February 28, 1983

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

In the Matter of	)	
	)	
PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE, *et al.*	)	Docket Nos. 50-443 OL 50-444 OL
	)	
(Seabrook Station, Units 1 and 2)	)	

NRC STAFF MOTION FOR SUMMARY DISPOSITION OF NECNP CONTENTION I.B.1

I. INTRODUCTION

The NRC Staff hereby moves for summary disposition, pursuant to 10 C.F.R. § 2.749, of NECNP Contention I.B.1. The Staff grounds its motion on the attached affidavit of Chu-Yu Liang, together with the other papers filed in this proceeding. These papers demonstrate that Contention I.B.1 poses no factual issues requiring adjudication and that dismissal of the contention is warranted as a matter of law.

II. DISCUSSION

A. Summary Disposition Standards

The Commission's Rules of Practice provide that summary disposition of any matter involved in an operating license proceeding shall be granted if the moving papers, together with the other papers filed in the proceeding, demonstrate that there is no genuine issue of material fact and that the movant is entitled to a favorable decision as a matter of

DESIGNATED ORIGINAL

Certified By SAB DS07

law. 10 C.F.R. § 2.749(d). The Rules also provide for summary disposition as to any portions of a matter involved in a proceeding as to which there is no genuine issue of material fact. 10 C.F.R. § 2.749(a). See, e.g., Public Services Company of Oklahoma, et al., (Black Fox Station, Units 1 & 2), LBP-77-46, 6 NRC 167 (1977); Toledo Edison Company (Davis-Besse Nuclear Power Station), LBP-73-30, 6 AEC 691, 699 (1973).

The use of summary disposition has been encouraged by the Commission and the Appeal Board to avoid unnecessary litigation over contentions for which an intervenor has failed to establish the existence of a genuine issue of material fact. See, e.g., Statement of Policy on Conduct of Licensing Proceedings, CLI-81-8, 13 NRC 452, 457 (1981); Houston Lighting & Power Company (Allens Creek Nuclear Generating Station, Unit 1), ALAB-590, 11 NRC 542, 550-51 (1980). A material fact is one that may affect the outcome of the litigation. Mutual Fund Investors Inc. v. Putnam Management Co., 553 F.2d 620, 624 (9th Cir. 1977).

Although the burden of showing the absence of any genuine issue of material fact is upon the moving party, and the record will be viewed in the light most favorable to the party opposing the motion,[1/] "a party opposing the motion . . . must set forth specific facts showing that there is a genuine issue of fact," 10 C.F.R. § 2.749(b), and may not rest upon the "mere allegations or denials" of his answer. Virginia Electric & Power Company (North Anna Nuclear Power Station, Units 1 & 2), ALAB-584,

---

1/ Cleveland Electric Illuminating Co., et al. (Perry Nuclear Power Plant, Units 1 & 2), ALAB-443, 6 NRC 741, 753-54 (1977).

11 NRC 451, 453 (1980). Any facts set forth in the statement of material facts required to be served by the movant will be deemed to be admitted, if not controverted by the opponent. 10 C.F.R. § 2.749(a). Any answers supporting or opposing a motion for summary disposition must be served within twenty days after service of the motion. Id. If no answer properly showing the existence of a genuine issue of material fact is filed, the decision sought by the movant, if properly supported, shall be rendered. 10 C.F.R. § 2.749(b).

B. NECNP Contention I.B.1

NECNP Contention I.B.1 reads as follows:

> The Applicant has not satisfied the requirements of GDC 4 and GDC 34 in that all systems required for residual heat removal, such as steam dump valves, turbine valves and the entire steam dumping system are not safety grade and environmentally qualified.

GDC 34 requires that a system be provided to remove residual heat from the reactor core. 10 C.F.R. Part 50, Appendix A, Criterion 34. The system must be able to tolerate the loss of either onsite or offsite power, and must be able to perform its function assuming a single failure. Id.

As shown in the attached affidavit of Chu-Yu Liang, the Seabrook facility has systems available to remove residual heat from the core. These systems are safety-related systems, they are able to withstand a single failure, and they are environmentally qualified as required by GDC 4. Affidavit of Chu-Yu Liang, ¶¶ 5-11. Given the existence of

these systems, the Seabrook facility must, as a matter of law, be found to be in compliance with GDC 34.

NECNP nonetheless alleges that the steam dump valves, turbine valves, and the entire steam dumping system are required for residual heat removal and therefore must be considered safety grade and must be environmentally qualified. These components are used to remove residual heat from the core during plant shutdown under normal circumstances. Affidavit of Chu-Yu Liang, ¶¶ 4, 12. However, as Mr. Liang's affidavit makes clear, they are not part of the (redundant, safety related, environmentally qualified) system at Seabrook that will be relied upon to remove residual heat from the core under accident conditions. Affidavit of Chu-Yu Liang, ¶¶ 5-12. Inasmuch as the items listed by NECNP in its contention are not required to remove residual heat from the core during an accident, they need not be environmentally qualified to operate under such conditions by GDC 4.[2/]

2/ In this regard, The NRC has recently published a regulation setting forth new environmental qualification requirements for electric equipment. 10 C.F.R. ¶ 50.49, 48 Fed. Reg. 2733 (January 21, 1983). Insofar as it may be relevant here, § 50.49(b) limits the scope of environmental qualification of such equipment to:

> (1) Safety-related electric equipment: This equipment is that relied upon to remain functional during and following design basis events to ensure (i) the integrity of the reactor coolant pressure boundary, (ii) the capability to shut down the reactor and

FOOTNOTE CONTINUED ON NEXT PAGE

III. CONCLUSION

In sum, NECNP seeks to have designated as safety grade and would require to be environmentally qualified equipment that, at Seabrook, is used during routine reactor shutdown but need not be used for emergency shutdown. Inasmuch as the Seabrook facility is equipped with other safety-related, environmentally qualified systems to remove residual heat from the core in accident situations, the Staff submits that NECNP's

---

2/ FOOTNOTE CONTINUED FROM PREVIOUS PAGE

> maintain it in a safe shutdown condition, and (iii) the capability to prevent or mitigate the consequences of accidents that could result in potential offsite exposures comparable to the 10 C.F.R. Part 100 guidelines. Design basis events are defined as conditions of normal operation, including anticipated operational occurrences, design basis accidents, external events, and natural phenomena for which the plant must be designed to ensure functions (i) through (iii) of this paragraph.
>
> [and]
>
> (2) Nonsafety-related electric equipment whose failure under postulated environmental conditions could prevent satisfactory accomplishment of safety functions specified in subparagraphs (i) through (iii) of paragraph (b)(1) of this section by the safety-related equipment.

The items identified by NECNP would not fall under the category either of the safety-related equipment or the nonsafety-related equipment described in the new rule.

contention is without factual or regulatory basis and must, as a matter of law, be dismissed.

Respectfully submitted,

Robert G. Perlis
Counsel for NRC Staff

Roy P. Lessy
Deputy Assistant Chief
Hearing Counsel

Dated at Bethesda, Maryland
this 28th day of February, 1983

February 28, 1983

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

In the Matter of	)	
	)	
PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE, *et al.*	)	Docket Nos. 50-443 OL 50-444 OL
	)	
(Seabrook Station, Units 1 and 2)	)	

MATERIAL FACTS AS TO WHICH THERE IS NO GENUINE ISSUE TO BE HEARD

1. GDC 34 requires that a system be available to transfer fission product decay heat and other residual heat from the reactor core at a rate such that specified acceptable fuel design limits and the design condition of the reactor coolant boundary are not exceeded and suitable interconnection, leak detection, and isolation capabilities are provided to assure that for onsite electric power system operation (assuming offsite power is not available) and for offsite electric power system operation (assuming onsite power is not available), the system safety function can be accomplished assuming a single failure. 10 C.F.R. Part 50, Appendix A, GDC 34; Affidavit of Chu-Yu Liang, ¶ 3.

2. During normal plant shutdown, the decay heat removal function at Seabrook will be performed by using the steam generators, the main feedwater system, the condenser steam dump system, and circulating water system. Affidavit of Chu-Yu Liang, ¶ 4.

3. During plant emergency shutdown, if offsite power and non-safety related equipment are not available, decay heat will be transferred from the core by natural circulation with the steam generator as the heat sink. Affidavit of Chu-Yu Liang, ¶ 5.

4. To achieve emergency shutdown, the safety related steam generator power operated atmospheric relief valves will be used to vent vaporized secondary coolant. Secondary coolant makeup will be provided via the Emergency Feedwater System (EFWS) from the seismic Catetory I tornado missile protected condensate storage tank. The minimum volume which will be required to be available in the tank is sufficient to accommodate a four hour period at hot standby plus a cooldown to less than 350°F at which point the residual heat removal (RHR) system can be utilized and the EFWS is no longer required. Affidavit of Chu-Yu Liang, ¶ 6.

5. When the steam generators are being used as the reactor heat sink during the cooldown to 350°F, a single failure of any active component will not render all steam generators ineffective as a heat sink. Affidavit of Chu-Yu Liang, ¶ 6.

6. Either of the two emergency feedwater pumps has sufficient capacity to provide for all steam generator makeup requirements. Affidavit of Chu-Yu Liang, ¶ 6.

7. Reactor Coolant System (RCS) depressurization will be accomplished by the combination of RCS contraction due to the cooldown or opening one of the two safety related pressurizer power operated relief valves (PORVs). The discharge will be directed to the pressurizer

relief tank where it will be condensed and cooled. Affidavit of Chu-Yu Liang, ¶ 7.

8. The depressurization process is integrated with the cooldown process to maintain the RCS within normal pressure-temperature limits. Just before initiating RHR cooling at 350°F, the RCS will be depressurized to less than 400 psig. Affidavit of Chu-Yu Liang, ¶ 8.

9. The second stage of the cooldown takes the reactor from the hot shutdown state (RCS temperature between 350°F and 200°F) to the cold shutdown state (RCS temperature below 200°F). During this stage, the RHR system will be brought into operation. Circulation of the reactor coolant will be provided by the RHR pumps, and the heat exchangers in the RHR system will serve as the means of heat removal from the RCS. In the RHR heat exchangers, the residual heat will be transferred to the component cooling water system which ultimately will transfer the heat to the service water system and the ultimate heat sink. Affidavit of Chu-Yu Liang, ¶ 9.

10. The RHR system is a fully redundant system. Each RHR subsystem includes one RHR pump and one RHR heat exchanger. Each RHR pump is powered from a different emergency bus and each RHR heat exchanger is served from a different component cooling water system loop. Affidavit of Chu-Yu Liang, ¶ 10.

11. The component cooling water and service water systems associated with the RHR system are designed and built to safety related standards. If any component in one of the RHR subsystems were rendered inoperable as the result of a single failure, cooldown of the plant could still be achieved by using the remaining operable subsystem of the RHR system. Affidavit of Chu-Yu Liang, ¶ 10.

12. The systems and components needed to remove decay heat from the core in the event of an accident include steam generators, main steam isolation valves, safety valves, atmospheric steam dump valves, emergency feedwater system, condensate storage system, station service water system, ultimate heat sink, the RHR system, and associated instrumentation, control, and power supply systems. These systems and components are designed to safety related standards and must be environmentally qualified to operate under postulated accident conditions. Affidavit of Chu-Yu Liang, ¶ 11.

13. The items identified by NECNP in its Contention I.B.1 - steam dump valves(except for atmospheric steam dump valves, which do have a safety function and are environmentally qualified), turbine valves, and the entire steam dumping system - are not needed to remove decay heat from the core in the event of an accident. Affidavit of Chu-Yu Liang, ¶ 12.

14. Because the items identified in NECNP Contention I.B.1 are not needed to remove decay heat from the core in the event of an accident, they are not safety-related items and need not be environmentally qualified to operate under postulated accident conditions. Affidavit of Chu-Yu Liang, ¶ 12.