STAFF EVALUATION OF PSNH DECOMMISSIONING FUNDING ASSURANCE PLAN FOR SEABROOK SUBMITTED IN ACCORDANCE WITH COMMISSION DECISION CLI-88-10

BACKGROUND

In CLI-88-10 the Commission accepted in part and rejected in part the Decommissioning funding plan submitted by the Applicants in response to CLI-88-07. The Commission established a requirement that "reasonable assurance that funds are available for decommissioning must be provided for a sum of $72.1 million before licensing for low-power operation." (p. 1.)

This amount was the sum of:

Reactor decommissioning	$19.7 million
Spent fuel storage	25.0 million
Spent fuel disposal	13.0 million
Contingency	14.4 million

This financial assurance could be in the form of a pre-paid external account, surety or other guarantee. Also a separate and segregated account guaranteed by at least two of the joint owners whose financial health has not been called into question would be acceptable.

SUBMITTALS FROM THE APPLICANT

In response to CLI-88-10, the Applicants made four written submittals to the staff, one on March 20, 1989, a second delivered at a public meeting on April 20, 1989, a third, on April 27, 1989, and a fourth, on May 3, 1989, clarifying one aspect of an earlier submittal, in response to staff reviews. The March 20 submittal included (1) an irrevocable Surety Bond purchased from Aetna Casualty and Surety Company (Aetna C & S, the "surety company" or the "the surety") which promises to pay to the trustee the amount of $72.1 million (approx.) according to an annual schedule of payments over the 28-year period in the event any Applicant defaults on payment of decommissioning costs, (2) a Pre-Operational Funding Agreement between FIRST NH INVESTMENT SERVICES CORPORATION (First NHISC) and the joint owners, and (3) a SEABROOK PRE-OPERATIONAL DECOMMISSIONING TRUST AGREEMENT between the same parties as (2). First NHISC is the trustee for any funds that may be drawn from the pre-operational decommissioning trust fund (including any monies from the surety bond).

On March 31, 1989, the staff provided the following comments to the Applicants on their March 20 submittal.

1. The Commission's funding requirements in CLI-88-10 were based upon values expressed in 1988 constant dollars (see CLI-88-10 pp. 14,15). The Commission adopted the Applicants' response to CLI-88-07, "The Plan", to develop its estimate of decommissioning and fuel storage costs. Section 3, Table 2, Note 1 of "The Plan" states "ALL VALUES ARE IN 1988 DOLLARS." Table 2 presented the estimated costs associated with returning Seabrook Unit 1 to unrestricted use and termination of the NRC license in the event low power testing had been completed and a full power license was not granted. The Surety does not state that the expenditure amounts that appear in the Surety are in 1988 constant dollars.

2. The language of the Surety does not appear to address contingencies other than denial of a full power license, e.g., where the Applicants withdraw their application for a full power license subsequent to operation in accordance with a low power license or where the Applicants are granted a license for operation at power levels above 5 percent but less than full power. The Surety, or whatever assurance mechanism is used, should make clear that funds as required by CLI-88-10 will be available in all cases "in the event that low power operation has occurred and a full power license is not granted" CLI-88-07, 28 NRC at 273, CLI-88-10, 28 NRC ____, p.4.

A public meeting was held on April 20, 1989, for the purpose of receiving Applicants' proposals for treating the staff's comments on the March 20 submittal. The Applicants proposed to account for inflation, making up the shortfall in the Surety Bond by purchasing zero coupon U.S. Treasury Bonds to mature in the years necessary to make up the shortfall. Applicants proposal also (1) assumed 3.5 percent inflation based on the Council of Economic Advisors and OMB forecasts, (2) removed the effects of double-counting of fuel storage costs, (3) provided assurance of fuel storage costs of approximately $36 million and, (4) used the 25 percent contingency factor, as in CLI-88-10. Finally, the Applicants proposed not to apply an inflation factor to fuel disposal costs, of $13 million, because they believed that DOE would not charge this amount under the conditions at issue. The staff urged the applicant to verify that this was the case and reply back to the staff.

The submittal of April 27 contained a number of enclosures and attachments, the most relevant for this evaluation are: (1) a commitment to purchase zero coupon U. S. Treasury Bonds to make up shortfalls in the Surety Bond due to projected inflation, (2) a table showing a 28-year schedule of source and

use of funds should the joint owners fail to make payments for decommissioning and fuel handling called NEW HAMPSHIRE YANKEE POST FIVE PERCENT DECOMMISSIONING FUND ANNUAL STATEMENT OF APPLICATION AND SOURCE OF FUNDS, EXHIBIT 2, (3) a schedule showing the plan for purchasing the Treasury Bonds called NEW HAMPSHIRE YANKEE POST FIVE PERCENT DECOMMISSIONING FUND SUPPLEMENTARY PRE-OPERATIONAL DECOMMISSIONING TRUST PRO FORMA SCHEDULE OF INVESTMENT PORTFOLIO, EXHIBIT 4, (4) A SEABROOK SUPPLEMENTARY PRE-OPERATIONAL DECOMMISSIONING TRUST AGREEMENT incorporating the agreement to receive and pay out funds from the proceeds of the Treasury Bonds, (5) a commitment to purchase the Treasury Bonds prior to the issuance of a low power license, and (6) a letter dated April 27, 1987, from DOE which states that DOE is obligated to take the fuel for final disposal but that since no electricity will have been generated and sold under the situation assumed for this review, there would be no financial liability under the contract with DOE for such disposal.

In providing funds to account for inflation, the Applicants made certain adjustments to the cost estimates set out in CLI-88-10. First, the Applicants took into account the double-counting of the cost of fuel storage in the first 49 months of the decommissioning period. The Applicants therefore removed this double-counting before calculating the dollar amount of additional assurance required. Secondly, the Applicants accounted for the fact that the estimated fuel storage cost of $25 million in CLI-88-10 was expressed as an annuity. Since the Applicants are providing the assurance with a combination of a Surety Bond and U. S. Treasury Bonds rather than an annuity the Applicants properly adjusted the amount required.

The Applicants reasonably accounted for inflation by adjusting annual costs upward at 3.5 per cent per year to account for inflation except for fuel disposal. The fuel disposal cost was not adjusted for inflation because of the DOE statement that there would be no charge for disposal of the fuel.

Certain features of the Surety Bond and the Treasury Bonds should be noted. The Surety Bond has a 28-year payout schedule (if called upon) which generally follows the expected annual costs. The payout in any one year can be made later than scheduled, but not earlier. The Treasury Bonds, although committed to the decommissioning activities, can be liquidated earlier than the maturity date. In each year, the sum of the two sources, together with any payment commitments carried forward, is equal to or greater than the expected fund requirements. If a repository is available earlier than the 28th year, proceeds from sale of the Treasury Bonds could fund any end-of-storage costs.

The net effect of the Applicants' adjustments provide for commitments of a dollar flow of $112,389,969 from these sources, if necessary, over the 28-year period (see April 27, 1989 submittal, EXHIBIT 2).

With respect to fuel disposal costs, the letter from DOE provided in the Applicants' April 27, 1989 submittal states that DOE is required to take the fuel from Seabrook at no cost to the joint owners. It is not necessary that this portion of the costs be escalated to take into account future inflation.

The staff researched the qualifications of Aetna C&S to serve as surety for the bond which has been negotiated and of First NH Investment Services Corporation to be the trustee for funds that may be paid into a trust account as a part of the decommissioning assurance program. Each is qualified to perform its expected services. Each has substantial resources and experience. In the case of Aetna, it is rated highly by insurance and investment rating services. It is an approved surety by the U.S. Treasury for accounts of up to nearly three times the $72.1 million.

First NH Investment Services Corporation is a wholly-owned subsidiary of a large New Hampshire bank holding company. It already has approval from the State of New Hampshire to be the trustee of the decommissioning fund forthcoming if Seabrook obtains a full power operating license. First NH Investment Services Corporation has the authority to act as a trustee and its trust operations are regulated and examined by agencies of the State of New Hampshire. First NH Investment Services Corporation is an acceptable trustee and the Trust Agreements are acceptable.

CLI-88-10 called for the funding assurance to be available "in the event that low-power operation has occurred and a full power license is not granted." The term of the Surety Bond provided by the Applicants continues until the earlier of a final non-appealable grant of a license to operate at any power level over 5 percent or a final non-appealable determination that no further decommissioning (after low power operation) is required. The obligation under the Surety Bond to pay in the event of a default does not commence until the

NRC orders decommissioning "as a result of a denial by NRC of a full power license." In its March 31, 1989 letter, the Staff indicated the need to resolve the question of timing.

The Applicants' response indicates their recognition that in the event of such a withdrawal of the application for a full power license, the NRC has sufficient authority to condition such withdrawal on such terms and conditions as may be needed to adequately assure safety and financial assurance. Similarly, the Applicants assert that if interim operation at a power level higher than 5 percent were proposed, such operation would require further licensing approval by the Commission and that the Commission has sufficient authority to impose any needed license conditions with respect to decommissioning.

We agree. The financial assurance arrangements employing the Surety Bond and Treasury Bonds cover the specific circumstances at issue in the proceeding to which CLI-88-10 was addressed. In the event that other circumstances arise in the period prior to July 27, 1990, when the decommissioning funding rule requirements become applicable (10 CFR 50.33(k)) such as withdrawal or a request for interim operation at a power level higher than 5 percent, these actions require Commission approval and the Commission has adequate authority to impose necessary decommissioning funding assurance requirements on such withdrawal or license amendment.

STAFF CONCLUSIONS

The staff finds that the decommissioning assurance plan provides reasonable assurance that the activities required by CLI-88-10 will be funded even if (1) no full power license is issued after a low power license has been granted, and (2) any one or more of the joint owners does not pay its share of the decommissioning costs.

The decommissioning assurance plan provides at least $72.1 million reasonably adjusted for inflation of decommissioning and fuel storage costs and cost contingency over the 28-year period.

The proposed funding arrangements consisting of a Trust and a Surety Bond, covering part of needed funds, satisfy the provisions of 50.75(e)(1)(iii). The proposed funding arrangement, consisting of a prepaid trust account funded with Treasury Bonds covering the remaining funds needed to provide adequate funding assurance, satisfies the provisions of 50.75(e)(1)(i).

We therefore conclude that the Applicants' submittal is acceptable to provide the necessary assurance and meets the Commission's requirements as set forth in CLI-88-10.