Mortgage, by a direct first mortgage lien on substantially all the property of the Company, and after-acquired property to the extent permitted by law, subject only to excepted property and Permitted Encumbrances. Under the First Mortgage, additional First Mortgage Bonds may be issued against the retirement at maturity of a like amount of First Mortgage Bonds or against 60% of the Net Amount of Additional Property; however, in the G&R Indenture the Company has covenanted not to issue First Mortgage Bonds except for pledging with the G&R Trustee. The Company has also covenanted in the G&R Indenture not to permit certain modifications to the First Mortgage which could reduce the amounts of First Mortgage Bonds issuable in the future, for the purpose of pledging under the G&R Indenture. The Pledged Bonds are nontransferable.

In 1978, when \$60,000,000 of G&R Bonds, Series A, were issued, the Company deposited \$10,000,000 of Pledged Bonds; in September, 1979, when \$60,000,000 of G&R Bonds, Series B, were

issued, the Company deposited \$9,302,000 of Pledged Bonds. The Company intends to issue no additional Pledged Bonds upon the issuance of the Series C Bonds. Because of provisions in the First Mortgage which limit the availability of property additions to support issuance of additional bonds (see "Financing — Mortgage Bonds"), there can be no assurance that the deposit of significant amounts of Pledged Bonds will occur when subsequent series of G&R Bonds are issued. The Company does not pay interest on the Pledged Bonds. The principal benefit to holders of G&R Bonds provided by the Pledged Bonds will be that, in the event of a reorganization or insolvency of the Company, the allocation to the holders of G&R Bonds may be increased by reason of their participation in the lien of the First Mortgage through the Pledged Bonds. Upon the retirement of all non-pledged First Mortgage Bonds (in 2006, or earlier if such First Mortgage Bonds are called for redemption), the First Mortgage will be discharged and the G&R Bonds will become first mortgage bonds.

Under the Atomic Energy Act, neither the Trustee nor any other transferee of the Company's property may operate a nuclear generating station without authorization from the Nuclear Regulatory Commission.

### **Release and Substitution of Property**

The G&R Indenture provides that subject to various limitations property may be released from the lien thereof on a sale or other disposition upon the deposit with the Trustee of cash, purchase money obligations or Additional Property equal to the Fair Value of the property released.

### **Additional G&R Bonds**

Additional G&R Bonds of any series may be issued as follows: (A) against 60% of the Available Net Additional Property, (B) to refund a like amount of First Mortgage Bonds of any series which are not then Funded, (C) to refund a like amount of bonds which are not then Funded originally issued under a mortgage (the lien of which is prior to the lien of the G&R Indenture) existing on property at or immediately prior to the time of acquisition by the Company of such property, (D) to refund a like amount of G&R Bonds of any series which are not then Funded, and (E) against the deposit of money. Money so deposited may be withdrawn in amounts equal to the principal amount of G&R Bonds otherwise issuable against Available Net Additional Property or to refund bonds.

When issuing G&R Bonds against Additional Property or the deposit of money, the Company must demonstrate that Net Earnings (not including any AFUDC in excess of 10% of Net Operating Revenues but including revenues subject to refund unless there has been issued a final decision, which has not been stayed, of a regulatory commission or a court ordering a refund of such revenues) for any 12 consecutive calendar months within the preceding 15 calendar months are at least twice the annual interest charges on all G&R Bonds outstanding and applied for and on all equal or prior lien indebtedness (excluding Pledged Bonds). Except in certain instances, no earnings test is required in connection with the refunding of a like amount of bonds.

The Series C Bonds will be issued against 60% of Available Net Additional Property. As of October 31, 1979, the Available Net Additional Property against which G&R Bonds might be issued (based on property additions through July 31, 1979) was \$219,397,642, which will be reduced to \$169,397,642 after giving effect to issuance of Series C Bonds. The actual earnings coverage ratio under the G&R Indenture is 2.36 for the twelve months ended October 31, 1979. The pro forma earnings coverage ratio is 2.06 after giving effect to the issuance of the Series C Bonds at an assumed annual interest rate of 14%.

### **Dividend Restriction**

So long as any of the Series C Bonds are outstanding, the Company may not declare or pay any dividend (other than dividends payable solely in shares of common stock), or make any other distribution on, or purchase, any shares of its common stock at any time outstanding (other than by new common stock financing), if after such action the amount of such dividends, distributions, and purchases (at cost) subsequent to December 31, 1977, would exceed its Net Income subsequent thereto, less the amount of all dividends paid or declared on its preferred stock, plus \$32,000,000.

### **Modification of the G&R Indenture**

The G&R Indenture may be modified with the consent of the holders of 66 $\frac{2}{3}$ % of the G&R Bonds at the time outstanding (or, if one or more but less than all the series of G&R Bonds would be materially adversely affected, 66 $\frac{2}{3}$ % of the total bonds of the one or more series so affected). No such modification shall (a) affect the payment of principal, premium, and interest on any G&R Bonds, or extend the maturity or time of payment, without the consent of the holders of the G&R Bond affected, (b) reduce the above specified percentages of G&R Bondholders, or (c) permit the creation by the Company of any lien not otherwise permitted ranking prior to or on a parity with the lien of the G&R Indenture. No modification may be made which would conflict with the Trust Indenture Act of 1939 as then in effect. The Trustee is not obligated to execute a supplemental indenture which would affect its own rights, duties, or immunities under the G&R Indenture.

### **The Trustee**

If the Trustee acquires any conflicting interest it shall either eliminate it or resign. There are limitations on the rights of the Trustee in respect of certain payments and property received by the Trustee within four months prior to default. The Trustee may become the owner or pledgee of G&R Bonds as freely as if it were not the Trustee.

The holders of a majority in principal amount of the G&R Bonds outstanding may require the Trustee to take certain action, except when forbidden by law or when the Trustee in good faith shall by its responsible officers determine that such action would involve the Trustee in personal liability or would be unjustly prejudicial to the other G&R Bondholders.

### **Defaults**

The following are termed events of default: (a) failure to pay principal, premium or sinking fund installment when due; (b) failure for 5 days to pay interest; (c) failure for 30 days to pay any replacement or analogous fund installment; (d) default under the First Mortgage or certain other mortgages; (e) failure for 30 days after notice from the Trustee to perform any other covenant or agreement; and (f) certain events of bankruptcy, insolvency, or reorganization. The Trustee may withhold notice to the G&R Bondholders of any default, except default in the payment of principal, interest, or any sinking, replacement, or analogous fund installment, if its responsible officers in good faith determine that withholding such notice is in the interests of the G&R Bondholders.

### **Evidence to be Furnished Trustee**

Evidence is required periodically as to the absence of default in connection with certain annual sinking and replacement fund requirements and as to compliance with certain other terms of the G&R Indenture. Further, prior to issuance of additional G&R Bonds, release of property, withdrawal of cash, and various other actions under the G&R Indenture, evidence as to the absence of default and as to compliance with certain terms of the G&R Indenture is required.

## LEGAL OPINIONS

The validity of the Series C Bonds will be passed upon for the Company by Ralph H. Wood, Esquire, Vice President and General Counsel of the Company, and by Messrs. Ropes & Gray, Boston, Massachusetts, and for the Underwriters by Messrs. Choate, Hall & Stewart, Boston, Massachusetts, both of which 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 Ralph H. Wood. Ralph H. Wood owns, jointly with his wife, 300 shares of the Company's Common Stock, and also has rights to approximately 140 additional shares of Common Stock under the Company's Employee Stock Ownership Plan.

## EXPERTS

The financial statements included herein so far as they pertain to each of the five years in the period ended December 31, 1978 have been so included 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.

Ralph H. Wood, Esquire, Vice President and General Counsel of the Company, has reviewed the statements made herein as to matters of law and legal conclusions under the subcaptions "Joint Projects", "Seabrook Nuclear Project", "Regulation", "Rates — New Hampshire Retail", "Rates — Other", "Fuel Supply", "Environmental Matters", "Employees, Salaries and Wages" and "Municipalities and Cooperatives" under the caption "Business", and under the caption "Description of the Bonds". Messrs. Ropes & Gray have reviewed the statements made herein as to matters of law and legal conclusions under the subcaptions "Mortgage Bonds" and "Preferred Stock" under the caption "Financing", under the subcaptions "New England Power Pool" and "Seabrook Nuclear Project" under the caption "Business", under the caption "Description of the Bonds" and concerning the jurisdiction of FERC, the NRC and the Massachusetts Department of Public Utilities under the caption "Business — Regulation." Such statements are included on the authority of such person and firm as experts.

90009202



## UNDERWRITING

The names of the several Underwriters and the respective principal amounts of Series C Bonds 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:

<u>Name</u>	<u>Principal Amount</u>	<u>Name</u>	<u>Principal Amount</u>
Kidder, Peabody & Co. Incorporated	\$		\$
Blyth Eastman Paine Webber Incorporated			

Total \$30,000,000

The Underwriting Agreement provides that the several Underwriters are required to take and pay for all of the Series C Bonds 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 Series C Bonds to the public initially at the offering price set forth on the cover page of this Prospectus and to certain dealers at such price less a concession of not in excess of % , and that the Underwriters and such dealers may realow a discount of not in excess of % 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

The Company	2
Prospectus Summary	3
Problems Facing the Company	4
Industry Problems	8
Use of Proceeds	9
Construction Program	9
Financing	12
Capitalization	14
Statement of Earnings	15
Management's Discussion and Analysis of the Statement of Earnings	18
Operating Statistics	20
Business	21
Power Supply and Properties	21
New England Power Pool	21
Joint Projects	22
Seabrook Nuclear Project	23
Regulation	25
Rates -- New Hampshire Retail	26
Rates -- Other	27
Fuel Supply	29
National Energy Policy	30
Environmental Matters	30
Employees, Salaries and Wages	32
Voluntary Wage and Price Guidelines	33
Municipalities and Cooperatives	33
Accountants' Report	35
Financial Statements	36
Description of The Bonds	49
Legal Opinions	54
Experts	54
Underwriting	55

\$30,000,000

**PSNH** PUBLIC SERVICE  
Company of New Hampshire

## General and Refunding Mortgage Bonds Series C      % due 2000

## PROSPECTUS

Kidder, Peabody & Co.  
Incorporated

Blyth Eastman Paine Webber  
Incorporated

January , 1980

20590008

90009204

PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE

Request for Rate Increase

Application for authority to alter existing rates on account of emergency circumstances.

..00..

Appearances: for the Company, Martin Cross, Esquire, Franklin Esquire and Philip Ayers, Esquire; for the Legislative Utility Consumers Council, William Shaine, Esquire and Gerald Lynch, Esquire; for Community Action Program, Gerald Eaton, Esquire; for the U S Air Force and General Services Administration, Captain Jefferson M. Shaffner, Esquire.

..00..

REPORT

On November 27, 1979, the Public Service Company of New Hampshire, an electric utility company, filed an application for authority to alter existing rates on account of emergency circumstances to produce an annual increase of revenues of 5.5% in the amount of \$11,970,591 or 7.5% over the present base revenues computed in accordance with Tariff No. 22 but exclusive of the fuel adjustment charge. The application is filed pursuant to RSA 378:9, or in the alternative RSA 378:27 or 29.

On November 29, 1979 the Commission issued an Order of Notice providing for a public hearing on this application to be held on December 11, 1979 and for publication of said notice. The notice was duly published and the hearings were held on December 11, 12, 13, and 14, 1979.

The Company presented testimony from Robert J. Harrison, Vice President and Chief Financial Officer of the Company, William Q. Harty, Vice President and the Head of the Public Utilities Department of Morgan Guaranty Trust Company and Eugene W. Meyers, Vice President of the Kidder Peabody Company, Hanover Square, New York, New York.

The Commission requested the testimony of Jonathan D. Horne of the First National Bank of Boston and Philip H. McLaughlin of Shawmut National Bank of Boston.

90009205

The Legislative Utility Consumers' Council (hereinafter called the LUCC) presented testimony of Professor J. Peter Williamson of Dartmouth College.

Various members of the public and representatives of consumer groups gave oral or written statements to the Commission.

I. Position of the Parties

A. Position of Public Service Company

Public Service Company (hereinafter referred to as the Company or PSNH) contends that without an increase in the basic rates it will no longer be able to sell long term securities nor will it be able to finance its construction or its day-to-day operations. This inability to meet its obligations is cited as confronting PSNH with immediate and substantial financial disaster both as to the completion of Seabrook and the continuation of PSNH as a corporate entity.

PSNH in its memorandum states that it has carried its burden under both RSA 378:9 (emergency) and RSA 378:27 and 29 (temporary). The Company cites the Commission's attention to Petition of Public Service 97 N.H. 549 (1951) and Concord Electric DR 74-1 (1974) for support of its contention that under either RSA 378:9 or 27, an inability to finance its capital requirements is a sufficient ground for relief.

PSNH relies upon evidence submitted in this proceeding for the proposition that it has made a good faith effort to reduce its cash demands. The Company charges that the failure to reduce these cash demands can not be laid at the Company's doorstep given the appeals taken by other parties to this proceeding.

The problems the Company faces are delineated in their memorandum as follows: (a) the need to raise \$290 million by December 31, 1980, (b)

90009206

the term loan is up for renewal, (c) access to the short-term credit market has been curtailed, (d) common stock access is limited, (e) general and refunding bonds are not a possibility at this time, and (f) only limited amounts of preferred stock could be issued.

PSNH contends that alternatives to the surcharge are not feasible or an adequate replacement for rate relief. The Company indicates that regulatory approvals which reduce PSNH ownership in Seabrook to 35% will not solve the problem since 28% is the level that is manageable by the Company. Other alternatives such as shutting down construction or altering the scheduled completion dates are also rejected by the Company as being both against the public interest and of little value in solving inadequate cash flow. The Company concludes that only through a surcharge can these problems begin to be resolved.

PSNH takes exception to the contention that the requested rate relief is a departure from cost of service principles. Supporting this position, the Company cites, that cost of service includes not only a utility's cost of operation but also its cost of capital. That further, this cost of capital is not to be determined solely in terms of return on amounts invested in plant actually in service.

The Company finds solace and support for its contentions as to cost of service principles in LUCC witness Williamson's testimony. If Professor Williamson finds a 4.2 to 6.2% increase necessary under a narrow concept of cost of service, the Company contends its 5.5% is clearly justified.

Finally, the Company contends that while it has submitted a variety of proposed rate structures to the Commission, it believes its original filing to be the strongest. However, the Company will accept the method the Commission finds appropriate.

90009207

B. Position of LUCC

The LUCC objects to the Company's application and sets forth a number of arguments for the consideration of the Commission.

The first argument is that the application discussed costs that are associated with the Company's uncompleted construction at Seabrook, and are, thus irrelevant to the establishment of rates whether they be interim, temporary, emergency or otherwise. LUCC takes the position that the level of rates and charges to be assessed by PSNH may not be based on any manner on the cost of construction work in progress; nor may the level of rates and charges be based upon any costs associated with construction work if said construction work is not completed. To do so would violate the language of RSA 378:20-a.

The second argument advanced by the LUCC is that Emergency rates should be denied because it is unlikely that PSNH will be able to substantiate an increase of 5.5% over their current levels of revenues in the hearings concerning rate relief requested by PSNH. This contention basically alleges that PSNH can not meet the burden of proof necessary to justify a rate increase of any kind in light of the fact that they cannot show that they can maintain their present level of revenues. In this context the LUCC also suggests that the Commission should not grant the Company's request to fully normalize its income tax accounts.

The third contention of the LUCC is that there is no testimony that the requested increase will avert the crisis. LUCC sets forth that it would be an abuse of discretion to grant an increase without evidence of a permanent financing package designed to allow PSNH to continue construction of Seabrook on schedule, at its current level of ownership.

Generally, the LUCC alleges that the Company has not pleaded a factual basis for the granting of emergency rate relief and if such relief were granted a bond should be required to protect residential consumers.

90009208



### C. Position of Community Action Program

The Community Action Program (CAP) sets forth a number of considerations for the Commission to evaluate in arriving at a decision in this proceeding. The first concern expressed by CAP is if the Commission finds that an emergency exists, the Commission should not allow a rate increase without a concomitant effort by Public Service Company. CAP views the additions of personnel for purposes of construction monitoring and the possibility of increased dividends to stockholders as unreasonable if consumers are asked to pay higher rates to relieve an emergency.

The second contention put forth by CAP is that Public Service has simply not carried its burden of proof pursuant to RSA 378:8. In addition, CAP alleges that the emergency, if it exists, relates directly to financing construction costs, generating cash for construction and preventing default on lending agreements for construction. Therefore, CAP contends that this expense of construction financing is directly prohibited from being passed on to the ratepayer by RSA 378:30-a.

The third concern expressed by CAP is that the Commission must first determine if there is a crisis of sufficient severity to warrant relief and then determine the extent of the relief. Petition of Public Service Company, 97 N.H. 549 (1951) - Blandin opinion. CAP alleges that even if there is an emergency, the emergency rate request will not cure the financial difficulties faced by the Company. CAP alleges that there is a significant probability that many of the Company's plans will not bear fruition in 1980, thus worsening the emergency. Among those cited by CAP are: (1) sale of the Vermont facilities; (2) the approval of the divestiture by other regulatory bodies; (3) the refusal of the various banks to provide assurances that the loans will be renewed or extended; (4) the nuclear fuel agreement will occur; and (5) that a renegotiation of the unit sale of power from Merrimack II will be successful.

90009209

CAP points to the fact that many of its clients face emergencies of their own. If these people are faced to part with a portion of their limited resources, CAP contends that there is no assurance that the Company will succeed in remaining stable during 1980, or that there won't be further requests.

CAP's fourth contention is that temporary rates cannot be granted because of the failure to adequately inform the public that temporary rates would be addressed.

CAP's final concern is that if the Commission ignores CAP's other concerns and finds an emergency, the rates granted should be applied on a per kilowatt hour basis.

## II. Statutory Concerns

### A. Temporary Rates

The Commission has in this proceeding provided adequate notice to the public of an immediate rate increase request. A hearing was scheduled and notice of said hearing was properly published. The adequacy of the notice and the awareness of the public concerning the matters before the Commission have been clearly demonstrated by the number of people who have presented their views both orally and in writing to the Commission.

Temporary rates have traditionally protected a utility's right to a reasonable return during the pendency of a proceeding. Consumers are protected through the notice and hearing provisions and RSA 378:20 which allow for a bond to secure repayment to the customers of the utility in the event that temporary rates prove to be higher than what is allowed in the permanent rate decision.

The Commission in Concord Electric DR 74-1 (1974) allowed a temporary increase in rates where it found that Concord Electric was unable to do any

90009210

permanent financing. Similar concerns were expressed in Public Service Company D-R 6081 (1974). Therefore, by past Commission precedent RSA 378:27 is a mechanism whereby a utility can obtain an increase in rates provided it can demonstrate that access to the permanent capital markets is being influenced by the inability of the utility to earn a reasonable return.

B. Emergency Rates

RSA 378:9, the emergency rate statute, has also been recognized as a vehicle whereby a utility after demonstrating a lack of avenues to the permanent financing markets can receive an increase in rates, New England Telephone and Telegraph v. State 95 N.H. 59 (1949) Petition of Public Service Company 97 N.H. 549 (1951).

In both the New England Tel. decision and the Blandin opinion in Public Service the inability to finance generally, inability to pay present bank loans and/or issue common stock have been recognized as sufficient grounds by the Supreme Court for the finding of an emergency. The Kenison opinion in Public Service does not differ as to the recognition of what factors result in a rate increase being granted prior to completion of a permanent rate order. Rather, the focus of the Kenison opinion is the statutory mechanism. Since that decision, the Supreme Court has clearly stated that the Commission is not to substitute form over substance, LUCC v. PSNH III \_\_\_\_\_ N.H. \_\_\_\_\_ (1979). While the issue of form versus substance was a question of methodology in that proceeding, the considerations supporting that decision are equally applicable to the question of which statute is appropriate.

The Commission does not believe that an emergency request pursuant to RSA 378:9 loses its character as an emergency, simply because the matter is set for public hearing. Commission policy is to always have a hearing because this is the only way the Commission can be assured of balancing the

90009211

interests of the consumers and the utility.

Therefore, the Commission adopted the position that this proceeding is pursuant to RSA 378:9 and 378:27 either individually or in conjunction.

C. Burden of Proof

RSA 378:8 states that when any utility seeks the benefit of any order of the Commission to charge and collect rates in excess of the rates presently being charged, the burden of proving the necessity of the increase is clearly on the utility.

In an emergency rate relief situation, there is a heavy burden upon the utility seeking relief to allege and establish the existence of circumstances which would warrant departure from the normal ratemaking process. Re Potomac Electric Power Co., 9 PUR 4th 363 (1975). While the burden of establishing the need for rate relief is always upon the applicant in a rate proceeding, that burden bears more heavily upon the applicant in a request for extraordinary relief. Re Arkansas Power & Light Co., 10 PUR 4th 474 (1975).

Since the Commission does not have the benefit of a complete independent analysis by its staff on the financial posture of the utility, the evidence submitted by an applicant for emergency rate relief must clearly and convincingly demonstrate that a situation exists which warrants an exercise of the Commission's emergency powers. Re Arthur Mutual Telephone Co., Case No. 73-562-4 (1973).

III. Commission Analysis

The testimony of Mr. Meyer of Kidder Peabody is concise and to the point. This Company is foreclosed from permanent financing if additional revenues are not forthcoming. If permanent financing is not available, the

90009212

commercial bankers have no reason to either renew or extend short term financial arrangements. If that occurs this company will not be able to meet its bills which would effectively stop the construction of Seabrook. Furthermore, there is at least a strong likelihood that Public Service Company itself would flounder on the shoals of insolvency absent rate relief.

Staff Exhibit #8 does show that this Company is earning a rate of return in excess of that allowed by the Commission in the last rate case decision DR 77-49. If the financial circumstances involving this Company had remained the same, Staff Exhibit #8 would present a significant barrier to rate relief. However, the circumstances involving this Company have changed. First, at the time the Company was last before the Commission the prime interest rate was below 10%; now it is at 15½%. Second, during the last proceeding the economy as a whole was on a relative upward swing. Today, all of us are in the throes of a recession. Third, between the last filing by this Company and this emergency rate filing, an incident occurred at the Three Mile Island Station. In the aftermath of this incident the financial markets have reacted somewhat less positively than in the past. While hopefully the events in Caracas this past week will begin to swing the pendulum in the opposite direction, certainly the incident did add risk to those utilities constructing nuclear plants.

Fourth, the stock market has had a steady downward slide. This overall market condition, a symptom of the recession and the high interest rates, has had a particularly chilling effect on stocks of utilities. Those with major construction programs or heavy reliance upon oil were hit the hardest. PSNH is in the unfortunate position of qualifying under both.

Fifth, the Company has maintained and correctly, we believe, that Seabrook is a valuable project. The New England utilities who first requested

90009213



portions of Seabrook and then backed off provided an additional risk factor that neither the Company or this Commission could control. However, a risk factor to which investors and bankers respond. Obviously, if the Company is perceived as having to be wary of its fellow brethren in the industry, this too causes risk.

Mr. Meyer's indication that he believed Public Service was the utility with the greatest risk may be true. However, what is clear is the correctness of our statement in DR 79-107 where the Commission indicated that both the overall rate of return and the return on common equity is higher than our findings in DR 77-49. LUCC witness Williamson, Company witness Meyer and Harrison all maintained that the cost of common equity for PSNH was higher than 14%. Certainly the 15.3% at this point in time is reasonable.

Applying the facts in this proceeding to the tests set forth by the Supreme Court, it is clear that the Company qualifies for emergency assistance. As in Petition of Public Service, (1951) infra Public Service Company is again faced with an inability to sell common stock, 95 N.H. 551.

As in 1951, Public Service Company must, assuming the divestiture is not completed in 1980, raise extraordinary amounts of additional capital. This factor was another one relied upon by the Supreme Court in determining an emergency existed in 1951. 97 N.H. at page 551. Finally, again as in 1951 a loan is coming due that must be renewed or extended to pay for past construction and to pay for further expansion of services.

The evidence of LUCC witness Williamson also indicates that at least some form of permanent rate relief is necessary. While Professor Williamson did not address his belief as to the emergency situation and what relief if any was needed. His recommendation of a 4.2% to 6.2% permanent increase does not differ markedly from the action the Commission takes today.

90009214

The testimony of Mr. Harrison together with our own extensive investigation into what is occurring in other jurisdictions, leads us to conclude that PSNH has made every attempt to implement the divestiture in the most expeditious fashion possible. If they had not been held up by people such as the Massachusetts intervenors there is a strong likelihood that the action taken today might not have been necessary.

Upon a review of all the evidence in this proceeding it is clear that PSNH has sustained its heavy burden and that our action conforms to the tests set forth by the New Hampshire Supreme Court. Obviously, this review cannot address all the concerns raised by each party to the proceeding. However, the full investigation in situations such as these is left to the hearings on the permanent increase. The \$11,970,00 revenue request is approved.

D. Bond.

The Commission pursuant to RSA 378:30 will require a bond to be posted.

#### IV. Allegations Concerning CWIP and RSA 378:30a

Parties to the proceeding have set forth the proposition that the Company's request is nothing more than CWIP by another name. In addition, some of these parties contend that RSA 378:30a precludes any mention of any project under construction. Because these parties have persisted with these positions, the Commission finds it necessary to provide the following:

If RSA 378:30-a was not in existence, the Company would be entitled to a rate base nearly double the rate base submitted in this proceeding. Assuming the same 14% return on equity allowed in DR 77-49 the Company would be entitled to approximately \$83,706,267 of additional revenue this year. This compares to the approximate \$11,970,000 granted by this opinion and the approximately \$18,500,000 asked in the permanent rate increase request.

90009215

Clearly neither this Commission nor PSNH is sidestepping the effect of RSA 378:30-a.

The formula used by the Commission in DR 79-107 will again be cited as an attempt to explain ratemaking.

$$R = E + (V-d)r$$

R = Overall revenues required

E = Expenses

V = Rate Base

d = Depreciation

r = Overall return

Under either the CWIP or no CWIP scenario, expenses and depreciation can be assumed to be treated in the same fashion. Consequently, the differences are rate base and return. Obviously, many of the concerns of the 15.3% at this early stage of the proceeding would not be ignored in a similar proceeding without RSA 378:30 (a). The differences, if any, on return on equity are the proper subject for experts. Debt costs and preferred stock costs that have been the subject of hearings by this Commission would not be addressed by the caliber of witnesses such as Harrison and Williamson, since these portions of the rate of return are rarely, if ever, in dispute.

This leaves a rate base under CWIP based rates on a New Hampshire jurisdictional basis of \$648,522,763 as opposed to the requested non-CWIP rate base (on a jurisdictional basis) of \$325,722,740.

As to the suggestion that RSA 378:30-a is designed to eliminate consideration of construction from all elements of ratemaking, i.e. expenses, return, and rate base is untenable.

The bill reads as follows:

90009216

1. Costs of Construction Work In Progress Excluded From Rate Base. Amend RSA 378 by inserting after section 30 the following new section:

378:30-a Public Utility Rate Base: Exclusions. Public utility rates or charges shall not in any manner be based on the cost of construction work in progress. At no time shall any rates or charges be based upon any costs associated with construction work if said construction work is not completed. All costs of construction work in progress, including, but not limited to, any costs associated with constructing, owning, maintaining or financing construction work in progress, shall not be included in a utility's rate base nor be allowed as an expense for rate making purposes until, and not before, said construction project is actually providing service to consumers.

2. Effective Date. This act shall take effect upon its passage. (Emphasis supplied).

The statute as well as the title of the statute clearly indicates that the legislature was intending to exclude CWIP from rate base.

V. Commensurate Jurisdiction Returns and Divesture

The Commission urges the Company to proceed in a reasonably expeditious manner to seek equality of rates from customers in other jurisdictions serviced by the Company and at the same time to continue to strive toward a successful conclusion of the planned divesture.

90009217

Emergency Measures - PSNH

CAP AND LUCC are concerned that if consumers are paying higher rates because of an emergency resulting from lack of cash flow then it is only fair and reasonable to require similar sacrifices by the utility and its stockholders. Both ask for a curtailment in expenses and CAP has particular concerns about a possible dividend increase.

Both of these parties want the Commission to evaluate the expenses of the Company and it is suggested that the Commission impose either a flat percentage reduction to expenses or in the alternative disallow certain expenditures such as the expenditure associated with the Electric Power Research Institute.

The questions raised by CAP and LUCC relate to the methods and practices of the utility and its management. These are legitimate inquiries that must be considered before reaching a decision in the permanent rate request. However, the Supreme Court has clearly indicated that "emergency relief does not depend upon the answers to these questions but upon the needs of the company..." New England Telephone and Telegraph Co. v. State 95 N.H. 58, 62 (1948).

While there is no statutory or case law which requires a limitation on expense, the question of increased dividends may well have been addressed in part by the New Hampshire Supreme Court in the New England Telephone and Telegraph Co. decision. In that decision, the Court found that a proper return for common equity was required to be found before establishing permanent rates. The court then stated the following:

"Until such permanent rates can be established, stockholders must expect to share the burden of abnormal costs without transferring the whole to the public under the guise of emergency relief." 95 N.H. at p. 63.

90009218



However, the Commission agrees with Mr. Harrison that the Commission lacks the authority to dictate the dividend policy of this Company or any other company (Transcript 4-48). The Company and its investment bankers must decide what is necessary for the common and preferred stock of the company to be attractive to investors.

#### Rate Design

Because of the expedited nature of both temporary and emergency proceedings, rates must be established without in depth allocations of costs. The allocations chosen by the Commission in these types of proceedings do not necessarily control when fixing permanent rates. New England Telephone and Telegraph Co. v. State 95 N.H. 515 68 A. 2d 114 (1949). Consequently, parties to the proceeding have the right to challenge the cost allocations made by the Commission in hearings to be held on the permanent rate request.

The Commission, in adopting the increased rate level sought by the Company is faced with substantial problems of increasing complexity. Yesterday's solutions are not always applicable where (1) a unit is being built with a cost many times the size of the Company's existing investment, (2) the fuel type of the new plant is more desirable because of inflationary and national interest problems associated with the fuel type that is presently being used, and (3) conservation is now a national policy.

The Commission has attempted to implement a three pronged approach to reducing the oil dependence of utilities within our jurisdiction. First, the Commission endorsed and continues to endorse the construction of the nuclear facility at Seabrook. Second, the Commission has initiated an investigation into the feasibility of converting oil fired stations to

90009219

coal. Third, the Commission has, through its decision on rates for small energy producers, attempted to increase substantially the amount of hydro-power in the State and possibly make it more likely that other alternate energy forms will also increase. In addition, the Commission has launched an investigation into whether or not the Commission should require greater amounts of hydro-power generation on the Connecticut River to be used within the State.

Today, the Commission adds a fourth prong; namely, to make the rate structure more conservation oriented at least until either the other fuel types begin to have a greater percentage of PSNH's mix or until the oil crisis lessens in impact.

At the present time any increased usage by any consumer in this State will be satisfied by a greater use of oil fired generating stations. This will be especially true if the NRC carries through on its order to begin closing some of New England's nuclear plants for safety checks and for safety related equipment additions. Consequently, the initial rate structure submitted by the Company will not be accepted for purposes of this proceeding.

Instead, the Commission will allow the following increases to the following customer classes and service charges. It should be noted that the full \$11,970,591 is being allowed but because of the \$1.82 fuel adjustment charge as opposed to the test year average fuel adjustment charge of \$1.33 the overall percentage is lower. (4.98%). The Commission will spread the emergency surcharge as shown on the attached report of proposed rate changes. The proposed change is to be placed on a per kilowatt hour basis within each customer class of service. The Company will use the amount of kilowatt hours for each class of service that it used in the calculations it submitted to the Commission. The Commission will make two deviations from this overall rule. The controlled water heating subclass for the general service rate C

90009220

will not have any increase applied to its kilowatt hour usage. This lost revenue is to be recovered on a per kilowatt hour basis from other rate C customers. The second deviation is that no increase will be applied to the high-pressure sodium outdoor lights. Again, this small revenue loss is to be recovered from other ML customers on a per kilowatt hour basis. Our order will issue accordingly. to be effective as of December 28, 1979.

J. Michael Love  
Chairman

Concurring:

December 21, 1979

Francis J. Riordan, Commissioner

Malcolm J. Stevenson, Commissioner

90009221

STATE OF NEW HAMPSHIRE  
PUBLIC UTILITIES COMMISSION  
CONCERN

REPORT OF PROPOSED RATE CHANGES

UTILITY Public Service Company of New Hampshire DATE FILED \_\_\_\_\_  
Supplement No. 7

TARIFF NO. 22 EFF. DATE \_\_\_\_\_  
Based on Actual Sales to New Hampshire Customers  
For the Twelve Months Period Ending May 31, 1979\*\*

Rate or Class of Service	Effect of Proposed Change*	Average Number of Customers	Estimated Annual Revenue		Proposed Change	
			Present Rates **	Proposed Rates	Amount	%
Residential Service Rate D***	Increase	238,225	\$105,171,503	\$108,521,160	\$3,349,657	3.18
General Service Rate G	Increase	30,379	\$40,474,739	\$41,573,712	\$1,098,973	2.71
Primary General Service Rate GV**	Increase	1,198	\$46,420,020	\$49,570,525	\$3,150,505	6.78
Transmission General Service Rate TR**	Increase	79	\$41,298,582	\$44,511,484	\$3,212,902	7.7
Outdoor Lighting Service Rate ML	Increase	13,814**	\$6,298,297	\$6,562,001	\$263,704	4.18
Service Charges, Rates D & G	Increase		\$447,425	\$1,342,275	\$894,850	200.00
TOTALS	Increase	270,054	\$240,110,566	\$252,080,872	\$11,970,306	4.98

\* Show increases, decreases and net changes in each rate classification separately, where applicable.

(See reverse side for  
other footnotes.)

Signed by: \_\_\_\_\_

90009222

PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE

..00..

ELEVENTH SUPPLEMENTAL ORDER NO. 13,962

In consideration of a report issued December 21, 1979, which is made a part hereof; it is

ORDERED, that the Public Service Company of New Hampshire be, and hereby is, allowed emergency rate relief in the amount of \$11,970,591, to become effective with all billings issued on or after December 26, 1979 and to continue until permanent rates are ordered under this docket; and it is


FURTHER ORDERED, that said revenue be gained by increasing service charges and applying a surcharge to each kilowatt-hour of energy sold, with the exceptions noted within the report; and it is

FURTHER ORDERED, that surcharges for each class be calculated according to the Report of Proposed Rate Change attached to the aforementioned Report; and it is

FURTHER ORDERED, that the resulting rates be documented by filing Supplement No. 7 to the Public Service Company of New Hampshire's tariff NHPUC No. 22 - Electricity; and it is

FURTHER ORDERED, that public notice be given according to tariff Filing Rule 27, said notice to summarize Supplement No. 7.

By order of the Public Utilities Commission of New Hampshire this twenty-sixth day of December, 1979.

  
Vincent J. Iacopino  
Executive Director and Secretary

90009223