UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

ATOMIC SAFETY AND LICENSING BOARD

Before Administrative Judges:

Helen F. Hoyt, Chairman
Dr. Emmeth A. Luebke
Dr. Jerry Harbour

In the Matter of	Docket Nos. 50-443 OL 50-444 OL
PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE, et al.	(ASLBP No. 82-471-02 OL)
(Seabrook Station, Units 1 and 2)	

MEMORANDUM AND ORDER

Part I. Introduction and Summary

Pursuant to Establishment of Atomic Safety And Licensing Board To Preside in Proceeding dated November 30, 1981, this Board was constituted to preside over the proceeding and hearing of the application for operating license in Docket Nos. 50-443 OL/444 OL.[1/]

1/ On August 25, 1982 in Notice of Reconstitution of Board, issued by Acting Chief Administrative Judge Robert M. Lazo, ASLBP, Dr. Jerry Harbour replaced Dr. Oscar H. Paris as a member of the Board.

D502

Petitions for Intervention to participate in these proceedings were filed by twelve individuals or organizations including the States of New Hampshire and Maine, Commonwealth of Massachusetts and Town of South Hampton. By this Memorandum and Order the Board has accepted the following Intervenors and their contentions:

INTERVENORS	CONTENTIONS[2/]	
State of New Hampshire (NH)	NH 9	Radioactive Monitoring.
	NH 10	Control Room Design.
	NH 13	(Refiled) Operation Personnel Qualifications.
	NH 20	Emergency Assessment. Classification and Notification.
	NH 21	Protective Action (limited to on-site measures).
New England Coalition on Nuclear Power (NECNP)	I.B.1	Classify Safety Grade "Residual Heat Removal" Items.
	I.B.2	Time Duration of Environmental Qualification.
	I.C	Pumphouse HVAC Environmental Qualification.
	I.D.1	Reactor Welds NDT.
	I.D.2	Protection System Test at Power.
	I.D.3	Leakage Detection Testing Required.

2/ Where an Intervenor's interest had been in litigating off-site emergency planning issues, the Board denied these contentions. See Duke Power Company, et al. (Catawba Nuclear Station, Units 1 and 2), ALAB-687, August 19, 1982.

(NECNP continued)	I.F	Diesel Generator Qualification.
	I.G	Pressure instrument Reliability.
	I.I	Cold Shutdown.
	I.L	PORV Flow Detection Monitoring.
	I.M	Fire Protection.
	I.N	Solid Waste Disposal.
	I.U	Turbine Missiles.
	II.B.1	QA - Operations -- FSAR Sec. 17.2 Fails to Address App. B Criteria Adequately.
	II.B.3	QA Organization Not Independent.
	II.B.4	QA Program for Replacement after Operations Begin.
	II.B.5	QA - Presence of Qualified QA/QC Personnel.

Commonwealth of Massachusetts

(admitted under provisions of 10 C.F.R. § 2.715(c))

Seacoast Anti-Pollution League (SAPL)	SAPL Supplement 3 - Class 9. SAPL Supplement 6 - Adopted. NH 9, 10, and 13 (Refiled). Designated Joint Intervenor with NH.

Coastal Chamber of Commerce of New Hampshire (CCCNH)	CCCNH.4	Accident Classification and Notification.
	CCCNH.5	On-Site Protective Measures.
	CCCNH.7	Radioactive Monitoring.

Town of South Hampton

(admitted under provisions of 10 C.F.R. § 2.715(c))

State of Maine

(admitted under provisions 10 C.F.R. § 2.715(c))

The Board has determined that all Intervenors submitting the contentions discussed in Part II have attained standing under 10 C.F.R. § 2.714(a) or 2.715(c). Lynn Chong et al and Co-Op Members for Responsible Investment (CMRI) did not appear at either of the Special Prehearing Conferences but did submit contentions in a pleading filed May 25, 1982 which was a supplement to its petition to intervene of November 14, 1981. Applicant and Staff opposed intervention. CMRI urged the Board to accept its assertions that as part owner of the proposed Seabrook facility[3/] and as members of the general public subject to harm from an accident at Seabrook[4/] it had acquired standing to intervene. The Board notes that CMRI did not cure deficiencies in regard to its standing under 10 C.F.R. § 2.714(a) either in appearances before the Board or in written pleadings. Accordingly, the Board finds that CMRI has not satisfied the standing

---

3/ Detroit Edison Company (Enrico Fermi Atomic Power Plant, Unit 2), ALAB-470, 7 NRC 473, 475 (1978).

4/ Transnuclear, Inc., CLI-77-24, 6 NRC 525, 531 (1977).

requirements of 10 C.F.R. § 2.714(a). CMRI's proposed contentions need not be considered.

Petitions to intervene were also received from Health Care Providers (November 17, 1981) and Donald L. Herzberg, MD and George Margolis (November 16, 1981). Neither of these groups pursued the petitions further. Accordingly, the Board dismisses these petitions of the named groups for failure to prosecute.

Part II of this Memorandum and Order is a discussion of the contentions of the Intervenors, arguments made by various participants in this proceeding and the Board's reasons for accepting or denying contentions. The Board has retained in this discussion each Intervenor's numbering of a contention for identification with other pleadings. However, by a separate order, the Board will republish accepted contentions and assign new reference identification for use in future proceedings.

Appendix A is the schedule for this proceeding. The Board in establishing the schedule considers the dates set forth to be target ones. Where good cause for altering these dates is established, the Board will entertain changes to achieve a fair hearing and orderly case management.

Part II. Petitioners and Their Contentions

STATE OF NEW HAMPSHIRE (NH) (Petitioner under 10 C.F.R. § 2.714)

NH filed its 22 contentions in an Amendment and Supplement to the Petition for Leave to Intervene and Request for Hearing of the State of New Hampshire and Gregory H. Smith, Attorney General of the State of New Hampshire on April 6, 1982. The Applicant responded on April 15, 1982 and the NRC Staff on April 21, 1982. At the May 6-7, 1982 Special Prehearing Conference[5/] the Intervenor, Applicant, and NRC Staff amplified their arguments. Tr. 45-119. The Intervenor was afforded an opportunity to provide more specifics on Contentions 6, 7, 12, 13 and 14 (Tr. 239) and to attempt to reach agreement through negotiations with Applicant and NRC Staff. Tr. 54. No negotiations took place. (Letter/NRC Staff Lessy to the Board, July 1, 1982.) On May 24, 1982 NH filed Amended Contention of the State of New Hampshire and Gregory H. Smith, Attorney General of the State of New Hampshire. A number of the contentions[6/] were refiled; others redrafted differently from the filing of April 6. The Applicant responded on June 10, 1982; the

---

5/ PHC-I = (First) Special Prehearing Conference, May 6-7, 1982; and PHC-II = Second Special Prehearing Conference, July 15-16, 1982.

6/ NH Contentions 6, 7, 12, 13 and 14 were refiled on May 24, 1982. Although NH redrafted several other contentions including NH-3, the Board granted NH leave to redraft only the five noted herein. NH Contention 16, Ultimate Heat Sink, was voluntarily withdrawn in the pleading of May 24, 1982 (p. 20).

NRC Staff on July 1, 1982. Oral arguments were heard at PHC-II on July 16, 1982. Tr. 633-639.

This Board will consider and rule upon the admissibility of NH's 22 contentions as stated in this Intervenor's pleading of April 6, 1982. The numbered contentions above will be stated in their entirety as refiled on May 24, 1982.

NH-1. Interim Reliability Evaluation Program

> A thorough, plant-specific interim reliablity evaluation program using probabilistic risk assessment techniques to find risk dominant sequences, consider multiple failures and assess the reliability of systems which may be called upon to mitigate an accident, is necessary to assure that the Seabrook Plant safety review has considered the appropriate high-risk accident sequences to ensure compliance with 10 C.F.R. 50.46.

The Intervenor relies upon the Three Mile Island Accident Plan, NUREG-0737, at Part I.C.1 which refers to a requirement to perform analysis of transients and accidents. Applicant opposes admission of the contention on the basis that it is not required by any regulation of this Commission and that this Board's jurisdiction is limited to items regarding compliance with the Commission's safety regulations Maine Yankee Atomic Power Company (Maine Yankee Atomic Power Station), ALAB-161, 6 AEC 1003 (1973), NRC Staff essentially agrees and adds that there is no statutory or regulatory basis shown to establish that compliance with 10 C.F.R. § 50.46, "Acceptance criteria for core

cooling systems for nuclear power reactors" could only be met by providing the probabilistic risk assessment NH urges be performed in NH-1. Any PRA done by the Applicant at the Seabrook Plant is an optional engineering tool used by the Applicant. It does not give this Board a criterion against which to test the safety of the operation of the Seabrook Plant. Indeed, nuclear power plants are routinely licensed without such an assessment. It is the determination of this Board that admission of Contention NH-1 is denied.

NH-2 Systems Interaction

The Applicant has not performed an adequate analysis of systems interaction and thus, there is no assurance that the appropriate interactions, failure combination and accident sequences have been considered in assessing the ability of the systems design to meet 10 C.F.R. 50 Appendix A. This contention relates to both the consideration of the interaction of safety and non-safety systems and the interaction and multiple failure of safety systems. There are systems and components presently classified as non-safety related which can have an adverse affect on the integrity of the core because they can directly or indirectly affect temperature, pressure, flow, and/or reactivity. The interaction between non-safety and safety systems may create demands on the safety systems that exceed their design basis. Not only must the Applicant perform fully an analysis of systems interaction, but also it must identify all systems and components which can either cause or aggravate an accident or be called upon to mitigate an accident and thus should be classified as important to safety and required to meet all safety grade design criteria.

The Intervenor supports the admission of the contention herein on the basis that Three Mile Island demonstrated that there are systems

and components which are classified as non-safety related but which can have an adverse effect on the integrity of the core. In support of this position New Hampshire cites NUREG-0578, The Three Mile Island II Lessons Learned Task Force Report, and NUREG-0572, Review of Licensee Event Reports.

Applicant notes that in this contention New Hampshire seeks to require Applicants to perform a comprehensive analysis of systems interaction although there is no requirement in either NUREG-0737 or in NRC regulations. The Staff has noted that NH has not identified any statutory or regulatory basis to establish that 10 C.F.R. Part 50 Appendix A requires analysis of systems interaction sought by Intervenor here. The Staff urges denial of this contention. Pacific Gas & Electric Company (Diablo Canyon Nuclear Power Plant, Units 1 & 2), LBP-81-27, 14 NRC 325 (1981). The Diablo Canyon Board found that the Intervenors had not established any special circumstances or identified specific interactions (at p. 331).

This Board is aware that the Shoreham licensing board in Memorandum And Order Confirming Rulings Made At The Conference Of Parties, Docket 50-322-06, 50-322-CPA (March 15, 1982), admitted a similar contention to NH-2 without any demonstration that the contention is litigable under current Commission regulations. This Board chooses to follow the lead of the Diablo Canyon decision decided

above and the language cited above of that Board in denying the admission of a similar contention. Indeed the Diablo Canyon Board and this Board have determined that there is no basis for litigation of this contention. Contention NH-2 is denied.

NH-3 Class 9 Accidents

> The Applicant has not presented, contrary to the requirements of 10 C.F.R. 51.20(a),(d), a complete assessment of the risk posed by the operation of Seabrook. The environmental report and the environmental impact statement should adequately address and evaluate the impact of a greater than design basis accident or "Class 9" accident on the environment. Unless the so-called "Class 9" accident is adequately considered, there can be no reasonable assurance that Seabrook can be operated without endangering the health and safety of the public. Since the draft environmental impact report was not available for the preparation of this contention, the state reserves the right to amend this contention at a later date.

As a basis for this contention, Intervenor in its written pleadings and during oral argument stated that its basis is NUREG-0737, Section 1(c)(1). Tr. 69. The Applicant takes the position that NH has failed to relate its contention to the environmental impact statements set out in the Commission's interim policy statement of June 13, 1980 (45 Fed. Reg. 40101) and has attempted to freight onto the contention its own view of what the law should be. Even in its redraft of NH-3 filed May 24, 1982, after the oral arguments at the prehearing conference, NH failed to, in Applicant's view relate NUREG-0737, Item 1(c)(1) and the Commission's interim policy statement issued June 13,

1980, 45 Fed. Reg. 40101, to the NEPA policy statement of June 13, 1980.

The NRC staff viewed the contention as being without basis because it did not address the requirements set forth in the Commission's interim policy statement dealing with Class 9 accidents. Further, NH's charge that the WASH-1400 methodology had been discredited does not provide a specific basis for a contention. The charge by NH that the environmental report does not consider the impact of human factors on the probability of an event occurrence, in the Staff's opinion, does not provide a sufficient basis.

As stated in Philadelphia Electric Company (Peach Bottom Atomic Power Station, Units 2 & 3), ALAB-216, 8 AEC 13, 20-21 (1974), a contention must be rejected where it constitutes an attack on applicable statutory requirements; it challenges the basic structure of the Commission's regulatory process or is an attack on the regulations; it is nothing more than a generalization regarding the intervenor's views of what applicable policies ought to be; it seeks to raise an issue which is not proper for adjudication in the proceeding, or it does not apply to the facility in question; or it seeks to raise an issue which is not concrete or litigable. Such deficiencies appear applicable to NH's Contention 3. NH has not added to this contention that degree of specificity required for the admission of NH-3. Contention NH-3 is denied.

NH-4 Anticipated Transients Without Scram (ATWS)

The Applicant and the NRC Staff have not demonstrated that the risk from an ATWS event is sufficiently reduced by interim measures to provide a reasonable assurance that the Seabrook station can be safely operated prior to the resolution of the generic issue.

NH relies upon NUREG-0460 - Anticipated Transients Without Scram for Light Water Reactors as the basis for this contention. NH states that the staff position is that the reliability of current scram systems cannot be shown to be adequate to meet the safety objective considering the rate at which these systems are challenged by anticipated transients. NH seeks to have this contention admitted as either the subject of a proposed rulemaking or as an unresolved safety issue which will be discussed in the SER.

The Applicant's position is that the Licensing Board should not accept in an individual licensing proceeding contentions which are or are about to become the subject of general rulemaking by the Commission. Sacramento Municipal Utility District (Rancho Seco Nuclear Generating Station), ALAB-655, 14 NRC 799, 816 (1981); Potomac Electric Power Company (Douglas Point Station, Units 1 & 2), ALAB-218, 8 AEC 79, 85 (1974). Further the Applicant distinguishes the order issued in the Shoreham case permitting an ATWS contention to be received by that Licensing Board. NH's contention is not the same as the contention admitted in the Shoreham case in that the Shoreham contention is framed in terms of a lack of a specific item (automatically initiated

redundant SLCS[7/]) which served the Intervenor there as the basis for saying GDC 20 was not met. The Staff has responded that the NH-4 has made no attempt to show that the interim operation of the Seabrook facility will be in violation of any applicable Commission regulations and it likewise seeks rejection of the contention.

It is the position of this Board that the contention as framed by NH does not meet the specificity requirements and in addition note that the ATWS is before the Commission in the form of a proposed rulemaking procedure. This Board therefore rejects the receipt of Contention NH-4 in the litigation of this case.

NH-5 Liquid Pathway Impact

> The Applicant has not adequately considered the consequences of a nuclear accident resulting in releases of radiation and exposure to the public by the liquid pathway, i.e., into ground water which can contaminate aquifers rivers, and streams. The failure to consider adequately liquid pathway accident impacts and corrective measures results in the inability to satisfy the standards of 10 C.F.R. 50.40 and 10 C.F.R. 51.21.

As a basis for NH-5, NH has argued that a core meltdown accident at the Seabrook plant would cause the ground water to become a pathway for radioactivity releases to the hydrosphere. NH is contending that the FSAR does not deal with major releases and that the environmental

---

7/ Standby liquid control system.

report did not study the liquid pathway. NH does not provide a basis for the position that special treatment of liquid pathways should be required for Seabrook. The Applicant's position is that NH has failed to point to any regulation of this Commission which requires core catchers for Seabrook vintage plants. The Staff position parallels that of the Applicant and both seek rejection of this contention.

The Board finds that the interpretation that NH places on core melt does not provide this contention with a basis for litigation in this proceeding. NH does not state a lack of compliance with the Commission's Interim Policy Statement on Class 9 Accidents (45 Fed. Reg. 40101 [June 13, 1980]) nor does it state a basis for the view that special treatment of liquid pathways should be required for Seabrook. Contention NH-5 is denied.

Revised
NH-6 Environmental Qualification of Safety-Related Equipment

The Applicant has not complied with the requirements of the Division of Operating Reactors guidelines and NUREG-0588 and NUREG-0737. The environmental qualification of safety-related equipment is inadequate in four respects:

(a) The parameters of the relevant accident and environment have not been identified;

(b) The length of time the equipment must operate in the environment has been underestimated;

(c) The methods used to qualify the equipment are not adequate to give reasonable assurances that the equipment will remain operable;

and

(d) The effects of aging and cumulative radiation on the equipment has not been adequately considered.

As a basis for this contention, NH maintains that all safety-related equipment must comply with Appendices A, G, and K of Part 50 and Criteria III and XI of Appendix B, Part 50 and 10 C.F.R. 50.55a. NH further maintains Applicant must perform the radiation qualification review required by NUREG-0737 II.B.2 and implement the testing program for reactor solvent system relief and safety valves required by II.D.1. Further, NH urges that until all safety-related equipment is demonstrated to be qualified by appropriate analysis and testing the application for this OL has not complied with General Design Criteria 1, 2, 4, 21, and 23 of Appendix A.

The Applicant rejects this contention as failing to specify the equipment NH is contending is safety-related and/or fails to comply with the various regulations cited. Likewise the NRC Staff notes that NH has made no attempt in this refiled contention to meet the objections to the original contention that this Intervenor had not identified the particular equipment or even the categories of equipment that are alleged to be environmentally qualified. Thus, both the Applicant and the Staff contend that this contention even in its refiled state is objectionable as not meeting the specificity requirements of 10 C.F.R. § 2.714.

Contention NH-6 is denied.

This Board agrees there has been ample opportunity extended to this Intervenor to file an appropriate contention dealing with the environmental qualifications of safety-related equipment and to name those categories of equipment which it holds are not meeting the safety requirements of this Commission. Unless this Intervenor can meet the requirements of § 2.714 by specifically naming the equipment, then this Board determines that the issue is too broad to be litigated in this operating license proceeding. The Board finds that the contention in its refiled state is not substantially different from the original contention which NH filed. Since NH has not specifically designated the equipment or categories of equipment, this Board rejects this contention at this time. Because of the importance which this Board assigns to the environmental qualifications of safety-related equipment, NH may be afforded an opportunity to refile this contention later if NH appropriately identifies the equipment which it maintains does not meet the environmental qualifications necessary for maintenance of safety at this installation. However, NH should be advised that the Board has determined such a refiled contention at a later date would need to meet the requirements of § 2.714(a)(1) dealing with non-timely filings of contentions and the five categories set forth under that section.

Refiled
NH-7 Instrumentation

The Seabrook station instrumentation is not in compliance with general design criteria GDC 13, 10 C.F.R. Part 50, Appendix A and the requirements of NUREG-0737.

As the basis for this contention, NH relies upon the results of the investigation at TMI-2 accident which NH maintains indicated a need for more direct indications of low-reactor coolant levels, reactor vessel water level, inadequate cooling, and hydrogen generation. Further, this Intervenor maintains that the TMI-2 accident also demonstrated the inadequacy of the monitoring in terms of the parameters monitored, range and adequacy of the instrumentation and the qualifications of the instrumentation for the accident and post-accident environment. As a further basis, NH points to the Kemeney Commission Report, Report of the President's Commission of the Accident at Three Mile Island (1970), and the four areas identified as needing further improvement by the NRC Staff. These areas are as follows: (a) direct and unambiguous measurements of the parameters, such as water level in the reactor vessel and the relief valve position; (b) extended range measurement of important parameters, such as in-core couples and radiation monitors to cover both normal operational and accident conditions; (c) ability to function in high-radiation and high-temperature environments, especially during and after an accident; and (d) information displayed to the operator in a comprehensive form.

NH notes that the instrumentation must be considered safety related because its greatest contribution is operation under accident conditions. Such information from the instrumentation is critical for public officials to have available to provide a basis for decision-making in emergency situations.

The Applicant finds the contention vague and inadmissible. The NRC Staff objects because it did not incorporate any of those subject matters discussed during the PHC-I which would have brought a proper basis and specificity lacking in the originally filed NH-7. The Staff objects to this refiled contention because it fails to meet both the basis and specificity requirements.

The Board rejects this contention based in part upon the oral arguments made during PHC-I. Tr. 82-87. NH has not provided even an indication of what kind of instrumentation it seeks to litigate in this case and admitted to the Board that in its opinion such specificity was not required but that the contention need only satisfy the requirement to place the Applicant and the Staff mentally on notice as to what issue was going to be litigated. It appeared to this Board that NH was clearly launched upon a general search course without the merest idea of what direction its search might take it. NH-7 refiled contention is denied.

NH-8 Hydrogen control systems

The applicant has not demonstrated that in the event of a loss-of-coolant accident at Seabrook (1) substantial quantities of the hydrogen (in excess of the design basis of 10 C.F.R. 50.44) will not be generated; (2) that in the event of generation, the hydrogen recombiner can process adequately the hydrogen generated; and (3) that in the event of combustion, the containment and key safety systems within containment have the ability to withstand pressure, thereby preventing releases of off-site radiation in excess of Part 100 guideline values.

The basis on which NH makes this contention is whether the Applicant has complied with 10 C.F.R. 100 by designing this plant to an accident such as that at TMI which resulted in hydrogen being generated in excess of the hydrogen design basis assumptions of. 10 C.F.R. 50.44. The Intervenor here bases the contention on the need for the Applicant to demonstrate whether or not the generation and combustion of hydrogen and the following failure of reactor containment to withstand hydrogen combustion would result in public radiation exposure in excess of that permitted by Part 100. Since pressures from hydrogen explosions could threaten the structural integrity of the containment, NH maintains, the subsequent purging of the containment to relieve pressure may result in unacceptable levels of radionuclides; hence a credible accident scenario exists with regard to the Seabrook plant involving hydrogen production resulting in off-site doses in excess of Part 100 limits.

Both the Applicant and the NRC Staff base their opposition to this contention on the failure of the NH to state a credible scenario for the generation of hydgrogen in excess of the 10 C.F.R. 50.44 design bases, and cites its authority for such a requirement the case of Metropolitan Edison Company (Three Mile Island Station, Unit 1), CLI-80-16, 11 NRC 674 (1980).

This Board agrees with the Applicant and Staff in regard to this contention. In spite of an opportunity to refile this contention, to have made some additional showing either in the oral hearings on May 7 or in their refiled pleadings, this Intervenor has not set forth that credible scenario which it wishes to litigate in this case. In the absense of the identification of such scenario, Contention NH-8 therefore is rejected.

The Board wishes also to note that in 46 Fed. Reg. 58484 (December 2, 1981), it was determined that the TMI scenario was no longer an acceptable scenario for the generation of hydrogen in excess of the § 50.55 design basis.

NH-9 Radioactive monitoring

The Seabrook design does not provide an adequate program for monitoring the release of radioactivity to the plant and its environs either under normal operating conditions or in pre- and post-accident circumstances. Thus, the application is not in compliance with general design criteria 63, 64 of Appendix A, 10 C.F.R. Part 50, and the requirements of NUREG-0737 and NUREG-0800.

Neither the Applicant nor the NRC Staff object to the admission of this contention.

This Board admits Contention NH-9. It is this Board's understanding that this contention raises the question of the conformity of the in-plant monitoring system with the cited provisions of NUREGs and GDCs.

NH-10 Control room design

The Seabrook Station control room design does not comply with general design criteria 19 through 22 and 10 C.F.R. Part 50, Appendix A, and NUREG-0737, item I.D.1 and I.D.2.

The basis of this contention is to assure that displays and controls added to the control room after the DCRDR[8/] do not increase the potential for operator error. It is critical at Seabrook that the accident monitoring and control room be the optimum because of the difficulties inherent in carrying out protection actions for the population in the immediate vicinity of the plant.

Neither the Applicant nor the Staff have objected to the admission of this contention.

8/ Detailed Control Room Design Review. This review was performed by NRC Staff after the TMI accident.

The Board concludes that the basis for the contention is sound and NH-10 is admitted.

NH-11 Deviation from current regulatory practice

> The Applicant has not justified and the NRC Staff has failed to require documentation for all Seabrook deviations from current regulatory practices. The Seabrook facility, due to its long licensing history, has in many instances been reviewed by the staff against guides and standards which have subsequently been updated or modified. Neither the Applicant in the FSAR, nor the NRC Staff, has systematically described standards against which Seabrook has been reviewed and the basis for the acceptability of any deviations from any current regulatory practices. This circumstance is not acceptable, particularly since the Board must make findings based upon the applicable regulatory requirements.

The Applicant objects to this contention because it does not conform to any current regulatory practice of this Commission and the NRC Staff joins this objection and further states that the contention is a mere generalization regarding the Intervenor's view of what applicable policies should be.

This Board rejects Contention NH-11 and finds that there is no regulatory requirement for such a review as proposed by the Intervenor here and further that the proposals which NH would have this Board rule upon are not within the jurisdiction of this Board.

Refiled
NH-12 Quality Assurance

The Applicant has failed to establish and execute a quality assurance/quality control program which adheres to the criteria set forth in 10 C.F.R. Part 50, Appendix B.

NH points to the past NRC Staff practices of documenting deviations at the plant as not being conservative enough to protect the health and safety of the public. NH further basis is that (1) the Applicant and the NRC Staff have not documented in the FSAR where Seabrook design structures and components do not conform with current regulatory practices (i.e., Regulatory Guides, branch technical positions, and standard review plans) and the basis for an acceptability of those deviations; and (2) not set forth in the Safety Evaluation Report the standard against which Seabrook has been reviewed and the basis for any deviations from current regulatory practices approved by the Staff.

The Applicant's position is that the quality assurance issue in an operating license proceeding does not include "execution" in any respect, because operational QA program is not "executed" until operations begin. Further, the Applicant finds that what NH is trying to do in this case is to litigate the CP QA when the remedy NH has is a

petition to this Commission's director of Nuclear Reactor Regulation under 10 C.F.R. § 2.206.

The NRC Staff attacks the contention as failing to meet the specificity requirements of 10 C.F.R. 2.714. The Staff finds that the NH suggestion that the contention be admitted so as to permit discovery is an admission by NH that it in fact lacks specificity in framing an admissible contention under the Commission's regulations.

This Board rejects refiled contention number 12 because it does not advise this Board what QA system NH wishes to litigate for this operating license. It appears to this Board that without detailing information NH is not in fact looking for a mechanism by which to litigate a safety contention but to launch upon an expedition seeking information as to whether such a contention could ever be framed. In light of the vagueness with which this contention is framed, the Board hereby rejects Refiled Contention NH-12.

Refiled
NH-13 Operations, Personnel Qualifications and Training

The Applicant has not demonstrated that the following and all other operations personnel, are qualified and properly trained in accordance with NUREG-0737, items I.A.1.1, or I.A.2.1, I.A.2.3, II.B.4, I.C.1, and Appendix C: (a.) station manager; (b.) assistant station manager; (c.) senior reactor operators; (d.) reactor operators; and (e.) shift/technical advisors (Tr. 634).

Neither the Applicant nor the NRC Staff object to the contention as stated above.

The Refiled Contention NH-13 is admitted. The Board, in admitting this contention, specifically limits any litigation to only the five categories of personnel listed above.

Refiled
NH-14 Reliable Operation Under On-Site Emergency Power

The Applicant has not demonstrated in its FSAR that the on-site power system complies with general design criteria 2, 4, 5, and 50 of 10 C.F.R. Part 50, Appendix A, and thereby has not adequately ensured reliable operation of Seabrook Station in the event of loss of off-site power and a LOCA at the plant.

As a basis for this contention, NH states that the NRC Staff has recognized the unresolved safety problem which arises from the unreliability of emergency on-site diesel generators. To alleviate the problem of a double failure if the off-site power was also lost, NH seeks to demonstrate the urgent need of a diesel generator system with a high reliability control and monitoring instrumentation for temperature and pressure for its cooling water system and engine lubrication system. NH notes in its basis that Applicant's FSAR 9.5 fails to adequately address problems associated with diesel generator reliability.

The Applicant objects to the admissibility of this contention as being vague and "based upon a marshland of nonspecifics". The NRC Staff objects to the contention as failing to specify in what manner the on-site power system fails to meet the General Design Criteria.

With the FSAR before it this Intervenor could not frame a contention which specifically identifies in what manner the on-site emergeny power failed. With drawings and engineering data in the FSAR, NH still did not lay out in its contention the basis upon which it found the on-site emergency power to be defective. For this reason this Board rejects Refiled Contention NH-14.

NH-15 Unresolved safety issues

> The Applicant and the NRC Staff have not adequately addressed certain unresolved safety issues nor justified a substitute approach for resolving these issues with respect to the Seabrook facility, and thus, have not complied with 10 C.F.R. Part 50, Appendix A, General Design Criteria 2, 4 and the standards of 10 C.F.R. 50.40. As requirement for the issuance of an operating license, the Applicant must demonstrate either that each applicable generic issue has been resolved for the particular reactor or the existence of measures employed at the reactor to compensate for the lack of a solution to the problem. Virginia Electric & Power Company (North Anna Power Station, Units 1 & 2, ALAB-491) (1978). A finding that each unresolved safety problem applicable to Seabrook has been addressed must be made.

As a basis for this contention, NH states that the SER is the place where the unresolved safety problems must be reviewed. NH relies

upon the Gulf States Utility Company (River Bend, Units 1 & 2), ALAB-444, 6 NRC 760 (1977), where the Appeal Board of this Commission had discussed the need for a summary description in the SER of those generic problems which have relevance to the facilities under review. As NH admits in its pleadings the SER has not been filed and it wished to reserve the right to raise such contentions at an appropriate time. Until such time as the Staff has filed the Safety Evaluation Report, this contention is deemed premature. Contention NH-15 is denied. ALAB-687.

NH-16 Ultimate heat sink

The State of New Hampshire has voluntarily withdrawn this contention.

NH-17 Environmental impact

The Applicant in its Environmental Report and the Staff in its Final Environmental Impact Statement have not demonstrated compliance with the provisions of 10 C.F.R. 51.20 and 51.26 respectively. Based on the information available, the Applicant has not shown that a monitoring and surveillance program will be established which is adequate to satisfy the requirements of 10 C.F.R. Part 50, Appendix I. Additionally, it is not clear that Criterion 60 through 64 of 10 C.F.R. Part 50, Appendix A will be complied with. At the time this contention was developed, the NRC draft Environmental Impact Statement was not available. For this reason, Petitioners reserve the right to provide amended contentions on the issue of environmental impact when that document becomes available.

NH-18 Health and environmental monitoring

The Applicant has not provided an adequate surveillance and monitoring program for releases of radioactive material which complies with the provisions of 10 C.F.R. 50 Appendix I and 10 C.F.R. 51.2. Thus, the application does not satisfy the standards of 10 C.F.R. 50.40.

The basis which NH offers for these two contentions is a recitation of the health and safety requirements of the regulations without any indication that new information has been developed from the time this issue was litigated during the Seabrook construction permit proceeding. Public Service Company of New Hampshire (Seabrook Station, Units 1 & 2), LBP-76-26, 3 NRC 857, 877-78 (1976). In the absence of new information, NH is estopped from raising the same issues in the operating license proceeding that were raised in the construction permit stage of this proceeding. Alabama Power Company (Joseph M. Farley, Units 1 & 2), CLI-74-12, 7 AEC 203 (1974).

The Board rejects Contentions NH-17 and NH-18. The off-site radiation monitoring was litigated in 1976 at the CP stage and at a time when Appendix I had already been issued. Appendix I was issued May 5, 1975 (45 Fed. Reg. 19439).

NH-19 Financial qualifications

The Applicant has not demonstrated reasonable assurance of its ability to obtain financing necessary to cover the costs of operating and shutting down both Seabrook I and II as required by 42 USC, § 2232(a); 10 C.F.R.

§§ 50.33(f), 50.40, 50.91; and 10 C.F.R. Part 50, Appendix C.

NH offers as a basis for this contention a recitation of various quotes from financial journals and reports indicating that the Applicant's bond rating has been lowered; the inability of the Applicant to obtain financing because of its poor financial condition; the failure of the Applicant to obtain buyers for its part ownership in the Seabrook project and NH's conclusion that the Applicant will be unable to raise revenue through rate increase relief which would permit it to meet its own forecast of financial needs.

Both Applicant and NRC Staff seek a rejection of this contention based upon the Commission's recent changed regulations to preclude consideration of financial qualifications in operating license proceedings where public utilities are concerned. See 47 Fed. Reg. 13750 (March 31, 1982), amending 10 C.F.R. § 50.33(f).

In view of the lack of any regulatory base for admitting this contention, the Board rejects Contention NH-19.

NH-20 Emergency assessment, classification, and notification

The accident at TMI demonstrated the inability of all parties involved to comprehend the nature of the accident as it unfolded; communicate the necessary information to one another, to the Federal, state and local governments and to the public in an accurate and timely fashion; and to decide in a timely manner what

> course to take to protect the health and safety of the public. The Applicant in these proceedings has not adequately demonstrated that it has developed and will be able to implement procedures necessary to assess the impact of an accident, classify it properly, and notify adequately its own personnel, the affected government bodies, and the public, all of which is required under 10 C.F.R. 50.47 and Appendix E and NUREG-0654.

As a basis for this contention, the Intervenor contends that the emergency classification and action scheme required by 10 C.F.R. 50.47(b)(4) and NUREG-0654, Appendix 1 as outlined in Section 9 of Applicant's emergency plan is inadequate since it should address the postulated accidents in the FSAR and Emergency Plan. In addition, NH maintains that the Environmental Plan [sic] should state the basis for selecting a certain emergency action level. The responsibilities of the unit shift supervisor and the shift superintendent relating to the operating procedures and the emergency implementing procedures must, in NH's opinion, be more clearly delineated. NH maintains that the emergency plan of the Applicant does not reflect that there is adequate and continual staffing as required in 10 C.F.R. 50.47(b)(2) and NUREG-0654, Table B-1. NH maintains that the emergency plan does not demonstrate establishment of notification to appropriate local authorities or the notification by Applicant of authorities responsible for implementing protective measures within the Plume Exposure Emergency Zone, as required by NUREG-0654, Criterion J.7, page 60. NH further notes that the emergency plan fails to set forth the required basis for a choice of recommended protective actions for plume exposure

pathways under emergency conditions as required by NUREG-0654, Criterion J.10(m). Further, the emergency plan does not, in NH's opinion, establish that "information will be made available to the general public on a periodic basis on how they will be notified and what the initial actions should be in an emergency". Procedures for coordinated dissemination of information to the public have not been established as required by 10 C.F.R. 50.47(b)(7).

Applicant seeks to have the contention rejected and substitute for NH 20-22 a single contention which would state that the Applicant has not complied with 10 C.F.R. 50.47 and 50, Appendix E. The Staff does not object to a contention alleging that the on-site emergency planning does not comply with the applicable provisions of 10 C.F.R. 50.47, 10 C.F.R. Part 50, Appendix E, and NUREG-0654.

This Board has determined that NH has adequately met the requirements of the regulations and the specificity prescribed by 10 C.F.R. 2.714. Since an on-site emergency plan has been filed by the Applicant and NH has expressed the concerns which it deems need protection, this Board admits Contention NH-20.

NH-21 Protective action

The State contends that the Applicant's emergency plan does not demonstrate how, in case of an accident resulting in a site area or general emergency, the large numbers of people in the zone of danger may be protected or evacuated. Until there is reasonable assurance that

adequate on-site and off-site protective measures can and will be taken, the Board should not issue an operating license.

As a basis for this contention, the State of New Hampshire cites 10 C.F.R. 50.47(a) and (b), 10 C.F.R. 50, Appendix E, and NUREG-0654, the NH expresses its concern about the adequacy of the emergency plan which does not contain any off-site preparedness plans of State or local emergency response organizations.

The NRC Staff expresses the same objections to NH-21 as it did to NH-20 and that any contentions raised on off-site would be premature at this point since emergency plans have not yet been developed.

The Board has determined that so much of NH-21 dealing with off-site protective measures will be rejected at this time. Contention NH-21 as modified herein (limited to on-site protective measures) is accepted.

NH-22 Emergency planning zones

Applicant's acceptance without formal analysis or evaluation of circular 10- and 50-mile radius for the Emergency Planning Zones does not discharge the applicant's responsibility to ensure that adequate emergency response plans exist to protect the public health and safety in the event of an emergency at Seabrook. See Section 4.3 of the Emergency Plan. Designation of circular 10- and 50-mile Emergency Zones is unjustified because such emergency planning zone does not consider local emergency response needs as they are affected by such facts as demography,

topography, land characteristics, access routes, and jurisidictional boundaries.

The basis for this contention and the various arguments of both the Applicant and the NRC Staff are similar to those filed in regard to NH-20-21. The Board denies Contention NH-22 because it deals with local emergency plans not yet filed.

NEW ENGLAND COALITION ON NUCLEAR POLLUTION (NECNP) (Petition under under 10 C.F.R. § 2.714)

Petitioner NECNP filed on April 21, 1982, a list of contentions in three categories -- I. Technical Safety Contentions; II. Quality Assurance Contentions; and III. Emergency Planning Contentions. This was supplemented by additional contentions in category IV. Blockage of Coolant Flow to Safety-Related Systems and Components by Buildup of Biological Organisms; and category V. NEPA Cost-Benefit Analysis. These supplemental contentions were received on July 19, 1982 (undated). Applicant's response to NECNP's first list of contentions was filed June 28, 1982. Staff's written comments are presented in responses dated May 19 and July 1, 1982. There are additional written comments and revisions by NECNP dated June 17 and by the Applicant dated June 28. There were oral arguments at the July 15-16 prehearing conference. Tr. 306 - Tr. 535. After PHC-II, NECNP filed reworded contentions on July 26, 1982.

NECNP noted several deficiencies in the organization of the reports about the Seabrook Plant and requested leave to file additional contentions later. The responses by Applicant and Staff and the oral argument at prehearing conference gave much emphasis to the fact that regulatory guides are not to be viewed as NRC requirements. In their filing, NECNP states their view that regulatory guides do not constitute NRC requirements but that the guides themselves constitute a factual basis for their contentions and provide a benchmark against which the Board may judge compliance with the regulations.

NECNP I.A.1: NECNP contends that the Seabrook facility cannot be licensed because it does not meet the Commission's standards for environmental qualification of electrical equipment under 10 CFR Part 50, Appendix A, General Design Criteria GDC 4. The FSAR's discussion of environmental qualification is deficient in four respects: (1) the parameters of the relevant accident environment have not been identified; (2) the length of time the equipment must operate in the accident environment has not been included as a factor; (3) the methods used to qualify the equipment are not adequate to give reasonable assurance that the equipment will remain operable; (4) the effects of aging and cumulative radiation exposure on the equipment have not been adequately considered. (Tr. at 309-319) (Revised wording filed July 26, 1982.)

Petitioner asserts that because of the Three Mile Island accident, GDC 4 requires more rigorous environmental qualification testing than was previously the case in order to provide reasonable assurance that electrical equipment will function for the entire time period in which

it is needed. The Final Safety Analysis Report's discussion of environmental qualification is deficient in four noted respects. The Applicant's FSAR at 1.8-33 states that the Applicant has complied with Regulatory Guide 1.89 in qualifying electrical, instrumentation and control equipment. Regulatory Guide 1.89, however, is not the applicable standard for environmental qualification. The Commission has set DOR Guidelines and NUREG-0588, which are more detailed and specific than Regulatory Guide 1.89, as the standard for compliance with GDC 4. The accident at Three Mile Island, in which theoretically qualified equipment did not function for the time period in which it was needed, showed that the Commission's standards at that time were inadequate to provide a reasonable assurance that plants may be operated safely. Although CLI-80-21 (11 NRC 707, May 27, 1980) was issued after the accident, the Commission stated specifically that it had not attempted to incorporate the lessons of TMI into the decision.

Staff states that the TMI Action Plan, NUREG-0737, does not require the action requested by NECNP in its contention, NECNP would impose requirements beyond that required by the Regulations and the Action Plan.

The Commission did issue a revised Statement of Policy at 45 Fed. Reg. 85236 on December 24, 1980. It allowed previously forbidden challenges to the sufficiency of the supplementation of the Regulations

and the Action Plan but that supplementation does not relieve a proponent of an additional requirement, in this case NECNP, of the burden of demonstrating that compliance with the Commission's Regulations is not a sufficient basis upon which to grant a license. NECNP has not met its burden and Staff objects to the contention. The contention completely fails to meet the basis and specificity requirements of the Regulations. Tr. 310-312. The equipment in question is not identified, the concept of "all electrical equipment" is too broad. Tr. 310-312, 317.

Applicant has no problem with the contention if it would stop at the end of the first sentence, i.e., at "GDC 4." That alone is the rule against which this application can be measured.

The Board denies NECNP I.A.1 because it is a challenge to the Regulations and lacks specificity.

NECNP I.A.2: The Applicants have not complied with GDC 4 standards regarding qualification tests of electric valve operators installed inside the containment. (Tr. 319) (Revised wording as filed, July 26, 1982.)

NECNP maintains that electric valve operators must be environmentally qualified to meet GDC 4 as implemented by CLI-80-21 and as may be further required to provide a reasonable assurance that the equipment

can survive an accident environment of the harshness and duration experienced at TMI Unit 2.

Staff and Applicant objected to the original contention seeking to litigate the environmental qualifications of such electrical equipment as having no sound regulatory basis with respect to the requirements in CLI-80-21.

The Board admits NECNP I.A.2 as reworded.

NECNP I.A.3: The Applicants have not complied with GDC 4 in that they have not environmentally qualified electrical equipment inside the containment to withstand the effects of the hydrogen release and burn such as occurred at Three Mile Island Unit 2. (Tr. 320-321) (Revised wording as filed July 26, 1982.)

NECNP states that this contention does not challenge the adequacy of hydrogen control at Seabrook, but asserts that a higher level of hydrogen release must be considered for the purpose of environmental qualification. The hydrogen control requirements of § 50.44 may differ from hydrogen release assumptions for the purpose of environmental qualification, just as the 5% standard of § 50.44 differs from the 17% assumption for the purpose of ECCS acceptance criteria under 10 C.F.R. § 50.46(b).

Applicant in its response of April 26 states that there is no requirement in any regulation (including GDC 4) that electrical equipment inside the containment be qualified to "withstand the effects of the hydrogen release such as occurrred at Three Mile Island Unit 2." The regulations to protect from events which could follow post-accident H_2 buildup are found in 10 CFR § 50.44. The prevention of fire has been selected as the method to provide protection. The contention should be excluded. ALAB-161 (6 AEC 1003, November 30, 1973).

Staff, in its pleading of May 19, states that this contention would be litigable only upon a showing that there is a credible scenario for the generation of hydrogen in excess of the 10 CFR § 50.44 design basis. Metropolitian Edison Company (Three Mile Island Station, Unit 1), CLI-80-16, 11 NRC 674 (1980); 46 Fed. Reg. 58484 (December 2, 1981). Such a scenario has not been demonstrated and the contention should be rejected. During oral argument (Tr. 323) the Staff noted that the Commission is considering adding a rule on hydrogen control.

The Board denies NECNP Contention I.A.3 on the basis that there is no regulatory requirement for electrical equipment inside the containment to withstand the effects of a hydrogen release and burn as occured at TMI. There is no requirement that mandates a higher level of hydrogen release to be considered for the purpose of environmental qualification of electrical equipment.

NECNP I.B.1 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. (Tr. 324-326) (As filed June 17, 1982 on p. 6.)

NECNP states as its basis that GDC 34 requires that a system to remove residual heat be provided. Residual heat removal systems are considered to perform safety functions because they transfer decay heat from the reactor core; therefore they should be safety grade and environmentally qualified under GDC 4.

The Applicant would limit this contention to the components mentioned. Staff does not object to the contention but would limit it to the "residual heat removal" system and views the components listed as examples in that system only.

The Board admits Contention I.B.1 as filed June 17, 1982.

NECNP I.B.2: The Applicant has not satisfied the requirements of GDC 4 that all equipment important to safety be environmentally qualified because it has not specified the time duration over which the equipment is qualified. (Tr. 327) (Original of 4/21/82.)

In its basis, Petitioner cites the Three Mile Island Accident which persisted for a lengthly period and makes necessary that all

equipment important to safety be required to operate for long periods of time. Applicant does not object to the admission of this contention. NECNP's reply of June 17 on this contention has satisifed the staff's objection which stated that GDC 4 contains no provision that time durations for such equipment must be given.

The Board admits NECNP Contention I.B.2.

NECNP I.C: Environmental qualification--emergency feedwater pumphouse HVAC

> According to Table 1.3-2, sheet 14 of the FSAR, the applicant has added a new heating ventilating and air conditioning (HVAC) system for the emergency feedwater pumphouse. Only parts of the HVAC system are considered safety-related and environmentally qualified. NECNP contends that the entire system and its function must be environmentally qualified, and that the environmental qualifications must take into account the likely duration of an accident during which the HVAC system would be relied upon (Tr. 327-220) (As originally filed April 21, 1982).

The emergency feedwater pumphouse and its equipment are capable of functioning and can be relied upon to function only within a particular temperature range, the HVAC system is required to maintain conditions within that range. The environmental qualification must take into account the fact that the equipment may be required to operate for a considerable length of time in the event of an accident.

The Applicant responded to this contention by listing parts of the emergency feedwater pumphouse HVAC which are environmentally qualified, and maintaining that no regulation exists which requires environmental qualification of more equipment. Further, the contention does not specify what to litigate. Petitioner replied on June 17 with more specific information, naming electrical cables as an example and noting the apparent failure to qualify the cables constitutes a factual basis for the contention. This reply has satisfied the Staff's objection to the contention's basis filed on May 19.

The Board admits this contention, NECNP I.C.

NECNP I.D.1: The Applicants have not complied with GDC 1 with respect to ultrasonic testing of reactor vessel welds during preservice and inservice examination. (Tr. 330-331) (As reworded July 26, 1982.)

Petitioner asserts that the Applicant has stated it does not intend to comply with all the terms of Regulatory Guide 1.150, yet it does not indicate any alternative ways in which the requirements of the regulatory guide will be satisfied.

Applicant objected to use of Regulatory Guide 1.150 in the original contention and suggested the rewording. Both Petitioner and Staff accepted this rewording of the contention. Tr. 330-332.

The Board admits NECNP Contention I.D.1 as reworded July 26, 1982.

NECNP I.D.2: The Applicant's proposed testing of protection systems and actuation devices fails to meet the requirements of GDC 21 and NUREG-0737, Task II.D.1. In particular, the Applicants do not provide for the testing at full power of twelve safety functions (see FSAR at 1.8-9), justify that omission, or provide for other reliable means of testing them. (Tr. at 332) (As reworded July 26, 1982.)

Petitioner explains that GDC 21 requires that actuation of safety functions be tested at power, otherwise sufficient assurance cannot be provided that it will be able to function while the reactor is operating. This is a fundamental requirement that cannot be waived by an unsupported assertion that the probability of failure at power is too low. The design of the Seabrook facility should be revised, if necessary, to allow testing at power for these necessary safety system actuations.

Applicant accepted, provided it was clear that there is no ruling now as to whether or not any of the twelve items in the original contention are in fact required. Staff had no objection to the reworded contention. NECNP Contention I.D.2 is admitted.

NECNP I.D.3: The applicant has not provided a reasonable assurance that the leakage detection system for the Seabrook reactor will operate when needed because not all of the system is to be tested during plant operation as required by GDC 21. Only the airborne radioactivity detector has the capacity to be tested during power operation, FSAR at 1.8-17. The applicant thereby also fails to satisfy GDC 30, which requires a development of adequate leakage detecting systems. (Tr. at 333-336) (Reworded in July 26, 1982 filing.)

Staff did not object to the reworded contention. Petitioner made the deletions suggested by Applicant. The Board admits NECNP Contention I.D.3 as reworded.

NECNP I.D.4: The Applicants have not complied with GDC 21 in that the Applicants indicate compliance with an outdated standard, IEEE 338-1975, which has been superseded by IEEE 338-1977. Furthermore, the Applicants improperly assert that they do not comply with IEEE 338-1975 whenever the standard states that an action should be taken or a requirement should be met. All the provisions of the IEEE standard should be treated as mandatory unless the Applicants can show an alternative means of achieving the same level of safety. (Tr. 336-343) (Reworded in July 26, 1982 filing.)

Petitioner reworded the contention to eliminate the regulatory guide reference. The Applicant continued to object to the use of the IEEE standard as a regulatory requirement (Tr. 338) because it is not the legal standard that governs this application. Applicant indicated that the issue could be resolved at the evidentiary hearing. Tr. 340. The Staff's view was that there was enough to litigate and they had no

objection to the contention as reworded on the grounds that the legal framework for it was essentially GDC 21. Tr. 342. Petitioner does not assert the IEEE standards as the standards to be met; GDC 21 has to be met. Tr. 343.

The Board admits NECNP I.D.4 as reworded.

NECNP I.E: Reactor coolant pump flywheel integrity

> The Applicants have not complied with GDC 4 in that the Applicants will not perform post-spin inspections of the flywheel, have not identified the design speed of the flywheel, and tested it at 125% of that speed, and have not specified the cross-rolling ratio. Furthermore, the flywheel should be environmentally qualified under GDC 4 because it constitutes equipment important to safety. (Tr. at 343-346) (Reworded as filed July 26,1982)

Petitioner explains that GDC 4 requires that equipment important to safety be protected from missiles. In addition, it requires that equipment important to safety be able to function when called upon to mitigate the effects of an accident. The flywheel is both a potential source of damaging missiles, and a component important to safety because it provides inertia to ensure a slow decrease in coolant flow in order to prevent fuel damage as a result of a loss of power to the pump motors.

Applicant objected to reference to the Regulatory Guide 1.14 in the original statement. Petitioner offered to reword the contention to delete this reference. Applicant indicated that the contention as reworded was close to acceptable. The Staff view was that everything up to the last sentence beginning "Furthermore" would be acceptable. The Staff is not aware of any requirement that the flywheel has to be environmentally qualified. The Staff objects to that because of a lack of basis. Tr. 345.

The Board denies NECNP Contention I.E as reworded because of lack of basis for the last sentence.

NECNP I.F: Diesel generator qualification

> The applicants have not met the requirements of GDC 17 or Criteria III, Appendix B in that it has not indicated compliance with IEEE 323-1974. (Tr. 346-349) (As reworded July 26, 1982.)

The basis for this contention was the NRC Staff position set out in Regulatory Guide 1.9, which provides that the qualification testing requirements of IEEE 323-1974 should be used in § 5.4 of IEEE 387-1977. Based on the FSAR, the Applicant has failed to do so, and it has failed to demonstrate that it has provided protections equivalent to those provided by Regulatory Guide 1.9.

Applicant objects to the reworded contention on the basis that GDC 17 or Criterion III, Appendix B does not represent Commission policy decision and that IEEE 323-1974 is not a regulatory standard. The Staff considers it to be an acceptable contention in that GDC 17 does apply to the generator qualification and it is the criterion by which the Applicant's generators were reviewed. Tr. 348-349.

The Board admits NECNP I.F as reworded.

NECNP I.G: Pressure Instrument Reliability

> NECNP contends that there is not reasonable assurance that the public health and safety will be protected in light of the RCS wide-range pressure instruments being utilized at Seabrook which cannot be relied upon to provide accurate information. Reliance upon the instruments could result in inappropriate operator actions or premature or late tripping of RCS pumps during the course of a small break loss-of-coolant accident (Tr. 349) (As reworded June 17, pp. 12, 13.)

Petitioner states that according to IE Information Notice No. 82-11 (April 9, 1982), qualification tests on Westinghouse-manufactured RCS pressure instruments have shown "abiguities in their accuracy which could result in inappropriate operator action." Because the pressure instruments may provide inaccurate information leading to the exacerbation or failure to correct accident conditions, their use constitutes a threat to the public health and safety and cannot support a license for the Seabrook reactor.

Staff and Applicant have no objection to the reworded contention. The Board admits contention NECNP I-G as reworded.

NECNP I.H: Decay heat removal

> The Applicants should be required to install additional heat exchanger capacity to allow for more rapid cool down of the facility in the event of an accident. (Tr. 349-352) (As reworded July 26, 1982 filing.)

Petitioner asserts that one of the lessons of the Three Mile Island accident was that heat exchanger capacity in nuclear power plants should be expanded and improved. This is particularly true with respect to the unexpectedly lengthy period it took to cool the TMI reactor and the need to assure effective heat exchange at high pressures.

Applicant and Staff have objected; there is no regulatory requirement for larger heat exchanger capacity at Seabrook. Petitioner noted that the basis for this contention was in Task A-45, a new unresolved safety issue described in NUREG-0705 at A-1. A critical element of this unresolved safety issue was "the adequacy of existing shutdown decay heat removal requirements." The unresolved safety issue will be addressed in the Staff's SSER, not yet issued.

The Board denies Contention I.H. ALAB-678.

NECNP I.I: Inadequate Provisions For Achieving Cold Shutdown

NECNP contends that the Applicants must identify and environmentally qualify one path to cold shutdown as per IE Bulletin 79-01B, Supplement 3. (Tr. 353) (As reworded in July 26, 1982 filing.)

The Applicant and Staff objected to the original statement of the contention. Petitioner provided the reworded contention (Tr. 353) based on comments in the Staff's response, dated July 1, 1982, at page 21. Staff inquired as to the bases for the contention. Petitioner responded that based on the FSAR, the Applicant has not identified one environmentally qualified path to cold shutdown as required by IE Bulletin 79-01B, but has provided the capability to place and maintain the plant in a hot standby condition.

Staff explains there are several categories of issuances from the NRC Office of Inspection and Enforcement. An "IE Information Notice" which puts Applicants and others on notice of certain technical requirements, but is not mandatory upon them. On the other hand, an "IE Bulletin" is a mandatory document and while it does not have the status of a Commission regulation, it has the effect of being a requirement. It is this Board's position that an IE Bulletin may form the basis for a valid contention when the subject matter of the notice sets forth technical safety requirements. Staff reaffirmed its position that this is a valid contention.

Applicant continued to object to the reworded contention on the basis that a contention must be related to the NRC regulations. Petitioner (Tr. 356) expressed the view that the requirements derived specifically from GDC 34.

The Board admits Contention I.I. There is a notice from this Commission to operators of a proposed nuclear power plant that they must identify and environmentally qualify equipment in a path to cold shutdown.

NECNP I.J: Sabotage

> 10 CFR Part 73, and particularly Sections 73.40-73.55, require the Applicant to develop and implement a plan that would effectively protect the Seabrook reators against industrial sabotage. Regulatory Guide 1.17, Rev. 1, issued in June 1973, establishes the requirements and procedures that the NRC Staff believes would be sufficient to comply with the regulations and provide the necessary protections. NECNP contends that the Seabrook reactors are seriously vulnerable to industrial sabotage by virtue of their design and that the Applicant's security plan is inadequate to prevent actions of industrial sabotage at Seabrook that would threaten the public health and safety.

In its latest filing of July 26, 1982 Petitioner states that this contention cannot be framed until they have pursued the appropriate course of qualifying expert witnesees to review the security plan and determine its flaws. They will inform the Board shortly as to their intentions concerning the sabotage contention. Tr. 357-365.

The Board deems this contention to be withdrawn.

NECNP I.K: Instrumentation for Monitoring Accidents

> The Applicant has not satisfied GDC 13, 19 and 64, as implemented by Reg. Guide 1.97. The General Design Criteria and the Regulatory Guide relateed to the instrumentation required to monitor plant conditions both during and after an accident. The instrumentation should be environmentally qualified.

This contention was withdrawn pending release of information from the Applicant concerning the post-accident monitoring system. Tr. 365-368.

The Board deems NECNP I.K to be withdrawn.

NECNP I.L: PORV Flow Detection Monitoring System

> Applicants have not provided for a direct indication of Power Operated Relief Valve positions and, therefore, have not complied with NUREG-0737, Item II.D.3. A safety grade environmentally qualified system in compliance with GDC 4 should be installed. (Tr. 368-9) (As reworded on July 26, 1982.)

The Petitioner has stated that after TMI the NRC Staff requires the use of a positive, direct indication of valve position rather than the indirect measurement previously used. This is based on both the TMI accident experience and on IEEE 279, which "requires that, to the

extent feasible and practical, protection system input shall be derived from signals that are direct measures of the desired variable." NUREG-0578, p. A-9. Contrary to these lessons and requirements, the Applicant is relying upon an indirect measure of protection system input by measuring noise rather than measuring the actual flow from the power operated relief valves and the safety valves. Safe reactor operation requires that the acoustic accelerometer system be replaced with a monitoring system that directly measures the flows.

Staff and Applicant agree with the rewording of this contention. The Board admits NECNP Contention I.L.

NECNP I.M: The Applicants' fire protection system does not meet the requirements of GDC 3 as implemented by the Commission in CLI-80-21 with respect to the following items:

A. General Guidelines for Plant Protection
   1. Building design
      a. cable spreading rooms
      b. floor drains
      c. floors, walls and ceilings
   2. Control of Combustibles
      a. reactor coolant pump lube oil system
   3. Electric Cable Construction, Cable Trays and Cable Penetrations
      a. cable spreading rooms
      b. cable trays outside cable spreading rooms
      c. control room cabling
   4. Ventilation
      a. discharge of products of combustion
      b. power supply and controls
      c. protection of charcoal filters
      d. stairwells
      e. smoke and heat vents

5. Lighting
   a. fixed emergency lighting

B. Fire Detection and Suppression
   1. Detection--alarm and annunciation
   2. Water Sprinkler and Hose Standpipe Systems
      a. sprinkler and standpipe layout
      b. supervision of valves

C. Guidelines for Specific Plant Areas
   1. Primary and secondary containment--normal operation
   2. Control room
   3. Cable spreading room
   4. Switchgear rooms
   5. Remote safety related panels
   6. Diesel generator areas
   7. Diesel fuel oil storage areas
   8. Safety related pumps
   9. New fuel area
   10. Spent fuel pool area
   11. Radwaste building
   12. Decontamination areas

D. Special Protection Guidelines
   1. Welding and cutting, acetylene-oxygen fuel gas systems
   2. Storage areas for dry ion exchange resins

(Tr. at 369-373) (As reworded in July 26, 1982 filing.)

Petitioner states that the Commission's decision in CLI-80-21 requires that Applicants whose construction permit applications were docketed before July 1, 1976, demonstrate compliance with Appendix A to BTP 9.5-1 and the requirements set forth in the proposed rule, which was finalized in 45 Fed. Reg. 76602. According to Petitioner, the Applicant indicates in the FSAR at 1.8-43, that it does not comply with all requirements of the Branch Technical Position BTP 9.5-1. This information, which was submitted by the Applicant in 1977, is outdated,

and NECNP maintains it should be revised to reflect more recent developments, including changes in BTP 9.5-1. The Applicant should be required to specify those items which are not complied with and to specify alternative means of satisfying the requirements.

The Applicant responded that CLI-80-21 does not make the Branch Technical Position or the proposed rule enforceable with regard to fire protection. Applicant contends that the materials that are in CLI-80-21 are just one acceptable way of satisfying GDC 3. The only thing that need be referred to in the contention is the General Design Criterion 3. The Staff would not object to a contention to the effect that Applicants' fire protection system does not meet the requirements of GDC 3 as interpreted by the Commission in CLI-80-21 provided they were limited to the two page list of items in the contention as stated. This Petitioner has done.

The Board finds that NECNP has met the requirements of 2.714(b) and admits NECNP Contention I.M.

NECNP I.N: Solid Waste Disposal

> The Applicant has not provided a means to handle radioactive solid waste [produced] during normal reactor operations including anticipated operational occurrences as required by GDC 60. (Tr. 374) (As reworded in June 17, 1982 filing.) (Word in brackets added by Board to make contention grammatically consistent with its basis.)

General Design Criteria 60 requires that the nuclear power unit design include means to control suitably the release of radioactive materials in gaseous and liquid effluents and to handle radioactive solid wastes produced during normal reactor operation, including anticipated operational occurrences. The Applicant should be required required to specify those items which are not complied with and to specify alternative means of satisfying the requirements.

The contention was reworded taking into account comments by Applicant. The Staff does not object to this contention as reworded. The Board admits NECNP Contention I.N.

NECNP I.O.1: Emergency Feedwater

> The emergency feedwater system is inadequate in that a single failure in the common discharge header, in conjunction with delayed operator action or no action to correct it, would result in a loss of feedwater to all the steam generators. The Seabrook design must be revised to provide an emergency feedwater system that is single failure-proof with respect to a rupture of the high-energy piping in the discharge header. Even if the common discharge header is not considered to be covered by the single failure criterion, the Applicant has not adequately considered the factors necessary to protect against passive system failure. (Tr. 374-379) (As filed April 21, 1982.)

As basis, Petitioner states that the emergency feedwater system design for the Seabrook facility provides one common discharge header for all the steam generators. This system is placed under stress and

pressure when the emergency feedwater system is activitated. In the event of a rupture in the common discharge header, feedwater supply to all the genertors would be jeopardized. Such a rupture should meet the Single Failure Criterion of Appendix A to 10 CFR Part 50. Even where systems are not specifically required to meet the Single Failure Criterion, the Applicant must consider the possibility of a single failure. At Seabrook, in the absence of prompt operator action to correct a loss of feedwater, all of the steam generators would be threatened by loss of coolant. Reliance on such operator action is unacceptable. To satisfy the Single Failure Criterion and the considerations listed in the preamble to Appendix A, the Applicant should redesign the facility to provide redundant feedwater capacity or institute automatic initiation of the emergency feedwater system.

Staff objected to the contention as not having a basis. There is no Regulatory requirement for the design change which NECNP is advocating. Staff is not aware that the discharge header has been classified as NECNP classifies it or seeks to have it classified. Contention I.O.1 is unacceptable because the design which NECNP is advocating is not a Commission requirement, but one NECNP has advocated be adopted.

Applicant states that NECNP is contending that Appendix A imposes a legal requirement that has never been imposed on any other plant before. Applicant's position is that Appendix A does not impose this requirement. It is simply not an issue for this litigation.

The Board denies NECNP Contention I.0.1 as not having a regulatory basis.

NECNP I.0.2: Emergency Feedwater

> The emergency feedwater system [EFS] is inadequate in that a break in the common discharge header between valve 65 and valve 125 (See FSAR Figure 6.8-1), coupled with a single failure, would result in a loss of feedwater to all steam generators. The Seabrook design must be revised to provide an emergency feedwater system that complies with GDC 17 with respect to the high energy piping in the discharge header. (Tr. 375-379) (As reworded, p. 20, in June 17, 1982 filing.)

The basis for this contention is that the common discharge header must be qualified as pressurized because under the conditions in which it will be called upon to operate, it will be pressurized. The Applicant has not provided a reasonable assurance that the EFS will operate safely, NECNP asserts.

Applicant argues that the EFS is not high or moderate energy piping because it will not be pressurized during normal operation of the plant. During normal operating conditions, the discharge header will be empty. Only during an accident will it be filled with pressurized water. The Applicant argued that the contention lacked any regulatory basis, in that, as in Contention I.0.1, the design change NECNP would impose is not required by any regulation.

The Staff in its response of May 19, 1982 would have no objection to the litigation of a contention which provided, "the emergency feedwater system does not comply with GDC 17 in that a break in the common discharge header between valve 65 and valve 125, coupled with a loss of offsite power would result in a loss of feedwater to all steam generators" subject to one clarification. That clarification would be that NECNP specify the nature and duration of the "loss of offsite power" with respect to which it is concerned. Staff also expressed reservation as to the basis of this contention. Tr. 379. The reworded version in Petitioner's filing of June 17, 1982, did not conform with Staff's condition in that it substituted "coupled with a single failure" for its reference to loss of offsite power.

The Board denies NECNP Contention I.O.2, as reworded, for lack of regulatory basis.

NECNP I.P: Human Engineering

According to Table 1.3-2, Sheet 8 of the FSAR, the Applicant has added a 0-2300 degree F multipoint recorder on the back of the main control panel. Its purpose is to record temperature at four core locations. NECNP contends that the location of this recorder on the back of the control panel constitutes poor human engineering that would detract from the opeartor's ability to take prompt, correct actions in the event of an accident. (Tr. 379-382) (Original statements of April 21, 1982 at p. 37.)

This contention is based on the fact that information that may become of major interest to the operator will be available only on the back of the control panel. The operator will be required to leave his station and divert his attention from on-going events in order to determine the temperature in the core as stated on the multipoint recorder. The information should be readily available such that the operator need not move to the back of the control panel. Petitioner argued that this was a violation of GDC 19 which requires that a control room be provided from which the plant can be run safely under normal and accident conditions, and of NUREG-0737, Task 1.D.1, implementing the lessons of Three Mile Island which call for reevaluation of control room design. Tr. 380.

Applicant objects to this contention because there is no regulation requiring the relocation of the Multi Point Recorder. The Staff states Petitioner has not shown that the location of the Multi Point Recorder is a significant problem under the standard of NUREG-0737.

The actual location of the temperature recorder could not be determined at the Special Prehearing Conference. Tr. 381. By his own statement, Petitioner desires opportunity for discovery in order to really identify what exactly the location is and how the operator would or would not have to move to read it. Tr. 381.

The Board denies NECNP Contention I.P. on the grounds that Petitioner has not shown factual or regulatory basis for the existence of a significant safety issue.

NECNP I.Q: Systems Interaction

> The Applicants and the Staff have not applied an adequate methodology to Seabrook to analyze the reliability of systems, taking into account systems interactions and the classification and qualification of systems important to safety to determine what sequences of accidents should be considered within the design basis of the plant, and if so, whether the design basis of the plant in fact adequately protects against every such sequence. In particular, proper systematic methodology such as the fault tree and event tree logic approach of the IREP program or the systematic failure modes and effect analysis has not been applied to Seabrook. Absent such a methodological approach to defining the importance to safety of each piece of equipment, it is not possible to identify the items to which General Design Criteria 1, 2, 3, 4, 10, 13, 21, 22, 23, 24, 29, 35 and 37 apply. Thus it is not possible to demonstrate compliance with these criteria. (Tr. 382-399). (As reworded in filing July 26, 1982, p. 7.)

Petitioner states this is one of the generic unresolved safety issues listed and described as A-17 in NUREG-0510. On October 12, 1979 the ACRS[9/] recommended with respect to the Indian Point plant and all light water reactors that the NRC study systems interactions by investigating sub-system failures within interconnected electrical or

---

9/ Advisory Committee on Reactor Safeguards.

mechanical complexes and potential interactions between nonconnected systems. On March 9, 1982, the ACRS again recommended to the NRC Chairman that a walk-through systems interaction study be developed for all light water reactors to detect obvious interactions. Petitioner also contended that Applicant had not satisfied the NRC Staff questions about safety consequences of interactions between control systems at Seabrook and further that recent state of the art review three laboratories had concluded that no single method currently exists to perform an adequate review of adverse system interactions.

In response to Board questions regarding the history of this subject, Staff reported that it is a relatively new unresolved safety issue which is just beginning to be responded to in Staff's writing of their SER. In addition, Staff stated there is no regulatory requirement for this type of study and the contention is not specific in the sense that no specific interactions have been identified to form a basis for the contention. Tr. 393-394. Applicant agrees there is no regulatory requirement.

The Board denies NECNP Contention I.Q. As often cited in this Memorandum and Order, the Board relies here on ALAB-687 since the Staff's SER will not be available until the projected date of November 8, 1982.

NECNP I.R: Hydrogen Control System (originally filed in NECNP's filing of April 21, 1982)

The design of the hydrogen control system at Seabrook is inadequate to protect the public safety in that it would protect against the hydrogen produced by a metal water reaction involving only 1.5% of the fuel cladding. FSAR 1.8-3.

In support of its basis, Petitioner refers to the hydrogen generated during the Three Mile Island accident. In particular it referred to the Commission's statement in Metropolitan Edison Company (Three Mile Island Nuclear Station, Unit 1), CLI-80-16, 11 NRC 674, 1980).

Both Staff and Applicant oppose the original contention and argument in two written replies by each, and also at the prehearing conference. Tr. 399-408.

The Board denies the original contention regarding hydrogen control on the basis of these legal arguments. Particularly, in stating the basis of the original contention, the demonstration of a credible accident scenario resulting in hydrogen releases above the limits contemplated by regulation is lacking.

Being denied the original contention, Petitioner seeks a ruling on the alternative hydrogen control contention presented on pages 24-25 of their filing of June 17, 1982. Tr. 399-407.

NECNP I.R. Hydrogen Control (Alternative)

NECNP contends that the hydrogen control system at Seabrook is inadequate to protect the public health and safety in that it would protect against the hydrogen produced by a metal water reaction involving only 1.5% of the fuel cladding and in that the the manual operation of the hydrogen recombiners and other hydrogen control equipment has not been demonstrated to be adequate to assure that large amounts of hydrogen can be safely accommodated without a rupture of the containment and a release of substantial amounts of radioactivity into the environment.

As a credible accident secnario, NECNP asserts the following:

1. a pipe break in the reactor coolant pressure boundary causes LOCA, as defined by CFR 50.46(c)(1).

2. failure of the ECCS to maintain coolant inventory. The cause of this failure may be: electrical or mechanical component failure; common mode failures resulting fromt he LOCA: design deficiencies which undermine ECCS effectiveness; and/or operator error.

3. The Zircaloy fuel cladding melts; the zirconium reacts with water, liberating hydrogen gas.

4. The hydrogen concentration within the containment increases to the flammability limit before the combustible gas control system becomes effective, or said system never operates effectively.
5. Uncontrolled hydrogen-oxygen reaction (explosion) occurs.

6. Containment is breached; a substantial fraction of tne core inventory is released to the atmosphere, resulting in offsite doses at the LPZ (low population zone) boundary which exceed the 10 C.F.R. 100.11 guidelines of 25 rems whole body and 300 rems thyroid.

7. This accident scenario should be construed as a TMI-2 type LOCA, with similar or equivalent hydrogen generation and explosion potential.

Petitioner states the crucial safety issue as being whether the hydrogen can be adequately controlled. The accident at Three Mile Island demonstrated that as much as 50 percent of the zirconium cladding in the TMI core reacted chemically to produce hydrogen, an amount greatly in excess of the design assumptions of 10 CFR 50.44.

Staff and Applicant do not accept the accident scenario given in the alternative contention as credible. Applicant states that the accident scenario is a general description of a LOCA plus ECCS failure, not a basis for a credible accident. Staff states that Petitioner must show that the hydrogen generation scenario is, in fact, credible, that hydrogen control measures will not be successful and that offsite releases will exceed the guidelines values of 10 C.F.R. Part 100. The Staff would admit the contention for discovery purposes only to provide an opportunity to make the above determinations.

There was considerable discussion of this contention in written replies and during the special prehearing conference at Tr. 399-408. Some of this discussion centered about the interpretation of the Commission Policy Statement regarding the hydrogen issue given in Metropolitan Edison Company (Three Mile Island, Unit 1), CLI-80-16, 11 NRC 674 (1980). To clarify the disagreements expressed about the intrepretation of this Commission Policy Statement, the Board believes it will be beneficial to state it below with emphasis added on pertinent parts. In its ruling the Commission declined to waive or except

the hydrogen generation provisions in 10 CFR § 50.44. This regulation limits the amount of hydrogen, generated during the course of a loss-of-coolant accident, to hydrogen associated with a five percent metal-water reaction. It must be taken into account in the design of nuclear reactor containment systems. The Commission, in its Memorandum and Order in the Three Mile Island Unit 1 case stated:

> The Three Mile Island accident has in fact raised a safety issue regarding hydrogen control measures following a loss-of-coolant accident that should be addressed. The Commission believes that, quite apart from 10 CFR 50.44 hydrogen gas control could properly be litigated in [the Three Mile Island Nuclear Station, Unit No. 1] proceeding under 10 CFR Part 100. Under Part 100, hydrogen control measures beyond those required by 10 CFR 50.44 would be required if it is determined that there is a credible loss-of-coolant accident scenario entailing hydrogen generation, hydrogen combustion, containment breach or leaking, and offsite radiation doses in excess of Part 100 guideline values. The design basis assumptions of 10 CFR 50.44, in particular the assumption that hydrogen generation following a loss-of-coolant accident is dependent on ECCS design as opposed to actual ECCS operation, do not constrain the choice of credible accident sequences used under 10 CFR 100.11(a) Union of Concerned Scientists v. AEC, 499 F.2d 1069, 1090 (D.C. Cir. 1974). Thus we answer the second certified question in the affirmative. [Emphasis Added]

> We answer the first certified question in the negative. We are of course aware that the Three Mile Island accident resulted in hydrogen being generated far in excess of the hydrogen generation design basis assumptions of 10 CFR 50.44. This was because the operator interfered with actual ECCS operation with the result that the safety system did not operate as designed and as 50.44 assumed it would operate. However, this is a safety issue that is not peculiar to Three Mile Island Unit 1 --

> it is an issue that is common to all light water power reactors because operators generally have the physical capability to interfere with atuomatic ECCS operation. The proper response to this issue is not waiver of the rule under 10 CFR 2.758 because this case presents no "special circumstances" but rulemaking to either amend or suspend the present rule. The Commission is planning a broad rulemaking proceeding that will address the general question of possible safety features to deal with degraded core conditions. This rulemaking proceeding will include measures to deal with hydrogen generation following a loss-of-coolant accident. [Emphasis Added]
>
> ...the hydrogen control issue can be litigated under 10 CFR Part 100. Under Part 100 the likelihood of an accident entailing generation of substantial (in excess of 10 CFR 50.44 design basis) quantities of hydrogen, the likelihood and extent of hydrogen combustion, and the ability of the reactor containment to withstand any hydrogen combustion at pressures below or above containment design pressue would all be at issue. A critical issue here would be the likelihood of an operator interfering with ECCS operation.
>
> However, after the Three Mile Island accident the Staff has given licensees explicit instructions not to turn off prematurely the ECCS system. As noted above, it was operator interference with ECCS operation that was the root cause of the hydrogen generation problem at Three Mile Island Unit 2. In our view this instruction which had not been issued when 50.44 and General Design Criterion 50 were promulgated, compensates for the less conservative analytical framework of Part 100, and serves as a basis to sustain the present hydrogen generation assumptions of 50.44 at least for the interim until the degraded core rulemaking can be completed. II NRC at 675-6. [Emphasis Added]

The Board takes official notice of a letter issued by the Commission July 27, 1982, regarding the McGuire Operating License Proceeding and ALAB-669. The Commission declined to review the Appeal Board

decision, ALAB-669 and the McGuire decision became final agency action July 15, 1982. The McGuire operating license decision was based, in large part, on reference to CLI-80-16, the Commission's policy statement on hydrogen control.

The McGuire Operating License Board limited its scope to consideration of credible accidents. The degraded core rule making was viewed as providing a forum for the treatment of other accidents.

The Commission has provided guidance with these rulings.

The interpretation is that Petitioner must prove the credible accident that will give rise to the production of excessive hydrogen; the credible condition wherein the core is inadequately cooled for a sufficient period of time Petitioner is considered to have the burden to establish a credible accident scenario involving hydrogen production resulting in offsite doses in excess of 10 C.F.R. Part 100 limits. Part 100 is a siting regulation, and it establishes radiation limits at a certain boundary from the plant surrounding the "exclusion" area. These radiation exposure limits are 25 rem to the whole body or 300 rem to the thyroid from iodine exposure.

The Board is not persuaded that the scenario in the alternate contention is credible for the Seabrook reactor. The Board denies

NECNP Alternate Contention I.R on hydrogen generation and control for litigation.

NECNP I.S. Loose Parts Detection System

The Applicants have not yet designed or developed a loose parts detection system for the reactor's primary system and, therefore, do not satisfy criteria 1 and 13 of Appendix A to 10 C.F.R. Part 50, 10 C.F R. 50.36, or 10 C.F.R. 20.1(c). (Tr. 409). (As reworded in filing of July 26, 1982.)

Petitioner gives as basis Regulatory Guide 1.133 which describes an acceptable method to implement NRC requirements with respect to detecting potentially safety-related loose parts in light water cooled reactors during normal operation. By complying with Regulatory Guide 1.133 an Applicant will satisfy the NRC Staff that Criteria 1 and 13 of 10 CFR Part 50, § 50.36 of 10 CFR Part 50, and Paragraph 20.1(c) of 10 CFR Part 20 have been met.

Staff has no objection to this contention as reworded.

Applicant objects and argues that neither 10 C.F.R § 20.1(c) nor 10 C.F.R. § 50.36, Technical Specifications, by its terms requires a loose parts detection system. It is viewed as a new device thought by some to be a good thing to have. The principal regulatory requirement is said to come from Regulatory Guide 1.133 and Applicant objects to giving a regulatory guide the dignity of a regulation.

The Board denies NECNP Contention I.S as reworded on July 26, 1982. There is not regulatory requirement for litigating a loose parts detection system. Unless the Petitioner qualifies the need for such a system on a firmer ground than a Regulatory Guide then it cannot expect this Board to accept the contention for by so doing would be to place a new requirement on the Applicant.

NECNP I.T. Steam Generators

> The Applicant has not demonstrated that the Seabrook steam generators are capable of resisting degradation or that the new model F Westinghouse generators have been designed to solve the degradation problem and maintain their integrity during normal operation and during a credible accident scenario, such as the accident which occurred at GINNA on January 25, 1982. (Tr. 410-418) (As filed April 21, 1982, p. 47.)

Petitioner describes the history of previous problems with Westinghouse steam generators as causing concern. The new Model F to be used at Seabrook although not yet showing any failures is still a Westinghouse product which has had past failures and this is sufficient enough to buy the Petitioner discovery to determine what the story is with the Model F as it relates to its predecessors.

It is the Staff view that this contention lacks basis and specificity, and is speculative. Tr. 414. The specific information should relate to the Seabrook plant. Applicant stated the contention should not be admitted for similar reasons.

The Board denies NECNP Contention I.T. There is nothing in Petitioner's arguments, either written or oral, that places parties on notice that there is something wrong with Model F steam generators at Seabrook. The Board agrees with Staff that this contention is speculative.

NECNP I.U. Turbine Missiles

> The Applicants have not demonstrated that they meet GDC 4 of Appendix A to 10 C.F.R. Part 50 in that they have not provided that structures, systems, and components important to safety be protected against the effects of turbine missiles whose launching might occur as a result of equipment failure. (Tr. 418 with corrections to transcript). (As reworded in filing of July 26, 1982.)

Petitioner states that the Applicant has failed to demonstrate in § 3.5.1.3 of the FSAR that the Seabrook plant has an acceptable alternative method to meet GDC 4, or that it has met Regulatory Guide 1.115 which provides an acceptable method to comply with GDC 4. Figure 3.5.1 of the FSAR illustrates how certain low-trajectory missiles resulting from turbine failure could severely harm the containment of one or both of the two Seabrook plants.

Staff and Applicant had no objection to the contention as reworded. The Board admits the contention NECNP I.U.

NECNP I.V. In-Service Inspection of Steam Generator Tubes

The Applicants have not demonstrated that they have met GDC 14, 15, 31 and 32 insofar and to the extent that those GDC require a program of the in-service inspection of steam generator tubes. (Tr. 419-420) (As reworded in filing of July 26, 1982.)

Petitioner notes that in-service inspection of steam generators has been demonstrated historically to be inadequate to prevent their degradation and resulting accidents due to this degradation. The Applicant has stated only that it fully meets all requirements of Regulatory Guide 1.83, which according to the Petitioner, is an inadequate standard for assuring compliance with General Design Criteria 14, 15, 31, and 32 of Appendix A to 10 CFR Part 50. Reference is made to a recent steam generator failure at the Ginna plant as evidence of insufficiency of the standard set forth in Regulatory Guide 1.83. Tr. 420.

The rewording was suggested by Applicant. Staff objects to the rewording on the basis that it is not specific. It does not say how the inspection program is inadequate. There is no basis for the contention in the absence of the showing that the Applicant who will comply with the Regulatory Guide will not meet the applicable general design criterion. Tr. 420. Applicants affirm that they will comply with the Regulatory Guide as they stated in the FSAR, and Petitioner states that an inspection program performed in accordance with that Regulatory Guide would not satisfy it.

The Board denies Contention NECNP I.V. Regulatory guides are not mandatory but when an Applicant voluntarily accepts one as a method of complying with GDC, then a Petitioner cannot be permitted to argue that this one method of complying with this Commission's requirements would not be sufficient to meet its demands.

NECNP I.W. Seismic Qualification of Electrical Equipment

The Applicants have not demonstrated that they have adequately assured the seimic qualification of electrical equipment at Seabrook as required by criterion III, "Design Control," of Appendix B to 10 C.F.R. Part 50. (Tr. at 421) (As reworded in filing of July 26, 1982.)

For a basis, Petitioner notes that according to FSAR 1.8-36, the Applicant has not demonstrated that all NSSS safety-related electrical equipment or BOP electrical equipment has been seismically qualified to meet all requirements of Regulatory Guide 1.100, Rev. 1. In a letter to the NRC the Applicant states that qualifiation of electrical equipment and instrumentation complies with the guidelines of Regulatory Guide 1.100. Because of this conflict between the statements the Applicant must demonstrate that its method of seismically qualifying electrical equipment at Seabrook fully complies with Criterion III of Appendix B to 10 CFR Part 50. Seismic Qualification of Equipment is an Unresolved Safety Issue listed as A-46 of NUREG-0705.

Petitioner has omitted the last sentence of the original contention and this complies with Applicants' objection. Petitioner wants the contention to apply to both electrical systems and components and notes that the seismic qualification program is still under review by the Staff. This includes a supplementary report on the resolved safety issues. Until this is complete, they are unable to identify individual components that are in issue.

The Board denies NECNP Contention I.W ALAB-687.

II. Quality Assurance Contentions

A. Design and Construction

II.A.1: General Design Criterion 1 of Appendix A to 10 C.F.R. Part 50 requires the establishment and implementation of a quality assurance program. This and all General Design Criteria cover all aspects of the facility that are "important to safety." NECNP contends that the Seabrook Quality Assurance Program for design and construction has been too narrow in scope, applying only to items considered to be "safety-related," rather than to the broader category of aspects that are "important-to-safety." Accordingly, the Applicant has failed to comply with GDC 1 to Appendix A. (Tr. 425-429) (As worded in April 21, 1982 filing, p. 55.)

The Applicants' quality assurance (QA) program was litigated at the construction permit stage. Petitioner notes that the interpretation of Appendix B to 10 C.F.R. Part 50 on which the Seabrook

QA program was based was recently reviewed by the Commission and found wanting with respect to major safety-related systems and components such as the in-core instrumentation, reactor coolant pump motors, reactor coolant power cables, and radioactive waste system, pumps, valves and storage tanks. Petitioner claims that these systems or components are not covered by the Seabrook QA program. Petitioner also claims that all equipment that removes heat from the steam generators during shutdown should be subject to the QA program. It has been identified as a new unresolved safety issue.

Applicant comments on both quality assurance contentions 1 and 2 that they are not litigable for at least two reasons. The first is that it has already been litigated in the construction permit stage. The second is that this is an operating license case, not a construction permit case, and if there are deficiences in the construction QA plan, they are not within the jurisdiction of this licensing Board. If the Petitioner wishes to litigate the sufficiency with which the Applicants have executed the plan, the remedies have to do with the construction permit and again it is not within the jurisdiction of this operating licensing Board. This has been recognized QA Consumers Power Company (Midland Plant, Units 1 and 2) ALAB-674, ____NRC ____CCH NUC. Reg. RPTR. Section 30, 678 (May 5, 1982).

Staff commented on the scope of the QA program and its acceptability at the construction permit stage by the Licensing Board presiding over that portion of the license. Applicants' QA program was found to meet NRC requirements. (LBP-76-26, 3 NRC 857 at 866-867, June 29, 1976.) NECNP was a party to that proceeding and in the absence of either significant supervening developments having a possible material bearing upon those previously adjudicated issues, or the presence of some unusual factors having special public interest applications, NECNP is estopped from raising the issue in the operating license proceeding. Petitioner has failed to demonstrate or meet either of these factors.

The Board denies Contention II.A 1 on the basis that it was litigated during the construction permit phase.

NECNP II.A.2 Quality Assurance-Design and Construction

NECNP contends that the Applicants have failed to meet the requirements of Appendix B with respect to the design and construction of Seabrook in the following areas such that there is no assurance that the plant has been designed or constructed in accordance with applicable requirements and consistent with the public health and safety:

1. Acceptance of deficient conditions through apparent oversight or incompetence of inspectors. I&E Report Nos. 79-05, 79-07, 79-10, 80-06, 80-10, 80-01, 81-09, 81-12, 80-13, 82-1.[10/] Appendix B, Criteria II, V, X, XIV.

10/ All I&E Reports will be identified by reference to the report number for Unit 1, Docket No. 50-443, except as otherwise noted.

2. Acceptance of deficient conditions as a result of inadequate or nonexistent Quality Assurance procedures. I&E Report Nos. 80-06, 80-04, 80-11, 81-01, 81-02, 81-03, 81-05, 81-07, 79-07, 79-06. Appendix B, Criteria II, V, XIV.

3. Failure to perform required inspections. I&E Report Nos. 79-06, 80-03. Appendix B, Criteria V, X.

4. Falsification of inspection record to show inspection was properly performed when it was not. I&E Report No. 79-06. Appendix B, Criteria II, X.

5. Failure to prevent deficiencies in pipe supports, pipe welds, and piping and tubing generally. I&E Report Nos. 80-06, 80-10, 81-03, 81-05, 81-14, 79-06. Appendix B, Criterion V.

6. Failure to determine the root causes of deficiencies or to assure that corrective actions are taken to prevent deficiencies from recurring. I&E Report Nos. 79-06, 79-09, 80-03, 80-11, 80-12, 81-03. Appendix B, Criterion XVI.

7. Failure to assure proper design. I&E Report Nos. 81-14, 81-05. Reports pursuant to 10 C.F.R.

   50.55(e), dated 10/27/78, 12/6/79 (three reports), 12/1/80, 7/17/81, 1/15/81, 2/23/81, 6/18/81, 8/25/81. Appendix B. Criteria III, V.

8. Failure to assure proper repairs. I&E Report Nos. 79-07, 80-04, 80-11, 80-12. Appendix B. Criteria V, IX, X.

9. Failure to assure deficiencies are not caused by poor contractor interface. I&E Report Nos. 80-11, 80-12, 81-12, 82-01. Appendix B, Criterion V.

10. Failure to assure the procurement of proper materials and failure to assure that procured items comply with requirements. I&E Report Nos. 81-09, 81-12. Appendix B, Criteria V, VII, XV.

11. Failure to assure proper document control such that required changes are not made, and incorrect procedures and specifications are used. I&E Report Nos. 79-06, 80-03, 80-04, 80-11. Report pursuant to 10 CFR 50.55(e), dated 12/6/79. Appendix B, Criteria II, III, V, VI.

12. Pervasive deficiencies in welding and weld repairs. I&E Report Nos. 79-06, 79-07, 79-10, 80-03, 80-11, 80-10, 81-01, 81-03, 81-05, 81-09, 80-04, 80-11, 80-12. NRC Stop Work Order in letter dated 12/22/80. Appendix B, Criteria V, IX, X.

13. Inadequate audit program and inadequate commitment to and understanding of Quality Assurance. I&E Report Nos. 79-08, 78-06, 80-05, 81-12, 80-09, 78-16. Appendix B, Criteria I, II, XIII, XVIII.

(Tr. 429-452) (As filed July 26, 1982.)

NECNP has provided 13 examples of the I&E Reports which cite the Applicant for QA deficiencies. They contend that these failures provide a basis for a contention that the entire QA program is faulty must be examined by the Board and that discovery is needed to provide additional particulars.

Applicant took the position that one must distinguish between execution of a QA program as one topic and the compliance of as built machinery with to be built plans and specifications. What matters is to determine whether or not the plant as built meets the statute and the regulations of the NRC. Tr. 448.

Staff pointed out that Quality Assurance deficiencies have been litigated in many operating license proceedings. The Staff feels that

the contention should be limited to the specific alleged failures of the QA program. Tr. 431, 432. Staff offered a rewording of the contention at Tr. 432. The final version submitted by NECNP in its filing of July 26th is different. The Staff objects to the restated contention to the extent that it continues to include design issues and they feel that those issues are not proper in an operating license proceeding. The Staff takes the position that if the word "design" continues to be included the contention is clearly not acceptable for litigation.

The Board rejects NECNP II.A.2. The thrust of NECNP's contention is the design of the plant. Clearly the design is not up for litigation in this proceeding. NECNP, although afforded more than one opportunity to bring its QA contention into line, has elected to continue to press for acceptance of design issues.

NECNP II.B.1 Quality Assurance for Operations

> FSAR addresses Quality Assurance for plant operation at Section 17.2. Section 17.2 fails to address each of the criteria in Appendix B in sufficient detail to enable an independent reviewer to determine whether or how all of the requirements of Appendix B and the guidance in all applicable regulatory guides will be satisfied. (Tr. 453) (As reworded in filing of June 17, 1982.)

Petitioner gives as the basis the language of Section 17.2 of the FSAR which has only a very general discussion of the Quality Assurance

Program, with scattered references to procedures. The FSAR does not provide the detail necessary to determine how the program will be implemented.

Appliant has no objection to Contention II.B.1. Staff accepts the rewording of Contention II.B.1 as representing its suggested limitation to Section 17.2.

The Board admits the NECNP II.B.1 as reworded, above.

NECNP II.B.2 The Quality Assurance Program for Operations extends only to matters considered to be "Safety-related," and not to all structures, systems, and components important to safety. (Tr. 452-454) (As filed April 21, 1982, p. 62.)

Petitioner states that the basis is the comparison between the scope of the Seabrook Quality Assurance Program for operations and the requirements of GDC 1 of Appendix A.

Staff objects to II.B.2 on the grounds it lacks specificity in that petitioner has not given a list of items it contends were excluded from the QA program. Petitioner stated they gave some examples on page 36 of their June 17th filing but these do not appear in the statement of the contention. Tr. 453.

The Board denies NECNP-II.B.2 on the basis that, as stated, it lacks specificity.

NECNP II.B.3 the Quality Assurance Organization does not have the independence required by Appendix B, Criterion 1. (Tr. 454) (As filed April 21, 1982, p. 62.)

Petitioner gives as basis the fact that the Nuclear Quality Manager reports to the Vice President - Production on an equal basis with the Nuclear Production Superintendent, rather than to the Executive Vice President - Engineering and Production. Since the Vice President - Production is directly responsible for maximizing the amount of power produced by Seabrook, the quality assurance organization must report to a separate-but-equal level or a higher level in order to assure its independence and freedom of operation.

The record indicates that Staff and Applicant do not object. The Board admits NECNP-II.B.3.

NECNP-II.B.4 The Quality Assurance Program for operations as described in the FSAR does not demonstrate how the Applicant will asssure that replacement materials and replacement parts incorporated into structures. systems, or components important to safety will be equivalent to the original equipment, installed in accordance with proper procedures and requirements, and otherwise adequate to

> protect the public health and safety. Similarly, the Quality Assurance program does not assure or demonstrate how repaired or reworked structures, systems, or components will be adequately inspected and tested during and after the repair or rework and documented in "as-built" drawings. (Tr. 454) (As filed April 21, 1982, p. 63.)

Petitioner gives as basis the fact that the FSAR contains no discussion whatsoever of Quality Assurance for maintenance, repairs, or rework, all of which will occur during the life of the plant, and cites Appendix B to 10 C.F.R. Part 100, and 10 C.F.R. & 50.34(b)(6)(ii), as well as GDC [1] in Appendix A to 10 C.F.R. Part 50, as stating the regulatory requirements. NECNP pleadings dated April 21 and June 17, 1982.

Staff comments that Petitioner has failed to satisfy either the basis or specificity requirements of 10 C.F.R. § 2.714. Petitioner, in pleading of June 17, p. 37, reads Appendix A and B as providing a requirement for having a quality control program for maintaining and repairing defective equipment, inspecting the results of such actions, and keeping accurate records throughout the life of the unit which may be as long as forty years. The Staff continues to object after this explanation was given.

The Board admits NECNP II.B.4. It is the Board's understanding of NECNP's contention herein that the basis is the absence of the contended items in the FSAR.

NECNP II.B.5 The Quality Assurance program for operations as described in the FSAR fails to assure the presence on the operating staff of an adequate number of qualified QA/QC personnel, particularly during off-shifts. (Tr. 455) (As filed April 21, 1982, p. 63.)

Petitioner gives as basis the absence of any discussion in the FSAR of minimum staffing levels or any indication that sufficient Quality Assurance staffing will be assured at all times.

Staff and Applicant had no objection. NECNP Contention II.B.5 is admitted.

III. Emergency Planning (Tr. 455-535)

The original filing by NECNP on April 21, 1982 was:

> NRC regulations require the license Applicant to submit with its FSAR a complete emergency plan before a license may be issued. 10 CFR 50.34(b)(6)(v). The plan must be "adequate and capable of being implemented," providing a "reasonable assurance that adequate protective measures can and will be taken in the event of a radiological emergency." 50.54(a)(1),(2). The emergency plan submitted by the Applicant for the Seabrook facility license is seriously deficient in a number of respects listed below, and fails to provide all the information required by Appendix E to Part 50. In its present form, the plan is incapable of being implemented or providing any assurance that in the event of an emergency adequate measures can and will be taken, and therefore it cannot be accepted as fulfillment of a licensing requirement under 10 CFR 50.47.

This was followed by 16 items of specification and basis (pp. 66-77).

In response to the objections of the Applicant and the Staff, NECNP revised its contention on June 17, 1982 in the following manner: used the wording proposed by the Applicant as a general statement of the contention and each of the sixteen items listed in the original contention as "specificity and basis" now constitute separate subparts of the contention which NECNP asserts must be individually addressed.

During the Special Prehearing Conference of July 15-16, 1982, the Board directed NECNP to file any redrafted emergency planning contentions and any argument that it may have with respect to those contentions. These were filed on July 23, 1982. Each of the 16 subparts of the previous emergency planning contentions were redrafted into proper contention form. Subcontention 2 was incorporated into subcontention 1 and all were renumbered, 1-15.

The Board's view of the status of and ruling on all emergency planning contentions is given above under MASS.[11/] Accordingly, NECNP Contentions 1-15 dealing with emergency planning are denied. ALAB-687.

11/ Footnote reference to MASS text.

IV. Blockage of Cooling Flow to Safety-Related Systems and Components by Build-up of Biological Organisms

The Applicant must establish a surveillance and maintenance program for the prevention of the accumulation of mollusks, other aquatic organisms, and debris in cooling systems in order to satisfy the requirements of GDC 4, 30, 32, 33, 34, 35, 36, 38, and 39, which require the maintenance and inspection of reactor cooling systems. The design, construction, and proposed operation of Seabrook fail to satisfy these requirements. (Tr. 493-496) (From filing of June 17, 1982)

The contention is based on the assumption that the Atlantic Ocean and the cooling water tunnels are a system essential to safety. Applicant stated that the issue had previously been litigated in the construction permit phase. There is an ultimate heat sink at Seabrook that is something other than the Atlantic Ocean. A special cooling tower was built for this purpose. The water that is used to cool during an accident sequence may come from the Atlantic Ocean but it is not necessary that it come from the ocean. Applicant repeated that the cooling tunnels are not a safety grade system and the issue was litigated in the construction permit case. Staff agrees with this. Tr. 496.

The Board denies NECNP Contention IV. The contention lacks basis and this cooling system authorized by the CP was litigated to a conclusion at that time.

V. NEPA Cost-Benefit Analysis

The evaluation of costs and benefits under NEPA which, at the construction permit stage, was found to weight in favor of completing the Seabrook facility, was inaccurate in that the costs associated with the back end of the nuclear fuel cycle were not given sufficient consideration. The Table S-3 Rule, used by the Commission in its cost/benefit analysis to assess the costs associated with the reprocessing, storage and disposal of spent fuel and other nuclear wastes was recently invalidated by the D.C. Circuit

> because they fail to allow for proper consideration of the uncertainties concerning the long-term isolation of high-level and transuranic wastes, and because they fail to allow for proper consideratin of the health, socioeconomic and cumulative effects of fuel-cycle activity.

Natural Resources Defense Council v. Nuclear Regulatory Commission, No. 74-1586 (April 27, 1982), Slip op. at II-12.

When an earlier S-3 Table was invalidated by the same court, the Appeal Board halted construction of the Seabrook plant based on the invalidity of the cost-benefit analysis. Public Service Company of New Hampshire (Seabrook Station Units 1 and 2), ALAB-349, 4 NRC 235, 271, (1976). Now the cost-benefit balance must be restruck once again, considering fully the costs associated with the back end of the fuel cycle. NECNP contends that the costs of the project far outweigh the benefits to be afforded, and that therefore NEPA requires either complete abandonment of the Seabrook facility or the substitutioin of less costly alternatives. In any event, an operating license may not be issued for the Seabrook facility in the absence of a valid Envrionmental Impact Statement addressing the back end of the fuel cycle. (Tr. 496-499) (Received by Board July 19, 1982.)

Petitioner provides as basis that the National Environmental Policy Act requires the preparation of an environmental impact statement for every major Federal action significantly affecting the quality of the human environment, which includes a discussion of "any adverse environmental effects which cannot be avoided should the proposal be implemented." 42 U.S.C. 4332 (C). In the case of licensing nuclear power plants, adverse impacts include the impacts of the nuclear fuel cycle. Vermont Yankee Nuclear Power Corp. v. NRDC, 435 U.S. 519, 539 (1978).

Petitioner further asserts that the Court of Appeals for the District of Columbia Circuit recently invalidated the S-3 Table, used by the NRC in the Seabrook construction permit proceeding to give values to the costs associated with the back end of the nuclear fuel cycle. The court found the rule to be invalid in that it failed to account for uncertainties regarding the safe long-term disposal of nuclear wastes, and because it did not include consideration of health, socioeconomic, or cumulative effects. NECNP claims that the court's rejection of the S-3 Table nullifies the original cost-benefit analysis for Seabrook and that the original analysis must be done again. NECNP believes that for several reasons, a new cost-benefit analysis for the Seabrook facility would yield different results from the original analysis.

The contention is based on the recent decision (April 27, 1982) from the U.S. Court of Appeals for the District of Columbia. The Staff noted that the Commission is planning to issue a policy statement soon. Staff and Applicant recommend that action on this contention be deferred until the Commission statement of policy is published. Applicant stated the mandate had not been issued by the court. Petitioner urged that the contention not be deferred, that it be admitted pending the completion of the Federal court decision and action by the Commission. Tr. 497.

The Board denies NECNP Contention V. Technically the Table S-3 is still valid and this contention constitutes an impermissible contention.

COMMONWEALTH OF MASSACHUSETTS (MASS) (Petitioner under 10 C.F.R. § 2.714)

MASS[12/] submitted a supplement to its petition to intervene on April 20, 1982 with four contentions, all in the general subject

---

12/ Subsequent to the close of PHC-II MASS filed Brief of the Commonwealth of Massachusetts In Support of Its Contentions on July 23, 1982. Applicant filed a Motion for Leave to reply to MASS Brief and Applicants' Reply To "Brief of the Commonwealth of Massachusetts In Support of Its Contentions" on August 5, 1982. Finally on August 11, 1982, MASS filed a Motion for Leave to respond to Applicant's reply and a Response of the Commonwealth of Massachusetts To "Applicants's Reply to Brief of the

[FOOTNOTE CONTINUED]

area of emergency planning. It noted that much of the data relevant to the issue was not yet available, including state and local emergency plans, the FEMA review and the results of the emergency planning exercise. MASS therefore requested leave to submit more complete contentions at a later date.

MASS-1: Applicants have failed to submit, as required by 10 C.F.R. § 50.33(g), radiological emergency response plans of state and local governmental entities within the plume-exposure pathway or ingestion pathway emergency planning zones, including plans of the Commonwealth of Massachusetts and its municipalities.

In its filing of July 22, 1982, MASS withdrew Contention MASS-1. The Board grants leave to refile at a later date with more basis and specificity as additional plans and reports are issued regarding Emergency Plans. MASS Contentions 2, 3 and 4 were resubmitted on July 22, 1982 with wording identical to previous submissions of April 20, 1982.

MASS-2: The Applicants have failed to account for local emergency response needs and capabilities in establishing boundaries for the plume exposure pathway

---

[FOOTNOTE CONTINUED]

Commonwealth of Massachusetts In Support of Its Contentions". This Board accepts MASS' Brief of July 23, 1982 and grants the Motion of Applicant for leave to file a response to MASS' brief but denies MASS' motion to file a Response to Applicants' Reply. The Board did request (Tr. 649) the Brief from MASS at the PHC-II and a rebuttal is appropriate. However, there must be an end to the pleadings this Board will accept. Hic labor finit.

and ingestion pathway EPZ's for Seabrook station, as required by 10 C.F.R. § 50.33(g) and § 50.47(c)(2).

MASS-3: There is no basis for the NRC to find, as required by 10 C.F.R. § 50.47(a)(1), that the state of onsite and offsite emergency preparedness for the Seabrook station provides reasonable assurance that adequate protective measures can and will be taken in the event of a radiological emergency.

MASS-4: The Applicant's emergency plan does not satisfy the standards set forth in 10 C.F.R. § 50.47(b) or provide the information required by 10 C.F.R. Appendix E.

Applicant and Petitioners urge the start of discovery as soon as possible. Instead of the above statements of contentions, Applicant recommends the admission of a single contention worded:

The Applicants have not complied with 10 C.F.R. § 50.33(g), 10 C.F.R. § 50.47, and 10 C.F.R. 50, Appendix E (Tr. 283).

Staff objects to all of MASS Contentions (Tr. 475) asserting that: (1) it permits the admission of contentions for discovery purposes which would not otherwise be admissible under § 2.714; and (2) it will set a different standard for the admission for discovery purposes of Emergency Planning Contentions than any other contentions the Board is considering. It lowers and sets a different standard for admission of contentions. Tr. 477. Staff further takes the position that only specific contentions should have been filed at this point. For

contentions based on documents that are not yet in existence, contentions should be deferred until such time as the appropriate document(s) have been prepared. Discovery then can follow which will be more meaningful. Tr. 518.

FEMA[13/] plays an important role in determining emergency plans and its role was described by Staff counsel at the PHC-II. Tr. 527, et seq. Staff counsel reported that, in conversation with FEMA on July 16 during the Special Prehearing Conference-II, FEMA opposed broad-based emergency planning contentions. FEMA urged the Board to treat Emergency Planning Contentions by the Rules under § 2.714. As of this time, the final State and local plans will not be submitted to FEMA for their review until early December 1982. FEMA proposed that the discovery process not go on without specific plans or contentions in hand. A broad-based kind of contention, even with specific subparts that could have been contentions, had they been admitted, would encumber FEMA's planning process. FEMA urged the Board not to permit discovery now. Tr. 527.

The Board gives weight to the Staff and FEMA positions and denies MASS (and other Petitioner's) contentions regarding off-site emergency

---

13/ Federal Emergency Management Agency.

plans at this time, granting leave to resubmit or reframe their contentions at a later date should they choose to do so, with appropriate basis and greater specificity possible when the additional plans and reports are issued, provided contentions are filed shortly after issuance of the plans or reports. The Board views these emergency contentions of MASS as premature. Upon the filing of the FEMA report, MASS and other Intervenors will be permitted to refile emergency planning contentions based on the newly filed documents. See also ALAB-687.

Accordingly, MASS Contentions 2-4 are denied.

The Board grants MASS standing in the proceeding at this time under 10 C.F.R. § 2.715(c).

An additional factor needs to be noted here for an understanding of this Board's action in regard to the Commonwealth of Massachusetts as an Intervenor under 10 C.F.R § 2.715(c). The Commission in Public Service Company of Indiana (Marble Hill Generating Station, Units 1 and 2), CLI-80-10, 11 NRC 438, 439 (1980), emphasized that the participation of an interested soverign state, as a full party or otherwise, is always desirable in the NRC process. Under § 2.715(c), the interested state or other government body need not furnish contentions or take a position on the issues. The state is nevertheless given an opportunity to introduce evidence, interrogate

witnesses, and advise the Commission. The state may also file proposed findings and exceptions, and petitions for review by the Commission. This section does provide that the presiding officer may require that the state indicate with reasonable specificity, in advance of hearing, the subject matters on which it desires to participate. This MASS has done in filing its four contentions with this Board. Once admitted to the proceeding, an interested state must comply with all the procedural rules and is subject to the same requirements as other parties appearing before the Board. Gulf States Utilities Company (River Bend Station, Units 1 and 2), ALAB-444, 6 NRC 760 (1977).

SEACOAST ANTI-POLLUTION LEAGUE (SAPL) (Intervenor under 10 C.F.R. § 2.714)

SAPL moved to become an Intervenor in this proceeding on November 13, 1981 and supplemented its petition with affidavits of two members of SAPL, dated February 4, 1982. In response to the Board's Memorandum and Order setting a special pre-hearing conference to begin May 6, 1982, SAPL submitted four contentions in its filing dated April 5, 1982. Applicant and Staff responded in writing to this filing and oral presentations of the parties were made on the record of the May 6th prehearing conference. Tr. 14-45; 132-143.

SAPL Contentions are as follows:

SAPL 1: Emergency planning cannot reasonably assure that public health and safety will be protected at the Seabrook site.

As a basis for this contention SAPL noted the unique character of the Seabrook site, located near a barrier beach with a large seasonal population and with limited egress routes.

The Staff noted that the proposed contention was vague, ambiguous, and fails to meet the specificity requirements of 10 C.F.R. Section 2.714(b).

Applicant commented in its filing of April 15 and agreed that emergency planning was an appropriate subject for litigation in this operating license proceeding. Applicant noted deficiencies in the stated contention and recommended it be rejected as written. However, if an emergency planning contention is to be admitted, Applicant urged alternate wording. The contention should be framed to read: "The Applicants have failed to comply with the applicable provisions of 10 C.F.R. § 50.47 and 10 C.F.R. 50, Appendix E." Tr. 34. The filing of a more specific contention at this time is not appropriate because the off-site emergency plans have not yet been prepared. ALAB-687, supra, 15 NRC ___ (August 19, 1982).

SAPL-1 is denied.

SAPL 2: The operation of the proposed condenser cooling system will have an unreasonable adverse affect on the quality of the aquatic environment.

Petitioner concedes that there have been extensive proceedings on the present design of cooling system at Seabrook. This system uses back-flushing to control bio-fouling. As a basis for this contention, petitioner notes that Applicant is considering the use of chlorine injection, in massive amounts, which may exceed requirements now contained in its permits from the State of New Hampshire and the United States Environmental Protection Agency.

Staff opposes admission of this contention because it is premature. Applicant joins Staff in stating that the change to chlorine to clean up the condenser cooling system must first be approved by EPA. The Staff has inquired regarding the status of EPA activities on the application to change the condenser cooling system but it will be many months before a decision is reached.

The Board denies admission of Contention SAPL-2 because it is premature.

SAPL 3: The operation of the proposed nuclear plant will have an unreasonable adverse effect upon the economic well being of the seacoast area.

As a basis for this contention, petitioner again notes that the Seabrook power plant is located in the center of one of New Hampshire's most heavily used recreational and tourist areas. Any report of a major accident at Seabrook or any other nuclear plant could have a devastating impact upon the economic well-being of the tourist industry in the area.

Both Applicant and Staff note that this contention was raised by SAPL at the Seabrook Construction Permit Hearing, was fully litigated, and decided adversely to SAPL. In the Initial Decision for the construction permit the Board found that there was no way to determine the exact impact on tourism in the Hampton-Seabrook area which would result from the plant. Public Service Company of New Hampshire (Seabrook Station, Units 1 & 2), LBP-76-26, 3 NRC 857, 881-82 (1976).

As this Commission has determined that, "[A]n operating license proceeding should not be utilized to rehash issues already ventilated and resolved at the construction permit stage." Alabama Power Company (Joseph M. Farley Nuclear Plant, Units 1 & 2), CLI-74-12, 7 AEC 203 (1974). SAPL alleges no significant intervening change in circumstances which would provide a basis for relitigating this issue. Classic principles of collateral estoppel apply. See Houston Lighting and Power Company (South Texas Project, Units 1 & 2), LBP-79-87, 10 NRC 563 (1979), affirmed summarily, ALAB-575, 11 NRC 14 (1980).

The Board concludes that SAPL-3 is denied.

SAPL 4: The decommissioning of the Seabrook Plant, should it receive its operating permit and actually operate, will have a major long term negative impact on the health and well-being of the citizens in the area of the facility.

SAPL again cites as a basis for this contention, that the Seabrook plant is within sight of the most heavily used tourist facility in the State of New Hampshire, and on peak summer days, the Hampton Beach State Park. The nature of the plant's impact would be dependent on a selection of the plan for the decommissioning of the plant, which plan would have to provide for complete removal to negate a negative impact on the economic wellbeing of the area. In its basis, SAPL also raises questions about the financial capability of Applicant to safely decommission and maintain the nuclear facility after its useful life.

Both Applicant and Staff comment that this same issue was fully litigated in the construction permit proceeding to a conclusion adverse to SAPL. They also note that financial qualification of Applicants have been completely eliminated as an issue in operating license proceedings for nuclear power plants. 10 C.F.R. § 50.33(f)(1), 50.40(b), as amended by 47 Fed. Reg. 13750 (March 31, 1982). The Board agrees.

The Board denies SAPL-4.

In its filing of April 5, 1982, SAPL reserved the right to amend its statement of contention by a proper supplement to be filed later. On April 20, 1982, SAPL filed the five supplemental contentions below. In its item 6 of that supplemental filing, it joins in and adopts as its own the contentions 4 through 10, and 12 through 16, and bases therefore set forth by the State of New Hampshire and Attorney General Gregory H. Smith.

SAPL
Supplement 1: The Applicant has not established reasonable assurance that the safety systems of the proposed plant can withstand a worst case accident analysis because of interactions with components presently classifed as non-safety, contrary to the requirements of 10 C.F.R. Part 50.

SAPL cites as the basis the known potential for interaction of safety and non-safety related components as occurred at Three Mile Island. (NUREG-0660, Item 2C3 and NUREG-0737, Item 1C1.)

The Applicant in its response of April 26th notes that this contention is vague and without basis. It does not identify what it is the parties are to litigate. It does not identify which safety systems, what worst case accidents, or what non-safety components. Staff finds the contention not a litigable issue and also notes that it is hopelessly vague. Tr. 138.

The Board is unaware of any requirement in the regulations to do a systems interaction study and agrees with the Applicant and the Staff that the Board deny this contention. SAPL Supplement 1 is denied.

SAPL
Supplement 2: The Applicant has not provided the assurance that safety related equipment will be able to perform adequately in an accident environment over the projected lifetime of the plant.

SAPL maintains that the contention is based on the need for all safety-related equipment to be able to operate as required by Appendices A, B (Criteron III and XI), G and K of Part 50. (Also 10 C.F.R. 50.55a).

Applicant argues that this contention is vague with respect to environmental qualification of some unstated equipment. It does not identify specifically the matter to be litigated. The Staff expressed similar views. Tr. 141.

The Board denies SAPL Supplement 2. This contention is so vague that the Board cannot grasp even a straw of what it is SAPL wants to litigate. In the Board's opinion, its so inprecise that it flies in the face of the Commission's mandate that a contention must be framed with reasonable specificity. (10 CFR 2.714(b))

SAPL
Supplement 3: The applicable requirements of the Commission's Interium Policy Statement issued June 13, 1980, 45 Fed. Reg. 40101 on Nuclear Power Plant Accident Considerations Under the National Environmental Policy Act of 1969 have not been met.

The contention dealing with Class 9 accidents was reframed by Applicant in its reponse of April 26, 1982 and Counsel for SAPL found the proposed revised language for SAPL Supplement 3, as stated above, to be acceptable. Tr. 136. The Staff concurs that reworded SAPL Contention 3 is acceptable. Tr. 142.

The Board admits reframed SAPL Supplement 3.

SAPL
Supplement 4: There is no need for the electricity hoped to be produced by the proposed plant and consequently this Board should find that the costs, including the risk of station operation, outweigh the benefits.

SAPL
Supplement 5: The lead Applicant and certain other Applicants including United Illuminating and Bangor Hydro, cannot demonstrate reasonable assurance that they are financially qualified to meet the cost of operating and decommission the proposed facility.

Staff and Applicant concur that financial qualifications and the need for power have both been prohibited from litigation in operating license proceedings by recent amendments to Commission Regulations.

47 Fed. Reg. 12940 (March 26, 1982) and 47 Fed. Reg. 13570 (March 31, 1982). On this basis the Board denies SAPL Supplements 4 and 5.

SAPL
Supplement 6: SAPL hereby joins in and adopts as its own the contentions and the bases therefore set forth by the State of New Hampshire and Attorney Gregory P. Smith nos. 4 through 10, and 12 through 16.

This contention statement incorporates by reference contentions of another party. The Board will permit this procedure and take action on NH's admitted contentions and will permit SAPL to participate with NH as a Joint Intervenor.

SOCIETY FOR THE PROTECTION OF THE ENVIRONMENT OF SOUTHEASTERN NEW HAMPSHIRE (The Society) (Petitioner under 10 CFR § 2.714(b).

The Society filed its Supplement to Petition to Intervene Pursuant to 10 CFR 2.714(b), Contentions Which Petitioner Seeks to Have Litigated, on April 21, 1982. The Applicant filed a response to this Intervenor on April 26, 1982. The NRC Staff filed its response to the proposed contentions of Society on May 10, 1982.

The Society has presented three contentions which it wishes this Board to rule upon.

SOCIETY-A The Society wishes to litigate the proposed route of transmission lines through the Town of South

Hampton, and more particularly, as they relate to the historical sites which are located in said town; the effect that the transmission route would have on an archaeological site known as "Indian Ground Hill" which archaeologists say represent the wealth of information concerning the Indians who occupied the land prior to its colonization; the effect the proposed transmission line would have as it crossed the Pow Wow River into the neighboring State of Massachusetts and the effect it would have as a recreation site as well as its aesthetic beauty.

SOCIETY-B
(as amended)

(Tr. 617-623 and Society for the Protection of the Environment of Southeastern New Hampshire Supplemental Petition for Leave to Intervene, July 23, 1982.)

The operation of the transmission lines violates Code of Federal Regulations, Title 10, Energy, Chapter 1 - Nuclear Regulatory Commission, Part 2, App. A, VIII (b)(3)(i) "Whether there is reasonable assurance (i) that the activities to be authorized by the operating license can be conducted without endangering the health and safety of the public... .." in that the electro-magnetic fields set up by the double and single transmission lines cause radiation which endangers the health and safety of people who inhabit dwellings near the operating transmission lines. Recent articles indicate that electro-magnetic radiation can affect the cardio-vascular system, hemotology, bio-chemistry, genetics, neuro physiology [sic] and other functions of the human body. The applicant has not demonstrated with reasonable assurance that the operating transmission lines, either single or double, will not affect the health and safety of the public.

SOCIETY-C

The aesthetic affect which the proposed transmission line route would have on the Town.

Both the Applicant and the Staff have objected to the three contentions filed by the Society. Two of the Intervenor's contentions deal directly with routing of transmission lines in some fashion, and the Applicant argues correctly that the alleged health effects of the third contention are inherently part of routing, not operation. The Applicant notes that reconsideration of transmission line routes is barred by the prior litigation of the Seabrook transmission line routes. In Contention B, the Applicant argues, the Society's proposed contention is simply trying to relitigate the transmission lines issue by stating another reason why the lines should be rerouted.

The Staff has objected to the contentions based upon the fact that none of the proposed contentions has any basis as required under 10 CFR § 2.714,[14/] and, secondly, the Intervenor is attempting to raise a matter which is not within the scope of issues for an operating license proceeding.

This Board has recognized that the Intervenors herein were not parties to the construction permit proceeding. However, as both Applicant and Staff have noted, the transmission lines were litigated

---

14/ Philadelphia Electric Company (Peach Bottom Atomic Power Station, Units 2 & 3), ALAB-216, 8 AEC 13 (1974) and Mississippi Power & Light Company (Grand Gulf Nuclear Station, Units 1 & 2), ALAB-130, 6 AEC 423, 426 (1973).

under the construction permit in a prolonged proceeding which at various stages invoked consideration of this issue by a number of appellate courts including a petition for a writ of certiorari to the Supreme Court of the United States. Public Health Service Company of New Hampshire (Seabrook Station, Units 1 & 2), LBP-76-26, 3 NRC 857, 885, et seq.

As the Applicant's Counsel pointed out in the oral arguments to this Board (Tr. 618), whether the Society was a party to the hearing is "legally irrelevant". The notice to parties wishing to intervene in hearings before this Commission are published in the Federal Register and as such there is a notice to all the world. A party wishing to intervene at a later time, as the Society does here, cannot complain that they were not in existence at the time of the publication of the notice and be heard to complain about the litigation involved in the notice previously published. In other words, the litigation of the issue of transmission lines either by the Society, or since it did not exist, some other agency or groups of agencies, has exhausted the issue and there is nothing for this Society to litigate in this operating license proceeding.

In Contention B, the Society seeks to litigate the possible health effects resulting from operation of the transmission lines on the basis that the effects represent a safety issue cognizable under 10 C.F.R.

Part 2, Appendix A, VIII(b)(3). Tr. 613, 621. Both the Applicant and Staff point out (Tr. 618, 621-2) that the electro-magnetic effects asserted in the contention have no specific relationship to radiological effects that are intended in the referenced paragraph (Ibid.) of the Commission's rules of practice. The Board agrees. There is nothing unique about electricity generated by nuclear power when it passes through transmission lines that makes it a radiological health or safety issue. The Board does not find that there is any basis upon which to litigate in an operating license proceeding the issue of health and safety of people who inhabit dwellings near operating electrical tranmission lines, except under the NEPA authority of the Commission which, as discussed above, was extensively done for the construction permit. The Petitioner made no attempt to base Contention B on NEPA requirements.

When in an operating license proceeding an Intervenor seeks to halt an already authorized plant construction or some part thereof such as transmission lines, then the Intervenor's remedy lies in a petition under 10 CFR 2.206 with officials of this Commission who are empowered with the appropriate remedy at its command.

Both the Applicant and the NRC Staff cited to this Board during oral argument the case of Consumers Power Company (Midland Plant, Units 1 & 2), ALAB-674, 15 NRC ___, May 5, 1982. In this case, the Appeal Board noted that:

> A licensing board for an operating license proceeding, such as the one involved here, is limited to resolving matters that are raised therein as legitimate contentions by the parties or by the board sua sponte. 10 CFR 2.760a; Consolidated Edison Company of New York (Indian Point, Units 1, 2 & 3), ALAB-319, 3 NRC 188, 190 (1976). Pursuant to that mandate, a board can authorize or refuse to authorize the issuance of an operating license. It does not, however, have general jurisdiction over the already authorized on-going construction of the plant for which an operating license application is pending and it cannot suspend such a previously issued permit. [Emphasis Supplied]

This Board has not attempted in this Intervenor's case to outline fully all arguments presented to the Board either in written pleadings or at the oral hearings. However, all of these have been considered and weighed, and the Board has concluded that these three contentions of the Society should be denied. Whether this Board determines that it does not have jurisdiction in the matter or whether or not collateral estoppel applies, may be academically interesting but will not contribute to a furtherance of the health and safety issues which this Board must deal with in this proceeding. As the Board noted above, the matters of health and safety which this Board has weighed in regard to the Society's contentions stem from the activity of the Applicant over whose operating license this Board sits as the initial determining body for the Nuclear Regulatory Commission. The Board has determined that a better expenditure of the time of all the parties and this Board would be better directed to matters dealing with nuclear power rather than the location and operation of transmission lines over which this

Commission has made its determinations during the construction permit stage. This Board has specifically heard the arguments of the Intervenor in regard to the various historical preservation means by which it has solicited this Board's help in ensuring certain remedies to be applied the immediate vicinity around the Seabrook Station. However, the Board, as was indicated during the oral hearing, has no mandate from this Commission to step outside the scope of its authority and assume authorities from statutes not within the scope of this Commission's concern. The Board, however, in this Memorandum and Order, wishes to use this means as advising the Society and its counsel to seek the remedy which it has solicited from the appropriate government agencies involved. With that in mind, this Board requests that the NRC Staff give guidance to the Society and its counsel within the proper scope of its authority and render such assistance as is appropriate to the Society and its counsel in obtaining a statutory empowered forum for the determination of its concerns expressed in these contentions before this Board.

Viewing the Society's Contention B as grounded in an environmental basis, the Board finds that the Commission's regulations as implementing the National Environmental Policy Act (42 USC § 4321, et seq.) generally limit review of the operating stage to relevant information arising after a grant of a construction permit. As was determined in Alabama Power Company (Farley Nuclear Plant, Units 1 & 2), ALAB-182, 7 AEC 210, 216 (1974), there is a bar against

relitigation of issues at this operating license stage which were considered at the construction stage absent either significant supervening development having a possible bearing upon previously adjudicated issues or the presence of some unusual factor having special public interest implications.

Even the most favorable examination of the Society's Contention B could not endow it with the qualities that Farley, supra, spoke of above. Certainly there is no new development regarding these transmission lines. These lines will do in the future what they were meant to do from the moment the CP was awarded the Applicant, i.e., transmit the electricity from the Seabrook Station. There is nothing new here. Nor is there any unusual factor having special public interest implications that was not exhaustingly litigated in the CP stage. The Society cannot be heard to argue the medical effects of transmission lines on the basis of some effect which was well known at the time of the CP stage.

Although neither the Society nor the Town of South Hampton were parties to the CP proceeding, as the Licensing Board in Cleveland Electric Illuminating Company (Perry Nuclear Power Plant, Units 1 & 2), LBP-81-24, 14 NRC 175, 199-200 (1981), said in describing the licensing process in this Commission, the public is throughly caught up in tne process by the widespread coverage of every phase of the event by print and electronic press. If there was concern for the health issue, then

there was ample notice at the CP stage for the issue to be litigated by one of the parties admitted at that stage. "... while intervenors do not have any obligation to represent persons who are not parties, they often attempt to litigate generally any concerns which might also bother other residents in the community." As the Perry board further noted, the Staff has an obligation to represent the public interest and conduct statutory required safety and environmental review. The Staff opposed these contentions involving transmission lines.

Society Contentions A, B, and C are denied.

COASTAL CHAMBER OF COMMERCE OF NEW HAMPSHIRE (CCCNH) (Petitioner under 10 CFR § 2.714)

The CCCNH had withdrawn its earlier filed contentions and has submitted on June 8, 1982 in Coastal Chamber of Commerce of New Hampshire's Response to Applicant's Response to Supplement to Petition to Intervene and Contentions of Coastal Chamber of Commerce of New Hampshire; its revised contentions which will be set forth in full as follows:

Contentions	
1 and 2	The Applicant has failed to comply with the Commission requirements that an emergency plan must be adequate and capable of being implemented and therefore has failed to provide reasonable assurance that adequate protective measures can and will be taken in the event of an emergency. 10 CFR 50.54(a)(1), (2); 10 CFR 50.34(b)(6)(v).

Contention

CCCNH 3 The Applicant has failed to comply with state and local government off-site emergency plans. 10 CFR 50.33(g), Appendix E III. There is no indication that the emergency plan will coordinate with state and local off-site plans. The Applicant has failed to submit state and local emergency plan agreements as required by NUREG-0654, Appendix III. The Coastal Chamber of Commerce reserves the right to amend its contentions to challenge the sufficiency of the Applicant's plan to coordinate with state and local authorities.

CCCNH 4 The Applicant has not adequately demonstrated that it has developed and will be able to implement procedures necessary to assess the impact of an accident, classify it properly, and notify adequately its own personnel, the affected governmental bodies, and the public, all of which is required by 10 CFR 50.47 and Appendix E, and NUREG-0654.

CCCNH 5 The Applicant has failed to demonstrate adequate on-site and off-site protective measures in the event of an emergency in accordance with 10 CFR 50.47(a)(b), 10 CFR 50, App. E, and NUREG-0654.

CCCNH 6 Emergency Planning Zones:

Applicant's acceptance witho t formal analysis or evaluation of Circular 10 - and 50-mile radius for the emergency planning zones does not discharge the Applicant's responsibilities to ensure that adequate emergency response plans exist to protect the health and safety in the event of an emergency at Seabrook. See, § 4.3 of the emergency plan. Designation of Circular 10 - and 50-mile emergency planning zones is unjustified because such emergency planning zones do not consider local emergency response needs as they are affected by such factors as demography, topography, land characteristics, access routes and jurisdictional boundaries.

CCCNH 7 Radioactive Monitoring:

The Seabrook design does not provide an adequate program for monitoring the release of radioactivity to the plant and its environs either under normal operating conditions or in pre- and post-accident circumstances. Thus, the application is not in compliance with general design criteria 63, 64 of Appendix A 10 CFR Part 50, and requirements of NUREG-0737 and NUREG-0800.

CCCNH 8 Control Room Design:

The control room design for the Seabrook plant does not provide adequate controls and instrumentation to monitor variables as appropriate to comply with general design criteria 13. All operator actions necessary to take the plant from normal operation to cold shutdown should be capable of being performed from the control room. The control room panel must be adequate to provide the appropriate and necessary information to operators in the event of an accident. Instrumentation must be provided for an adequate amount of parameters and, additionally, that such instrumentation be environmentally qualified. And further an adequate system must be provided to inform the operator regarding the status of safety systems, i.e., whether a safety system has been deliberately disabled.

A detailed control room design review (DCRDR) should be carried out in conformance with the guidelines of NUREG-0700 and NUREG-0737 (Item 1.D.1 and 2).

Finally, the Seabrook facility must be designed to provide adequate equipment outside the control room to promptly put the reactor in hot shutdown and maintain it until cold shutdown from outside the control room as required by general design criteria 19, 20, 21 and 22 of Appendix A, to Part 50.

CCCNH has in support of these Contentions 1 through 6 argued (1) that the evacuation plan cannot reasonably assure that adequate measures can or will be taken in the event of an emergency; or (2) that

the Applicant has failed to comply with state and local government off-site emergency plans; (3) that the emergency classifications and actions scheme required under 10 CFR 50.47(b)(4) and NUREG-0654, Appendix 1 as outlined in § 9 of the Applicant's emergency plan is inadequate; (4) that the emergency plan does not contain any off-site preparedness plans of the state or local emergency response organizations; or (5) that the emergency plan demonstrates that adequate arrangements have been or will be made for medical services for contaminated injured individuals; and (6) that the Applicant has not demonstrated in its emergency plan whether in case of an accident it will be possible to protect or evacuate the large number of people who may be within the zone of danger at any given moment. In CCCNH-6 the Intervenor seeks to support this contention by arguing that the Applicant has not considered adequately the effect of such things as the proposed circular 10-mile emergency planning zone nor taken into account unique factors within the region such as the rural-urban mix, automobile ownership, ownership of campers, vans, and second homes, available public transportation, proportion of the population confined to institutions, location of friends and relatives etc. CCCNH contends that such factors as those enumerated above must be investigated and considered in deciding how large and what shape the plume exposure emergency planning zone should be.

In support of CCCNH-7 dealing with radioactivity monitoring, this Intervenor seeks to establish that the Applicant must provide

sufficient radiation monitoring capability in containment spaces which could contain LOCA fluids, effluent discharge paths, and plant environs as required by General Design Criterion 64. CCCNH also contends that the health physics division at the plant must be assured by the Applicant as qualified and properly staffed to perform this service.

In support of Contention 8 on control room design, CCNH wishes to litigate the control room design so as to ensure that the displays and controls in the control room do not increase the potential for operator error which error was involved in the Three Mile Island accident. CCCNH wishes to establish that at Seabrook the accident monitoring and control room design be the optimum because of the difficulties inherent in carrying out protective actions for the population in the immediate vicinity of the plant.

The Applicant in contesting Contentions 1 through 6 notes that they all deal with emergency planning.

In Contention 7 CCCNH seeks to raise the off-site radiation monitoring which in Applicant's view was litigated in the construction permit proceeding. In Contention 8 the Intervenor, Applicant states, lacks any basis for saying that the Seabrook's control room design is not in compliance with the various regulations cited. In the case of Contentions 7 and 8 the Applicant urges the Board to reject the contentions.

The NRC Staff has replied to the contentions of CCCNH and points out that CCCNH-1 and 2 contentions are lacking in any basis since they are conclusionary statements. In CCCNH-3, the Staff maintains that the off-site emergency plans for Seabrook have not been developed and considers the filing of a contention based upon that plan as being speculative and premature. In CCCNH-4 and 5, the Staff has no objections but objects to that portion of CCCNH's contentions dealing with the inadequacy of state and local plans because they are speculative and premature. In regard to CCCNH-6, the Staff finds that the contention lacks specificity and inadequate basis in that the Intervenor does not state an example of how the 10-mile EPZ fails to account adequately for jurisdictional boundaries. Although this Intervenor was given an opportunity to amend CCCNH-6 to perhaps remedy this objection of the Staff, the Board has been advised by telegram of July 23, 1982 that the Intervenor does not wish to change the wording of its contention to meet the objection of the Staff and provide specific examples of how the the plans fails to account adequately for the jurisdictional boundaries. The Staff has found these unclear and failing to demonstrate how the designation of the 10-mile EPZ relates to the second basis of CCCNH-6 concerning such unique factors as the rural-urban mix. In regard to CCCNH-7, the Staff does not oppose the contention. In CCCNH-8, on control room design, the Staff maintains that Intervenor has not specified what in the control is not in compliance with the provisions of the various documents and design criteria noted and therefore objects to receipt of this contention.

As this Board has noted elsewhere in this Order, matters dealing with off-site emergency planning will be deferred until plans have been prepared and filed. CCCNH-1, 2, 3 and 6 are denied.

The Board has determined that Contention 4 will be admitted. Contention 5 will be admitted except for that portion of CCCNH-5 which seeks to litigate at this time "off-site" protective measures. CCCNH-7 will be admitted.

CCCNH-8 is denied because it does not state the basis upon which CCCNH finds the Seabrook control room design in not in compliance with the various regulations cited. In denying CCCNH-8 the Board notes the interest this Intervenor has expressed and finds that similar interest has been set forth in NH-10 already admitted. Accordingly, CCCNH is instructed by this Board to join NH in pursuing its interest as a Joint Intervenor.

The Board notes that the Contention 4 is similar to that of the State of New Hampshire in its NH-20 and directs that these parties in litigating this matter coordinate efforts in order to eliminate any duplicative effort.

TOWN OF SOUTH HAMPTON (The Town) (Petitioner under 10 C.F.R. § 2.714)

The Town filed its Amendment to Petition for Leave to Intervene on the Town of South Hampton on April 13, 1982. In this petition the Town set out five contentions.

The Applicant responded to this petition on April 16, 1982 and the NRC Staff filed Response of the NRC Staff to the Proposed Contentions of . . . the Town of South Hampton of New Hampshire, on May 10, 1982. At the PHC-II on July 16, oral arguments were made to this Board by the Town, Applicant, and the NRC Staff. Tr. 563-607.

The contentions of the Town of South Hampton are stated as follows:

TOWN OF SOUTH HAMPTON-1	The transmission lines emanating from the Seabrook Nuclear Power Plant would, and as presently routed, have a most severe and adverse impact upon Indian Ground Hill, a ridge of high ground, which is historically significant as an Indian camp ground and possible burial ground.
TOWN OF SOUTH HAMPTON-2	The transmission lines emanating from the Seabrook Nuclear Power Plant would, as presently routed, have a most severe and adverse impact upon the historical district at the center of the Town of South Hampton.

TOWN OF SOUTH HAMPTON-3	The transmission lines emanating from the Seabrook Nuclear Power Plant would, as presently routed, have a most severe and adverse impact upon the historical areas known as Jewell Town and Highland.
TOWN OF SOUTH HAMPTON-4	The transmission lines emanating from the Seabrook Nuclear Power Plant would, as presently routed, have a most severe and adverse impact upon the property values within the Town of South Hampton commercial and residential districts.
TOWN OF SOUTH HAMPTON-5	Reasonable alternatives to the present transmission line routes including, but not limited to, underground placement of lines must be formulated prior to any grant or operating authority.

This Board has clearly indicated in the discussion concerning the contentions of the Society for the Protection of the Environment its position that the matter of the routing of the transmission lines emanating from the Seabrook plant has been completely and exhaustively litigated at the CP stage. This Board will not entertain any further contention(s) at this operating stage based upon the placement of the transmission lines since this is not a matter which this Board may consider at this operating license stage. Indeed, this Board takes the position that the Town of South Hampton should be admitted as an interested municipality herein under the provisions of

§ 2.715(c)[15/] which permits the presiding officer to "afford representatives of an interested State, county, municipality and/or agencies thereof, a reasonable opportunity to participate and to introduce evidence, interrogate witnesses, and advise the Commission without requiring the representatives to take a position with respect to the issue." This Board does require the Town to meet the requirement of § 2.715(c) that the municipality indicate with reasonable specificity in advance of the hearing the subject matter, other than the routing of the transmission lines, on which it may desire to participate. In view of the provisions of that section, the Board finds that the vital interests of the Town of South Hampton and its concerns with the Seabrook plant will be protected with its participation on those health, safety and environmental issues which will come before this Board during the future proceedings. Accordingly, this Board admits the Town of South Hampton as a party under the provisions of § 2.715 and denies as being previously litigated the five contentions set forth above.

15/ See discussion under section on contentions of the Commonwealth of Massachusetts of § 2.715.

SUN VALLEY ASSOCIATION (SVA) (Petitioner under 10 CFR § 2.714(b))

SVA has revised its originally filed contention by striking each of them and has submitted two new contentions in lieu thereof. These were filed by SVA on June 15, 1982. The contentions are as follows:

SVA-1 The Seabrook Station off-site emergency planning does not comply with applicable provisions of 10 CFR § 50.47, 10 CFR § 50, Appendix E, and NUREG-0654.

SVA-2 Off-site emergency planning based upon existing egress routes cannot reasonably ensure the safe removal of the local populace in the event of a nuclear accident. The cornerstone of an evacuation plan which might be deemed adequate under applicable regulations would be the construction of a new highway linking the Hampton-Seabrook area with the interstate highway system.

The Applicant opposes the first of these contentions only in that it includes a reference to NUREG-0654. Because NUREG-0654 is not a regulation, compliance with it is unnecessary. The second of the contentions the Applicant objects to as lacking a basis and tells the parties nothing about what accident is involved. The Applicant maintains that the second contention is so vague and nonspecific as to fail to put the Applicant on notice as to what they must prove. The off-site plan has not been filed and SVA does not specify the inadequacies in the off-site plans which they seek to litigate. The Staff objects to SVA-2 in that SVA does not identify the evacuation

routes planned to be used by the emergency planners or give reasons why the routes are inadequate or explain why if egress routes are inadequate that the resolution of the problem lies in the constuction of a new highway to the already existing interstate highway system.

The Sun Valley Association here argued orally during the PHC-II that it has no objection to withhold these two contentions until such time as the off-site planning had been completed and filed. Tr. 627-631.

The Board denies Contentions SVA-1 and 2. The off-site emergency plan has not been filed and these contentions are premature. ALAB-687, supra, 15 NRC ____ (August 19, 1982).

ORDER

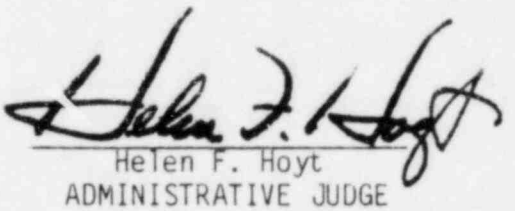
For all the foregoing reasons and based upon a consideration of the entire record in this matter, it is,

ORDERED,

That those Intervenors and their contentions as set forth in this Memorandum are admitted as parties with their contentions to this

proceeding and that all other Intervenors' petitions and their contentions are denied.

FOR THE ATOMIC SAFETY
AND LICENSING BOARD



Helen F. Hoyt
ADMINISTRATIVE JUDGE

Dated at Bethesda, Maryland,
this 13th day of September, 1982

APPENDIX A

Schedule for Proceeding

September 15, 1982	Opening of Discovery on Contentions Adm. Hed by Order of 9/13/82.
November 8, 1982	Staff SER filed.
December 15, 1982	Last Discovery Request on the Contentions admitted by Order of 9/13/82.
January 11, 1983	Prehearing Conference for Schedule Adjustments and Resolution of Identified Discovery Disputes for Contentions admitted by Order of 9/13/82.
February 12, 1983	Motion(s) for Summary Dispoistion of Contentions Admitted by Order of 9/13/82 to be filed by this date.
March 9, 1983	Answers to Motion(s) for Summary Disposition filed on 2/12/83.
April 5, 1983	Ruling(s) of Presiding Officer on Summary Disposition (10 C.F.R. § 2.749(d)).
May 5, 1983	Direct Testimony Filed. FEMA Testimony Filed.
May 28, 1983	Rebuttal Testimony Filed.
June 14, 1983	Hearing Begins.