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Utility Financial Stability and the Availability of Funds for Decommissioning

Prepared by J. J. Siegel

Engineering and Economics Research, Inc.

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Prepared by
J. J. Siegel*

Engineering and Economics Research, Inc.
1951 Kidwell Drive
Vienna, VA 22180

*Presently with The Wharton School, University of Pennsylvania

Prepared for
Division of Engineering Technology
Office of Nuclear Regulatory Research
U.S. Nuclear Regulatory Commission
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INTRODUCTION

The NRC is currently developing its decommissioning rulemaking. R.S. Wood, in a publication (NUREG-0584, Rev. 3, March, 1983) entitled "Assuring the Availability of Funds for Decommissioning Nuclear Facilities", has already examined the options of prepayment, external sinking funds, internal reserve, and surety bonds or insurance (if available). In general, Wood's report finds that all these methods provide reasonable assurance of the availability of funds and hence would be termed acceptable methods of funding.

However, recent developments in the utility industry indicate a potential weakness in the financial stability of utilities and raise question as to whether all of the aforesaid funding methods should continue to be ranked as acceptable.

Based on these concerns, I have been asked by the Nuclear Regulatory Commission to reevaluate these funding options under current financial conditions. In particular, I have been requested to answer the following questions:

(1) What relative level of assurance do the four methods provide that funds will be available for decommissioning under present conditions?

(2) Do financial problems such as bankruptcy of a utility or other financial instabilities pose a serious enough problem to eliminate the use of any of the allowed funding methods?

(3) If the answer is that each of the funding methods is still adequate, what measures could be taken by utilities, ratemaking bodies, successor organizations, or government agencies to assure that decommissioning is carried out in the case of serious financial instability? This would include potential problems of premature shutdown.

A. UTILITIES' FINANCIAL CONDITION

A.1. Sources of Current Difficulties

Currently, there has been sharply increased concern about the financial condition of those utilities involved in substantial nuclear power construction. In fact, for the first time in recent memory, several public utilities have been threatened with bankruptcy, i.e., projected revenues are insufficient to cover both the operating costs and the interest on debt incurred during the construction of nuclear plants.

There are several reasons why these problems have recently become far more severe. First, the cost of completing nuclear generating facilities has skyrocketed far beyond original cost projections. This has been particularly true in the final completion stages, when plants which were once deemed over ninety-five percent complete now have cost completion estimates that have ranged up to 30% of their total costs. Secondly, most states do not allow Construction Work in Progress, or CWIP, to be included in the rate base until the generating plant is placed in service and begins supplying power to the ratepayers. In order to compensate the utility for the ongoing interest cost of raising funds for constructing such plants, the Public Utility Commissions (PUC) credit Allowance for Funds Used During Construction, or AFUDC, to the earnings of the utility. Essentially, this means that when a nuclear power plant is included in the rate base, the addition includes not only the actual construction costs of the facility, but all the interest and dividends that have accrued, but not yet charged to ratepayers, on funds used for construction. This could amount to 30 or more percent of the final cost of the facility. Due to the increased delays in completing the facilities, the level of AFUDC has increased far beyond estimates.

When all these accrued costs of the nuclear power plant become incorporated into the rate base, there is frequently a sharp increase in the service rate. This sharp increase has been termed "rate shock," and has aroused strong opposition from those ratepayers affected. In addition, because of the mounting costs of nuclear construction, many plants which

are in relatively early stages of construction have been deemed uneconomic to complete and have been marked for cancellation.

These two factors, i.e., the cancellation of partially constructed nuclear facilities and the sharp increase in rates when existing facilities are put in service and become eligible to be placed in the rate base, have led to increased fears by investors. Investors' fears are based on the fact that some Public Utilities Commissions have not allowed, and others will not allow, sufficient rate increases to ensure that the dividends and interest payments on the securities of the utility will be secure. In other words, the PUCs will grant insufficient return to investors by (1) not allowing the utilities to recover all, or any, of the costs associated with cancelled plants, and (2) phasing in a new facility into the rate base without allowing any return on that part of the facility not yet incorporated into the rate base.

In order to preserve cash during these periods of financial stress, several utilities have, for the first time since the Great Depression, either cut or eliminated their dividends on common and preferred stock. Furthermore, this pessimistic financial climate has made it difficult for utilities to refund their short-term securities and bank loans except at extraordinarily high interest rates. The price of the common equity of these firms has dropped far below book value, and the long-term bonds of such utilities are selling at deep discounts.

A.2. Financial Bankruptcy - General Discussion

Bankruptcy is generally caused when the utility is unable to pay interest on its fixed income obligations. For convenience, I shall term these fixed income obligations "bonds," although they include all short-term debt, including bank loans.

Bankruptcy does not arise when utilities cannot pay the dividends on either their common or their preferred stock. Holders of stock, or equity holders, are considered the residual recipients of the profits of the firm. Preferred stockholders obtain first claim on such profits, and a utility cannot cut its preferred dividend without first eliminating the dividend on its common stock. Most preferred stock is referred to

as "cumulative." This means that before resumption of dividends on the common equity, all past and current dividends (often with interest) must be paid to the preferred stockholders.

This decision to pay dividends to either the common or preferred stockholder is a management decision. The management is not obligated to pay dividends, even if the utility is earning a profit. However, most stockholders or public utilities desire a substantial dividend yield as part of their return. Therefore, payment of dividends is necessary to attract equity capital.

If the management of the utility cannot pay the interest on its bonds after conserving as much cash as possible by eliminating dividends on common and preferred stock, then the utility is subject to bankruptcy, and the creditors, in this case the bondholders (or the banks) may take possession of the assets of the utility.

Frequently, when the management of the utility sees that it will have difficulty meeting its fixed obligations, it enters into negotiations with the bondholders. Since the value of the assets of a firm which is operating is frequently greater than the value of one which is not, it is rarely in the interest of the bondholders to "close down" the firm and auction the assets. This is particularly true if the financial difficulties of the firm cannot be totally attributed to the faults of current management or are thought to be temporary. Bondholders discuss methods of funding the utility under these circumstances in an attempt to restore financial health to the firm and enable it to recover the value of its assets.

The above point is important, since, contrary to much public opinion, bankruptcy does not mean that the assets of the firm are worthless, and it may not even mean that such assets are impaired in value. It means that current cash revenues are insufficient to cover fixed interest obligations and the financial climate is such that borrowing to cover these obligations is not deemed financially feasible or desirable.

A.3. Impairment of Utility Assets

There are two ways that the assets of a utility can be impaired by nuclear power construction. First, and most importantly, the market value of utilities is lowered if the PUCs do not allow full cost recovery of all the CWIP, includng all the AFUDC accrued during the construction of the nuclear plant. Secondly, even if full recovery is allowed, the tremendous increase in rates may place the utility at a competitive disadvantage and cause a loss in the customer base which ultimately lowers revenues. Of course, the public utility commissions could attempt to compensate for this loss in revenue by raising service rates even higher, but there is a limit, for political and economic reasons, to the amount of extra revenue that may be raised by this method.

The impact of asset impairment from adverse PUC actions can be easily calculated. As mentioned earlier, there are two ways that the PUC's can effectively prevent the utility from recovering costs: (1) disallowance, and (2) delayed allowance of CWIP. The first will, in general, apply to cancelled plants, while the second has been used to ease the "rate shock" of incorporating new nuclear power plants in the rate base. It should be noted that at the present, investors can only estimate the actions of the PUCs. Although PUCs throughout the country have already made such adverse decisions, many of these will be litigated, and the final outcome may take years to assess.

B. ANALYSIS OF UTILITY ASSET VALUES

In this study, I have examined the balance sheets of four public utilities: Public Service Company of New Hampshire, Public Service Company of Indiana, Long Island Lighting Company, and the Philadelphia Electric Company. All these utilities are in various stages of financial distress owing to the large costs of ongoing nuclear power construction. Appendix A gives a brief description of these utilities. In addition, for the purpose of comparison, I have analyzed the Washington Public Power Supply System (WPPSS). This entity differs from the others insofar as it is financed wholly by bonds of a tax-exempt organization. Therefore, there is no "cushion" of equity between the shareholders and bondholders as is present in the private stock utilities. WPPSS has no opportunity to conserve cash by cutting dividends of shareholders in order to meet the obligations of fixed-income securities. A description of WPPSS is also given in Appendix A.

Appendix B provides the balance sheet of each of these entities. The securities used to fund the utilities are found on the liability side of the balance sheet. The face value of the equity is the value of the common stock when sold to the public. Note, that for these four utilities, the average percentage book value of the debt is 44.2%, of the preferred is 13.9%, and of the equity is the remainder, or 41.9%. This is referred to as the capital structure of the firm, and is quite typical for the industry. Note that about 40% of the capital structure involves securities for which interest payments are an absolute obligation, and 60% involves securities (common and preferred) for which payments of dividends are not an absolute obligation.

Appendix B also lists the assets of the firm. The Construction Work in Progress, referred to as CWIP, represents those assets which have not yet been allowed in the rate base. As described above, it is this amount upon which investors fear the Public Utility Commissions will not allow the utilities to recover the normal rate of return. CWIP amounts to an average of 53.3% of the total assets of these utilities, ranging from a high of 67.0% for Public Service of New Hampshire to a

low of 44.0% for Philadelphia Electric Company. These high figures indicate that, on average, over half the assets of these utilities have not yet been included in the rate base.

It can also be noted that the CWIP amounts to an average of 119% of the shareholders equity (preferred and common) of these firms, ranging from a high of 129% for Public Service of New Hampshire, to a low of 106% for the Philadelphia Electric Company. In other words, if the Public Utility Commissions did not allow any recovery of the current nuclear power plant construction, they would in effect wipe out all of the stockholders equity. The fact that all of these utilities have greater than one hundred percent of their stockholders equity in CWIP is significant. If CWIP were less than stockholders equity, then even if no current CWIP were allowed recovered, the utility would still generate sufficient revenues, under current service rates, to pay the interest on it bonds.[1]

Appendix C displays the current book and market value of the stocks and bonds of the utilities. Because of the fears of non-recovery of CWIP, the market value of the securities is far less than the book value. The market value of the stock and bonds was taken at the low point, so as to illustrate the maximum risk that the utility will not be able to satisfy decommissioning costs.

It can be seen that the market value of bonds and equity range from 37% of book value in the case of Public Service of New Hamoshire to 69% in the case of Philadelphia Electric Company. The average for the four utilities is 51%. For WPPSS Units 1, 2, and 3 it is 55%, but for WPPSS Units 4 and 5 it is only 15%. Overall, for the Washington Public Power Supply System the market value of the bonds is 44% of book value.

In the case of Long Island Lighting, the market value is $2.5 billion below book, for Philadelphia Electric, $1.9 billion, for Public Service of Indiana, $1.6 billion, and for Public Service of New Hampshire, $1.2 billion. For WPPSS, the market value of bonds is nearly $4.6 billion

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1. One should qualify this to state that if there were little or no stockholders equity, then there would be no cushion for bondholders, meaning that although current obligations could be satisfied, new debtholders may require much higher interest rates. Of course, if nuclear power construction were cancelled, new capital needs would drop sharply, and only refinancing of existing bonds and bank loans would become important.

below book value. For the private utilities, this difference between market and book value is equal, repsectively, to 71%, 54%, 76%, and 86% of Construction Work in Progress.

It should be emphasized that the entire difference between the market and the book value of each utility cannot be wholly ascribed to investor risk concerning CWIP. Many utilities which are not involved in nuclear construction are selling somewhat below book value because the recent rise in interest rates has depressed the market price of bonds and equity. However, a large fraction of the decline in market value, especially that which has taken place over the past six months, is primarily due to investor fears of non-allowance of CWIP in service rates.

C. ASSURANCE OF DECOMMISSIONING FUNDS

C.1. Financial Coverage of Decommissioning Costs During Periods of Financial Distress

What is clear from Appendices B and C is that the market value of utilities, although significantly below their book value, in each case exceeds $665 million, and averages $2.32 billion. With decommissioning costs estimated at approximately $100 million per plant, all these utilities have a market value many times in excess of their expected decommissioning costs. The most troubled utility is clearly Public Service of New Hampshire, by all criteria thus far examined. It has 35.23% ownerhsip in Seabrook Units 1 and 2, an average of 5% in each of four "Yankee" nuclear plants, and less than 1% ownership in Millstone Nuclear Unit 3. Therefore, even PSNH's decommissioning obligations are small relative to its market value.

This means that investors perceive that the value of the assets of these utilities, including all the risks, obligations, and requirements entailed therein, is still worth a substantial sum despite current financial difficulties. This is true because utilities still have the distribution network, capital base, and official public sanction and charter to carry on as the provider of energy resources in their area. If the PUC removes all these current rights of the utility, it will literally expropriate the entire net worth not only of the shareholders but also the bondholders. Unless there occurs extreme malfeasance involving literally criminal actions by the management, directors, and bondholders, this outcome is considered to be virtually inconceivable.

Even if the firm passes to the bondholders because of a default in the payment of interest, this does not necessarily release the firm from other financial and legal obligations. In general, accounts payable, including wage services, and all other contracts remain in force, and are considered prior legal obligations of the firm.[2]

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2 Recently some manufacturing firms have declared bankruptcy to rid themselves of burdensome labor contracts. This is now being examined in the courts and Congress is considering establishing new legislation establishing a priority of claims.

Appendices B and C establish that there is sufficient value in on-going utilities, even those experiencing severe financial stress in bringing completed or nearly-completed nuclear reactors on line, to more than cover the decommissioning costs.

C.2. Other Concerns Regarding Availability of Decommissioning Fund

Under current NRC regulations, the obligation to decommission a nuclear power plant is attendant with the license. Certainly, as long as the utility has licensed nuclear power facilities, the NRC can withhold or deny approval, or levy fines, on these facilities. The case to consider is when the utility has no ongoing or prospective nuclear facilities, and is just at the point of decommissioning a nuclear plant.

Under these conditions, it is potentially possible, even if there is no financial distress, for the utility to attempt to sell its productive assets to another corporation, leaving the inactive, but not yet decommissioned, nuclear power plant in a shell corporation with no other assets. The utility's property consists solely of a nuclear plant with no market value.

It may be that such a corporate move would be identified as a sham designed solely for the utility to rid itself of valid prior obligations. If the NRC went to court exposing this scheme, the Commission would probably be successful, and the utility would be blocked from such a move. The NRC could argue that, according to regulations (e.g., CFR Title 10, Chapter 1, Part 2, Subpart B), such actions by the utility endanger the health and safety of the public by not providing adequate funds for decommissioning.

However, in times of financial distress, the consequences of rearrangement of corporate assets are not so easily identified. Recently, Public Service of New Hampshire has formed a new organization for its Seabrook reactors, called Newbrook, which is designed to separate out the nuclear generating assets from the other conventional assets of the firm. These arrangements are being made by the creditors of PSNH so that the risk of the assets of the utility can be more easily identified by the investors. It is conceivable that in a time of financial crisis there may be a similar

move made by a utility to rid itself of the financial obligations of decommissioning.

C.3. Discussion of Decommissioning Funding Alternatives

The above analysis indicates that the greatest assurance of the availability of decommissioning funding would be attained with an external reserve, specifically marked and held by a trustee for the ratepayers and the utility. In this circumstance, it would be virtually impossible for the utility to divert these assets for other uses and funds would be assured no matter what events, legal or financial, occur. Of course, prepayment into an external fund, with periodic funding review to assure the adequacy of the reserve, would provide the greatest assurance. Next would include an external sinking fund financed by a negative net salvage value, or some other acceptable method.

Other methods of funding for decommissioning suffer from the possibility that corporate changes could diminish or eliminate the funds available. Even if an internal reserve is specifically funded by government, or other AAA quality bonds, such a fund could be lost or transferred if changes in corporate ownership or structure occur. Even surety bonds or insurance, to the extent they are available, are not a guaranteed method of satisfying decommissioning costs. An insurance company could claim that the corporation with which it entered its contracts is no longer in existence. Even if such a position would be challenged in court, it may take years to resolve the liability of who pays for decommissioning costs.

For the above reasons, I rank external funding through trusteeship as guaranteeing the greatest assurance of funding availability. Next, and much further down in my ranking, I would list internal funding in segregated accounts with separate, high-grade securities, then bonding and insurance, and last, internal funding with no segregated account. It should be noted that these lower ranking alternatives can be made far more attractive by the NRC taking measures to assure the prior legal obligations of the utility and of any successor firms and organizations to cover decommissioning expense.

It should be noted that I regard the possibility of the maneuvers described above designed to avoid decommissioning costs to be very small. This is still true despite the fact that the current financial state of utilities involved in substantial nuclear generating construction increases the probability of such events occurring.

D. SUMMARY AND CONCLUSIONS

My analysis indicates that, even during the current periods of financial distress, utilities are able to satisfy the financial requirements of decommissioning. In particular:

1. The market value of utilities, even those involved in the most extreme financial crises, is still far in excess of decommissioning costs. Therefore, even if the worst fears of investors are borne out, and the Public Utility Commissions do not allow substantial CWIP to be included in the rate base, the value of the remaining assets, both tangible and intangible, are more than adequate to cover future projected decommissioning costs.

2. Point #1 indicates that, from an economic and financial standpoint, any method of funding decommissioning, i.e., external reserves or internal reserves, is acceptable and provides excellent assurance of the availability of funds.

3. Notwithstanding Points #1 and #2 above, there is an incentive on the part of utilities to establish a separate corporate entity for a spent, but not decommissioned, nuclear power reactor. During times of extreme financial distress it may be easier for the utility to create such a shell corporate entity to avoid decommissioning costs. Although this event is unlikely, the NRC may wish to strengthen the language of provisions which specify the firm legal obligation of the utility to undertake decommissioning. Binding the utility and its assets to such a commitment may lead to the desirable result that the decommissioning obligation will be placed in the prospectuses of utilities issuing securities used to build or fund nuclear power construction or operation.

4. The NRC may also wish to seek prior approval of any corporate change of structure or ownership which involves a substantial portion of the utilities' assets and threatens the availability of decommissioning funds. This could be done to assure that the health and safety of the public, the primary concern and responsibility of the NRC, is not endangered by permitting a utility to substantially weaken its financial ability to undertake decommissioning.

Appendix A

Long Island Lighting Co. (LILCO)

LILCO provides electricity and gas to most of Long Island, New York. Although its Shoreham nuclear project is all but complete (commercial operations are scheduled to begin in mid 1985), the company is experiencing cash flow difficulties due to its huge construction costs. It omitted its common stock dividends in March, and in its most recent rate increase request, the hearing examiner recommended that LILCO receive the entire rate increase it has requested, to keep the company out of bankruptcy. As of the date of this report, LILCO has not cut the dividend on its preferred shares.

Public Service of Indiana (PIN)

PIN provides electricity in central and southern Indiana. In January of this year, due to financial difficulties, PIN announced the cancellation of its Marble Hill Nuclear project, in which it has an 83% stake and had invested $2.3 billion. PIN also cut the dividend on its common stock from $2.48 per share to $1.00 per share in January. In May, PIN filed with the Indiana Public Service Commission for increased rates. PIN requested in the filing to amortize their investment in the Marble Hill project. No decision is expected until mid 1985.

Public Service Company of New Hampshire (PSNH)

PSNH supplies electricity to most of New Hampshire. It holds a 35.2% stake in the Seabrook Nuclear plant. Seabrook Unit 1, now 80% complete, is expected to be in operation no sooner than mid 1986 and there is a very strong possibility that Seabrook Unit 2, 22% complete, may be cancelled as a part of a financing plan to stave off bankruptcy. PSNH eliminated all its dividends on common and preferred shares in April.

Philadelphia Electric Company (PECO)

PECO provides electricity, gas, and steam to Philadelphia and its surroundings. Besides its minority ownership interests in the Peach Bottom and Salem nuclear plants, PECO is constructing the Limerick nuclear facility

of which it is the sole owner. Limerick Unit is about 95% complete and is scheduled to be in commercial operation in April 1985. At the insistence of the Pennsylvania PUC, PECO announced in January, 1984 plans to suspend construction of Limerick Nuclear Unit 2 until Unit 1 is on line and providing service. In July the PUC ordered an independent investigation into the need for Unit 2. PECO has not cut its dividend on either its preferred or common stock.

Washington Public Power Supply System (WPPSS)

WPPSS is a municipal corporation made up of 19 public utility districts and 4 municipalities in the state of Washington involved primarily in the production and transmission of electricity. The NRC recently approved an operating license for WPPSS Nuclear Unit 2. Of the five nuclear plants WPPSS set out to build more than a decade ago, Unit 2 is the only one likely to produce power. The plant is expected to begin commercial operation in July, amid a regional power surplus, nearly seven years after its scheduled completion and $2.7 billion over budget. Units 1 and 3, 63% and 75% built respectively, have been mothballed. In 1982, WPPSS cancelled Units 4 and 5, and last July defaulted on $2.25 billion in bonds issued to build those two plants. New York-based Chemical Bank, trustee for bondholders of Units 4 and 5, has said it would try to attach any revenue generated by any WPPSS unit. Litigation in this matter may go all the way to the U.S. Supreme Court.

APPENDIX B

UTILITIES' BALANCE SHEETS

LONG ISLAND LIGHTING COMPANY
BALANCE SHEETS
12/31/83

ASSETS	(000'S OF $)	LIABILITIES	(000'S OF $)
NET (IN SERVICE) PLANT	1,517,123	COMMON STOCK EQUITY	2,008,999
CWIP (PRINCPPLY SHORHM)	3,467,211	PREFERRED STOCK	759,360
INVESTMENTS	67,693	LONG-TERM DEBT	2,172,523
CURRENT ASSETS	587,002	CURRENT LIABILITIES	481,074
OTHER ASSETS	39,666	OTHER LIABILITIES	254,143
NUCLEAR FUEL IN TRUSTS	710,888	TRUST OBLIGATIONS	713,484
TOTAL ASSETS	6,389,583	TOTAL LIABILITIES	6,389,583

NUCLEAR POWER PLANT OWNERSHIP

Shoreham Unit 1	100%
Jamesport Units 1 & 2	50
Nine Mile Point Unit 2	18

PHILADELPHIA ELECTRIC COMPANY
BALANCE SHEETS
12/31/83

ASSETS	(000'S OF $)	LIABILITIES	(000'S OF $)
NET (IN SERVICE) PLANT	3,690,111	COMMON STOCK EQUITY	2,569,323
CWIP (PRINCPPLY LIMERICK)	3,582,133	PREFERRED STOCK	807,335
INVESTMENTS	99,445	LONG-TERM DEBT	3,381,805
CURRENT ASSETS	691,731	CURRENT LIABILITIES	658,880
OTHER ASSETS	80,375	OTHER LIABILITIES	726,452
TOTAL ASSETS	8,143,795	TOTAL LIABILITIES	8,143,795

NUCLEAR POWER PLANT OWNERSHIP

Limerick Units 1 & 2	100%
Salem Units 1 & 2	43
Peach Bottom Units 2 & 3	42

PUBLIC SERVICE COMPANY OF INDIANA
BALANCE SHEETS
12/31/83

ASSETS	(000'S OF $)	LIABILITIES	(000'S OF $)
NET (IN SERVICE) PLANT	1,734,930	COMMON STOCK EQUITY	1,470,088
CWIP (PRINCPPLY MBL HILL)	2,090,039	PREFERRED STOCK	330,000
INVESTMENTS	NA	LONG-TERM DEBT	1,337,778
CURRENT ASSETS	253,013	CURRENT LIABILITIES	444,190
OTHER ASSETS	36,802	OTHER LIABILITIES	675,109
NUCLEAR FUEL OWND & TRSTS	229,976	TRUST OBLIGATIONS	87,595
TOTAL ASSETS	4,344,760	TOTAL LIABILITIES	4,344,760

NUCLEAR POWER PLANT OWNERSHIP

Marble Hill Units 1 & 2	83%

PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE
BALANCE SHEETS
12/31/83

ASSETS	(000'S OF $)	LIABILITIES	(000'S OF $)
NET (IN SERVICE) PLANT	438,644	COMMON STOCK EQUITY	764,368
CWIP (PRINCIPALLY SEABROOK)	1,396,134	PREFERRED STOCK	320,263
INVESTMENTS	33,214	LONG-TERM DEBT	726,777
CURRENT ASSETS	192,917	CURRENT LIABILITIES	214,169
OTHER ASSETS	22,874	OTHER LIABILITIES	60,206
TOTAL ASSETS	2,085,783	TOTAL LIABILITIES	2,085,783

NUCLEAR POWER PLANT OWNERSHIP

Seabrook Units 1 & 2	35%
Millstone Unit 3	1
Maine Yankee	5
Conn. Yankee (Haddam Neck)	5
Vermont Yankee	4
Yankee - Rowe	7

WASHINGTON PUBLIC POWER SUPPLY SYSTEM
BALANCE SHEETS
06/30/82

ASSETS	(000'S OF $)	LIABILITIES	(000'S OF $)
NET (IN SERVICE) PLANT	48,450	(1) PFRA SPECIAL FUNDS	701,966
CWIP	7,729,117	(1) PFRA DEBT SERVICE FUNDS	318,614
RESTRICTED ASSETS	2,344,332	LONG-TERM DEBT	8,224,463
CURRENT ASSETS	72,391	CURRENT LIABILITIES	59,737
OTHER ASSETS	(588,273)	OTHER LIABILITIES	46,593
NUCLEAR FUEL	380,507	UNEARNED REVENUE	635,151
TOTAL ASSETS	9,986,524	TOTAL LIABILITIES	9,986,524

NUCLEAR POWER PLANT OWNERSHIP

WPPSS Nuclear Project #1	100%
WPPSS Nuclear Project #2	100
WPPSS Nuclear Project #3	70

(1) PFRA: PAYMENTS FROM RESTRICTED ASSETS

APPENDIX C

UTILITIES' CAPITALIZATION

LONG ISLAND LIGHTING COMPANY
CAPITALIZATION

	BOOK VALUE 12/31/83	LOWEST VALUE 1983/84 (1)
	(000'S OF $)	
COMMON STOCK EQUITY	2,008,999	572,660
PREFERRED STOCK	759,360	316,588
LONG-TERM DEBT	2,172,523	1,542,645
TOTAL CAPITALIZATION	4,940,882	2,431,893

PHILADELPHIA ELECTRIC COMPANY
CAPITALIZATION

	BOOK VALUE 12/31/83	LOWEST VALUE 1983/84 (1)
	(000'S OF $)	
COMMON STOCK EQUITY	2,569,323	1,695,880
PREFERRED STOCK	807,335	454,193
LONG-TERM DEBT	3,381,805	2,533,750
TOTAL CAPITALIZATION	6,758,463	4,683,823

PUBLIC SERVICE COMPANY OF INDIANA
CAPITALIZATION

	BOOK VALUE 12/31/83	LOWEST VALUE 1983/84 (1)
	(000'S OF $)	
COMMON STOCK EQUITY	1,470,088	383,390
PREFERRED STOCK	330,000	162,369
LONG-TERM DEBT	1,337,778	956,131
TOTAL CAPITALIZATION	3,137,866	1,501,890

(1) THRU MAY 31, 1984

PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE
CAPITALIZATION

	BOOK VALUE 12/31/83	LOWEST VALUE 1983/84 (1)
	(000'S OF $)	
COMMON STOCK EQUITY	764,368	134,112
PREFERRED STOCK	320,263	80,950
LONG-TERM DEBT	726,777	450,323
TOTAL CAPITALIZATION	1,811,408	665,365

WASHINGTON PUBLIC POWER SUPPLY SYSTEM
CAPITALIZATION

	BOOK VALUE 06/30/82	LOWEST VALUE 1983/84 (1)
	(000'S OF $)	
LONG-TERM DEBT		
WPPSS UNITS 1-3	5,904,682	3,258,291
WPPSS UNITS 4&5	2,266,008	339,901
OTHER	53,773	53,773
TOTAL CAPITALIZATION	8,224,463	3,651,965

(1) THRU MAY 31, 1984

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12. SUPPLEMENTARY NOTES

13. ABSTRACT (200 words or less)

The NRC is currently developing rulemaking in the area of decommissioning nuclear facilities. A part of that rulemaking effort is assuring that funds will be available at the time of decommissioning of power reactors. Previous NRC reports have examined this issue by studying various funding methods. This report provides an update by analyzing the relative level of assurance of funding methods, considering the present utility financial situation. In its analysis the report makes use of specific case situations. The report concludes that the various funding methods studied in the earlier reports including the internal reserve method provide assurance of the availability of funds for decommissioning.

14. DOCUMENT ANALYSIS — a. KEYWORDS/DESCRIPTORS

Decommissioning, Financial Assurance

b. IDENTIFIERS/OPEN-ENDED TERMS

15. AVAILABILITY STATEMENT

Unlimited

16. SECURITY CLASSIFICATION

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18. PRICE

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